ACADEMIC PERFORMANCE DIFFERENCES OF

FIRST-YEAR UNDERGRADUATE ASIAN AND PACIFIC ISLANDER STUDENTS

IN A LARGE URBAN FOUR-YEAR AANAPISI IN TEXAS

by

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Dedication

To my Mom, "Ibu", for her unconditional love and support. Everything good that I have done in my life reflects her love. For supporting me and believing in me, I also dedicate this to my late Dad, "Bapak," the smartest person whom I have known, and to my siblings —Yanti, Mira, Donny, Sonya—, my nieces and nephews — Kiki, Mandy, Diallo, Dinda, Bryan, and Julian —and Peter, our family friend who has been like a brother to us.

Abstract

Background: Model minority myths have suggested that Asian Americans are high achievers who are without barriers to success. Due this myth, the problems and needs of the underrepresented and underachieving Asian and Pacific Islander (API) students often can be overlooked in higher education. This study compared the differences in academic performance within API populations based on the residency status (U.S.-born, foreign-born, and international), geographic origin (five regions of Asia and the Pacific Islands), and ancestral countries of origin. The study occurred at one of two 4-year AANAPISI (Asian American and Native American Pacific Islander-Serving Institution) in Texas. **Purpose**: The purpose of this study was to analyze five factors: (1) the academic outcomes (grade point averages, credit hours earned, and academic standing status) of the overall sample of students who classify as API at a large urban four-year AANAPISI in Texas; (2) the differences in the academic outcomes of the residency status, regions, and ancestral countries of origins; (3) whether the retention and graduation rates of students differ by residency status, regions, and ancestral countries of origins; (4) whether there was a relationship between parents' level of education and the academic outcomes of first-generation API students, and how different the academic outcomes by residency status, regions, and ancestral countries of origin, and (5) whether the parents' level of income related to credit hours earned for first-generation API students. **Method**: The archival sample comprised a cohort of 1,445 first year first-time-in-college (FTIC) undergraduate students in Fall 2016 who self-identified as Asian or Pacific Islanders. This cohort was followed every Fall until the beginning of Fall 2020 and/or Fall 2021 (fourth and fifth-year graduation rate marks). The study used a

quantitative approach that combined descriptive, causal-comparative, and correlational designs. SPSS was used to present the descriptive statistics that described the sample characteristics and analyze group differences (MANOVA) and correlations (Spearman rho). **Results**: For the overall samples of 1,445 students, the APIs had average GPAs of more than 3.0 and were 90% in good academic standing. However, the credit hours earned were short of the targets of 120 credit hours in the Fall 2020 and Fall 2021. There were significant differences for academic outcomes, as well as retention and graduation rates, based on regions and ancestral countries of origin, but not for residency status. The 4-year graduation rate for the API students in the urban public AANAPISI in Southeast Texas was 44.2% compared with 33.3% (the national average). The 5-year graduation rate was 64.8%. For the 531 first-generation API students, only their mother's (not their father's) education correlated with academic standing status, although it was very weak. Interestingly, the less educated the mother had been, the higher the child's academic standing was. Similar to the overall sample, there were also significant differences for the first-generation API students' academic outcomes based on regions and ancestral countries of origin, but not for residency status. There was no correlation between parents' level of income and credit hours earned by the first-generation API students.

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Chapter I

Introduction

There are more than 22.6 million Asian and Pacific Islanders (APIs) in the United

States, and this group is the fastest-growing minority group in the country. Most of the

members of these two populations are foreign-born (66%), and upon their arrival to the

United States, they fall into one of the three following three classifications: refugees,

legal immigrants, or asylum seekers (Asian Pacific Institute on Gender-Based Violence,

2015). As shown in Table 1, the number of foreign-born APIs is slightly more than the

U.S.-born APIs, although the growth rate of U.S.-born is higher than that for foreign-born

APIs.

Table 1

U.S. Asian American and Pacific Islander Population, 2010 to 2017

Population	2010	2017	Growth rate (%) 2010–2017
AAPIs	17,983,511	22,613,591	25.7
Foreign-born	10,348,915	12,735,690	23.1
U.S.-born	7,634,596	9,877,901	29.4
Hispanic	50,729,570	58,837,861	16.0
U.S. overall	309,349,689	325,719,178	5.3

Note. Data from 2010 and 2017 American Community Survey, U.S. Census Bureau.

AAPI, Asian Americans and Pacific Islanders.

Some may consider members of the API population to be a monolith. However,

there is considerable diversity in the API population. The 2019 U.S. Census Bureau

recorded the presence of 24 identified Asian American ethnic groups, which make up

6.8% of the total population of the United States of America. The most populous Asian

group was Chinese (excluding Taiwanese) totaling 5.2 million. The remaining

populations are Asian Indians, standing at 4.6 million; Filipinos, totaling 4.2 million; and the Vietnamese, who add up to 2.2 million. Additionally, Koreans account for 1.9 million, and the Japanese are estimated to total 1.5 million. Further down the list in descending order are Pakistani, Thai, Cambodian, Hmong, Laotian, and Bangladeshi groups. Meanwhile, there are more than 1.4 million Native Hawaiian and other Pacific Islanders (NHPIs). Of the total United States population, these NHPIs make up just 0.5%, and they also comprise those containing partial Pacific Islander ancestry with 11 identified NHPI ethnic groups (U.S. Census Bureau, 2019). The Native Hawaiians are the most populous ethnic subgroups of Pacific Islanders. The rest, starting from the second most populous to the least populous are Samoans, Guamanians (also called "Chamorros"), Fijians, Palauans, and Tongans.

The API population is diverse, having people from at least 48 ethnic groups who speak no less than 300 languages, who are from different socioeconomic status, cultures, and religions and have different immigration histories in the United States (Asian American, Native American, Pacific Islander–Serving Institution [AANAPISI], 2020). Therefore, since the API population is so diverse, research using disaggregated data provides a deeper understanding of the API students' educational needs. Since many view Asian Americans as American education's success story, it is significant to determine if that is the case for all students or if that is a myth for many students.

Model Minority Myth

Many views Asian Americans as the success story of education in America, where they are expected to perform well in college and attain higher degrees. As a group, Asians tend to earn higher incomes than the general population (Ramakrishnan &

Ahmad, 2014). Given these educational and economic successes, Asian Americans are more times than not to be stereotyped as a model minority (Kao, 1995), where the myths are that Asian Americans are doing great and are high achievers. This stereotype can result in Asian Americans who underachieve not receiving any services for academic resources, mental health resources, and outreach services (AAPI Data, 2011).

As a whole, Asian Americans possess the highest levels of educational achievement. However, these levels vary by the ethnic subgroup of Asians (AAPI Data, 2011). As an example, the East and South Asian students have higher scores in some subject areas in school; meanwhile, the Southeast Asian and Pacific Islander students, who often underperform, have vastly different results. This underachievement of API students is overlooked in higher education due to this model minority myth (MMM), or stereotype. The homogenous assumptions may prevent these underprivileged and underrepresented API students within this population from getting the help they need.

Understanding the educational achievement and attainment of different Asian and Pacific Islander groups requires investigating the differences between groups' academic performance. The differences will be examined by residency status (U.S.-born, foreign-born [naturalized citizens, permanent residents, undocumented individuals], and international students), from five regions of Asia and the Pacific Islands and from the ancestral countries of origin.

Problem of Practice

Due to the model minority myth (MMM), the problems and needs of the underrepresented and underachieving API students are overlooked in higher education. Kao et al. (2014) suggested that these students need to be understood within the diversity

in the educational system and the occupational attainment of the API population. Most previous research ignores the heterogeneity of the API population, and it may prevent the underrepresented and underprivileged students within this population, such as those from families from a low-socioeconomic level or of first-generation status, from seeking the help they need.

If faculty and administrators know the different needs of API students and understand the complexity of these students' needs, then they may begin to differentiate what they do in and outside classes to help API students and how the institution can support them.

Impact of Study

The aggregate data on the API population show that APIs have exceptionally high educational attainment and economic success (Museus & Buenavista, 2016) and that how the policies are based on. However, some API subgroups encounter significant challenges and obstacles regarding access and success in their academic journey, and the model minority myth masking the issues and struggles. Therefore, research using disaggregated data could provide a deeper understanding of the students' educational needs. Such research, besides helping to distinguish issues of API academic performance from those of other minority students and allowing schools to take results-driven action, could lead to a change in the quality of education for underperforming API students and eliminate any inequalities and disadvantages faced by APIs in the AANAPISIs. Furthermore, this research also seeks to create changes in policy, laws, supports, and resources for the API population. To serve the API population effectively, education policy should consider different populations among API subgroups.

This study addresses the diversity of the API population and examines in detail the impact that race and ethnicity have on APIs living in the United States in terms of educational attainment based on residency status (i.e., U.S.-born, foreign-born, and international) and the countries, territories, and regions of their ancestral origins. It examines whether parents' educational achievement has an impact on the students' academic outcomes and whether parents' income level is related to the number of credit hours earned by the students.

National Context

There are four types of minority-serving educational institutions, each one directed toward specific racial or ethnic minority populations. In 2016-2017 (IES NCES, 2016), there were 113 AANAPISI (Asian American and Native American Pacific Islander-serving institutions), 102 historically black colleges and universities (HBCUs), 35 universities and colleges controlled by tribes, and 290 Hispanic-serving institutions (HSIs).

The federal government appreciates the fact that institutions that serve Asian and Pacific Islanders are unique. The first AANAPISI was established in 2007 as part of the College Cost Reduction and Access Act of 2007. As the number grew, they were then incorporated into Title III of the Higher Education Act in 2008 alongside the other minority-serving institutions (HBCUs, HSIs, and tribal colleges and universities [TCUs]) (Teranishi et al., 2019). The AANAPISI program ensured that these institutions had the leeway to improve the quality of their education, strengthen their capacity, and increase their self-sufficiency. The endgame of this national law was to give the API students the best chance of success.

Seventy four-year institutions and 43 two-year institutions make up the 113

AANAPISIs. For an institution to be admitted to the AANAPISIs program, the eligibility

requirements include, among other specific requirements, that API enrollment is no less

than 10% of overall enrollment. Once an institution receives the designation status, it

then receives the authority to apply for federal funding. The use of such federal funding,

among other non-specific uses, includes improving their academic quality, strengthening

their capacity to serve AANAPI students, and increasing self-sufficiency, all backed by

the College Cost Reduction and Access Act of 2007 (NCES, 2016). These funds are

given annually for five years through the Higher Education Act (Teranishi et al., 2019).

Figure 1

Fall 2016 API Enrollment at all U.S. Colleges and Universities at AANAPISIs
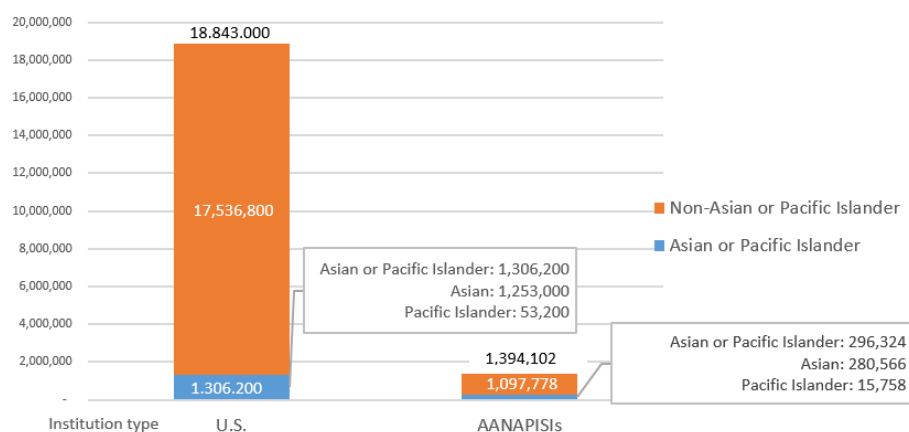
Note. Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2017

Fall Enrollment component in Asian and Pacific Islander-serving institutions
https://nces.ed.gov/programs/digest/d17/tables/dt17_306.10.asp?referer=raceindicators

In the fall of 2016, approximately 1.4 million students were enrolled in an

AANAPISI. Their specific composition included 8,100 Pacific Islanders and 277,400

Asian students. Of the whole Asian student population, 22% of Asian students enrolled at

AANAPISIs, and 15% of Pacific Islanders enrolled at AANAPISI (NCES, 2016). Furthermore, of the 235,700 degrees awarded by AANAPISIs, 20% went to API students in the academic year 2015–16. Of the aggregate sum of degrees received by API students from all institutions, 19% were awarded to API students by AANAPISIs. Of the degrees awarded by the AANAPISIs, bachelor's degrees accounted for 54%. There are AANAPISIs in 15 states mostly in the western part of the United States, with 63 institutions, mostly in California with 52 institutions. In the Northeast, there are 24 institutions in six states, mostly in New York with 12 institutions. In Texas, there are six AANAPISIs.

Figure 2

Degrees Awarded to API Students by the Degree Level and Institution in the 2015–16 Academic Year
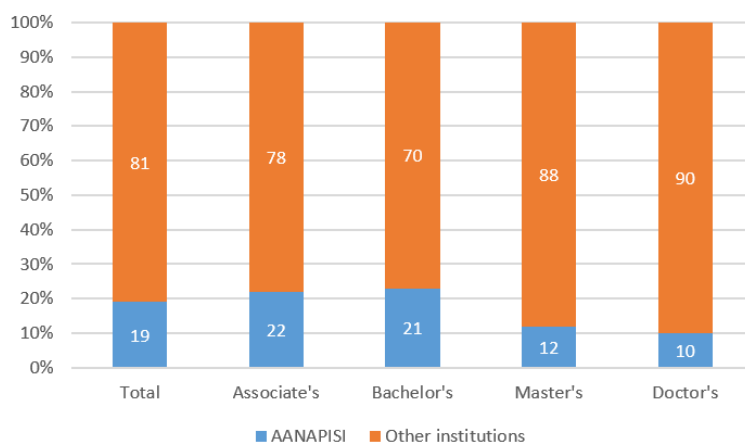
Note. Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2016.

Completions component.

The State of Texas Context

Texas has one of the highest API populations in the United States, after California, New York, and Hawaii. In 2020, the total API population was 1,590,082, a

number representing 137% population growth since 2000. Asian Indians were the most populous API ethnic group (474,699), followed by the Vietnamese (295,255). Further down the list were the 254,379 Chinese, 204,192 Filipinos, 106,878 Koreans, and 71,757 Pakistanis (AAPI Data, 2020).

The *60x30TX*, a student-centered strategic plan, was launched in 2015 to position Texas among the highest achieving states in the U.S. and to maintain global competitiveness. The goal was to ensure 60% of adults ages 24 to 34 years of age hold postsecondary degrees by 2030. That means that under the *60x30TX* plan at least 550,000 students will have completed a certificate, associate, bachelor, or master's degree from a Texas institution.

How many API student populations in Texas graduated from college? According to Texas Higher Education Coordinating Board (2015), Texas has benefited from importing college-educated residents. Of the adults in Texas between 25 and 34 years of age, approximately 42% are holders of an associate degree or higher. It is important to note that the Asians in Texas are the most educated foreigners with having at least a bachelor's degree. With an ever-deepening global economy, this educational attainment plays a considerable role. However, still 12% of Asian Americans in Texas in the 25 and 34 years of age have less than a high school education (AAJC, 2017), and they are usually Hmong, Cambodian, Laotian, and Vietnamese Americans. These are the groups with the lowest education levels among Asian American ethnic groups. Furthermore, Fijian, Marshallese, and Tongan Americans are among the Pacific Island groups less likely to hold a high school diploma.

In Texas, the six AANAPISI institutions include four two-year institutions and two four-year institutions. The two-year institutions are Brookhaven College, North Lake College, Richland College—all in northeast Texas—and Wharton County Junior College—in southeast Texas. The four-year institutions are the University of Houston and the University of Texas MD Anderson Cancer Center, both in Houston. The focus of this study is the four-year public institution (not the medical school in Fall 2016).

The Regional Context

Houston, the largest city in Texas, is the fourth largest city in the United States. The county seat of Harris County, Houston is an international city that thrives in and is synonymous with diversity. The largest population of immigrants from Asia in Texas resides in the greater Houston area. The city had 290,405 members of the API population in 2018, representing more than a fifth (22.2%) of Texas's API total population of nearly 1.6 million.

Figure 3

Distribution of Greater Houston's API Population by County
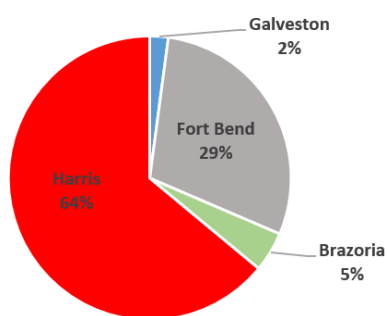
Note. Source: US Census Bureau, Selected Population Profile, 2018

https://data.census.gov/

Brazoria, Galveston, Fort Bend, and Harris County (containing and surrounding the City of Houston), which are all part of the Greater Houston area, host as many as

35.3% of API groups in the total of the State of Texas population. Higher proportions of API groups live in Harris County (64%), followed by Fort Bend County (29%), Brazoria County (5%), and Galveston County (2%).

In 2015, 80% of the API population in the Greater Houston area under 18 years of age were native-born, while only 14% of the API population 18 years and older were native-born. Of the foreign-born API living in the four counties of Brazoria, Fort Bend, Galveston, and Harris, 61% are naturalized citizens, and the rest are non-U.S. citizens. The high API population has shaped and will continue to shape the Greater Houston area's cultural and political landscape (U.S. Census Bureau, 2015). Figure 4 shows the percentages of the Asian subpopulations in the Greater Houston area.

Figure 4

Population by Asian Ancestry in Four Greater Houston Area Counties
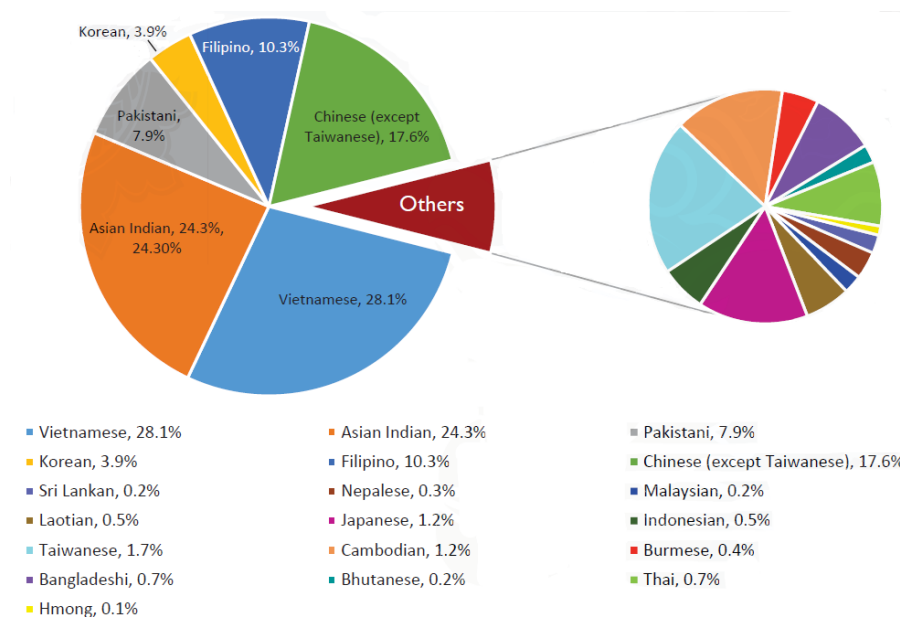
Notes. Source: 2009-2013 American Community Survey 5-Year Estimate

The Kinder Institute of Rice University (Klineberg & Wu, 2013) provided survey-based reports in the *Diversity and Transformation Among Asians in Houston: Findings*

from the Kinder Institute's Houston Area Asian Survey (1995, 2002, 2011), on the differences of the Asian experience. These differences are found in the attitudes, beliefs, and life circumstances among the largest Asian communities in the area. These communities are Taiwanese and Chinese, Filipino, Vietnamese, and Indian/Pakistani.

In the 2011 survey, first-generation immigrants made up 70% of all the Asian adult participants in Harris County. These included 37% who immigrated to Houston directly from abroad and 51% who grew up outside the United States. Approximately 89% reported the birthplaces of both of their parents were outside the United States (Klineberg & Wu, 2013). Furthermore, most Asian groups of immigrants in Houston reported high levels of educational credentials, with 59% having a college or postgraduate degree and professional skills. Forty-five percent reported working in managerial or professional posts, whereas 48% were in one of the services, technical, or sales industries. The survey reported only 7% of the Asian immigrants were working in low-skilled occupations.

Asians have been relatively successful in Houston and the United States in general. The success is primarily because, in their native countries, they are from families known for their high occupational and educational attainments, as reported by Klineberg & Wu (2013). In answer to a question in the 1995 and 2002 surveys inquiring about the occupation of the father of the respondents when they (the respondents) were age 16, 39% said their fathers were professionals, such as corporate executives, doctors, engineers, lawyers, professors, or other professionals. Only 22% of the respondents said their fathers had worked as agricultural or day laborers or in any low-paying production jobs.

Figure 5

Education Attainment by Race from the 2002–2012 Rice University Surveys
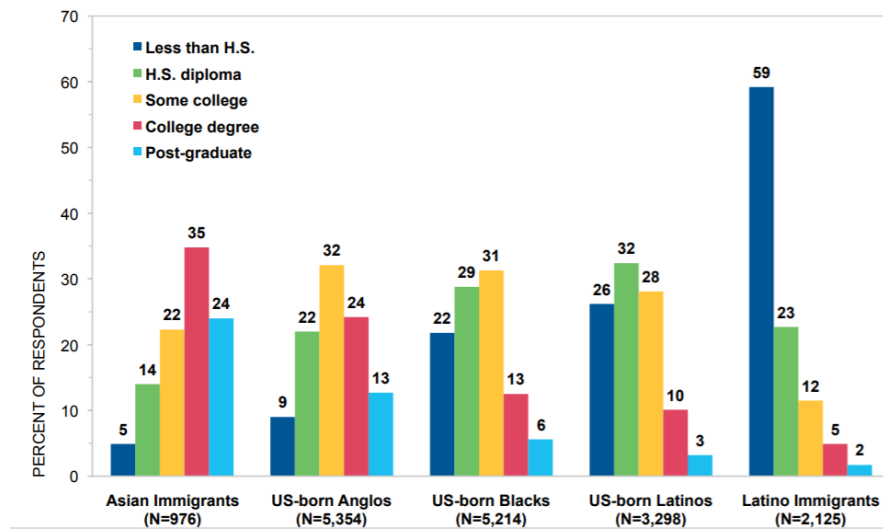
Note. Reprinted with permission. *Diversity and Transformation Among Asians in Houston: Findings from the Kinder Institute's Houston Area Asian Survey (1995, 2002, 2011),* edited by Stephen Klineberg and Jie Wu, 2013, Kinder Institute for Urban Research, Rice University.

The model minority myth, in contrast, explains the educational and occupational attainments success of Asians, while simultaneously diverting attention from continuing discrimination. The professionals from China, India, and the Philippines were all lumped together in a single stereotype. The myth also stereotypes the lower levels of education and income of refugees from Southeast Asia who also had problems with English fluency. These underachieving Asians had a low chance of obtaining the required assistance because of the MMM and were believed to be doing fine.

In the 1995 survey, approximately 10% of Asian adults (who were at least 18 years of age) in Harris County were born in the United States of America. The U.S.-born

Asian population grew from 15% in 2002 to 31% in 2011. These second-generation U.S.-born Asians have a higher likelihood of possessing a degree and earning higher incomes, impacting the Houston region's economy.

Importance of Disaggregating API Data

According to Museus & Buenavista (2016), the aggregate data on the API population show that APIs have exceptionally high educational attainment and economic success. In reality, however, some API subgroups encounter significant challenges and obstacles regarding access and success in their academic journey. They end up struggling with poverty and a lack of English proficiency. With high employment and incomes of more populous Asian American subpopulations masking these issues and struggles, research using disaggregated data does provide a deeper understanding of the students' educational needs.

In 2013, the National Commission on Asian American and Pacific Islander Research in Education (CARE) and the White House Initiative on Asian Americans and Pacific Islanders started a data quality campaign called "iCount" (1) to increase awareness of disparities across AA and NHPI subgroups, (2) to provide models for collecting and then reporting data that is disaggregated; and (3) to work collaboratively within the education field toward the implementation of practices to collect and report disaggregated data (CARE, 2013).

Disaggregated data on AA subgroups supports the fact that institutional change is possible when it is possible to improve data systems that heavily impact educational policy. As of December 2018, five states have passed legislation to disaggregate data on Asian Americans and NHPIs, including California, Hawaii, Minnesota, Rhode Island,

and Washington. Advocates have celebrated and praised the bills as a step toward more nuanced data and greater knowledge to serve AA communities.

Variables for the research

The key variables chosen for the research are listed and explained below:

Independent Variables

Racial/Ethnicity—Race and ethnicity of the students who identify themselves as Asian, Pacific Islander, or a multi-combination of Asian and other races/ethnicities at an urban public AANAPISI in Southeast Texas.

Gender—This variable is constructed by the sex of the student, male and female.

Age—The age is counted as of September 1 in Fall 2016.

Residency status—There are three types of residency status:

- U.S.-born API students – These are native-born API students.

- Foreign-born API students – These are naturalized citizens, permanent residents, and undocumented API students.

- International API students – These are the international API students not born within the United States.

Birth/citizenship country—Birth country and citizenship country of API students from the United States and the five regions of Asia and the Pacific Islands.

Applicant status—Applicant status includes identification of the first-year undergraduate students who have transferred into the student body and first-time in college (FTIC) students. An FTIC label refers to the status of a student who attended a college at the undergraduate level for the foremost time in the fall semester and previous summer term.

Academic level classification—A student's academic level classification refers to a student's undergraduate academic level. The credit hours completed determines the classification. Specifically, they are freshmen (0–29 credit hours), sophomores (30–59 credit hours), junior (60–89 credit hours), and senior (90+ credit hours).

Parents' educational achievement—This includes first-generation college students whose parents do not possess a degree and who thus will be the first ones in their family to obtain a bachelor's degree.

Family level of income—Income is measured by family annual income. The level of annual income was coded into eight subsets: (a) less than $20,000, $20,000–$39,999, (2) $40,000–$59,999 (3), $60,000–$79,999 (4), $80,000–$99,999 (5), $100,000–$149,999 (6), $150,000–$199,999 (7), more than $200,000 (8). Family annual income is an indicator of the financial resources that parents can provide to support children's success in an academic field.

First-generation status—A first-generation college student is one whose parents have not completed a degree and who, if graduating, will be the first in the family to obtain a bachelor's degree.

Dependent Variables

Cumulative GPA—The overall GPA is referred to as the "cumulative" GPA. It is the measure used to summarize academic achievement.

Credit hours completed—A typical course load of 15 credit hours earned each semester or at least 30 credit hours per year is expected to keep a student on track for graduation in four years.

Academic standing—Academic standing describes the status of academic performance and includes the terms *good standing,* and not in good standing, such as *academic suspension, academic probation,* and *academic warning.*

Definition of terms and abbreviations

API – Asian and Pacific Islanders, AAPI – Asian American Pacific Islanders, or APIA – Asian and Pacific Islander American.

AANAAPISI – Asian American and Native American Pacific Islander Serving Institutions

Asian – A person whose ancestral country of origin is from East Asia, Southeast Asia, or South Asia including, for example, Japan, Vietnam, Cambodia, Thailand, China, the Philippine Islands, Indonesia, Malaysia, India, Pakistan, and Korea.

Native Hawaiian and Other Pacific Islander (NHPI) – A person whose ancestral country of origin is from Samoa, Hawaii, Tonga, Guam, or other Pacific Islands. (OMB 1978).

Chapter II

Literature Review

The U.S. higher education sector serves diverse populations that include American Indian/Alaskan Native, Hispanic, White, Black or African American, Asian, and Native Hawaiian and Pacific Islander students. This study is focused on the Asian Pacific Islanders (APIs) who are studying in one type of Minority Serving Institutions (MSIs), specifically, students enrolled in AANAPISIs (American Council of Education, 2020).

One of the major issues that underpin Asian students' lives in the United States is the Model Minority Myth (MMM). The MMM suggests that Asian Americans are a homogeneous group and achieve high levels of academic, social, and economic success, in which Asian Americans are doing great and are high achievers. This stereotype can result in Asian Americans who underachieve not receiving any services for academic resources, mental health resources, and outreach services (Asian and Pacific Islander American Vote, 2011).

While Asian Americans generally possess the highest educational achievement levels, these levels vary by the ethnic subgroups of Asians. This study focuses on the academic performance differences of the three residency subgroups: the U.S.-born (or native-born), foreign-born (naturalized citizens, permanent residents, and undocumented individuals), and international undergraduate API students. A comparison is also made on the performance of the APIs by regions of Asia and the Pacific Islands, along with the role of AANAPISIs in these issues. For an effective comparison of performance to occur, it is first important to know the ancestral origin of these students. Understanding their ancestral origin will, later on, help put the difference in their performance into context. It

will be important to decipher whether, apart from the three subgroups, the regions they

originate from play a role in the students' performance during their undergraduate.

Consequently, the main purpose of understanding the theoretical framework of the study

is to focus on the five regions of Asia and the Pacific Islands, their cultural

demographics, and other relevant characteristics, such as languages. These five regions

are South Asia, East Asia, West Asia (the Middle East), Southeast Asia, and Central

Asia. The focus will also include students who identify as Pacific Islanders.

The next section reviews this study's theoretical framework. Since many views

Asian Americans as American education's success story, it is important to determine if

that is the case for all students or if that common understanding is a myth. An

examination of model minority myth through the lens of Asian Critical Race Theory

(CRT), the culturally engaging campus environments (CECE) model, and the identity

development model follow.

Theoretical Framework

Getting a deeper understanding of the minority myth is possible through three

theories: Asian CRT, the CECE model, and the identity development model.

Asian Critical Race Theory

CRT is an important theory in the analysis of APIs. It is a social science construct

that focuses on categorizing and grouping members of a society based on race, law, or

power, among many other specific categorizations (Liu, 2009). CRT, in its current form,

was developed by many scholars, including Richard Delgado, Derrick Bell, and Alan

Freeman in the mid-1970s. Later, CRT scholars such as Mari Matsuda, Kimberlé

Crenshaw, and Patricia Williams emphasized the need to find a way for diverse

individuals to share their experiences (Purdue OWL, 2020). In its most basic sense, CRT

calls for setting up an egalitarian society. Such is a society that is fair, just, and

objectively identifies issues that affect society and tries to deal with them. CRT,

therefore, advocates against the use of race to maintain power.

Asian CRT is an apt adaptation of the CRT. Asian CRT acknowledges and

upholds the intersection of race and ethnicity and the role it plays in the issues and

challenges encountered by API students in colleges. While the API population includes

diverse ethnic groups, according to the Asian CRT framework, society racializes Asian

Americans as a monolithic group (Iftikar & Museus, 2018).

Teranishi (2002) suggested that Asian CRT gives focus and priority to challenges

Asians face and tries to resolve them. The minority myth especially extenuates the

importance of this theory. The most common perception of Asian students studying in the

United States is that they are all performing exceptionally well in school. For this reason,

they have faced exclusion from the racial discourse that affects educational matters

because there is a false belief that they are okay, and there is no need to focus on their

issues. This event explicitly demonstrates the minority myth that the Asian CRT is trying

to address. Another minority myth theory from Asian CRT is that almost all API students

attend highly selective institutions (Blackburn, 2020). The reality, however, is that 47%

of API students attend community colleges (Maramba, 2017).

Cultural Engaging Campus Environments (CECE) model

The CECE model was developed to address racial and ethnic issues facing

students in higher education. According to Museus and Smith (2016), higher education

institutions have increased their focus on retaining culturally diverse students and making

them thrive during their college education. Despite the massive investment and the many measures taken to improve success rates in higher education, the completion rates still differ, especially along racial and ethnic lines. Also, the students' cultural diversity depends on the countries they grew up in and how they compare to others who grew up in the culture and diversity present in U.S. colleges and universities. The CECE model was then born out of the need to bridge the gap between students' nurturing environments and the campus environment and make the campus environment more inclusive. Specifically, the CECE model envisions a university with an environment that allows a diverse student population to thrive. In cases where the campus environment is not culturally engaging, it provides a framework that can be used to create a campus environment that would lead to greater equity among the students. Among the minority student populations whose success is affected by the campus environment is that of APIs. The effects on the API subgroups may differ; nevertheless, the CECE model helps in identifying and correcting any variances that may exist.

Identity Development Model

The identity development model is a model that is also relevant to the plight of the APIs, especially with regard to the model minority myth. According to Hill (2017), the identity development model refers to the struggles of individuals as APIs try to develop and negotiate their personal identity rather than accept an identity that has been given to them by someone else. The model mainly examines societal categorization and how an individual views that categorization or grouping. Thus, the identity development model attempts to answer who an individual is in terms of race, ethnicity, class, social

standing, and any other categorizations that may be inherent in society. The model is relevant to the model minority myth facing Asians.

The perception is that the identity of all Asians is the same. Consequently, they are all lumped together in one group, and individuals are singularly viewed from only one perspective. In contrast, the reality is that the U.S. API population is heterogeneous. An excellent example of the relevance of the identity development theory in higher education is that Chinese people and Vietnamese people may be lumped into one group, simply because they are Asians. However, their language and culture are different, which may contribute to their academic performance. The identity development theory advocates for handling these two groups as different and for focusing on how to help them optimize their academic performance. Accepting the minority myth, therefore, means failing to appreciate the fact that many Asian subgroups exist, including Filipinos, Vietnamese, Chinese, Japanese, Asian Indians, Koreans, and other Asians, and the experiences faced in life by these different Asian subgroups differ.

The differences in the performance of different Asian subgroups with the performance of non-Asian students reinforce the minority myth and support Asian CRT, which advocates for the delineation of these subgroups and separately dealing with the issues that face them. The subgroups can be placed into two major categories, (a) the differences exhibited by three residency subgroups, which are the U.S.-born (or native-born), foreign-born (naturalized citizens, permanent residents, and undocumented individuals), and international undergraduate API students born outside the United States, and (b) the differences based on the five regions of Asia and the Pacific Islands and

ancestral countries of origin. These two major categories of Asian subgroups will be discussed sequentially below.

APIs in the United States

According to AANAPISI (2020), the API population is a heterogeneous group, thus distinguishing it from any other racial group in the United States, largely due to its demographic characteristics. Specifically, the API population contains not less than 48 ethnic groups, within which more than 300 languages are spoken. This heterogeneity is a representation of different cultures, religions, socioeconomic classes, and immigration histories.

This section is divided into two sections: 1) the three residency subgroups (U.S.-born, foreign-born, and international undergraduate API students), and 2) the cultural, language, and educational attainment from five regions of Asia and the Pacific Islander group. First, the three residency subgroups.

The Three Subgroups by Residency Status

According to Pew Research Center (2017), the Asian populations in the United States can be divided into two groups: descendants of immigrants (41%) or immigrants from Asia (59%). The U.S. API students fall into three categories or subgroups: U.S.-born, foreign-born, and international students.

U.S.-born APIs

The U.S.-born (or native-born) APIs are students who have parents or grandparents who may be naturalized residents, permanent residents, or foreigners within the country for a short period, which includes the birth. Approximately 83% of the Asian American population's ancestral lineage is from Vietnam, the Philippines, China, Japan,

India, and Korea, groups who have been in the United States for generations. Of these six groups, the Chinese are the most populous and the Japanese are the least (Pew Research Center, 2017).

Second-generation Asians have distinct differences from first-generation Asians in certain areas. First, one distinct difference is in educational performance. The second generation of Asian immigrants has better academic performance than first-generation immigrants. Second, first-generation immigrants were not fluent in the English language. In contrast, second-generation Asian immigrants are often bilingual, possessing the ability to speak both English and their parents' language proficiently. However, with time, these second-generation immigrants had an increased likelihood of losing proficiency in their parents' native language. Despite this loss of proficiency, they still develop their unique identity by ensuring that they maintain an emotional attachment to their heritage and family (Zhou & Xiong, 2005).

The high educational success exhibited by the second-generation Asian immigrants is primarily attributed to their focus on success in addition to the common Asian cultural value of family honor. Therefore, it is not a surprise that second-generation Asian Americans have a higher college graduation rate than the first-generation. Second-generation Indian and Chinese immigrants exhibit the two highest college graduation rates among Asians (Zhou & Xiong, 2005).

The Chinese and Indian scenario above was also seen in the Vietnamese and Japanese subgroups. U.S.-born Vietnamese and Japanese subgroups had higher college attainment rates than did the same subgroup members born outside the United States. An excellent example is the Vietnamese subgroup, in which 57% of the second generation

attained a degree whereas 39% of first-generation Vietnamese immigrants did (Pew Research Center, 2017). Also, Hmong and Japanese Americans are the Asian American subgroups with the highest native-born numbers at 35% and 42%, respectively (Asian Americans Advancing Justice [AAJC], 2019).

Foreign-born Individuals

Most Asian Americans are foreign-born, the top five countries of origin being India, China, the Philippines, Vietnam, and Korea. These foreign-born groups include naturalized citizens, permanent residents, and undocumented individuals. Permanent residents can go through the naturalization process to become U.S. citizens. The other category is undocumented Asians. Within this undocumented category are some who came to the United States as children, entering the country with undocumented immigrant parents. These individuals are eligible for a deportation deferral and work authorization under the Deferred Action for Childhood Arrivals immigration policy.

There has been a constant change in the demographic characteristics of Asian immigrants and their motivation for immigrating. The differences are observed based on the country of origin. Some of the most common reasons for these Asians to immigrate include family reunification, employment, investment opportunities, study and education, and humanitarian protection as refugees. The last reason—immigrating as refugees—is common among the Bhutanese, whereby approximately 92% of them are foreign-born and first-generation. Apart from the Bhutanese, the other APIs with the highest percentage of first-generation immigrants are the Nepalese (88%), Burmese (85%), Malaysians (82%), and Sri Lankans (78%). On the other end of the spectrum are those with the lowest share of first-generation immigrant Asians, the Japanese (27%), and the

Hmong (39%). As for citizenship, 58% of the foreign-born Asian American adults in the United States became naturalized citizens (AAJC, 2019).

Immigration plays a significant role in the educational achievement patterns exhibited by some ethnic groups. For example, the highest performing Asian American ethnic groups are the Asian Indians, Filipinos, Japanese, Koreans, and Chinese. Some of the lowest-performing Asian American ethnic groups are Southeast Asians— the Hmong, Cambodians, and Vietnamese. The rationale behind their poor performance is that they are from low-income families. Coming from a low income increases the likelihood of their being the first to attend college in their family. Since they are first-generation immigrants, they have to split their concentration between their studies and supporting themselves financially. Since they are grouped with other Asian Americans, especially the high-performing groups mentioned, they are thus overshadowed and given no differential treatment. In general, their low-income status subjects them to such serious challenges as language acquisition difficulties, occupational barriers, and poverty. All these eventually culminate in higher educational barriers and low graduation rates from high school and college. Due to their low-income status, these Southeast Asians attend low-performing colleges. All the above issues and challenges make them highly unprepared for college work, thus they need basic skills taught in classes such as remedial English.

The American Community Survey (2010) has a compilation of APIs' college attendance and degree attainment rates. Among the Pacific Islanders, 58% of Samoans, 54% of Tongans, 50% of Native Hawaiians, and 47% of Guamanians attended college but left without earning a degree. Among Southeast Asian adults 25 years or older, 48%

of the Hmong, 47% of Laotians, 43% of Cambodians, and 34% of Vietnamese reported not having earned a degree despite attending college.

The Asian overall population living in poverty in 2015 was 12.1%, which was lower than the general U.S population in poverty (15.1%). The situation is, however, different within the Asian subgroups since some have a high poverty rate. Specifically, of the 19 Asian subgroups, eight had a poverty rate higher than the 15.1% U.S. average poverty rate. The highest poverty rates among the Asian subgroups belonged to the Burmese (35%), Bhutanese (33.3%), Hmong (28.3%), Cambodians (25%), and Bangladeshi (20%). The Japanese, Indians, and Filipinos exhibited the lowest poverty rates at 8.4%, 7.5%, and 7.5%, respectively.

International Students

In the academic 2018-2019 year, 369,548 Chinese students and 202,014 Asian Indian students were studying in the United States, together representing the majority of international students (Erin Duffin, Nov 19, 2019, Statista). Figure 5 displays the international students' enrollment in U.S. schools by country of origin during the academic year 2018–2019.

The international undergraduate students use an F-1 student visa to study in an accredited U.S. college or university. The visa is viable for the duration of their study. One of the requirements for international students is to be able to finance their studies. International students can find scholarships and grants for study and research from any organization, such as private foundations, businesses, and non-profits. To be accepted at U.S. universities and colleges, the students must take the Test of English as a Foreign Language) and other required standardized tests.

Figure 6

Number of International API Students Studying in the US by Regions of Asia and the Pacific Islands, 2016-2017

Note. Data from 2016-2017 Open Doors, All Places of Origin.
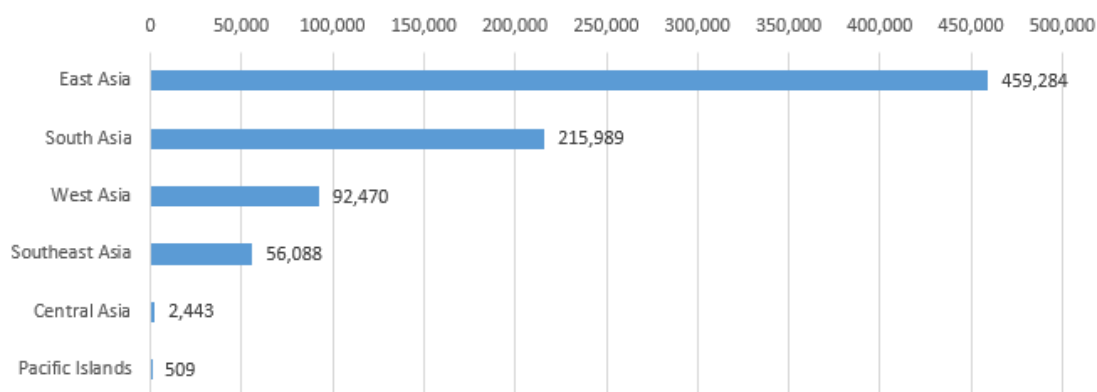
https://opendoorsdata.org/data/international-students/all-places-of-origin/

Figure 7

Number of International API Students Studying in the US by Country of Origin, 2016-2017

Note. Data from 2016-2017 Open Doors, All Places of Origin.
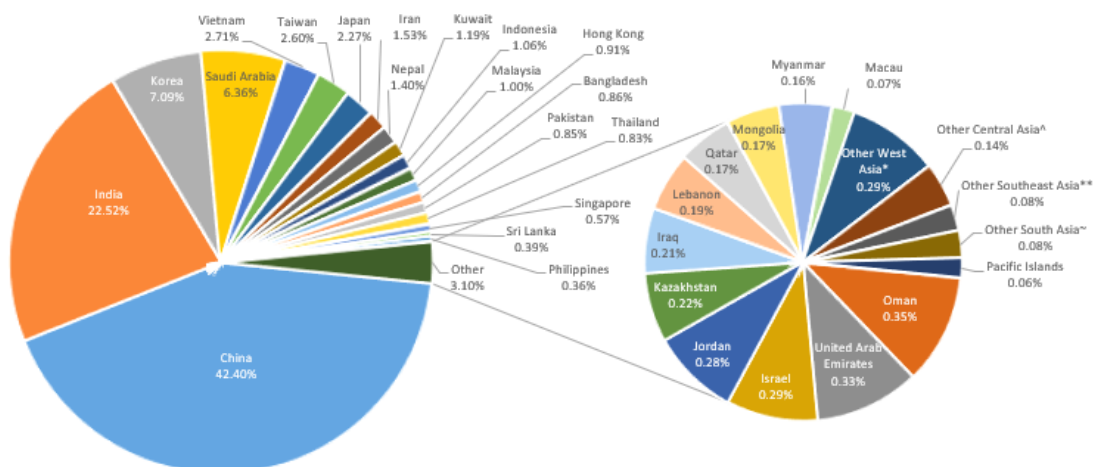
https://opendoorsdata.org/data/international-students/all-places-of-origin/

To maintain their F-1 status, the international undergraduate students must be

enrolled full-time repeatedly (at least 12 credit hours per fall or spring semester) in the

course of the academic year until the completion of their programs of study. If an undergraduate student holding an F-1 visa is academically dismissed through suspension during or after the semester and not able to enroll for classes, the Office of International Students will terminate the status permitting enrollment. The student will be considered as "Out of Status" and must leave the United States. immediately or transfer to another school by securing admission as soon as possible.

International Asian students face barriers in the form of cultural differences because the American values, perceptions, and beliefs surrounding them in school must be understood. However, they work hard and earn the grades they get. There is usually a high percentage of Asian students on the honor roll. Because English is not their first language, writing is the one academic skill they usually struggle to master, primarily in English and history classes.

API Culture, Language, and Educational Attainment in the United States.

The APIs in the United States come from five main regions of Asia and the Pacific Islands. The five regions are East Asia, Southeast Asia, South Asia, Central Asia, and West Asia, which are discussed below along with homelands of the Pacific Islanders. In the U.S. Census data, a person originating from East, Southeast, or South Asia is called an Asian. However, this study will include students from Central and West Asia regions who identify themselves as Asian.

East Asia

East Asia comprises the following countries: Japan, North Korea, China, China-Macao, China–Hong Kong, Mongolia, South Korea, and Taiwan. China's culture, known as Sinosphere, influences most of the culture in these countries within the East Asian

sphere. The cultures from the Japanese and Korean cultures are on the periphery since their languages have absorbed large numbers of Chinese words. These words are collectively referred to as Sino-Xenic words of the Sino-Tibetan language family. A deeper look at Sino-Xenic vocabulary reveals that it contains Mandarin, which is spoken by 70% of the Chinese population. Also, it contains other varieties of the Chinese language, specifically the Altaic languages of northwestern China, Manchu, and Mongolia in northeastern China. Korean is spoken in North and South Korea, and Japanese and the Ryukyuan languages are spoken in Japan (Wikipedia, 2020).

Among all Americans, the top spot regarding educational attainment is occupied by Chinese Americans (AAPI data, 2017). Of all the Chinese and Korean Americans, approximately 50% possess a bachelor's degree. In 2016, 53.6% of immigrants from Korea 25 years and older had a bachelor's degree.

Southeast Asia

Overall, an 8.5% of the world's total population resides in Southeast Asia, making it one of the most populous areas in the world. The countries that makeup Southeast Asia are Myanmar, Vietnam, Philippines, Brunei Darussalam, Timor-Leste, Cambodia, Thailand, Indonesia, Singapore, Laos, and Malaysia. The region contains different ethnic groups speaking hundreds of languages, which qualifies it as being culturally and ethnically diverse (McGovern, 2017; Britannica, 2020). Language patterns in Southeast Asia are rooted in four major language families: the Austro-Asiatic (Cambodia, Laos, and Vietnam), Sino-Tibetan (spoken in Myanmar), Austronesian (Malayo-Polynesian), and Tai (Thailand and Laos). The languages of Malaysia, Indonesia, and the Philippines are

rooted in Austronesian and Polynesian languages. Many separate languages, as well as dialects, are also used in the Southeast Asia region.

Certain Southeast Asian American groups, such as the Laotian, Vietnamese, Hmong, and Cambodian populations, have educational attainment levels that are lower than the U.S. national average, similar to African Americans and Latinos (AAPI data, 2020). Of those Americans 25 years and older of Laotian, Hmong, Vietnamese, and Cambodian heritage, 29%–38% possess less than a high school diploma. In comparison, less than 9% of their East or South Asian American counterparts with Taiwanese, Indian, Japanese, and Korean ancestry have less than a high school diploma (Teranishi et al., 2013). Burmese Americans are also less likely than some Asian counterparts to have graduated from college, with only 24% of those 25 years or older have at least a bachelor's degree. In contrast, 41%–61% of Indonesian, Malaysian, and Filipino Americans have at least a bachelor's degree (Pew Research Center, 2017).

Additionally, approximately 37.8% of Hmong families live at or below the national poverty level, demonstrating the presence of the highest poverty rates among then Southeast Asian Americans.

South Asia

Just as is in the case in Southeast Asia, South Asia is also highly populated with about 25% of the world population. It is made up of eight countries. They are Afghanistan, Pakistan, India, Nepal, Bhutan, Bangladesh, Sri Lanka, and the Maldives. Another essential fact about South Asia is that it has great diversity (Claus, Diamond, & Mills, 2003). The diversity manifests itself in areas of religion, language, and ethnicity. Though the above countries are all in South Asia, they have different cultures, festivals,

and special events. For example, Bhutan's culture gives importance to showing respect to the king, whereas republic and independence days are celebrated across the whole of India.

Hindi is the most frequently spoken language in India, followed by Telugu, Marathi, Gujarati, and Punjabi. Nepali and Maithili are spoken in Nepal, and Sinhala and Tamil are spoken in Sri Lanka. Muslim community of northern states of India and Pakistan speaks Urdu. Dzongkha is a Sino-Tibetan language spoken in Bhutan.

Among those of Asian Indian descent, 80% of the adults had at least a bachelor's degree, making it the highest within the Asian subgroups. Meanwhile, only 9% of Bhutan Americans have at least a bachelor's degree. The Bhutanese also had the highest poverty rate (33.3%) among South Asian groups, followed by the Bangladeshi (nearly 20%).

Central Asia

Many people in this region consider themselves White. Central Asia consists of countries that were previously considered to be part of the territories of Russia or the Soviet Union. The Central Asia region is made up of five countries. They are Tajikistan, Kyrgyzstan, Uzbekistan, Turkmenistan, and Kazakhstan. It refers to the "stans" and is made up of five major ethnic groups. They are the Tajik, Kyrgyz, Uzbek, Turkmen, and Kazakh (Soliev, 2019). The languages spoken by most of these ethnic groups resemble the Turkic languages. People in Turkmenistan mostly speak Turkmen. The Kypchak group of Turkic languages incorporates the related languages of Kyrgyz and Kazakh, and they are mainly spoken in Kyrgyzstan and Kazakhstan. In Tajikistan, Kyrgyzstan, and Uzbekistan, the main languages spoken are Uyghur and Uzbek.

Regarding education attainment in the United States, there is not much information for this region. The information available is about the limited number of international students from this region. Of 530 Uzbekistan students studying in the United States, 50% were enrolled at the undergraduate level in 2015–2016; meanwhile, almost 52% of 1,792 Kazakhstani students studying in the United States were pursuing undergraduate studies in the 2016–2017 academic year. No information is available for Kyrgyzstan, Tajikistan, and Turkmenistan students studying in the United States. With limited information about this region, there is no information on the percentages of students who received a bachelor's degree.

For this study, only the students from this Central Asia region who identify themselves as "Asian" are included.

West Asia

West Asia, also known as the Middle East, consists of 19 countries. They are Oman, Israel, Qatar, Yemen, Armenia, Jordan, Iran, United Arab Emirates, Lebanon, Azerbaijan, Turkey, Kuwait, Bahrain, Syria, Cyprus, Palestine, Georgia, Saudi Arabia, and Iraq. Like other parts of Asia, the Middle East, which is how the U.S. Census Bureau classifies this region, is also highly diverse in regards to ethnicity, but most living there consider themselves White. Western Asia is mainly occupied by Turks, Persians, and Arabs, and the dominating spoken languages are Turkish, Persian, and Arabic, respectively.

Except for the Yemenis, virtually all immigrant-origin groups from West Asian–originating populations have a higher likelihood of being college-educated than the general foreign-born population. The proportion of college graduates was particularly

high among immigrants from the United Arab Emirates, having 83% of its adults recognized as college graduates. The corresponding percentages for Kuwait and Saudi Arabia stood at 56% each, whereas Libya's share was slightly higher at 60%. For Yemen, only 16% had a bachelor's degree or above (Cumoletti & Batalova, 2018).

Despite an Arab American's average income being higher than the national average by 27%, approximately 13.7% of Arab Americans lived below the poverty line in 2011 (Arab American Institute, 2011).

For the study, only the students from this region who identify themselves as Asian are included.

Pacific Islanders

Pacific Islanders are also known as Pasifika. These are the people known as Native Hawaiian and Pacific Islanders. The Pacific Islanders come from three significant subregions in Oceania. They are Melanesia, Micronesia, and Polynesia (Kiteau, 2020). Melanesia comprises the Solomon Islands, Papua New Guinea, Vanuatu, and Fiji. Polynesia includes Niue, Hawaii, Tuvalu, Samoa, the Cook Islands, and Tonga. Micronesia comprises the Marshall Islands, Nauru, Guam, Palau, Kiribati, and the Federated States of Micronesia.

In Melanesia, 1,319 languages of the Austronesian language family or one of the many Papuan language families are spoken. The twenty Micronesian languages form a family of Oceanic languages, and there are approximately forty Polynesian languages that include Hawaiian, Samoan, and Tongan. The Pacific Islanders are synonymous with following customs and traditions that promote noble and honorable lifestyles.

Many Pacific Islander groups have lower educational attainment levels than other Asians, 18% having completed college. This 18% is lower than the U.S. average and also not higher than the percentages for each Asian subgroup. The 47% of the NHPI population who enrolled in college in the 21st century face many challenges in maintaining persistence and attaining a degree. Unfortunately, 58% of the Samoans, 54% of Tongans, 50% of Native Hawaiians, and 47% of Guamanians or Chamorros start college but drop out, therefore not earning a degree (Dembicki, 2019). Poverty rates are also high among certain Pacific Islander groups.

How are the AANAPISIs meeting the API students' needs? It will be discussed in the next section.

Research Outcomes

Research on the API Students' Needs in the AANAPISIs

The AANAPISIs have been helpful to the API students in the United States. The issues faced by the APIs that were solved by the AANAPISI may be credited to the fact that most of these public institutions of higher learning were suited for the model of the traditional college student. The traditional college student had a high chance of easily plugging into and gaining access to the courses, professional development, social opportunities, and student access services. Apart from growing with the culture in which these outlets were designed, the traditional college student is also more familiar with higher education from listening to family members' academic history (Collier & Morgan, 2008). What then happens to non-traditional students? How would such students plug into these outlets with which they are not familiar? Whose academic histories will they need to listen to be acquainted with U.S. public college life and its modus operandi? All

these questions can be summarized into one question: what happens to the students who cannot plug into the traditional post-secondary outlets with ease?

APIs are part of these non-traditional students who are often overlooked or forced to navigate the academic path on their own. According to Nguyen et al. (2018), these non-traditional API students need to be incorporated into the new environment as they catch up with their studies. However, many of these institutions of higher education remain adherent to tradition, thus failing to address the challenges commonly faced by non-traditional students.

The lack of English proficiency is one of the issues facing foreign-born refugees, including APIs, in these institutions of higher learning. The APIs had, for a long time, posted transition rates to 4-year institutions of higher learning relatively lower than those of other Asians. Their failure to enter 4-year institutions stemmed from the fact that their English proficiency rates were not up to the required standards. Unfortunately, the content, teaching methods, and exams did not consider these differences but instead operated under the assumption that all the students had the same capabilities.

Apart from the English proficiency issues, another major issue is that even in cases in which their issues and academics of the APIs have been handled differently, colleges and universities default to seeing all Asians as the same. Thao Jacobson (2019) points out that, for example, when the issues faced by Asian Americans are considered, their academic performance is presented as one record without deviations across groups. Such generalization assumes that all Asian Americans are the same, and it fails to appreciate the heterogeneities that exist within the various groups. For example, the Southeast Asian subgroups' academic performance is typically lower than the academic

performance of the other Asian subgroups. Failing to perceive and treat Asian Americans as individuals and failing to recognize that Asian American groups differ from one another are consequential disservice to them.

All these issues, as enumerated, among many others, affect APIs in the United States. Specifically, these issues affect their academic performance; however, the effect has been different in the three residency status subgroups of APIs. Some interventions have already been staged to try and resolve these issues, particularly at the AANAPISIs.

Successful AANAPISIs' Interventions That Support the Needs of API Students

Based on the challenges faced by APIs, which adversely affect academic performance, minority-serving institutions have put some measures and interventions in place. These interventions are a response to the AANAPISI Title III program. According to Maramba (2017), the program targets institutions with API students. The AANAPISI Title III program is backed by the 2007 College Cost Reduction and Access Act. The key advantage of these funds given to these AANAPISIs is that no directives specify how schools should utilize the funds. The program understands that the needs of the colleges and the circumstances of the APIs are unique. The uses of these funds differ from institution to institution, with some funds going to curricular, academic, and student support; however, the endgame of giving these funds to the AANAPISI should be the same: The funding should improve student outcomes and academic performance. So far, these targets seem to have been achieved, and grants should continue to be implemented. This is because the preliminary research and investigation by the Partnership for Equity in Education show that educational outcomes for students have improved.

What are some of the examples of programs implemented by these minority-serving institutions? Some of these programs are discussed in more detail below.

Creation of Learning Communities

Some of the APIs with incomes lower than that of other Asian Americans had low pass rates and could not transition into and pass college-level English. Maramba (2020) argues that since English is the main language used in teaching, it then disadvantages these learners, and their grades are inevitably lower. South Seattle College created AANAPISI learning communities on campus, which were mainly targeted at first-year API students. The main goal of these learning communities was to increase the English proficiency of these first-year APIs. With the implementation of the learning communities, these APIs recorded a remarkable improvement in their English language proficiency. Since English is the primary instructional language used by the teachers at the college, these APIs were able to understand the course content better. It thus ultimately had a positive impact on their performance.

The evidence given above is just but a sample, because many other institutions used learning communities to help APIs make the transition to college-level classes. Therefore, the program is widely popular since it improves the pass rate of these students as they become more proficient in English.

The other funded program at a four-year AANAPISI is the University of Massachusetts in Boston, which created the Asian American Student Success Program. In its role as a support office for students, the program assists the API students who are traditionally underrepresented. These API students are either first-generation students, low-income students, or both. The first form of assistance is help in gaining admission to

the University of Massachusetts in Boston. Other types of assistance given to these API students include ensuring personal, social, and academic success throughout their stay at the college.

The Full Circle Project

The Full Circle Project (FCP), funded by the AANAPISI program, was implemented by California State University, Sacramento. According to Nguyen et al. (2018), the main aim of the FCP is to serve as a converter to address challenges faced by non-traditional low-income API students. FCP was a considerable effort for the learning institutions because it was not meant to force students to adapt to the expectations and conditions of funded institutions since they were mainly beneficial to the traditional students. Instead, the FCP by the institution acknowledges the unique pathway used by these APIs to get into and succeed in their current degree program. It aims to help them become proficient at meeting the demands of social and academic campus life, which is usually challenging and complicated.

In California State University, Sacramento, 49.9% of the APIs are eligible for Pell grant awards. With the target of the FCP being to improve the sense of self-worth and belongingness of the students within the university, it formed an Asian American-centric curriculum. One of the approaches taken by this curriculum is for the APIs to learn about their community, its history, and the significant contributions APIs made. For example, Filipino students were able to learn that their community made an impact during the civil rights movement, including contributing toward improving higher learning (Nguyen et al., 2018). Through teaching the Filipino students about their history, the FCP gave these APIs a sense of empowerment and agency. Some of the Asian students within the FCP

curriculum went to Oakland and met its mayor, an Asian. These experiences positively impact the students' morale and motivation, helping them engage easily with peers and life on campus. Eventually, the academic outcomes improve as they are more comfortable within the institution, with the model minority myth not in use. This is because the FCP takes into account the individual differences of the students, including the APIs, and treats them differently; the Asian American-centric curriculum is proof of the school's recognition of their distinctive character.

Creation of a Student Affairs Center

The Asian American Resource and Cultural Center was created by the University of Illinois at Chicago (UIC). The center promotes Asian Americans' knowledge through its educational, social, and cultural programs. The beneficiaries of the center also advance their UIC experience through opportunities for integrated development and learning accessed through co-curricular programs. Some of the programs include educational support directed at Asian American undergraduate students, irrespective of their backgrounds. The target is to advise them on cultural, personal, or academic issues. The Asian American Mentor Program was designed to simplify and ease the transition to UIC for first-semester students. The Community Connections' program's major objective was to introduce UIC staff, students, and faculty to the different off-campus resources in Chicago's Asian American communities.

Significance of Research to Improving API Academic Outcomes

CRT has so far advocated for differentiated treatment of college students due to the different experiences they encounter. Asian CRT goes further to differentiate the

Asian subgroups since they go through different experiences; thus, their academic

performance also differs.

The AANAPISIs are given the freedom to choose the type of interventions they

want to invest these funds in, as long as the goal is the academic improvement of the

APIs. The two most frequently used interventions that have been effective are the

learning communities and the Full Cycle Project. These two programs, among others,

have helped APIs face issues and resolve them. Such intervention has enabled the

addressing of the personalized and differentiated issues faced by the three subgroups of

APIs: the U.S.-born (natural born), foreign-born (naturalized citizens, permanent

residents, and undocumented individuals), and international students.

All three subgroups of APIs face different realities in these AANAPISIs with

regard to their academic performance. As a departure from the MMM, these three API

subgroups do not have the same level of academic performance; hence, the need remains

to understand the reason for these differences and to set up a plan to resolve any issues

that arise.

Research Questions

The following are the research questions (RQs) that are posed in this study:

RQ1.   What are the academic outcomes of students who classify as Asian/Pacific

Islander (API) at a large urban 4-year AANAPISI in Texas? Academic outcomes

are cumulative GPA, the number of credit hours earned, and academic standing.

RQ2.   To what extent are there any differences in the academic outcomes by residency

status–U.S.-born, foreign-born (naturalized citizens, permanent residents,

undocumented individuals), and international API students, at a large urban

AANAPISI in Texas? Are there differences also within five regions of Asia and the Pacific Islands and by ancestral countries of origin?

RQ3. To what extent are the retention and graduation rates of students different by residency status, by regions of Asia and Pacific Islands, and by ancestral countries of origin? The rate of first-time undergraduate students who complete their major of study at the same institution within a specified time is measured through graduation rates. The time period for graduation rate measurements is counted through a 4-year, 5-year, and 6-year graduation rate. Additionally, the rate of first-time undergraduate students who return to the same institution the following fall is measured through the retention rates.

RQ4. To what extent is there a relationship between parents' level of education and the academic outcomes of first-generation undergraduate FTIC API students and how different are they by the residency status, by regions of Asia and Pacific Islands, and by ancestral countries of origin at a large urban 4-year AANAPISI in Texas?

RQ5. To what extent does the parents' level of income relate to credit hours earned for first-generation undergraduate API students at a large urban 4-year AANAPISI?

Chapter III

Method

Asian Americans as a whole tend to have higher levels of education and higher income than all other races. As a result, they are often stereotyped as a model minority, whereas it is a myth that Asian Americans uniformly are high achievers and doing well. Most research ignores the heterogeneity of the API population. Due to the model minority stereotype, the problems and needs of the underrepresented and underachieving API students are overlooked in higher education. Especially worth noting are students who are of low SES, who are first-generation college students, or who are both and are unrecognized or discounted by institutions, preventing them from getting the help they need.

This research, therefore, addresses the diversity of the API population and examines in more detail than usual the impact that race and ethnicity have on APIs living in the United States, both in terms of educational attainment based on residency status and based on ancestral countries of origin, including the five regions of Asia and the Pacific Islands.

This study further examines academic outcomes of aggregated and disaggregated groups of API students in regard to ancestral country of origin, including regions of Asia and the Pacific Islands. The causal-comparative research design will be used to determine the overall level of academic achievement of API students in the sample. The relationship between parents' educational achievement and level of income and the academic outcomes of first-generation API students will also be examined.

Research Site

The present study, conducted at a large urban public research university in Southeast Texas, focused on first-year API undergraduate students, both FTIC and transfer students, who first enrolled in Fall 2016. This university was chosen as it was one of two 4-year AANAPISIs in Texas. The university is very diverse, having been designated an AANAPI– and a Hispanic-serving institution. The Fall 2016 semester was chosen for initiation because the FTIC API students' 4-year graduation "window" was set to close in Fall 2020, after summer school but before the fall semester began.

In Fall 2016, this urban public AANAPISI in Southeast Texas had a total enrollment of 43,774 students. It included 35,870 undergraduate students, with males (51.2%) slightly more represented than females (48.8%) on campus. The largest racial or ethnic student population at the university was Hispanics (29%), followed by Whites (27%), Asians/Pacific Islanders (21%), Blacks/African Americans (10%), and Native Americans (0.1%).

Data for this research was drawn from the university's student records of first-year undergraduate API students who enrolled in Fall 2016. With Institutional Review Board review, data from the Fall 2016 cohort was followed annually to calculate the retention rate, and the FTIC students were followed annually until the beginning of the Fall 2020 semester for the 4-year graduation rate and Fall 2021 for the 5-year graduation rate.

Sample and Sampling

Sample

The sample for the research comprises a cohort of all first-year undergraduate students, both FTIC and transfer students, in the Fall 2016 data set at an urban public university in Southeast Texas who self-identified as Asian or Pacific Islanders, either alone or in combination with any of the other racial or ethnic groups, such as White, African American/Black, Native American, or Hispanic populations. Fall 2016 was chosen to ensure that the FTIC students' potential 4-year graduation rate data would be finalized in 2020. The FTIC cohort was followed annually until the beginning of Fall 2020 for a 4-year graduation rate and until Fall 2021 for a 5-year graduation rate.

Among these API students exist many different layers of groups. The first layer consists of three types of the residency status of APIs: U.S.-born citizens, foreign-born (naturalized citizens, permanent residents, and undocumented individuals), and international undergraduate API students. The second layer is an extension of the first layer. Within all these three groups are different subgroups of APIs from ancestral countries of origin, including regions of Asia and the Pacific Islands.

Sampling

The data for this study were obtained from the university's Student Data table. IRB guidelines were followed to ensure that the privacy and identity of the students in the research were protected. The first data set downloaded was from Fall 2016 data, through the Student Data table, Student Semester table (or Class Enrollment table), and the Admission table and followed annually from 2017 through 2021.

From the Student Data table, demographic data, such as ethnicity, gender, date of birth, home country, and last name, were retrieved. From the Student Semester table, the academic information retrieved consisted of major, academic classification, academic load (full-time vs. part-time), transferred credit hours, academic standing, cumulative GPA, test credits, and credit hours attempted and passed. Lastly, from the Admission table, information retrieved included the term admitted, admission status, languages spoken at home, high school information, last school attended, birth country, citizenship country, residency, U.S. citizenship status, visa type, father's education, mother's education, family gross income, language spoken at home, and first-generation status. If the students' visa status was unavailable in the sample, eligibility for Pell grant funding was used as a proxy.

Retrieving API students' data from the data sets required following the steps below:

1. Retrieve data from the ethnicity column listed as ASIAN and PACIFIC.

2. Retrieve data of "Y" under the "IR_Asian" and "IR_Pacif" columns.

3. In the CB_ethnicity table, under "International," retrieve data from Asia and the Pacific Islands countries.

4. In the CB_ethnicity table, under "Unknown" (usually marked "NSPEC" [not specified] or indicated by a blank cell), retrieve data from the "languages spoken" column to identify API students.

From the columns containing birth country, citizenship country, residency, U.S. citizenship status, and visa type were created three new columns—Citizen status, Region, and Ancestral country of origin. Citizenship status was collected for three groups, U.S.-born, foreign-born, and international students. The residency status and U.S. citizenship

status provided information regarding persons who were native-born, permanent

residents, naturalized citizens, undocumented individuals, and international students.

Distinguish the Asian subgroups from the foreign-born and international students

required reporting the birth countries in the region or ancestral country of origin columns.

However, linking the Asian subgroups for the U.S.-born was executed by collecting

the region and ancestral country of origin from the last names and "languages spoken at

home" categories in the university's PeopleSoft software. For example, the U.S.-born

Asian name Nguyen, paired with the language spoken at home, if Vietnamese, would

suggest Vietnam as the country of origin and Southeast Asia as the selected region of

Asia.

Research Design

This study, which used a quantitative approach, was based on a combination of

descriptive, causal-comparative, and correlational designs. In response to RQ1,

descriptive statistics were used to describe the demographic characteristics of the sample

and the mean of the overall sample of API groups at a large urban AANAPISI.

In response to RQ2 and RQ3, a causal-comparative design was used to determine

academic performance by residency status of each of three groups (U.S.-born natives,

foreign-born permanent residents, and undocumented individuals, and international

students), including by region of Asia or Pacific Islands and by ancestral country of

origin. Furthermore, the retention and graduation rates overall of API students in the

sample were compared. The four-year graduation rates were compared among the

aggregated and disaggregated API subgroups. In response to RQ4, a causal-comparative

design was used to gain information about the relationship between the parents' level of

education and API first-generation students' academic outcomes. Descriptive and multivariate analyses were used to compare academic outcomes of the first-generation API students by residency status, regions, and ancestral countries of origin.

In response to RQ5, the correlation research design was used to measure the strength of a relationship between the level of income of the parents of first-generation students and the students' credit hours earned. The aim was to examine the extent to which two variables were associated or correlated with each other.

Variables

Independent Variables

This study examined the differences in academic performance within API populations. Ten independent variables were used in the analyses. The independent variables were race/ethnicity, gender, age, residency status, Asian sub-groups from ancestral countries of origin, including regions of Asia and the Pacific Islands, academic level classification, parents' educational achievement, family income, and first-generation status.

Independent variables for the study were downloaded from the enrollment table of PeopleSoft from an urban public research AANAPISI in Southeast Texas. The terms' definitions follow:

- *Racial/ethnicity*—the race and ethnicity of students who enrolled at an urban public AANAPISI in Southeast Texas who identify themselves as Asian, Pacific Islander, Multi combination of Asian and other races/ethnicities, and international students from the five regions of Asia and the Pacific Islands.

- *Gender*—This variable is constructed by the sex of the student, male and female.

- *Age*—The age is counted as of September 1 in Fall 2016.

- *Residency status*—Three types of residency status include the U.S.-born (native), foreign-born (naturalized citizens, permanent residents, and undocumented individuals), and international API students.

- *Asian sub-groups*—Primary home language and surnames or last names are used as a proxy to identify Asian subgroups since detailed race and ethnic subgroup data are not available from PeopleSoft. The information provided data on ancestral countries of origin, including the five regions of Asia (East, Southeast, South, Central, and West Asia) and the Pacific Islands. For example, the U.S.-born Asian name Nguyen, paired with the "language spoken at home" being Vietnamese, would be recorded as Vietnam in the Country, and the Southeast Asia in the Regions.

- *Applicant status*—Applicant status includes only first-time in college (FTIC) students. An FTIC label refers to the status of a student who attended a college at the undergraduate level for the foremost time in the fall semester and previous summer term.

- *Academic level classification*—A student's academic level classification refers to a student's undergraduate academic level. The credit hours completed determines the classification. Specifically, they are freshmen (0–29 credit hours), sophomores (30–59 credit hours), junior (60–89 credit hours), and senior (90+ credit hours).

- *Parents' educational achievement*—This includes first-generation college students whose parents do not possess a degree and who thus will be the first ones in their family to obtain a bachelor's degree.

- *Family level of income*—Income is measured by family annual income. The level of annual income was coded into eight subsets: (1) less than $20,000, (2) $20,000–$39,999, (3) $40,000–$59,999, (4) $60,000–$79,999, (5) $80,000–$99,999, (6) $100,000–$149,999, (7) $150,000–$199,999, (8) more than $200,000. Family annual income is an indicator of the financial resources that parents can provide to support children's success in an academic field.

- *First-generation status*—A first-generation college student is one whose parents have not completed a degree and who, if graduating, will be the first in the family to obtain a bachelor's degree.

Dependent Variables

The dependent variables are the academic standing score, cumulative GPA, and completion rate (credit hours completed). These are obtained from the enrollment table from an urban public university in Southeast Texas:

- *Cumulative GPA*—the Cumulative GPA refers to the overall GPA that is the measure used to summarize academic achievement. The GPA for the sample population will also be another important variable for comparison. GPA is essential since it is direct and straightforward in comparing academic performance. The GPA is from 0.00 to 4.00 and was calculated by the university at the end of Fall 2016 and prior to the fall semester.

- *Completion rate/credit hours earned*—The completion rates have been one of the factors used to measure student success rates. A typical course load of 15 credit hours earned each semester, or at least 30 credit hours per year, is expected to keep a student on track for graduation in four years. For this study, the credit

hours completed will include the courses enrolled in at an urban public university in Southeast Texas, and the dual credit courses and test credits, such as Advanced Placement (AP) and International Baccalaureate (IB), taken while in high school, and the university's departmental test credits and course credits from community college. In the State of Texas, all undergraduate degrees require a minimum of 120 semester credit hours, including 36 advanced hours (junior and senior-level courses).

- *Academic standing—Academic standing* description includes Good standing and Not in good standing. The status of Not in good standing includes the academic warning, academic probation, and academic suspension.

Analysis

The following outlines the method, models, and statistical tests that were used to examine each research question. Statistical hypothesis testing used an alpha level equal to 0.050.

RQ1. What are the academic outcomes of students who classify as API at a large urban 4-year AANAPISI in Texas?

Method: First, a descriptive statistical analysis of independent variables will be run to show the characteristics of the sample of the Fall 2016 data. Such an analysis displays the frequency count (*N*) and the percentages (%) of demographic API data for the overall sample including residency status, regions of Asia and the Pacific Islands, ancestral countries of origins, gender, age, academic level classification, parent's education achievement, family level of income, and first-generation status. Second, the overall mean of academic outcomes will be

calculated at the end of the Fall 2016 semester and at the beginning of every fall until Fall 2020 and Fall 2021 for fourth- and fifth-year graduation rate marks. The academic outcome variables were GPA, the number of credit hours earned, and the academic standing status. Data will be displayed in tables.

RQ2. To what extent are there any differences in the academic outcomes of the students by residency status—U.S.-born, foreign-born (naturalized citizens, permanent residents, undocumented individuals), and international API students—at a large urban AANAPISI in Texas? Are there differences also by five regions of Asia and the Pacific Islands, and by ancestral countries of origin?

Method: A descriptive and multivariate analysis of variance will be run to determine whether there are any statistical differences among the means of academic outcomes of (a) the three residency status API groups; (b) five regions of Asia and the Pacific Islands Asian subgroups; and (c) by ancestral countries of origin. The data will be analyzed at the end of Fall 2016, and every beginning of fall until Fall 2021. The outcomes will be presented in tables and charts.

RQ3. To what extent are the retention and graduation rates of students different by residency status; by regions of Asia and the Pacific Islands; and by ancestral country of origin?

Method: A descriptive and multivariate analysis of variance will be run to determine whether there are any statistical differences among the retention and graduation rates by (a) the three residency API groups, (b) regions of Asia and the Pacific Islands, and (c) ancestral countries of origin. The overall 4-year and 5-year graduation rates of the FTIC API students in this study will be compared with the

national and overall public AANAPISI in Southeast Texas. Additionally, the rate of FTIC undergraduate API students who return to the same institution the following fall is measured through the retention rates. The retention rates data will be analyzed at the end of Fall 2016, and every beginning of fall until Fall 2021. The outcomes will be presented in tables and charts.

RQ4. To what extent is there a relationship between parents' level of education and the academic outcomes of FTIC API students and how different are they by the three residency API groups, by regions of Asia and Pacific Islands, and by ancestral countries of origin, at a large urban 4-year AANAPISI in Texas?

Method: First, the Spearman's rank correlation coefficient, or Spearman's ρ, will be run to measure rank correlation. It assesses how well correlated the relationship is between the parent's level of income and each of academic outcomes. If there are no repeated data values, a perfect Spearman correlation of +1 or −1 occurs when each of the variables is a perfect monotone function of the other. The data will be analyzed at Fall 2020. Second, the descriptive and MANOVA will be run to examine whether there are any statistical differences of academic outcomes among the means of academic outcomes of the first-generation undergraduate API students by (a) the three residency status API groups; (b) five regions of Asia and the Pacific Islands Asian subgroups; and (c) ancestral countries of origin. The data will be analyzed at the end of Fall 2016, and every beginning of fall until Fall 2021.

RQ5.   To what extent does the API students' parents' level of income relate to credit hours earned for first-generation undergraduate API students at a large urban 4-year AANAPISI in Texas?

Method: Spearman's rank correlation coefficient, or Spearman's ρ, will be run to measure rank correlation. It assesses how well correlated the relationship is between two variables, the parents' level of income and their student's credit hours earned. If there are no repeated data values, a perfect Spearman correlation of +1 or −1 occurs when each of the variables is a perfect monotone function of the other.

The data were analyzed every fall until Fall 2020. Graduating within 4 years generally required students to accumulate at least 120 credit hours for the fourth-year graduation mark at the beginning of Fall 2020 and the fifth-year graduation mark at the beginning of Fall 2021.

Chapter IV

Results

The model minority stereotype — that Asian Americans tend to have higher levels of educational credentials and income — has, in itself created challenges for subgroups of Asian Americans, specifically, the needs of API students who underperform academically or are overlooked in higher education. This has been shown to be especially true for APIs from families of low socioeconomic status or for families who hold first-generation status. The consequence is that APIs who struggle may not get the help they need to be academically successful in higher education. This research examined FTIC API students enrolled in a 4-year AANAPISI in Texas.

A quantitative approach, based on a combination of descriptive, causal-comparative, and correlational designs, was utilized to respond to the research questions.

This chapter has three sections. The first section is a descriptive statistical analysis that describes the characteristics of the Fall 2016 sample of the FTIC API students. The next section presents the results of the analyses performed to address the overall sample in answering Research Questions 1 to 3 for the study. The last section presents the results of the analyses performed to address the first-generation API students in answering Research Questions 4 and 5 for the study.

The second section addresses Research Questions 1 to 3. In response to Research Question 1, descriptive statistics were used to analyze the academic outcomes of the overall sample of 1,445 API students at an urban public AANAPISI in Southeast Texas. Academic outcomes are grade point average (GPA), the number of credit hours earned, and the academic standing status. The credit hours earned included the number of courses

enrolled at this AANAPISI plus dual credit courses and test credits, such as Advanced Placement (AP) and International Baccalaureate (IB) taken while in high school. Other credits earned could be the university's departmental test credits and course credits taken concurrently at community college.

In response to Research Question 2, the results of descriptive and multivariate analysis of variance would determine whether there were any statistically significant differences among the means of academic outcomes based on residency status (i.e., U.S.-born, foreign-born, and international students), the five regions of Asia and the Pacific Islands, and ancestral countries of origin. The U.S.-born students are students who were born in the United States. Foreign-born API students include the naturalized, permanent residents and the undocumented API students. International API students are students from five regions of Asia and the Pacific Islands studying at an urban public AANAPISI in Southeast Texas on an F-1 visa.

In response to Research Question 3, the results of descriptive and multivariate analysis of variance would be examined to determine whether there are any statistically significant differences among the retention and graduation rates of first-year API students based on residency status, regions, and ancestral countries of origin in Fall 2020 (4-year graduation rate mark) and Fall 2021 (5-year graduation rate mark). The final section examines the first-generation college students of API status. The characteristics and academic outcomes of the first-generation first-year API students would be presented first, followed by analysis performed to answer Research Questions 4 and 5.

In response to Research Question 4, the relationship between parents' educational achievement and the academic outcomes of the first-generation API students were

examined using the Spearman rho correlation. Furthermore, the results of descriptive and multivariate analysis of variance will determine whether there are any statistical differences among the means of academic outcomes of the first-generation API student based on residency status, regions, and ancestral countries of origin.

In response to Research Question 5, the relationship between parents' level of income and credit hours earned of the first-generation API students would be examined using the Spearman rho correlation.

Overall sample

Characteristics of the Overall Sample of Fall 2016 First-Year API Students

This first section discusses the descriptive statistical analysis of a cohort of all first-year FTIC undergraduate students in the Fall 2016 datasets at a large urban public university in Southeast Texas who self-identified as Asian or Pacific Islanders, either alone or in combination with any of the other racial or ethnic groups, such as White, African American/Black, Native American, or Hispanic. Fall 2016 was chosen since the 2016 FTIC students would potentially graduate in the traditional 4-year matriculation for students. Consequently, annual data were obtained in 2017, 2018, 2019, 2020, and 2021.

As seen from Table 2, at the baseline year of study, a sample of 1,445 FTIC API students was identified. In the fourth-year follow-up (Fall 2020), the number of students enrolled was 465, and in the fifth-year follow-up (Fall 2021) that number was 158. Reductions in the annual numbers are to be expected due to graduation and non-enrollment. Table 2 displays the number and percentage of the overall sample of first-year FTIC API students from the baseline enrolled from Fall 2016 to Fall 2021.

Table 2

Retention from Baseline in Fall 2016 to Fifth Follow-up in Fall 2021

Base Year Fall 2016	First Follow up Fall 2017	Second Follow up Fall 2018	Third Follow up Fall 2019	Fourth Follow up Fall 2020	Fifth Follow up Fall 2021
1,445	1,291	1,167	1,048	465	158
100.0%	89.3%	80.8%	72.5%	32.2%	10.9%

Below is the summary of findings of the overall sample from the first semester (Fall 2016), followed by graphs in Figure 8. The detailed results of the students' demographic items are shown in Appendix A.

Summary of findings

As shown in Figure 8, the 1,445-member Fall 2016 FTIC API class included more men (52.7%) than women (47.3%). Almost all students (99.72%) were 22 years old or younger as of September 1 in the Fall of 2016, with ages ranging from 16- to 27-years-old. Indeed, four out of every five students were 18-years-old ($M = 18.01$; $SD = 0.625$). Nearly 96% were taking courses full-time in their first semester in Fall 2016.

Regarding residency status, more than 68% of students were U.S.-born, 26% were foreign-born (naturalized, permanent residents, and undocumented), and 6% were international-born students (F-1 visa). More than 41% of the sample were of Southeast Asian descent (41.2%), 36.5% South Asian descent, 14.6% East Asian descent, 3.4% West Asian descent, 0.8% Pacific Islander descent, 0.2% Central Asian descent, and 2.6% unknown API region descent. There were 30 different ancestries reported in the sample with 31.1% Vietnamese, 21.5% Asian Indian, 13.4% Pakistani, 10.2% Chinese, 8.2% Filipino, 2.5% Korean, and 1.1% Bangladeshi. Other ancestries made up less than

1% of the study population, and the balance remaining (3.3%) was of unknown ancestry.

Slightly more than 37% of students are first-generation college students.

Figure 8

Characteristics of Overall Sample of FTIC API Students
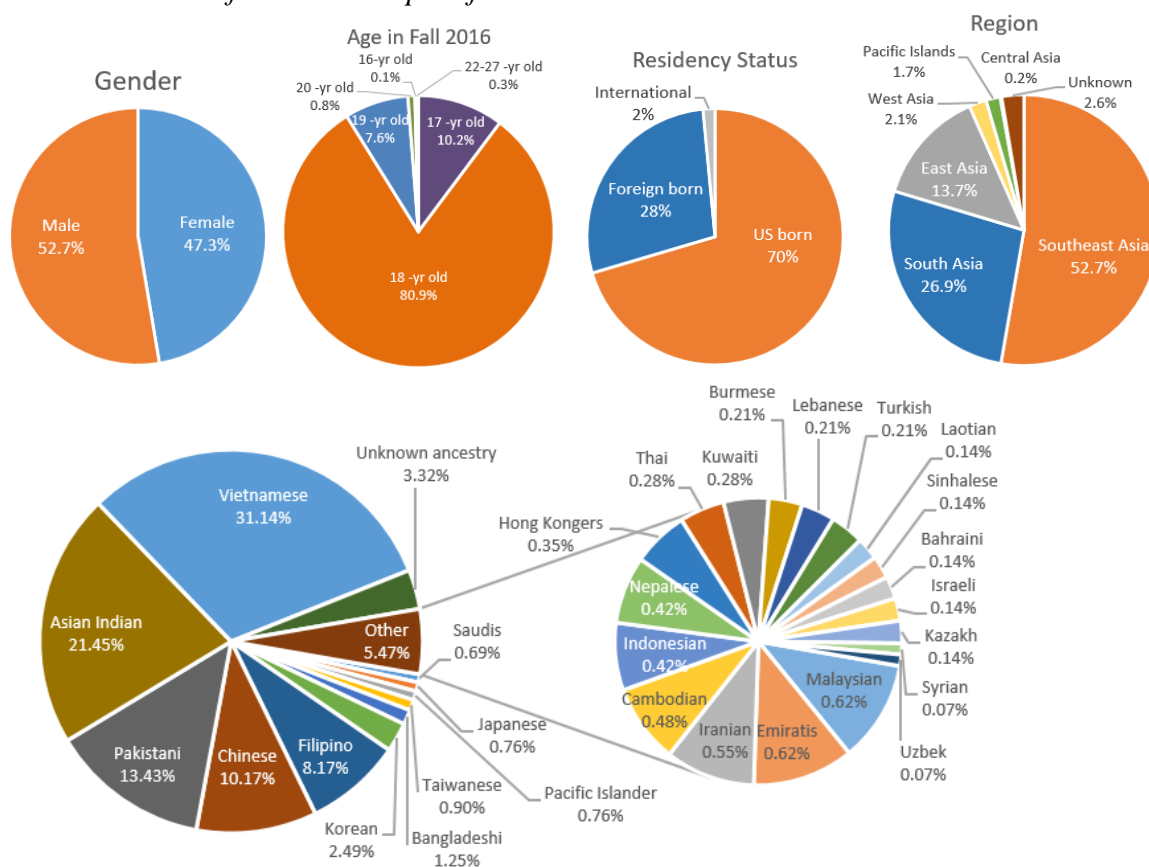
There were two wealth groups in the sample, those with an annual income of more than $60,000 (40%, *n* = 576), and the other with income of less than $60,000 (39%, *n* = 568). Of those students from families with an annual income of $60,000 or more, 75% were U.S.-born, 24% were foreign-born, and 1.2% were international students (born outside the United States). In regard to regions, 43.8% of South Asian families had an annual family income of $60,000 or more, followed by Southeast Asians (37.3%), East Asians (11.5%), and other APIs (7.5%). Furthermore, based on ancestral countries of

origin, Indian students had a higher annual family income (28.8%), followed by

Vietnamese (22.6%), Filipino (13.7%), Pakistani (12.8%), Chinese (8.2%), Korean

(1.6%), and Bangladeshi students (1.2%), with students with unknown API ancestry

(3.3%), and any other Asian and Pacific Islander students (≤ 1.0%) completing the group

organized by ancestral origin.

On the other hand, of those whose families had an annual income of less than

$60,000, 65.7% were U.S.-born, followed by the foreign-born (33.1%), and those

identified as international students (1.2%). In regard to regions, almost half (49.5%) were

Southeast Asian, followed by South Asian (29.8%), East Asian (15.1%), and other APIs

with 6.7%. Based on ancestry, 43.7% of Vietnamese students came from families with

income of less than $60,000, followed by Indians and Pakistani (14.1% each), Chinese

(10.4%), Filipinos (3.3%), Koreans (3.2%), Pacific Islanders (1.2%), Bangladeshis and

Cambodians (1.1%). Also other students from families with an annual income of less

than $60,000 were API students whose ancestry was unknown (2.8%) and students whose

ancestry of any other APIs (1.0%).

More than 45% of API students' fathers and nearly 42% of API students' mothers

attained postsecondary education (bachelor's degree and/or graduate/professional

degrees). From the father's educational attainment, 71.3% were U.S.-born, 27.1% were

foreign-born, and 1.7% were international students. South Asian fathers had higher

postsecondary education with 48%, followed by Southeast Asian with 32%, East Asian

with 14%, unknown API region with 4%, and West Asian with 3%. Pacific Islanders'

whose fathers had no postsecondary education. Indian fathers in the sample had higher

postsecondary education with 29%, followed by Vietnamese (18%), Pakistani (17%),

Filipino (12%), and Chinese (10%). Students whose fathers had no postsecondary education included students from the Pacific Islands, Laos, Sri Lanka, Kazakhstan, Bahrain, and Israel.

Of the mothers with educational attainment, 70.3% were U.S.-born, 28.2% were foreign-born, and 1.5% were international students. South Asian mothers had higher postsecondary education (47%), followed by mothers from Southeast Asia (34%), East Asia (13%), and West Asia (3%). Only 0.2% of Pacific Islander mothers had postsecondary education. Indian mothers had higher postsecondary education (31%), followed by Filipino with 16.4%, Vietnamese with 16%, Pakistani with 15%, and Chinese with 10%. Mothers without postsecondary education of students were from Laos and Bahrain.

An alpha level of $\alpha = 0.050$ was used throughout the study in answering the five research questions.

Research Question 1

What are the academic outcomes of students who classify as Asian Pacific Islanders (API) at a large urban AANAPISI in Texas?

This section presents the academic outcomes (GPA, the number of credit hours earned, and the academic standing score of the overall sample of API students (Table 3). Academic outcomes are GPAs, credit hours earned, and academic standing status.

Table 3

Overall Academic Outcomes of API students Fall 2016 to Fall 2021

Semester	Grade point average		Credit hours earned		Academic Standing (%)	
	Target	Mean	Target	Mean	Target	Mean
Fall 2016	2.00	3.112	15	27	100	89
Start of Fall 2017	2.00	3.098	30	42	100	89
Start of Fall 2018	2.00	3.071	60	67	100	90
Start of Fall 2019	2.00	3.073	90	90	100	90
Start of Fall 2020	2.00	3.105	120	105	100	90
Start of Fall 2021	2.00	3.122	120	110	100	90

Note. Fall 2016 measures were taken at the end of the semester. All other measures—

2017–2021—were at the start of the semester.

The overall GPAs from Fall 2016 to Fall 2021 were consistently higher than a 3.0

average, and the academic standing status was 89% the first year and 90% in good

standing at each Fall semester afterward. However, from the credit hours earned, only the

first three years reached the required target of 30, 60, and 90 credit hours. A first-year

(freshman) student should complete at least 30 credit hours by the next fall semester, a

second-year (sophomore) should have 60 credit hours at the beginning of the next year, a

third-year (junior) should have 90 credit hours, and a fourth-year (senior) should have

120 credit hours, or should have graduated. The aggregated data showed an average of 27

credit hours earned, of which 12 credit hours were more than the required target of 15

credit hours in the first semester. It means most FTIC API students took test credits in

Advanced Placement (AP), International Baccalaureate, and/or dual credit courses while

in high school. An average of 42 credit hours was earned in the first year, of which 12

credit hours were more than the required 30 credit hours' target. In the second year, an

average of 67 credit hours was earned, which was seven credit hours more than the

required 60 credit hours' target. In the third year, the average 90 credit hours was on the 90 credit hours' targets. In the fourth-year graduation mark, the average credit hours were 105, 15 credit hours short of the 120 credit hours' target. Lastly, at the fifth-year graduation mark, the average of 110 credit hours was ten credit hours short of the 120 credit hours' target. The lockdown of the COVID-19 pandemic from Spring 2020 to Spring 2021 might have affected students' ability to complete the required credit hours and graduate on time.

Figure 9 shows the academic outcomes of GPA, credit hours earned, and academic standing status as compared to the target.

Table 4 shows the academic outcomes based on gender. Female API students tended to have higher academic outcomes in comparison to the male API students. Overall GPAs for female API students are consistently more than 3.0. The credit hours earned for the first three years had more than the required targets of 15, 30, 60, and 90. In the fourth and fifth year, female API students were short 11 and 6 credit hours earned respectively. Their academic standing scores were 92% and 93%. Meanwhile, the overall GPA of male API students was less than 3.0 between the second and fourth-year, but still above the target of 2.0. The credit hours earned were above the target for the first two years. In the third to fifth year, they were below the target of 4, 19, and 13 credit hours short. The academic standing scores were between 86% and 88%.

Figure 9

Academic outcomes Fall 2016 to Fall 2021
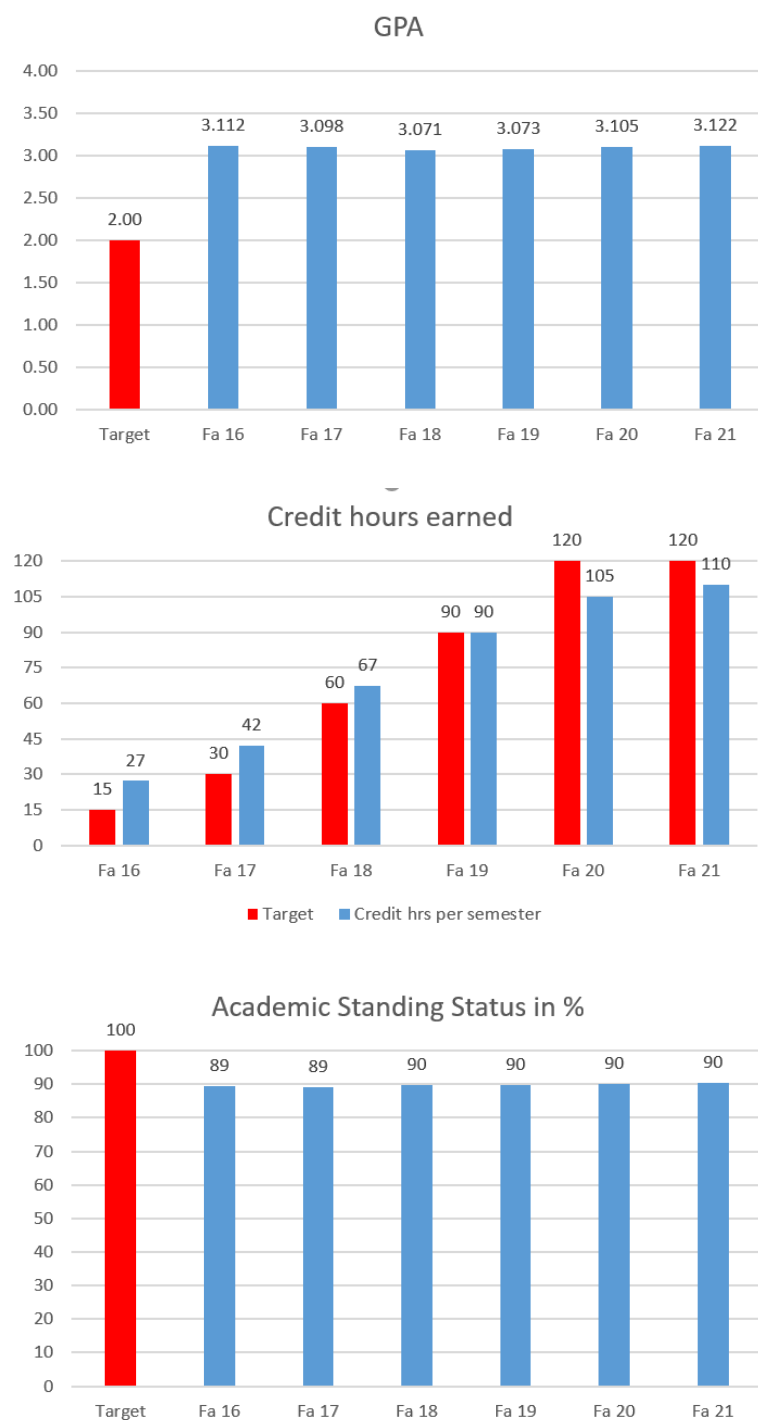
Note. Fa = Fall; hrs = hours.

Table 4

Academic Outcomes of API Students by Gender Fall 2016 to Fall 2021

Gender	N	Fall 16	Fall 17	Fall 18	Fall 19	Fall 20	Fall 21
				Grade point average			
Target		2.000	2.000	2.000	2.000	2.000	2.000
Female	684	3.221	3.222	3.202	3.210	3.246	3.259
Male	761	3.014	2.986	2.954	2.950	2.979	2.999
Overall	1,445	3.112	3.098	3.071	3.073	3.105	3.122
				Credit hours earned			
Target		15	30	60	90	120	120
Female	684	29	44	71	94	109	114
Male	761	26	40	64	86	101	107
Overall	1,445	27	42	67	90	105	110
				Academic standing (%)			
Target		100	100	100	100	100	100
Female	684	92	92	93	93	93	93
Male	761	87	86	87	87	88	88
Overall	1,445	89	89	90	90	90	90

Table 5 provides the academic outcomes based on age of the students as of September 1 in Fall 2016. API students whose ages were 17-18-year-olds were consistently earning a GPA of more than 3.0, had credit hours earned more or on target in the first three years, and were at least 89% in good academic standing. The 17-year-old students tended to have the highest GPA and credit hours earned overall. The credit hours earned for 19 and 20-year-old students were only on target the first year. The 19-year old students had GPA between 2.89 and 2.94, and the 20-year old students consistently had GPAs of more than 3.0. The academic standings were at least 86% for 19-year old students and 92% for 20-year old students.

Table 5

Academic Outcomes of API Students by Age from Fall 2016 to Fall 2021

Age in Fall 16 (years)	N	Fall 16	Fall 17	Fall 18	Fall 19	Fall 20	Fall 21
				Grade point average			
Target		2.00	2.00	2.00	2.00	2.00	2.00
16–17	149	3.173	3.162	3.141	3.148	3.185	3.200
18	1,168	3.127	3.110	3.082	3.084	3.117	3.130
19	110	2.902	2.908	2.900	2.894	2.913	2.940
20	12	3.253	3.201	3.143	3.135	3.181	3.200
21–27	6	2.150	2.237	2.136	2.087	2.114	2.140
Overall	1,445	3.112	3.098	3.071	3.073	3.105	3.120
				Credit hours earned			
Target		15	30	60	90	120	120
16–17	149	27	43	70	94	109	115
18	1,168	28	43	68	91	106	111
19	110	24	37	58	78	91	97
20	12	21	35	55	73	91	97
21–27	6	15	28	50	71	81	87
Overall	1,445	27	42	67	90	105	110
				Academic standing (%)			
Target		100	100	100	100	100	100
16–17	149	89	94	91	91	91	91
18	1,168	90	89	90	90	91	91
19	110	84	84	85	86	86	86
20	12	92	92	92	92	92	92
21–27	6	67	67	67	67	67	67
Overall	1,445	89	89	90	90	90	90

Table 6 shows that students whose family income was less than $20,000 had a GPA of lower than 3.0, lower credit hours earned, and lower in good academic standings. Every other level of income had a GPA of more than 3.0. Students from all income levels had credit hours earned more than the required targets of 30 and 60 credit hours in the first two years. In the third year, students whose family incomes were less than $20,000, between $60,000 and $79,999, and more than $200,000 were short of the target of 90 credit hours. Students with all income levels were short of 120 credit hours to graduate in the fourth and fifth years. The academic standings based on income were between 83% to 93%.

Table 6

Academic Outcomes of API Students by Income Fall 2016 to Fall 2021

Income	N	Fall 2016–Fall 2021					
		16	17	18	19	20	21
		Grade point average					
Target		2.000	2.000	2.000	2.000	2.000	2.000
< $20,000	139	2.920	2.893	2.899	2.906	2.947	2.960
$20,000–$39,999	249	3.149	3.142	3.094	3.084	3.111	3.130
$40,000–$59,999	180	3.252	3.225	3.180	3.166	3.193	3.210
$60,000–$79,999	109	3.112	3.029	2.983	2.968	3.002	3.020
$80,000–$99,999	120	3.147	3.141	3.113	3.116	3.155	3.170
$100,000–$149,999	204	3.131	3.136	3.104	3.105	3.137	3.150
$150,000–$199,999	74	3.153	3.169	3.145	3.167	3.187	3.200
> $200,000	69	3.040	3.008	3.005	3.054	3.093	3.110
None/unknown	301	3.066	3.064	3.056	3.065	3.099	3.120
Overall	1,445	3.112	3.098	3.071	3.073	3.105	3.120
		Credit hours earned					
Target		15	30	60	90	120	120
< $20,000	139	25	39	61	82	98	104
$20,000–$39,999	249	26	41	67	90	106	111
$40,000–$59,999	180	30	46	71	93	108	113
$60,000–$79,999	109	28	43	65	85	99	104
$80,000–$99,999	120	29	44	72	96	111	116
$100,000–$149,999	204	30	46	72	95	108	112
$150,000–$199,999	74	30	45	69	92	105	110
> $200,000	69	25	40	65	87	104	110
None/unknown	301	24	39	65	87	103	109
Overall	1,445	27	42	67	90	105	110
Income	N	Fall 2016–Fall 2021					
		16	17	18	19	20	21
		Academic Standing (%)					
Target		100	100	100	100	100	100
< $20,000	139	83	85	86	86	88	88
$20,000–$39,999	249	90	90	90	90	89	88
$40,000–$59,999	180	92	92	92	92	92	93
$60,000–$79,999	109	90	90	85	85	86	86
$80,000–$99,999	120	90	90	92	93	93	93
$100,000–$149,999	204	90	90	91	90	90	91
$150,000–$199,999	74	91	91	91	88	92	92
> $200,000	69	90	90	86	91	88	90
None/unknown	301	89	89	88	91	91	91
Overall	1,445	89	89	89	90	90	90

The father's education did not affect the overall GPA of the sample (see Table 7).

All GPAs were higher than 3.0. Similar to income, the credit hours earned were more than

the required target of 30 and 60 credit hours earned in the first two years of college. In the

third year, only API students whose father had some college (SC), Associate Degree

(AD), and Graduate/ Professional Degree (GPD) reached the required 90 credit hours or

more. The academic standings based on father education were between 86% to 95%.

Table 7

Academic Outcomes of API Students by Father Education Fall 2016 to Fall 2021

Father's education	N	Fall 2016–Fall 2021					
		16	17	18	19	20	21
		Grade point average					
Target		2.000	2.000	2.000	2.000	2.000	2.000
No High School (NHS	68	3.116	3.070	3.015	2.988	3.011	3.023
Some High School (SHS)	119	3.225	3.215	3.176	3.179	3.213	3.226
High School (HS)	173	3.076	3.035	3.025	3.007	3.037	3.054
Some College (SC)	186	3.137	3.114	3.099	3.085	3.125	3.154
Associate Degree (AD)	106	3.116	3.084	3.059	3.079	3.110	3.128
Bachelor Degree (BD)	366	3.072	3.079	3.043	3.053	3.085	3.100
Graduate/Professional Degree (GPD)	288	3.170	3.162	3.147	3.154	3.179	3.193
Unknown	139	3.007	2.995	2.954	2.967	3.012	3.032
Overall	1,445	3.112	3.098	3.071	3.073	3.105	3.120
		Credit hours earned					
Target		15	30	60	90	120	120
No High School (NHS	68	29	44	68	89	105	110
Some High School (SHS)	119	26	40	65	89	105	110
High School (HS)	173	27	41	65	85	99	104
Some College (SC)	186	27	42	67	90	107	113
Associate Degree (AD)	106	30	45	71	95	110	114
Bachelor Degree (BD)	366	27	42	67	89	104	109
Graduate/Professional Degree (GPD)	288	29	45	72	96	110	115
Unknown	139	23	37	62	83	99	106
Overall	1,445	27	42	67	90	105	110
		Academic Standing (%)					
Target		100	100	100	100	100	100
No High School (NHS	68	88	86	86	87	88	88
Some High School (SHS)	119	92	93	93	95	95	95
High School (HS)	173	90	88	88	88	88	88
Some College (SC)	186	89	90	90	90	90	90
Associate Degree (AD)	106	91	89	88	87	88	89
Bachelor Degree (BD)	366	89	88	89	89	90	90
Graduate/Professional Degree (GPD)	288	89	90	92	92	92	92
Unknown	139	89	90	92	92	92	92
Overall	1,445	89	89	89	90	90	90

Table 8

Academic Outcomes of API Students by Mother Education Fall 2016 to Fall 2021

Mother's education	*N*	Fall 2016–Fall 2021					
		16	17	18	19	20	21
		Grade point average					
Target		2.000	2.000	2.000	2.000	2.000	2.000
No High School (NHS	78	3.199	3.156	3.079	3.070	3.101	3.120
Some High School (SHS)	137	3.076	3.105	3.098	3.106	3.144	3.158
High School (HS)	221	3.077	3.051	3.014	3.008	3.033	3.053
Some College (SC)	176	3.172	3.098	3.083	3.060	3.088	3.108
Associate Degree (AD)	112	2.940	2.949	2.941	2.966	3.008	3.016
Bachelor Degree (BD)	417	3.179	3.174	3.135	3.137	3.169	3.186
Graduate/Professional Degree (GPD)	182	3.076	3.093	3.087	3.103	3.131	3.146
Unknown	122	3.057	3.019	2.997	3.008	3.051	3.076
Overall	1,445	3.112	3.098	3.071	3.073	3.105	3.120
		Credit hours earned					
Target		15	30	60	90	120	120
No High School (NHS	78	29	43	68	91	109	115
Some High School (SHS)	137	27	42	66	89	104	109
High School (HS)	221	28	42	66	87	101	107
Some College (SC)	176	26	41	67	90	105	111
Associate Degree (AD)	112	27	42	66	87	104	109
Bachelor Degree (BD)	417	28	43	70	93	108	113
Graduate/Professional Degree (GPD)	182	30	45	70	93	106	110
Unknown	122	22	37	61	83	99	106
Overall	1,445	27	42	67	90	105	110
		Academic Standing (%)					
Target		100	100	100	100	100	100
No High School (NHS	78	94	94	92	91	94	94
Some High School (SHS)	137	89	91	92	92	92	92
High School (HS)	221	87	87	86	88	89	89
Some College (SC)	176	90	88	90	89	89	89
Associate Degree (AD)	112	83	80	82	81	82	83
Bachelor Degree (BD)	417	92	93	92	92	93	93
Graduate/Professional Degree (GPD)	182	87	88	92	92	92	92
Unknown	122	89	87	87	88	88	88
Overall	1,445	89	89	90	90	90	90

Research Question 2

To what extent are there any differences in the academic outcomes among three groups: U.S.-native born, foreign-born, and international FTIC API students, at a large urban AANAPISI in Texas? Are there differences also by regions of Asia and the Pacific

Islands and by ancestral countries of origin? The relevant academic outcomes of these students are their GPAs, the number of credit hours earned, and academic standing status.

In this section, descriptive analysis and multivariate analysis of variance (MANOVA) were run to determine whether there were any statistical differences among the means of academic outcomes of 1) the residency status group, 2) regions of Asia and the Pacific Islands, and 3) ancestral countries of origin. The data analyzed was the academic performance based on GPA, credit hours earned, and academic standing status at the beginning of the Fall 2020 semester, which was within the fourth-year graduation mark. In the analysis, students from the Central Asian region were excluded due to a very small number of samples.

Residency status

Descriptive Analysis

In regards to academic outcomes and residency status (shown in Table 9), residency status did not affect the overall GPA as all residency status had a GPA higher than 3.0. At the fourth-year graduation mark (Fall 2020) and the fifth-year graduation mark (Fall 2021), the GPA and the academic standing of the international API students tended to be higher than the U.S.-born and foreign-born API students. The foreign-born API students had the highest credit hours earned in the fifth year and they were on target the first three years. The U.S.-born had the highest credit hours earned in the fourth year and were on target the first three years. The international students were on target only for the first two years. All residency statuses fell short of the target of 120 credit hours earned to graduate. Of the U.S.-born students, 43% are Southeast Asian, of which 35% are Vietnamese. Of the foreign-born students, 41% were Southeast Asian, of which 25%

are Vietnamese, and 40% are South Asian, of which 27% are Asian Indian students.

Meanwhile, of the international students, 38% are East Asian, of which 26% are Chinese

students.

Table 9

Academic Outcomes of FTIC API Students Based on Residency Status

Region	*N*	Fall 16	Fall 17	Fall 18	Fall 19	Fall 20	Fall 21
				Grade point average			
Target		2.000	2.000	2.000	2.000	2.000	2.000
U.S.-born	988	3.114	3.096	3.080	3.088	3.122	3.139
Foreign-born	375	3.112	3.100	3.050	3.034	3.057	3.075
International	82	3.083	3.101	3.060	3.073	3.118	3.142
Overall	1,445	3.112	3.098	3.071	3.073	3.105	3.120
				Credit hours earned			
Target		15	30	60	90	120	120
U.S.-born	988	28	43	68	90	105	110
Foreign-born	375	28	43	68	90	105	111
International	82	20	35	61	84	102	109
Overall	1,445	27	42	67	90	105	110
				Academic Standing (%)			
Target		100	100	100	100	100	100
U.S.-born	988	90	88	90	90	90	90
Foreign-born	375	89	91	90	90	91	91
International	82	88	88	90	92	92	92
Overall	1,445	89	89	90	90	90	90

MANOVA Analysis

Results of the MANOVA analyses using Wilks' Lambda as the multivariate

criterion failed to detect a significant difference for academic outcomes. Therefore, we

can conclude that the academic outcomes of FTIC API students were not significantly

dependent on which residency status they have. Specifically, at the fourth-year

graduation mark, there were no statistically significant differences in academic

performance of API students based on their residency status, on GPA, $F (2, 1.079) =$

$1.750, p > .05$; Wilk's $\Lambda = 2.159$, partial $\eta2 =.003$, on credit hours earned, $F (2, 2744) =$

1.841, p > .05; Wilk's Λ = 5487, partial η2 =.003, and on academic standing, F (2, 0.052)

= 0.606, p > .05; Wilk's Λ = 0.103, partial η2 =.001. Since we had not achieved a

statistically significant result, any further follow-up tests would not be performed.

Regions of Asia and the Pacific Islands

Descriptive Analysis

Table 10 shows a detailed comparison of the breakdown of API academic

outcomes based on the regions of Asia and the Pacific Islands. East Asians tended to have

higher GPAs within both the 4-year and the 5-year graduation marks, compared to South,

Southeast, and West Asians with average GPAs higher than 3.0. It means that East,

Southeast, South, and West Asian students may have no difficulty graduating. East

Asians were the highest with 3.19 in the fourth year and 3.21 in the fifth year, followed

by South Asians with 3.14 and 3.16, Southeast Asians with 3.10 and 3.12, and West

Asians with 3.03 and 3.05. The unknown API region had an average GPA of 2.62 and

2.64. Pacific Islander students were the lowest with the average GPA below 2.0, which

was 1.99, and were at risk of not graduating.

Table 10

Academic Outcomes of FTIC API Students Based on Region

Region	N	Fall 16	Fall 17	Fall 18	Fall 19	Fall 20	Fall 21
				Grade point average			
Target		2.000	2.000	2.000	2.000	2.000	2.000
East Asia	212	3.213	3.182	3.158	3.157	3.188	3.207
Southeast Asia	599	3.114	3.105	3.081	3.071	3.102	3.119
South Asia	530	3.134	3.132	3.100	3.112	3.145	3.162
West Asia	42	3.042	2.954	2.941	2.983	3.033	3.049
Pacific Islands	11	2.116	2.040	**1.860**	**1.874**	**1.952**	**1.989**
Central Asia	3	3.132	3.451	3.497	3.518	3.527	3.579
Unknown	48	2.686	2.598	2.594	2.602	2.622	2.637
Overall	1,445	3.112	3.098	3.071	3.073	3.105	3.122
				Credit hours earned			
Target		15	30	60	90	120	120
East Asia	212	26	42	67	**88**	103	109
Southeast Asia	599	28	43	68	**89**	104	109
South Asia	530	27	43	70	94	110	116
West Asia	42	22	37	61	**83**	100	104
Pacific Islands	11	15	**24**	**38**	**51**	65	76
Central Asia	3	38	58	84	111	131	144
Unknown	48	23	33	**50**	**64**	74	78
Overall	1,445	27	42	67	90	105	110
				Academic Standing (%)			
Target		100	100	100	100	100	100
East Asia	212	92	90	91	91	91.0	91.0
Southeast Asia	599	90	90	90	90	91.2	91.3
South Asia	530	89	90	91	91	92	92
West Asia	42	88	83	86	83	83	83
Pacific Islands	11	64	64	**45**	**45**	**45**	**45**
Central Asia	3	67	100	100	100	100	100
Unknown	48	79	77	73	75	75	75
Overall	1,445	89	89	90	90	90	90

South Asians had higher average credit hours earned with 110 and 116 credit hours in the fourth and fifth year, followed by Southeast Asians with 104 and 109, East Asians with 103 and 109, and West Asians with 100 and 104. Meanwhile, the unknown API region had 74 and 78 credit hours, and the Pacific Islands regions were the lowest with 65 and 76 credit hours. These two regions' descendants were a long way from

graduating with at least 120 credit hours. Furthermore, more than 90% of South, Southeast, and East Asian students had good academic standing, with South Asian having the highest rate, compared to 83% of West Asian, 75% of unknown API region students, and 45% of Pacific Islander students (the lowest). There were only three students of the sample in the Central Asia region, and their outcomes have the highest GPA of 3.50+, credit hours earned with 131 and 144 credit hours in the fourth and fifth-year, and 100% in good academic standing.

MANOVA Analysis

The 1,442 reduced student samples included 599 Southeast Asians, 530 South Asians, 212 East Asians, 42 West Asian/Middle Eastern, 11 Pacific Islander students, and 48 unknown API regions. Results of the MANOVA analyses using Wilks' Lambda as the multivariate criterion show that there is a significant difference for academic outcomes of GPA, credit hours earned, and academic standing based on the students' region of descendants.

From the output of the multiple comparison table for the fourth-year graduation mark (Fall 2020), there were statistically significant differences in average GPA's between the Pacific Islander students and East, Southeast, South, and West Asian students ($p < .05$). East Asians had the highest GPA with 3.19 in Fall 2020 and Pacific Islands had the lowest GPA with 1.95. The mean difference was 1.24. There were also statistically significant differences in average GPA between the unknown API region students and East, Southeast, and South Asian students ($p < .05$), with unknown API region with 2.64. The mean difference between the East Asian and the unknown API region was 0.57.

For the credit hours earned, there were statistically significant differences between the Pacific Islander students and East, Southeast, and South Asian students ($p < .05$), as well as between the unknown API region students and East, Southeast, South, and West Asian students ($p < .05$). South Asians had the highest credit hours earned with 110 and Pacific Islands had the lowest with 65. The mean difference was 45. Meanwhile, the unknown API region had credit hours earned of 74, and the mean difference with South Asians was 36 credit hours.

In the output for academic standing, there were statistically significant differences between the Pacific Islander students and all other region students ($p < .05$). There were also statistically significant differences of academic standing between the unknown API region students and East, Southeast, and South Asian, and Pacific Islander students ($p < .05$). Similar to credit hours earned, South Asian students also had the highest academic standing of 92% and Pacific Islanders had the lowest with 46%, and the mean difference was 46%. The mean difference of good academic standing between South Asian (92%) and the unknown API region (75%) was 17%. In contrast, there were no statistically significant differences in academic outcomes between East, Southeast, South, and West Asian students.

These differences are visualized by the plots as shown in Figure 10 below. It shows that Pacific Islander students' academic outcomes were consistently lower than in any other region. Pacific Islanders have lower GPAs, fewer credits, lower academic standing, and are less likely to graduate on time, and are at risk of not graduating. Unknown API region was higher than Pacific Islander, although lower than any other regions.

Figure 10

Plots of academic outcomes based on regions
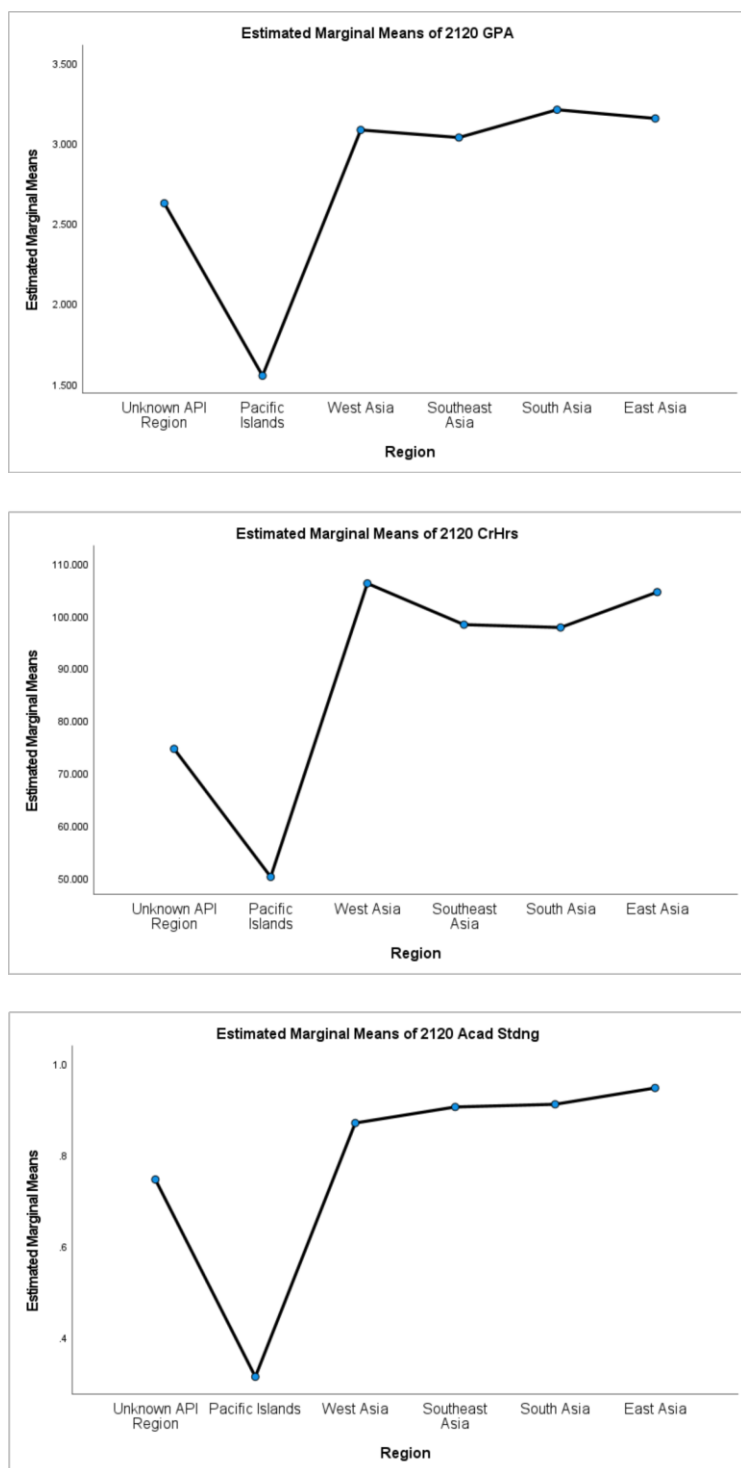
Note. Term 2120 is Fall 2020; GPA = Grade point average; CrHrs = credit hours; Acad

Stdng = Academic standing.

Ancestral countries of origin

Descriptive Analysis

Table 11

Academic Outcomes of GPA and Credit Hours Earned of FTIC API Students Based on Ancestral Countries of Origin

Ancestry	N	Fall 2016–2021						Fall 2016–2021					
		16	17	18	19	20	21	16	17	18	19	20	21
		Grade point average						Credit hours earned					
Target		2.00	2.00	2.00	2.00	2.00	2.00	15	30	60	90	120	120
Vietnamese	450	3.16	3.15	3.12	3.12	3.15	3.17	28	44	69	91	107	112
Asian Indian	310	3.14	3.14	3.12	3.13	3.16	3.18	28	44	72	97	113	118
Pakistani	194	3.10	3.10	3.06	3.08	3.11	3.13	26	40	65	89	107	113
Chinese	147	3.22	3.21	3.19	3.20	3.23	3.25	27	42	67	90	105	110
Filipino	118	2.95	2.94	2.93	2.92	2.95	2.97	27	41	64	84	97	103
Unknown	48	2.69	2.60	2.59	2.60	2.62	2.64	23	33	50	64	74	78
Korean	36	3.25	3.14	3.07	3.06	3.09	3.11	24	39	61	77	89	95
Bangladeshi	18	3.10	3.14	3.20	3.23	3.28	3.29	29	45	69	95	108	112
Japanese	13	3.13	2.96	2.96	2.87	2.88	2.90	23	40	69	94	115	125
Pacific Islander	11	2.12	2.04	1.86	1.87	1.95	1.99	15	24	38	51	65	76
Taiwanese	11	2.95	3.12	3.18	3.21	3.24	3.26	25	39	66	88	106	113
Saudis	10	2.57	2.55	2.56	2.59	2.60	2.61	21	34	54	70	85	86
Malaysian	9	3.54	3.45	3.27	3.22	3.23	3.25	27	40	65	85	100	105
Emiratis	9	3.16	3.16	3.20	3.29	3.36	3.36	21	37	67	99	126	126
Iranian	8	3.54	3.48	3.43	3.48	3.55	3.56	26	42	70	96	109	114
Cambodian	7	2.50	2.72	2.74	2.71	2.72	2.72	36	47	67	83	100	102
Indonesia	6	3.23	3.12	3.14	3.11	3.09	3.06	31	46	72	96	106	111
Nepali	6	3.62	3.39	3.28	3.16	3.19	3.19	36	53	79	102	114	114
Hongkonger	5	3.37	3.31	3.28	3.25	3.33	3.35	27	45	76	98	109	113
Kuwaiti	4	2.99	2.65	2.62	2.71	2.79	2.91	17	30	52	70	89	106
Thai	4	2.53	2.71	2.79	2.84	2.85	2.88	35	45	68	85	95	101
Lebanese	3	3.58	3.23	3.16	3.17	3.19	3.20	29	41	52	61	67	73
Burmese	3	2.95	2.96	3.03	3.05	3.06	3.06	28	41	61	72	68	68
Turkish	3	3.30	3.14	3.18	3.15	3.25	3.25	33	49	81	106	131	131
Other Asian[a]	12	2.97	2.96	2.88	2.90	2.90	2.92	32	47	71	91	103	111
Overall	1,445	3.11	3.10	3.07	3.07	3.11	3.12	27	42	67	90	105	110

Note. FTIC = First time in college; API, Asian and Pacific Islander.

[a] The term *other Asian* includes students from Laos, Sri Lanka, Bahrain, Israel, Syria, Kazakhstan, and Uzbekistan.

Table 11 provides a detailed breakdown of academic outcomes of GPA and credit hours earned by ancestral countries of origin. In comparing ancestral countries of origin, I will discuss those with a sample of 10 or more students. Vietnamese, Asian

Indian, Pakistani, Chinese, Korean, Bangladeshi, and Taiwanese students had average GPAs of more than 3.0 in the fourth and fifth-year graduation rate. Filipino, Japanese, Saudis, and unknown API ancestry students had average GPAs between 2.5 and 3.0. Bangladeshi had the highest GPA with 3.28 and 3.29 in the fourth and fifth years of college. In contrast, Pacific Islander students had the lowest with an average GPA of 1.95 and 1.99.

Japanese students had the highest credit hours earned with 115 in the fourth year and 125 in the fifth year. The credit hours earned by Bangladeshi, Asian Indian, Pakistani, Vietnamese, Chinese, and Taiwanese students were above 100 credit hours for the fourth and fifth years, and most likely to graduate in the middle of sixth-year. Filipino students averaged 97 and 103, and most likely will graduate within the sixth year. Korean students had an average of 89 and 95 credit hours. We can imply that these Korean students will most likely graduate in the seventh year if taking full-time courses. Meanwhile, the Saudis had 85 and 86 credit hours, which nearly need more than 34 credit hours to graduate in the seventh year. The unknown API ancestry had 74 and 78 credit hours, and Pacific Islander students had the lowest with 65 and 76 credit hours, which were at least 42 credit hours short to graduate with at least 120 credit hours in the eighth year, or at risk of not graduating.

As shown on Table 12, Japanese students also had the highest 100% in good academic standing. Bangladeshi had 94% in good academic standing, followed by Asian Indian with 93%, Vietnamese with 92%, Chinese with 91.2%, and Taiwanese with 90.9% in good academic standing. Pakistani, Filipino, and Korean students had lower than 90% in good academic standing, with Pakistani with 89%, Filipino with 88%, and Korean with

86%. The unknown API ancestry students had 75%. Meanwhile, the Saudis had only

60% in good academic standing, and Pacific Islanders had the lowest academic standing

with 46%.

Table 12

Academic Outcomes of Academic Standing of FTIC API Students Based on Ancestral Countries of Origin

Ancestry	N	Fall 2016–2021					
		16	17	18	19	20	21
		Academic Standing (%)					
Target		100	100	100	100	100	100
Vietnamese	450	91	91	91	92	92	92
Asian Indian	310	89	89	92	93	93	93
Pakistani	194	89	90	89	89	89	89
Chinese	147	92	91	91	91	91	91
Filipino	118	90	86	87	86	88	88
Unknown	48	79	77	73	75	75	75
Korean	36	92	89	89	86	86	86
Bangladeshi	18	83	94	94	94	94	94
Japanese	13	100	92	100	100	100	100
Pacific Islander	11	64	64	45	45	45	45
Taiwanese	11	82	82	82	91	91	91
Saudis	10	70	60	60	60	60	60
Malay	9	100	100	100	100	100	100
Emiratis	9	89	100	100	100	100	100
Iranian	8	100	88	88	88	88	88
Cambodian	7	43	71	71	71	71	71
Indonesia	6	100	100	83	83	83	83
Nepali	6	100	100	100	100	100	100
Hongkonger	5	80	80	100	100	100	100
Kuwaiti	4	100	100	100	100	100	100
Thai	4	75	75	75	75	100	100
Lebanese	3	100	100	100	100	100	100
Burmese	3	100	100	100	100	100	100
Turkish	3	100	67	100	100	100	100
Other Asian[a]	12	83	92	92	83	83	83
Overall	1445	89	89	90	90	90	90

Note. FTIC = First time in college; API, Asian and Pacific Islander.

[a] The term *other Asian* includes students from Laos, Sri Lanka, Bahrain, Israel, Syria,

Kazakhstan, and Uzbekistan.

There were 137 API students in the sample who were not in good academic

standing, which was represented by being served under an academic warning, probation,

or suspension. Table 13 shows that 43% (N=59) were under academic suspension, 38% (N=52) were under probation, and 19% (N=26) were under warning. Not being in good academic standing also means that the overall GPAs were less than 2.0, and the credit hours earned in the fourth and fifth-year marks will be far from the required 120 credit hours making them at risk to graduate.

Table 13

Fall 2020 List of Not in Good Academic Standing

Academic Standing	N	%
S1-Suspension 1	57	42%
Academic Probation	45	33%
Academic Warning	26	19%
Probation, continued	4	3%
Prob-S1 (Probation after Suspension 1)	3	2%
S2-Suspension 2	2	1%
Total	137	

Table 14 shows that 95 of those academically struggling students were U.S.-born (69%), 35 were foreign-born (26%), and 7 were international students (5%). When compared to overall sample, U.S.-born students also had the highest number with nearly 10% at-risk. By region, of those 137 students not in good academic standing, 38% were Southeast Asian, followed by 32% South Asian, 13% East Asian, 9% unknown API region, and 4% each for West Asian and Pacific Islanders. When comparing with the overall sample, Pacific Islands region were the most students not in good academic standing with nearly 46%, followed by the unknown region with 25%, and West Asian with 14%. Focusing on ancestral countries of origin, the highest proportion of students not in good academic standing were Vietnamese with 26%, followed by 16% Pakistani, 15% Asian Indian, 10% Filipinos, 9% Chinese, and 9% unknown API ancestry. When

comparing to overall sample, Pacific Islanders were the most in not good academic standing with nearly 46%, followed by Saudis with 40%, and unknown ancestry with 25%.

Table 14

FTIC API Students Not in Good Academic Standing Based on Residency, Region, and Ancestries Fall 2020

Residency	*N*	%	% to overall sample	Region	*N*	%	% to overall sample
U.S.-born	95	69%	9.6%	Southeast Asia	52	38%	8.7%
Foreign-born	35	26%	9.3%	South Asia	44	32%	8.3%
International	7	5%	8.5%	East Asia	18	13%	8.5%
Overall	137			West Asia	6	4%	14.3%
				Pacific Islands	5	4%	45.5%
				Unknown	12	9%	25.0%
				Overall	137		

Ancestry	*N*	%	% to overall sample
Vietnamese	35	26%	7.8%
Pakistani	22	16%	11.3%
Asian Indian	21	15%	6.8%
Filipino	14	10%	11.9%
Chinese	13	9%	8.8%
Pacific Islander	5	4%	45.5%
Korean	4	3%	11.1%
Saudis	4	3%	40.0%
Cambodian	2	1%	28.6%
Taiwanese	1	1%	9.1%
Indonesian	1	1%	16.7%
Bangladeshi	1	1%	5.6%
Bahraini/Israeli	2	1%	50.0%
Unknown	12	9%	25.0%
Overall	137		

MANOVA Analysis

Results of the MANOVA analyses using Wilks' Lambda as the multivariate criterion show that there is a significant difference for academic outcomes of GPA, credit hours earned, and academic standing based on the students' ancestral countries of origin.

From the output of the multiple comparison table at the fourth-year graduation mark (Fall 2020), there were statistically significant differences in average GPA between the Pacific Islander students and Vietnamese, Indian, Pakistani, Chinese, Filipino, Korean, Bangladeshi, Taiwanese, Iran, and Emiratis students ($p < .05$). The mean difference of the highest and the lowest GPA between Bangladeshi (3.28) and Pacific Islander (1.95) was 1.32. There were also statistically significant differences between the unknown API ancestry students and Chinese, Asian Indian, Vietnamese, and Pakistani ($p < .05$). The mean difference between Chinese (3.25) and unknown ancestry (2.62) was 0.61.

For the credit hours earned, there were statistically significant differences between Asian Indian students and Filipino, Pacific Islander, and unknown ancestry students ($p < .05$). The overall credit hours earned of Asian Indians (113) was significantly higher than Pacific Islanders (65) with a mean difference of 47, Filipino (97) with a mean difference of 16, and unknown ancestry students (74) with a mean difference of 38. There were also statistically significant differences between the unknown API ancestry students (74) and Asian Indian (113), Vietnamese (107), Pakistani (107), and Chinese students (105) ($p < .05$).

In the output for academic standing status, there were statistically significant differences between:

- Pacific Islander students and Vietnamese, Asian Indian, Pakistani, Chinese, Filipino, Korean, Japanese, Bangladeshi, Malaysian, and Emiratis students ($p < .05$). The academic standing of Japanese (100%) was significantly higher than Pacific Islander (45%) with mean difference of 55%.

- The unknown ancestry students and Asian Indian and Vietnamese students ($p < .05$). The mean difference between unknown ancestry students (75%) and Vietnamese (92%) was 18%.

- Asian Indian and Pacific Islander and unknown ancestry students ($p < .05$). The academic standing of Asian Indians (93%) was significantly higher than Pacific Islanders (45%) and unknown ancestry students (75%) with a mean difference of 48% and 19% respectively.

Research Question 3

To what extent are the retention and graduation rates of students different by the three API residency status groups and by API subgroups (regions and ancestral countries of origin)? What are the graduation rates of the first-time API FTIC students at a fourth and fifth-graduation mark?

In this section, Tables 15 displays the retention and graduation rates. The retention and graduation rates were coded as "2" for graduation, "1" for enrolled, and "0" for not enrolling. Then, a multivariate analysis of variance (MANOVA) was run to determine whether there were any statistical differences among the retention and graduation rates of 1) the residency status, 2) by regions of Asia and the Pacific Islands, and 3) by ancestral countries of origin. The overall fourth and fifth-year graduation rates of the FTIC API students were compared to the overall UH graduation rates of Fall 2016 freshmen in Fall 2020 and Fall 2021. Additionally, the rate of first-time undergraduate API students who return to the same institution the following fall is measured through the retention rates.

Table 15

Fall 2016 to Fall 2021 FTIC API Retention and Graduate Rates

	Base Year Fall 2016	First Follow up Fall 2017	Second Follow up Fall 2018	Third Follow up Fall 2019	Fourth Follow up Fall 2020	Fifth Follow up Fall 2021
Enrolled	1,445	1,291	1,167	1,048	465	158
Graduation		0	2	15	639	936
Not enrolled		154	276	382	341	351
Retention Rate	1,445	89.3%	80.76%	72.53%	32.18%	10.93%
Graduation Rate		0.00%	0.14%	1.04%	44.22%	64.78%
Total R & G rate		89.34%	80.90%	73.57%	75.40%	75.71%

Note. R & G = Retention and Graduation

The official four-year graduation rate for students attending public colleges and universities is 33.3% (U.S. Department of Education, 2021). The 4-year graduation rate for first-time, FTIC undergraduate API students who began seeking a bachelor's degree in Fall 2016 at a 4-year degree-granting AANAPISI institution in Texas, was 44.2%. As we see from Table 15, the 44.2% graduation rate of FTIC API students at a large urban AANAPISI in Texas was higher than the national average. The FTIC API students' graduation rate was also higher than this university's overall graduation rate of 39.2%. For the fifth year, in Fall 2021, the graduation rate for FTIC undergraduate API students was 64.8%, which is higher than 56% national average.

Of the total sample of 1,445 FTIC API students at an urban public AANAPISI in Southeast Texas, 24.3% (N=351) students were not enrolled back at this public university in the fifth year. Of these, 64.4% (N=226) students were in good standing, and 35.6% were not in good academic standing, of which, 7.4% (N=26) were under academic warning, 12.5% (N=44) were under academic probation, and 15.7% (N=55) were students under academic suspension.

Table 16

FTIC API Students who were Not Enrolled in Fall 2020 and Fall 2021 by Region and Ancestry

Region	Fall 2020			Fall 2021		
	N	%	% to sample	*N*	%	% to sample
Southeast Asia	153	44.9%	25.5%	161	45.9%	26.9%
South Asia	96	28.2%	18.1%	98	27.9%	18.5%
East Asia	51	15.0%	24.1%	53	15.1%	25.0%
West Asia	10	2.9%	23.8%	9	2.6%	21.4%
Pacific Islands	5	1.5%	45.5%	5	1.4%	45.5%
Unknown	26	7.6%	54.2%	25	7.1%	52.1%
Overall	341			351		

Ancestry	Fall 2020			Fall 2021		
	N	%	% to sample	*N*	%	% to sample
Vietnamese	104	30.5%	23.1%	107	30.5%	23.8%
Asian Indian	54	15.8%	17.4%	55	15.7%	17.7%
Filipino	38	11.1%	32.2%	40	11.4%	33.9%
Pakistani	37	10.9%	19.1%	40	11.4%	20.6%
Chinese	34	10.0%	23.1%	36	10.3%	24.5%
Unknown	26	7.6%	54.2%	25	7.1%	52.1%
Korean	14	4.1%	38.9%	13	3.7%	36.1%
Pacific Islander	5	1.5%	45.5%	5	1.4%	45.5%
Saudis	4	1.2%	40.0%	4	1.1%	40.0%
Malay	3	0.9%	33.3%	4	1.1%	44.4%
Cambodian	3	0.9%	42.9%	3	0.9%	42.9%
Bangladeshi	3	0.9%	16.7%	1	0.3%	5.6%
Taiwanese	2	0.6%	18.2%	2	0.6%	18.2%
Nepali	2	0.6%	33.3%	2	0.6%	33.3%
Burmese	2	0.6%	66.7%	2	0.6%	66.7%
Lebanese	2	0.6%	66.7%	2	0.6%	66.7%
Hongkongers	1	0.3%	20.0%	1	0.3%	20.0%
Japanese	0			1	0.3%	7.7%
Indonesian	1	0.3%	16.7%	2	0.6%	33.3%
Laotian	1	0.3%	50.0%	2	0.6%	100.0%
Thai	1	0.3%	25.0%	1	0.3%	25.0%
Bahraini	1	0.3%	50.0%	1	0.3%	50.0%
Iranian	1	0.3%	12.5%	0		
Israeli	1	0.3%	50.0%	1	0.3%	50.0%
Kuwaiti	1	0.3%	25.0%	1	0.3%	25.0%
Overall	341			351		

Table 16 shows that of the 341 students in the overall sample who were not enrolled in the fourth-year graduation mark, Southeast Asians were the most with 45% (N=153), and 30% Vietnamese (N=104) was the most, followed by 16% Asian Indians (N=54), 11% each of Filipino and Pakistani (N=40), and 10% Chinese students.

However, when compared to each ancestral countries of origin, unknown ancestry was the most with 54% (N=26), followed by 46% of Pacific Islanders (N=5), 40% of Saudis (N=4), 39% of Korean (N=14), and 32% of Filipino (N=38).

Residency status

Descriptive Analysis

As seen in Table 17, of overall students (N=639) who graduated in the fourth-year graduation rate mark in Fall 2020, 70% were U.S.-born (N=446), 25% were foreign-born (N=159), and 5% were international students (N=34). Similarly, in the fifth-graduation rate mark in Fall 2021, of the overall students who graduated (N=936), 70% were U.S.-born (N=655), 24% were foreign-born (N=225), and 6% were international students (N=56). When compared to the overall sample, in Fall 2020, 45.1% were U.S-born, 42.4% were foreign-born, and 41.5% were international students, and in Fall 2021, 66.3% were U.S-born, 60% were foreign-born, and 68.3% were international students.

Table 17

Fall 2020 and Fall 2021 Graduates of FTIC API Students by Residency

Residency	Graduated		Graduated		Overall Sample	Compared to overall sample			
	Fall 2020		Fall 2021				Fall 2020		Fall 2021
	N	%	N	%	N	N	%	N	%
U.S.-born	446	69.80%	655	70.00%	988	446	45.10%	655	66.30%
Foreign-born	159	24.90%	225	24.00%	375	159	42.40%	225	60.00%
International	34	5.30%	56	6.00%	82	34	41.50%	56	68.30%
Overall	639		936		1,445	639	44.20%	936	64.80%

Note. FTIC = First time in college; API, Asian and Pacific Islander.

MANOVA Analysis

Results of the MANOVA analyses using Wilks' Lambda as the multivariate criterion failed to detect a significant difference for the retention and graduation rate for

the Fall 2020 (fourth-year graduation mark) and Fall 2021 (fifth-year graduation mark) based on residency status. Therefore, we can conclude that the retention and graduation rates of FTIC API students were not significantly dependent on which residency status the students have.

Regions of Asia and the Pacific Islands groups

Descriptive Analysis

Table 18

Fall 2020 and Fall 2021 Graduates of FTIC API Students by Region

Region	Graduated		Graduated		Overall Sample	Compared to overall sample			
	Fall 2020		Fall 2021				Fall 2020		Fall 2021
	N	%	N	%	N	N	%	N	%
East Asia	88	13.80%	132	14.10%	212	88	41.50%	132	62.30%
Southeast Asia	249	39.00%	368	39.30%	599	249	41.60%	368	61.40%
South Asia	265	41.50%	384	41.00%	530	265	50.00%	384	72.50%
West Asia	20	3.10%	28	3.00%	42	20	47.60%	28	66.70%
Pacific Islands	2	0.30%	4	0.40%	11	2	**18.20%**	4	**36.40%**
Central Asia	3	0.50%	3	0.30%	3	3	100.00%	3	100.00%
Unknown	12	1.90%	17	1.80%	48	12	**25.00%**	17	**35.40%**
Overall	639		936		1,445	639	44.20%	936	64.8%

Note. FTIC = First time in college; API, Asian and Pacific Islander.

From Table 18, of overall students who graduated in the fourth year (N=619) and in the fifth year (N=936), South Asian students had the highest graduation rate at 42% in the fourth year and 41% in the fifth year. Compared to the overall sample, 50% of South Asians graduated the most frequently in the fourth year, followed by 48% of West Asians, 42% each for East and Southeast Asians, and 25% of the unknown region. Students from the Pacific Islands graduated the least with 18%. Similar in the fifth year, South Asians graduated the most with 73%, followed by 67% of West Asian, 62% of East Asian, 61% of Southeast Asian, and 36% of Pacific Islands. Students from the

unknown region graduated the least with 35% in the fifth year. All Central Asians

(100%) graduated in Fall 2020, although the sample was too small to generalize.

MANOVA Analysis

Results of the MANOVA analyses using Wilks' Lambda as the multivariate

criterion show that there were significant differences for the retention and graduation rate

for the Fall 2020 (fourth-year graduation mark) and Fall 2021 (fifth-year graduation

mark) based on the students' region of descent. Given that the significant value is 0.000,

which is below 0.05, the null hypothesis must be rejected, which means the relationship

between regions is a statistically significant difference.

A Tukey post hoc test revealed that there were statistically significant differences

in the retention and graduation rates in Fall 2020 (fourth-year graduation mark) between

Southeast and South Asian descents ($p=.009$), and between the unknown API region

descents and East ($p=.003$), Southeast ($p=.002$), South ($p<.001$), and West Asian descents

($p=.027$). In Fall 2021 (fifth-year graduation mark), there were statistically significant

differences in the retention and graduation rates between South and Southeast Asian

descent ($p=.001$), and between the unknown API region students and East ($p=.001$),

Southeast ($p=<.001$), South ($p<.001$), and West Asian students ($p=.009$).

Retention and graduation rates of South Asians were significantly higher than

Southeast Asians. For the graduation rates alone, South Asians had significantly higher

graduation rate than Southeast Asians, and the unknown region were significantly lower

than East, Southeast, South and West Asians to graduate in the fourth and fifth years.

Ancestral Countries of Origin

Descriptive Analysis

Table 19

Fall 2020 and Fall 2021 Graduates of FTIC API Students by Ancestry

Ancestry	Graduated		Graduated		Overall Sample	Compared to overall sample			
	Fall 2020		Fall 2021			Fall 2020		Fall 2021	
	N	%	*N*	%	*N*	*N*	%	*N*	%
Vietnamese	197	30.80%	290	31.00%	450	197	43.80%	290	64.40%
Asian Indian	164	25.70%	227	24.30%	310	164	52.90%	227	73.20%
Pakistani	85	13.30%	137	14.60%	194	85	43.80%	137	70.60%
Chinese	65	10.20%	97	10.40%	147	65	44.20%	97	66.00%
Filipino	42	6.60%	63	6.70%	118	42	35.60%	63	53.40%
Unknown	12	1.90%	17	1.80%	48	12	**25.00%**	17	**35.40%**
Korean	11	1.70%	17	1.80%	36	11	**30.60%**	17	47.20%
Bangladeshi	11	1.70%	14	1.50%	18	11	61.10%	14	77.80%
Japanese	6	0.90%	8	0.90%	13	6	46.20%	8	61.50%
Pacific Islander	2	0.30%	4	0.40%	11	2	**18.20%**	4	36.40%
Taiwanese	3	0.50%	6	0.60%	11	3	**27.30%**	6	54.50%
Saudis	4	0.60%	6	0.60%	10	4	40.00%	6	60.00%
Emiratis	9	1.40%	9	1.00%	9	9	100.00%	9	100.00%
Malaysian	3	0.50%	5	0.50%	9	3	**33.30%**	5	55.60%
Iranian	4	0.60%	6	0.60%	8	4	50.00%	6	75.00%
Cambodian	2	0.30%	3	0.30%	7	2	28.60%	3	42.90%
Indonesian	3	0.50%	4	0.40%	6	3	50.00%	4	66.70%
Nepali	4	0.60%	4	0.40%	6	4	66.70%	4	66.70%
Hongkongers	3	0.50%	4	0.40%	5	3	60.00%	4	80.00%
Kuwaiti	0	0.00%	1	0.10%	4	0	0.00%	1	25.00%
Thai	1	0.20%	2	0.20%	4	1	25.00%	2	50.00%
Burmese	1	0.20%	1	0.10%	3	1	33.30%	1	33.30%
Lebanese	0	0.00%	0	0.00%	3	0	0.00%	0	0.00%
Turkish	2	0.30%	3	0.30%	3	2	66.70%	3	100.00%
Other Asian[a]	5	0.90%	8	0.90%	12	5	41.60%	8	66.70%
Overall	639		936		1,445	639	44.20%	936	64.80%

Note. FTIC = First time in college; API, Asian and Pacific Islander.

[a] The term *other Asian* includes students from Laos, Sri Lanka, Bahrain, Israel, Syria, Kazakhstan, and Uzbekistan.

From Table 19, of the students who graduated (N=639), Vietnamese students graduated the most with 31% in the fourth year and 41% in the fifth year (N=936), followed by Asian Indians with 26% and 24%, Pakistani with 13% and 15%, and Chinese with 10% each. When compared to the overall sample, 100% of Emirati graduated on time in Fall 2020, followed by 61.1% Bangladeshi, 53% Asian Indian, 44% of Chinese, Vietnamese and Pakistani, and 40% Saudi students. In contrast, only 36% Filipino, 33% Malaysian, 31% Korean, 27% Taiwanese, and 25% unknown ancestry students graduated on time. Pacific Islander students were the lowest to graduate on time with only 18.2%.

Nearly 78% of Bangladeshi students graduated in the fifth year, followed by 73% of Asian Indians, 71% of Pakistani, 66% of Chinese, 64% of Vietnamese, 62% of Japanese, 60% of Saudi, 55% of Taiwanese, 53% of Filipino, and 47% of Korean students. Meanwhile, only 36% of Pacific Islander students graduated in the fifth year, followed by the unknown ancestry, the lowest to graduate in the fifth year, with 35%.

MANOVA analysis

A Tukey post hoc test revealed that there were statistically significant differences in the retention and graduation rates in Fall 2020 (fourth-year graduation mark) between:

- unknown API ancestry and Chinese ($p=.021$), Asian Indian ($p=0.000$), Pakistani ($p=.004$), Vietnamese ($p=.006$), and the Emiratis students ($p=.001$),

- the Emiratis and Pacific Islander ($p=.020$), and Korean students ($p=.035$), and

- Asian Indian and Filipino students ($p=.027$).

Similarly, in Fall 2021 (fifth-year graduation mark), a Tukey post hoc test revealed that there were statistically significant differences in the retention and graduation rates between:

- unknown API ancestry and Chinese ($p=.006$), Bangladeshi ($p=.022$), Indian ($p=.000$), Pakistani ($p=.000$), Vietnamese ($p=.001$), and the Emiratis students ($p=.023$), and

- Asian Indian and Filipino students ($p=.014$),

Emiratis students were more likely to graduate on time in the fourth year, and Pacific Islanders and the unknown API ancestry students were most likely not to graduate on time in the fourth year. Bangladeshi students were more likely to graduate in the fifth year than the unknown API ancestry students. Furthermore, Asian Indians students had significantly higher graduation on time rate in the fourth and fifth year than Filipinos students.

First-Generation API Students

The following sections are analyses concerning the first-generation API students in answering research questions 4 and 5.

Characteristic of first-generation FTIC API students

As seen in Figure 10, there were 531 first-generation API students from 26 ancestral countries of origin at an urban public AANAPISI in Southeast Texas, which were 37% of all FTIC API students in the Fall 2016 dataset. All 531 first-generation FTIC students were between 16 and 22 years old, with 52% of whom are male and 48% are female. Almost 84% of the students were 18-year old with a mean age of 18.03 with a standard deviation of 0.48. Nearly 96% of the students were taking full-time classes in Fall 2016. Of the first-generation sample, 70% were U.S.-born, 28% foreign-born, and 2% internationally-born (on an F-1 visa). Southeast Asian students comprised 53% of this study, followed by South Asian of 27%, East Asian of 14%, West Asian of 2%, and

Pacific Islanders of 2%. Only one Central Asian student was a first-generation college student (0.2%) and there were 3% from the unknown API region. The detailed results of the first-generation students' demographic items are shown in Appendix B.

Figure 11

Characteristics of First-Generation API Students
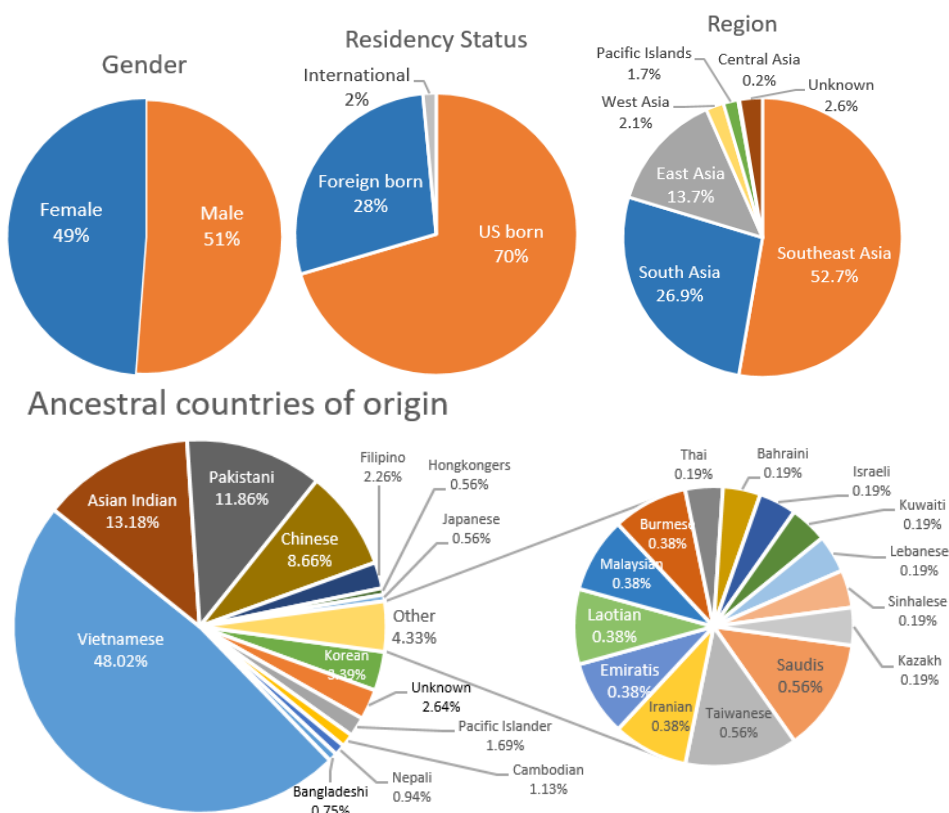
Table 20 shows the retention and graduation rate of first-generation API students. These first-generation API students were followed yearly, and the analysis was run within the fourth and fifth-year graduation rate marks. There were 75.3% and 75.1% retention and graduation rate for the fourth and fifth year of the first-generation students in this sample. More than 40% (N=213) had graduated by the fourth year, compared to 27% of the national average of first-generation students. In the fifth-year graduation

marks, 64% (N=340) had graduated compared to less than 45% of the national average of first-generation students graduated in the same time frame. Some of these first-generation API students had continued to take master's degree level classes at an urban public AANAPISI in Southeast Texas. An important note is that eight students were enrolled into a professional degree level program at the College of Pharmacy from Junior or Senior academic classification without obtaining a bachelor's degree. These students were categorized as "graduated" in this study in the fourth and fifth graduation year marks.

On the other hand, 24.9% (N=132) of first-generation students were not enrolled back at this urban public AANAPISI in Southeast Texas. Of these, 64.4% (N=85) students were in good standing, 7.6% (N=10) were under academic warning, 14.4% (N=19) were under academic probation, and 13.6% (N=18) were under academic suspension.

Table 20

Retention and Graduation Rate of First-Generation API Students Fall 2016 to Fall 2021

	Base Year Fall 2016	First Follow up Fall 2017	Second Follow up Fall 2018	Third Follow up Fall 2019	Fourth Follow up Fall 2020	Fifth Follow up Fall 2021
Enrolled	531	475	427	384	187	59
Graduation		0	1	5	213	340
Not enrolled		56	103	142	131	132
Retention Rate	531	89.45%	80.41%	72.31%	35.22%	11.11%
Graduation Rate		0.00%	0.19%	0.94%	40.11%	64.03%
Total R & G rate		89.45%	80.60%	73.25%	75.33%	75.14%

Note. R & G = Retention and Graduation

The 2011 UCLA study found that only 27% of first-generation students graduated within four years, 45% within five years, and 50% within six years. As we see from

Table 20, the 4-year graduation rate for first-generation API students who began seeking a bachelor's degree in Fall 2016 at an urban public AANAPISI in Southeast Texas was 40% within the four-year graduation rate, higher than the 27% graduation rates related to the national average, and 64% within the five-year graduation rate, higher than 45% of national average.

Academic outcomes of first-generation FTIC API students

This section presents academic outcomes for aggregated and disaggregated first-generation API students. Table 21 shows the aggregated results. Similar to the overall sample, the overall GPAs of the 531 first-generation API students were consistently more than a 3.0 average, and the academic standing status was between 89% and 90% in good standing from Fall 2016 to Fall 2021. However, only the first two years of the credit hours reached the recommended target. The first-generation API students had an average of 27 credit hours in the first semester of their freshman year, and an average of 42 credit hours at the completion of their freshman year. In their sophomore year, they had obtained an average of 66 credit hours. In the junior year, they had an average of 88 credit hours, two credit hours short of the 90 credit hours' target. In the senior year, they obtained an average of 104 credit hours, 16 credit hours short of the required 120 credit hours to graduate on the fourth-year graduation mark, and an average of 109 credit hours, 11 credit hours short of 120 credit hours to graduate on the fifth-year graduation mark. The lockdown of the COVID-19 pandemic from Spring 2020 to Spring 2021 might be affecting the first-generation students' credit hours' completion and graduation time.

Table 21

Overall Academic Outcomes—First-Generation API Students Fall 2016 to Fall 2021

	N	Grade point average		Credit hours earned		Academic Standing (%)	
		Target	Mean	Target	Mean	Target	Mean
Fall 2016	531	2.00	3.13	15	27	100	89
Start of Fall 2017	531	2.00	3.11	30	42	100	90
Start of Fall 2018	531	2.00	3.08	60	66	100	90
Start of Fall 2019	531	2.00	3.07	90	88	100	89
Start of Fall 2020	531	2.00	3.10	120	104	100	90
Start of Fall 2021	531	2.00	3.12	120	109	100	90

Note. Fall 2016 measures were taken at the end of the semester. All other measures—

2017–2021—were at the start of the semester.

Table 22 shows the academic outcomes of first-generation API students by

income. First-generation API students with all income levels had an average GPA higher

than 2.0. Students with family of income less than $20,000 and income between $100K

and $150K tended to have average GPAs less than 3.0. Students with family income

between $100K and $150K also had the lowest academic standing of 81%. Students with

family income between $150K and $200K had the highest GPA and 100% in good

academic standing. Students with family income between $60K and $80K had the lowest

credit hours earned among the groups.

First-generation students with family income of higher than $200K had reached

the 120 credit hours earned to graduate with 122 in the fifth year (Fall 2021), and 100%

in good academic standing. Six of eight students (75%) had graduated with one student

who applied for graduation in Fall 2021, and one student did not enroll back during the

pandemic after Spring 2021.

Table 22

Academic Outcomes of First-Generation API Students Fall 2016 to Fall 2021 by Income

Income	N	Fall 2016–Fall 2021					
		16	17	18	19	20	21
		Grade point average					
Target		2.000	2.000	2.000	2.000	2.000	2.000
< $20,000	88	2.865	2.810	2.827	2.816	2.860	2.876
$20,000–$39,999	166	3.197	3.219	3.191	3.184	3.213	3.227
$40,000–$59,999	109	3.305	3.262	3.188	3.162	3.184	3.204
$60,000–$79,999	47	3.081	2.971	2.979	2.969	3.009	3.032
$80,000–$99,999	38	3.187	3.194	3.146	3.140	3.176	3.190
$100,000–$149,999	31	2.898	2.846	2.807	2.778	2.814	2.847
$150,000–$199,999	7	3.537	3.464	3.491	3.485	3.532	3.543
> $200,000	8	2.745	2.834	2.936	3.015	3.132	3.196
None/unknown	37	3.088	3.131	3.087	3.095	3.121	3.142
Overall	531	3.126	3.106	3.078	3.068	3.101	3.120
		Credit hours earned					
Target		15	30	60	90	120	120
< $20,000	88	25	38	60	80	96	102
$20,000–$39,999	166	26	41	67	92	108	113
$40,000–$59,999	109	30	46	71	92	106	111
$60,000–$79,999	47	28	42	63	81	95	99
$80,000–$99,999	38	28	43	68	92	107	111
$100,000–$149,999	31	30	44	67	87	103	110
$150,000–$199,999	7	30	45	70	98	112	117
> $200,000	8	22	40	65	93	115	122
None/unknown	37	25	40	64	86	105	112
Overall	531	27	42	66	88	104	109
		Academic Standing (%)					
Target		100	100	100	100	100	100
< $20,000	88	83	84	84	84	86	86
$20,000–$39,999	166	90	93	93	92	92	92
$40,000–$59,999	109	93	94	91	92	93	93
$60,000–$79,999	47	91	83	83	85	85	85
$80,000–$99,999	38	92	92	92	89	89	89
$100,000–$149,999	31	84	81	81	81	81	81
$150,000–$199,999	7	100	100	100	100	100	100
> $200,000	8	75	75	88	88	88	100
None/unknown	37	92	92	97	97	97	97
Overall	531	89	90	90	89	90	90

Research Question 4

To what extent is there a relationship between parents' level of education and the academic outcomes of first-generation FTIC API students and how different are they by

residency status, by regions of Asia and Pacific Islands, and by ancestral countries of

origin at a large urban 4-year AANAPISI in Texas?

In this section, a Spearman Rho correlation was run first to examine the

relationship between parents' education and academic outcomes. Then, descriptive

analysis and multivariate analysis of variance (MANOVA) were run to determine

whether there were any statistical differences among the means of academic outcomes by

1) the residency status group, 2) regions of Asia and the Pacific Islands, and 3) ancestral

countries of origin. The data analyzed was the academic performance of GPA, credit

hours earned, and academic standing status at the beginning of the Fall 2020 semester,

which was within the fourth-year graduation mark.

Correlations

A Spearman Rho correlation was run to examine whether the parents' level of

education relates to the academic outcomes of the first-generation API students. The

outcomes of the beginning of Fall 2020 and Fall 2021 datasets were used. From the

correlation, the father's and mother's educational achievements were not significantly

related to the GPAs and credit hours earned by first-generation API students. The

father's educational achievement was also not significantly related to the academic

standing status. Conversely, reviewing the relationship between the mother's education of

531 first-generation API students and academic standing status in Table 23 showed that

there was a very weak, negative correlation between the mother's education and

academic standing status in both Fall 2020 and Fall 2021, which were statistically

significant ($r_s = -.144$, $p = .001$) and ($r_s = -.135$, $p = .002$)

Table 23

Correlation Output of Mother's Education Achievement and First-Generation API Students' Academic Standing Status Fall 2020 and Fall 2021

Correlations			Fall 2020		Fall 2021	
			Acad Stdng	Mother edu	Acad Stdng	Mother edu
Spearman's rho	Acad Stdng	Correlation Coefficient	1.000	-.144**	1.000	-.135**
		Sig. (2-tailed)		0.001		0.002
		N	531	531	531	531
	Mother edu	Correlation Coefficient	-.144**	1.000	-.135**	1.000
		Sig. (2-tailed)	0.001		0.002	
		N	531	531	531	531

Note. Acad Stdng = Academic Standing; edu = education.

Scatter plots were not used to plot data points on a horizontal (X) and a vertical (Y) axis in an attempt to show how much one variable was affected by another, as the results show that there was a very weak relationship between the mother's education and academic standing status of the first-generation API students. Therefore, a cross-tabulation was performed. We can see from Table 24 that first-generation API students whose mothers had less education (no high school to high school) tended to have a greater academic standing.

Table 24

Fall 2020 Cross-tabulation of Academic Standing and Mother Education

Education		Academic Standing			
		Not in Good Standing	In Good Standing	Total	In Good Standing %
Mother Education	No High School (NHS)	5	65	70	92.90%
	Some High School (SHS)	5	109	114	95.60%
	High School (HS)	15	142	157	90.40%
	Some College (SC)	16	115	131	87.80%
	Associate Degree (AD)	13	46	59	78.00%
Total		54	477	531	89.80%

Table 25 shows that of 341 mothers with education in high school or less, 55.1% were Vietnamese's mothers.

Table 25

Mother Education of High School or Less by Ancestral Countries of Origin

Ancestry	N	%	Ancestry	N	%
Vietnamese	188	55.10%	Saudis	2	0.60%
Pakistani	39	11.40%	Burmese	2	0.60%
Chinese	33	9.70%	Bangladeshi	2	0.60%
Asian Indian	32	9.40%	Malaysian	2	0.60%
Korean	10	2.90%	Taiwanese	1	0.30%
Cambodian	6	1.80%	Japanese	1	0.30%
Filipino	5	1.50%	Laotian	1	0.30%
Nepali	5	1.50%	Emiratis	1	0.30%
Pacific Islander	4	1.20%	Israeli	1	0.30%
Unknown	3	0.90%	Lebanese	1	0.30%
HongKonger	2	0.60%			

Residency status

Descriptive Analysis

In regards to residency status as shown in Table 26, at the fourth and fifth-year graduation marks, all residency status had an average GPA of more than 3.0. The international first-generation FTIC API students had the highest GPA of 3.15 and 3.17, and highest credit hours earned of 111 and 116, although they had the lowest good academic standing with 88%. In contrast, the GPA and credit hours earned of first-generation foreign-born students tended to be lower than the U.S.-born and international students, although they had a higher academic standing (91%) compared to the U.S.-born (90%) and international students (88%). The first-generation U.S.-born students are 56% Southeast Asian, of which 51% are Vietnamese. Of the first-generation foreign-born students, 48% are Southeast Asian, of which 43% are Vietnamese. Lastly, of the first-

generation international students, 75% were East Asian, of which less than 38% each are

Chinese and Korean students.

Table 26

Academic Outcomes of First-Generation API Students Based on Residency

Region	N	Fall 16	Fall 17	Fall 18	Fall 19	Fall 20	Fall 21
		Grade point average					
Target		2.000	2.000	2.000	2.000	2.000	2.000
U.S.-born	374	3.109	3.098	3.084	3.082	3.122	3.142
Foreign-born	149	3.153	3.116	3.059	3.030	3.046	3.062
International	8	3.418	3.256	3.175	3.122	3.148	3.168
Overall	531	3.126	3.106	3.078	3.068	3.101	3.120
		Credit hours earned					
Target		15	30	60	90	120	120
U.S.-born	374	27	42	66	88	104	110
Foreign-born	149	28	42	66	88	103	109
International	8	23	36	64	90	111	116
Overall	531	27	42	66	88	104	109
		Academic Standing (%)					
Target		100	100	100	100	100	100
U.S.-born	374	90	89	89	89	90	90
Foreign-born	149	89	92	91	90	91	91
International	8	100	88	88	88	88	88
Overall	531	89	90	90	89	90	90

MANOVA Analysis

The data analyzed were the academic outcomes at the beginning of the Fall 2020

semester, which was within the fourth-year graduation mark. Results from MANOVA

show that there was not a statistically significant difference in the academic outcome of

first-generation API students based on their residency status, (F (6, 974) = 0.468, $p > .05$;

Wilk's $\Lambda = 0.994$, partial $\eta 2 = .003$), on the fourth-year graduation mark. We can

conclude that the academic outcomes of first-generation FTIC API students were not

significantly dependent on which residency status they have.

Region of Asia and the Pacific Islands groups

Descriptive Analysis

Based on the regions as shown in Table 27, at the fourth and fifth-year graduation marks, the overall GPAs of first-generation API students were more than the 2.0 target. The students of East and South Asian descents had the highest with 3.17 in the fourth year and 3.19 in the fifth year, followed by Southeast Asian with 3.12 and 3.13. West Asian had an average GPA of 2.91 and 2.92 in the fourth and fifth year, and the unknown region had an average GPA of 2.25 and 2.27. It means that East, Southeast, South, West Asians, and unknown region first-generation students have no difficulty graduating.

Table 27

Academic Outcomes of First-Generation API Students Based on Region

Region	N	Fall 16	Fall 17	Fall 18	Fall 19	Fall 20	Fall 21
				Grade point average			
Target		2.000	2.000	2.000	2.000	2.000	2.000
East Asia	73	3.205	3.161	3.145	3.133	3.168	3.192
Southeast Asia	280	3.125	3.116	3.097	3.086	3.119	3.135
South Asia	143	3.197	3.199	3.162	3.146	3.172	3.190
West Asia	11	3.054	2.891	2.792	2.851	2.913	2.924
Pacific Islands	9	2.549	2.471	2.251	2.268	2.364	2.409
Central Asia	1	1.908	2.708	2.777	2.889	2.870	3.025
Unknown	14	2.472	2.200	2.207	2.203	2.246	2.275
Overall	531	3.126	3.106	3.078	3.068	3.101	3.120
				Credit hours earned			
Target		15	30	60	90	120	120
East Asia	73	25	40	64	85	102	108
Southeast Asia	280	29	44	68	91	106	111
South Asia	143	26	41	66	91	107	112
West Asia	11	24	40	60	81	96	98
Pacific Islands	9	18	29	46	62	80	85
Central Asia	1	69	82	103	124	139	176
Unknown	14	22	30	45	55	68	71
Overall	531	27	42	66	88	104	109

Region	N	Fall 16	Fall 17	Fall 18	Fall 19	Fall 20	Fall 21
		Academic Standing (%)					
Target		100	100	100	100	100	100
East Asia	73	93	92	93	92	92	92.0
Southeast Asia	280	90	91	91	91	92	92.0
South Asia	143	90	90	91	91	92	92
West Asia	11	100	91	91	82	82	82
Pacific Islands	9	78	78	56	56	56	56
Central Asia	1	0	100	100	100	100	100
Unknown	14	71	64	57	57	57	57
Overall	531	89	90	90	89	90	90

The credit hours earned above for East, Southeast, and South Asian descents were more than 100, with South Asian students tending to be the highest with 107 and 112 credit hours earned in the fourth and fifth year, followed by Southeast Asians with 106 and 111, and East Asians with 102 and 108. It means that they only needed between 8 and 12 credit hours to graduate in the middle of the sixth-year mark. Pacific Islands and unknown API regions had credit hours below 100, although West Asians had higher credit hours (96 and 98) than Pacific Islanders (78 and 85) and unknown API region students (68 and 71). West Asian first-generation API students were most likely to graduate at the end of the sixth year. With the low credit hours earned, students from the Pacific Islands and unknown API regions would most likely not to graduate in the sixth-year graduation mark and may graduate in the eight-year, or could be at risk of not graduating.

The East, Southeast, and South Asian descents students had higher academic standing of 92%, compared to West Asians with 82% and Pacific Islanders and unknown API region students with only 56% and 57%.

Figure 12

Plots of Academic Outcomes of First-Generation API Students Based on Regions
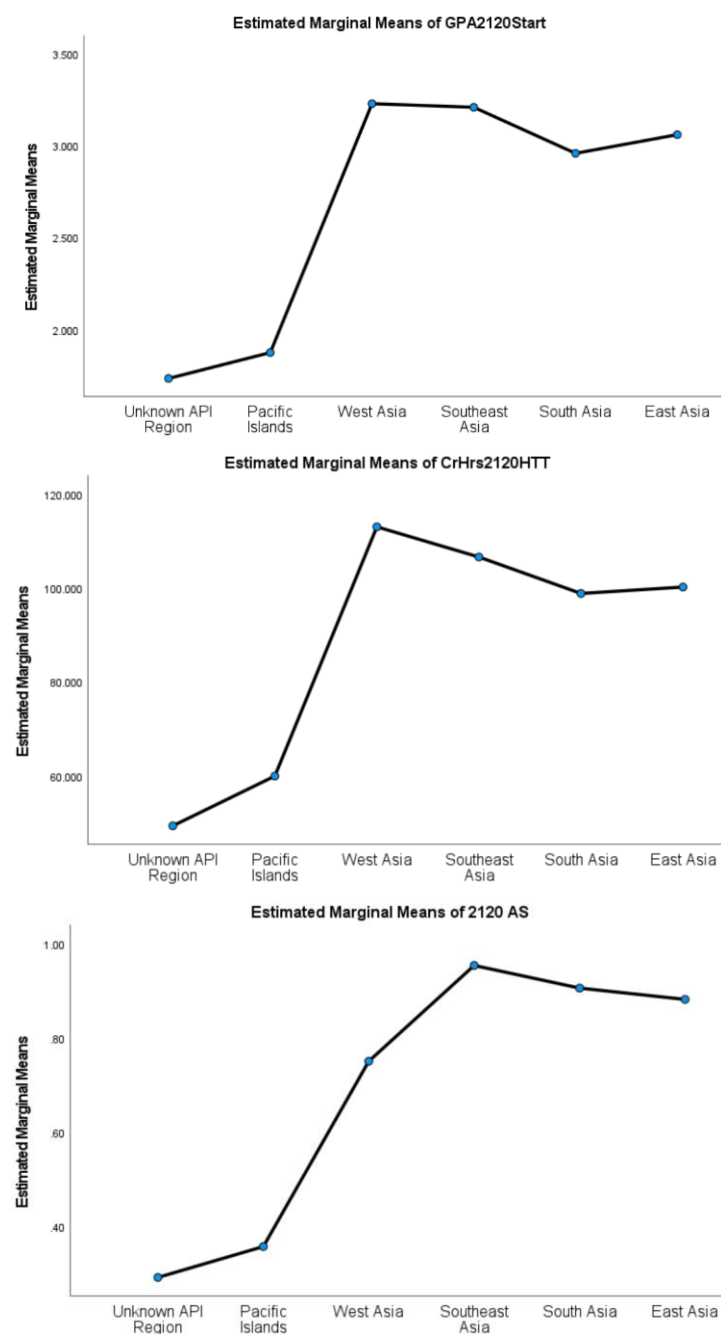
Note. Term 2120 = Fall 2020; GPA2120Start = Grade point average at the beginning of

Fall 2020; CrHrs2120HTT = Credit hours earned at the at the beginning of Fall 2020;

2120AS = Academic standing at the beginning of Fall 2020.

The academic outcomes differences for the first-generation API students are visualized by the plots as shown in Figure 12 above. It shows that unknown region students' academic outcomes were consistently lower than in any other region. Unknown region first-generation students had lower GPAs, fewer credits, lower academic standing, and were less likely to graduate on time, or could be at risk of not graduating.

MANOVA Analysis

From the output of the multiple comparison table for the fourth-year graduation mark (Fall 2020), there were statistically significant differences in average GPA, credit hours earned, and academic standing status of the first-generation API students. For GPA, there were statistically differences in GPA between the Pacific Islander students and East ($p=.039$), Southeast ($p=.056$), and South Asian students ($p=.029$), as well as between the unknown API region students and East ($p=.001$), Southeast (($p<.001$), and South Asian ($p<.001$) first-generation API students. East and South Asians were significantly higher than Pacific Islanders with a mean difference of 0.81, and South Asians were also higher than the unknown region with a mean difference of 0.92. The GPAs of the unknown region of first-generation API students were significantly lower than any other region.

For the credit hours earned, there were statistically significant differences between unknown API region first-generation API students and East Asians ($p=.045$), Southeast Asians ($p=.006$), and South Asians ($p=.008$). South Asian first-generation students were again significantly higher than the unknown region with a mean difference of 38 credit hours. The unknown region of first-generation API students was significantly lower in credit hours earned than in any other regions.

For academic standing, there were statistical differences between the Pacific Islander students and East ($p=.005$), Southeast ($p=.003$), and South Asian first-generation API students ($p=.004$), and between the unknown API region students and East, Southeast, and South Asian first-generation API students ($p<.001$). East Asians were significantly higher than the unknown region with the mean difference of 38%, and East Asians were also significantly higher than Pacific Islander students with the mean difference of 36% in academic standing. The unknown region of first-generation API students was significantly lower in academic standing than any other regions, except first-generation Pacific Islanders.

Ancestral countries of origin

Descriptive Analysis

In regards to the ancestral countries of origin as shown in Table 28, I will discuss those with a sample of 6 or more students. The average GPA for the fourth- and fifth-year mark of first-generation students from Vietnamese, Indian, Pakistani, Chinese, and Korean students tended to be more than 3.0 with Asian Indian with the highest GPA of 3.25 in the fifth year, followed by Korean with 3.24, Chinese and Vietnamese with 3.16, and Pakistani with 3.14. Filipino and Cambodian students had an average GPA with 2.89 and 2.87 respectively. Pacific Islander students had a 2.41 GPA and unknown API region students had GPAs of 2.27. Cambodian, Chinese, Asian Indian, Filipino, Korean, Pakistani, and Vietnamese students had higher credit hours earned of more than 100 credit hours, with Pakistani being the highest. Pacific Islanders and the unknown API region students had the lowest credit hours with 85 and 71 respectively, which most likely would not graduate in the sixth-year graduation mark, or be at risk of not graduating.

Table 28

Academic Outcomes of First-Generation API Students Based on Ancestry Fall 2016-2021

Ancestry	N	Fall 2016–2021						Fall 2016–2021					
		16	17	18	19	20	21	16	17	18	19	20	21
		Grade point average						Credit hours earned					
Target		2.00	2.00	2.00	2.00	2.00	2.00	15	30	60	90	120	120
Vietnamese	255	3.15	3.14	3.12	3.11	3.14	3.16	29	44	69	92	108	113
Asian Indian	70	3.21	3.26	3.23	3.22	3.23	3.25	25	41	67	90	104	109
Pakistani	63	3.16	3.13	3.09	3.08	3.12	3.14	26	40	65	91	110	117
Chinese	46	3.15	3.10	3.09	3.08	3.12	3.16	24	39	63	85	102	108
Korean	18	3.29	3.23	3.19	3.20	3.24	3.24	23	38	62	78	96	102
Unknown	14	2.47	2.20	2.21	2.20	2.25	2.28	22	30	45	55	68	71
Filipino	12	2.78	2.72	2.79	2.80	2.85	2.89	23	36	56	76	94	102
Pacific Islander	9	2.55	2.47	2.25	2.27	2.36	2.41	18	29	46	62	80	85
Cambodian	6	2.61	2.87	2.90	2.87	2.87	2.87	37	48	69	89	108	111
Nepalese	5	3.69	3.38	3.28	3.15	3.17	3.17	38	55	81	102	112	112
Bangladeshi	4	2.91	2.84	2.89	2.88	2.91	2.96	22	36	54	74	87	91
Hong Kongers	3	3.05	3.32	3.37	3.35	3.35	3.35	30	48	75	94	94	94
Japanese	3	3.26	2.95	2.89	2.64	2.70	2.70	31	48	71	91	109	120
Saudi	3	3.13	3.24	3.10	3.17	3.17	3.19	27	46	77	105	124	128
Taiwanese	3	3.62	3.71	3.78	3.77	3.76	3.76	33	49	81	114	133	133
Other SE Asian[a]	7	3.12	2.99	2.98	2.94	2.91	2.92	21	33	53	63	71	75
South Asian[b]	1	3.53	3.50	3.66	3.63	3.63	3.63	39	58	95	125	125	125
Central Asian[b]	1	1.91	2.71	2.78	2.89	2.87	3.03	69	82	103	124	139	176
Other West Asian[c]	8	3.02	2.76	2.68	2.73	2.82	2.82	23	37	54	72	85	87
Overall	531	3.13	3.11	3.08	3.07	3.10	3.12	27	42	66	88	104	109

Ancestry	N	Fall 2016–2021					
		16	17	18	19	20	21
		Academic Standing (%)					
Target		100	100	100	100	100	100
Vietnamese	255	91	92	91	92	93	93
Asian Indian	70	89	89	90	91	91	91
Pakistani	63	89	89	90	89	90	90
Chinese	46	93	91	91	91	91	91
Korean	18	94	94	94	89	89	89
Unknown	14	71	64	57	57	57	57
Filipino	12	83	67	75	75	75	75
Pacific Islander	9	78	78	56	56	56	56
Cambodian	6	50	83	83	83	83	83
Nepalese	5	100	100	100	100	100	100
Bangladeshi	4	100	100	100	100	100	100
Hong Kongers	3	67	67	100	100	100	100
Japanese	3	100	100	100	100	100	100
Saudi	3	100	100	100	100	100	100
Taiwanese	3	100	100	100	100	100	100
Other SE Asian[a]	7	100	100	100	100	100	100
South Asian[b]	1	100	100	100	100	100	100
Central Asian[b]	1	0	100	100	100	100	100
Other West Asian[c]	8	100	88	88	75	88	75
Overall	531	89	90	90	89	90	90

Note. API = Asian and Pacific Islander.

[a] The term *other SE Asian's* or other Southeast Asian's ancestry include students from Laos, Malaysian, Myanmar, and Thailand

[b] Ancestral countries of origin were redacted due to small sample

[c] Other West Asian include students from Bahrain, Iran, Israeli, Kuwait, Lebanon, and United Arab Emirates.

Table 28 also shows that Vietnamese, Indian, Pakistani, Chinese, and Korean first-generation students had higher academic standing of more than 90%, compared to Korean students with 89% and Cambodian students with 83% in good academic standing. Filipino students had 75% in good academic standing and Pacific Islander and unknown API region students had the lowest with only 56% and 57% in good academic standing.

There were 50 first-generation API students of the sample who were not in good academic standing (see Table 29), of which 36% (N=18) were under academic suspension.

Table 29

First-Generation API Students Not in Good Academic Standing Fall 2020

Academic Standing	N	%
S1-Suspension 1	18	36%
Academic Probation	18	36%
Academic Warning	10	20%
Probation, continued	2	4%
Prob-S1 (Probation after Suspension 1)	2	4%
Total	50	

Table 30 shows that 35 of the students not in good standing were U.S.-born (70%). More than 9% each of the total overall sample of first-generation API students were U.S.-born and foreign-born. By region, of those 50 students not in good standing, 44% were Southeast Asian, followed by 24% South Asian, 12% East Asian, and 12% represented in the unknown API region. When compared to overall sample of first-generation API students, 43% were represented in the unknown region. With the focus on ancestral countries of origin, the highest proportion of students not in good academic standing were Vietnamese with 36%, followed by Asian Indian, Pakistani, and unknown ancestry with 12% each, Chinese with 8%, and Filipino and Pacific Islanders with 6% each. When

compared to the overall sample of first-generation API students, 43% of unknown

ancestry were not in good academic standing.

Table 30

First-Generation API Students Not in Good Academic Standing Based on Residency,

Region, And Ancestral Countries of Origin Fall 2020

Residency	N	%	% to sample	Region	N	%	% to sample
U.S.-born	35	70%	9.4%	Southeast Asia	22	44%	7.9%
Foreign-born	14	28%	9.4%	South Asia	12	24%	8.4%
International	1	2%	12.5%	East Asia	6	12%	8.2%
Overall	50			Pacific Islands	3	4%	33.3%
				West Asia	1	2%	9.1%
				Unknown	6	12%	42.9%
				Overall	50		

Ancestry	N	%	% to sample
Vietnamese	18	36%	7.1%
Asian Indian	6	12%	8.6%
Pakistani	6	12%	9.5%
Chinese	4	8%	8.7%
Korean	2	4%	11.1%
Filipino	3	6%	25.0%
Pacific Islander	3	6%	33.3%
Cambodian	1	2%	16.7%
West Asian[a]	1	2%	100.0%
Unknown	6	12%	42.9%
Overall	50		

Note. API = Asian and Pacific Islander.

[a] The term *West Asian's* ancestry was intentionally redacted due to small sample

MANOVA Analysis

From the output of the multiple comparison table for the fourth-year graduation

mark (Fall 2020), there were statistically significant differences in average GPA, credit

hours earned, and academic standing status of the first-generation API students. For

GPA, there were statistically differences in GPA between the unknown API ancestry

students and Asian Indian ($p =.002$), Chinese ($p=.023$), and Vietnamese students ($p=.010$). First-generation Asian Indian students were significantly higher in GPA than unknown ancestry students with the mean difference in GPA of 0.95.

For the credit hours earned, there were no statistical differences between ancestry. On the other hand, for academic standing, there were statistical differences between the unknown API region students and Asian Indian ($p=.020$), Chinese ($p=.019$), and Vietnamese students ($p=.010$). First-generation Vietnamese students were significantly higher than the unknown ancestry students with a mean difference of 32% in academic standing.

We can conclude that first-generation Asian Indians had significantly higher GPAs than any other region, first-generation Pakistani in credit hours earned, and first-generation Vietnamese students in good academic standing. Academic outcomes for the first-generation unknown region students were significantly lower than any other region, except for first-generation Pacific Islanders' academic standing.

Research Question 5

To what extent does the API students' parents' level of income relate to credit hours earned for first-generation undergraduate API students at a large urban four-year AANAPISI in Texas?

A Spearman's rank-order correlation was run to determine the relationship between 531 first-generation students' credit hours earned and parents' level of income. We can conclude that the correlation between parents' level of income and the student's credit hours earned is not statically significant.

Scatter plots were not used to plot data points on a horizontal (X) and a vertical (Y) axis in an attempt to show how much one variable was affected by another, as the results show that there was no correlation between parents' level of income and the first-generation API students' credit hours earned.

Conclusion

This research examined the academic outcomes of 1,445 Fall 2016 FTIC (First-Time-In-College) API students enrolled in a 4-year AANAPISI (Asian American and Native American Pacific Islands Institution) in Texas. Comparisons of academic outcomes were investigated based on residency status (i.e., U.S.-born, foreign-born, and international students), regions of Asia and the Pacific Islands, and ancestral countries of origin.

From the overall sample, 53% are male and 47% are female. Almost all (99.72%) were between 16-22 years old in Fall 2016 as of September 1. The father's education level for 24.9% of the sample was high school or less and 52.5% had earned an associate degree or higher. The mother's education level for 30.2% of the sample was high school or less and 49.3% had earned an associate degree or higher. South Asian fathers and mothers had higher postsecondary education. For family income, 40% reported an income of more than $60,000, and 39% reported an income of less than $60,000. There were 21% of the overall sample whose income were either none or unknown.

Research Question 1

The overall GPAs from Fall 2016 to Fall 2021 were consistently higher than a 3.0, with no problems in graduating, and the overall academic standing was 90% in the fourth and fifth years. However, in the credit hours earned, only the first three years of college

reached the required target of 30 (first year), 60 (second year), and 90 credit hours (third year), and short on the fourth and fifth years. They did have more credit hours in at least the first two years due to test credits and dual credit hours taken while in high school, as well as transfer credits from community colleges taken mostly in Summer semesters.

Female API students and students whose age was 17-year-old when first enrolled tended to have higher academic outcomes in GPA and academic standing.

Students whose family income was less than $20,000 had a GPA lower than 3.0, lower credit hours, and fewer students in good academic standing.

Students whose father's level of education was a graduate/professional degree or some high school, and students whose mother's level of education was graduate/professional degree or bachelor's degree, tended to have higher academic outcomes in GPA, credit hours earned, and academic standing.

Research Question 2

Residency

The academic outcomes of FTIC API students were not significantly dependent on residency status. GPA and the academic standing of the international API students tended to be higher than the U.S.-born and foreign-born API students. The foreign-born had the highest credit hours earned in the fifth year and they were on target for the first three years of college.

Region

There was a significant difference in academic outcomes based on the students' region of descent. East Asians had a higher GPA, but South Asians had higher credit

hours and higher percentage in good academic standing. Pacific Islander students had a lower average GPA of below 2.0, lower credit hours earned, low good academic standing, and were at risk of not graduating on time, or even not graduating.

Ancestral countries of origin

There was a significant difference in academic outcomes based on the students' ancestral countries of origin. Japanese students had the highest credit hours earned, 100% were in good academic standing, with an average GPA of nearly 3.0 in the fourth and fifth years. Pacific Islander students had a lower average GPA of below 2.0, lower credit hours earned, lower good academic standing, and were at risk of not graduating on time, or even not graduating.

Research Question 3

In general, 4-year graduation rates for FTIC API students is higher (44%) than the urban public AANAPISI in Southeast Texas's average of 39% and the national average of 33%. The 5-year graduation rate for the API student was 65%, higher than the national average of 56%.

Residency

The retention and graduation rates were not significantly dependent on which residency status the FTIC API students had. However, of the overall sample who graduated, 70% were U.S.-born API students, and of all U.S.-born API students, 45% graduated.

Region

There were significant differences in the retention and graduation rate in the fourth and fifth-year graduation marks based on the students' region of descendants.

Retention and graduation rates of South Asian descent were significantly higher than those of other regions. Among the overall sample who graduated on time in the fourth year, 50% of South Asians graduated the most compared to 18% of Pacific Islanders. In the fifth year, 73% of South Asians graduated the most compared to 35% of unknown API region.

Of those who were not enrolled in the fourth- and fifth-year graduation marks, Southeast Asians were the most with 45% (N=153) and 46% (N=161) respectively.

Ancestral countries of origin

There were statistically significant differences in the retention and graduation rates in the fourth and fifth-year graduation marks based on ancestral countries of origin. Among all students who graduated on time in the fourth year, 31% were Vietnamese students. Among the overall sample, all Emiratis students (100%), followed by 61% of Bangladeshi, and 53% of Asian Indians graduated on time. Only 18% of Pacific Islanders graduated on time in the fourth year. In the fifth year, 31% of Vietnamese were graduated. Among the overall sample, 78% of Bangladeshi, followed by 53% of Asian Indians graduated in the fifth year. More than 36% of all Pacific Islanders graduated in the fifth year. Also, only 25% and 35% of all unknown API ancestry graduated in the fourth and fifth years.

Of those who were not enrolled in the fourth- and fifth-year graduation marks, Vietnamese were the most with 30% (N=104) and 31% (N=107) respectively.

Research Question 4

There were 531 first-generation API students from 26 ancestral countries of origin at an urban public AANAPISI in Southeast Texas, which was 37% of all FTIC API

students in the Fall 2016 dataset. More than 51% are male and 49% are female, and all were between 16 and 22 years old, with 84% being 18 years old. More than 70% were U.S.-born, 28% were foreign-born, and 2% were internationally-born. Southeast Asian students comprised 53% of this study, followed by South Asian of 27%, East Asian of 14%, West Asian of 2%, and Pacific Islanders of 2%.

For graduation rates, the 4-year graduation rates for first-generation FTIC API students were significantly higher (40%) than the national average of 27%. In 5-year graduation rates, the first-generation FTIC API students were also significantly higher (64%) compared to the national average of less than 45%.

Correlations

Only the mother's education had a very weak correlation with academic standing and there was no correlation among other academic outcomes. Surprisingly, first-generation API students whose mothers had less education (no high school to high school) tended to have greater academic standing.

Residency

There was not a statistically significant difference in the academic outcome of first-generation API students based on their residency status; however, international students had higher GPA's and credit hours earned than U.S.-born and foreign-born students, and foreign-born first-generation API students had higher good academic standing.

Region

There were statistically significant differences in the academic outcomes of first-generation API students based on the regions of Asia and the Pacific Islands.

First-generation South Asians were significantly higher in academic outcomes than in any other region. In contrast, the unknown region students were significantly lower in academic outcomes than any other regions.

Ancestral countries of origin

There were statistically significant differences in the academic outcomes of first-generation API students based on ancestral countries of origin.

The first-generation Asian Indians were significantly higher in GPA than any other region, first-generation Pakistani were higher in credit hours earned, and first-generation Vietnamese were higher in academic standing. The first-generation unknown region students were significantly lower in academic outcomes than any other regions, except first-generation Pacific Islander in academic standing.

Research Question 5

Using the correlation design, there was a weaker association between a parents' level of income and the student's credit hours earned. This correlation was not statistically significant.

Chapter V

Discussion

The purpose of this study was to analyze the differences in academic outcomes (GPAs, credit hours earned, and academic standing status) of students who classify as Asian and Pacific Islander (API) at a large urban four-year AANAPISI in Texas based on three residency status groups: U.S.-born, foreign-born, and international API students, as well as regions of Asia and the Pacific Islands and their ancestral countries of origins. The results of this study suggested that although residency status did not affect the academic outcomes, regions and ancestral countries of origin did affect the academic outcomes. This chapter provides the major findings and discussion of primary results, the limitations of this study, the implications of practice, and recommendations for future research.

The analysis of the data results in chapter IV confirmed the prior research on the negative effects of model minority myth and why it was important to challenge this misconception. The results show that Asians and Pacific Islanders are not a monolith. Monolith means that different API subgroups were lumped together as one 'Asian.' Some API groups were consistently high-achieving academically in the study. However, other API subgroups, especially from smaller groups, had a lower academic performance.

In this research, the focus was examining the academic performance of the API students in the urban public AANAPISI in Southeast Texas. From the results, the common theme is that the historical aggregation of data resulted in Asian students being placed in disadvantageous situation to the students from various subsets of APIs. With the data aggregation that was conducted, the academic and social obstacles encountered

by the API students can be concealed by societal expectations of these groups, yet fail to

identify the poor performance levels and low graduation rates for some of this group of

students. With the disaggregation of this data, and from previous research conducted on

this topic, it has been possible to acknowledge how the specific issues faced by certain

API students, the goal is to provide practical ways to address the concerns articulated in

this study and past research. This research adds to the existing literature because of its

relevancy to what these students are facing in college. It also expands on varying levels

areas of disaggregated data, including academic performance and graduation rates of the

API students, the impact of origins on performance, and many others. This research adds

to the existing literature because of its relevancy to what these students are facing in

college. The AANAPISIs in Texas can use the disaggregated data to make meaningful

changes that could benefit API students and address the misconceptions that have been

associated with this group of students.

Major Findings and Discussion

Research Question 1

The first research question examined the academic outcomes of students who

classify as Asian Pacific Islanders (API) at a large urban AANAPISI in Texas. The

model minority myth is demonstrated in the academic outcomes of the API students in

the study. The academic outcomes of the overall sample show that APIs at the urban

public AANAPISI in Southeast Texas had above-average academic outcomes on the

GPA, credit hours earned, and good academic standing. Specifically, the myth is

demonstrated in the overall GPA. From the first to the fifth year, the API students in the

study consistently had an average GPA of more than 3.0. These GPAs far exceeded the

target of 2.0 GPA to graduate. The myth is also demonstrated in the overall good academic standing of 90%, supporting the stereotype of the model minority myth where API students are smarter and more studious than any other racial and ethnic groups and that they are high-achieving students.

The credit hours earned for the first three years reached the target of 30 credit hours (freshmen), 60 (sophomore), and 90 (junior). By the end of their first semester, the average credit hours earned were 27, more than the average of 15 credit hours. This is because most of these API students took dual credit courses and test credits, such as AP and IB, while in high school. These outcomes continue to support the model minority myth that the majority of first-year API undergraduate students were high achievers even prior to their freshmen year.

However, the API students were 15 credit hours short of 120 credits needed to graduate on time in the fourth year, and 10 credit hours short in fifth-year graduation rate marks. The myth is busted as the model minority myth of API students graduating on time was not supported.

Research Question 2

The second research question examined the differences of academic outcomes of FTIC API students among residency status (U.S.-born, foreign-born, and international), regions of Asia and the Pacific Islands, and ancestral countries of origin at a large urban AANAPISI in Texas. Overall, while the model minority myth was supported, the disaggregated data within the same period, however, may portray a different scenario.

Residency status

From the Fall 2016 data set, 65% of the total international students were Asian, with India and China as the top two countries producing more international students. According to the Boundless report (2021), 74% of the international student population in the United States comes from Asia, with China and India as the top two representing international students. International students are usually well prepared academically and they are expected to perform academically better by their parents than U.S.-born students due to having to pay higher tuition and fees. In the sample, the GPAs and academic standing of international API students were indeed higher than the API students who are U.S.-born and foreign-born, although the credit hours earned are lower than the U.S.-born and foreign-born students.

From the first semester until the third year, U.S.-born and foreign-born students reached the required targets of 30, 60, and 90 credit hours; however, the international students only reached the targets of 30 and 60 credit hours in their second year. International students deal with "academic challenges, social isolation, and cultural adjustment" (Wu, 2015). Although international students have to meet requirements in academic and language aspects, their greatest academic challenge is communicating with faculty, staff, and classmates. Due to the language barrier, international students face social isolation when engaging in different group activities. They need to make cultural adjustments due to different cultural norms and expectations from their country as compared to United States' norms and expectations. Understanding these students' academic challenges, faculty and staff should recognize the students' needs and effectively offer supportive campus resources and services.

Whereas there was little difference in the students' academic performance based on their residency status, a difference was discovered based on the students' regions and ancestral countries of origin below.

Regions of Asia and the Pacific Islands

When considering the regions, there were differences in GPAs, credit hours earned, and academic standing between regions of Asia and the Pacific Islands. Students from the East, Southeast, South, and Central Asian regions had GPAs above 3.0, and unknown API regions had an average GPA of more than 2.0. In contrast, the students from the Pacific Islands region had GPA's less than 2.0, had lower credit hours, and lower academic standing. Similar to the national average, the Pacific Islands region had the lower educational attainment level. East and South Asian students had the highest academic performance (Pew Research Center, 2019). Ng, Chan, and Chen (2017) stated that Southeast Asian Americans had the lowest high school graduation rate as well as bachelor degree rates, which were lower than African Americans and Latinos. Southeast Asians were also supposed to be lower than the East Asians (Pew Research, 2019), but in this study, the academic outcomes overall for both East and Southeast Asians were similar, although East Asians had a higher GPA. South Asians were overall higher than any other region.

Ancestral countries of origin

Similar to the regions, when considering the ancestral countries of origin, there were differences in GPAs, credit hours earned, and academic standing between API sub-groups. Chinese Americans currently have one of the highest educational attainment levels in the United States (Song, 2016). In this study, Chinese and Taiwanese were the

groups with higher GPAs, credit hours earned, and academic standing, supporting Song's studies. According to Pew Research Center (2017), Asian Indians and Emiratis were the highest in their API subgroups in terms of educational attainment. Similarly, Asian Indians had the higher academic outcomes among the South Asians, and Emiratis performed higher in academic performance among West Asians in this study. As in regions, Pacific Islander students performed lower than the students from the other API subgroups, similar to the national average.

Research Question 3

The third research question examined the differences of retention and graduation rates of FTIC API among residency status (U.S.-born, foreign-born, and international), regions of Asia and the Pacific Islands, and ancestral countries of origin at a large urban AANAPISI in Texas. The completion and graduation rates of the FTIC API students reinforce the model minority myth. Specifically, while the national average for graduating from a 4-year institution for public college and university is 33% (U.S. Department of Education, 2021), 44% of the Fall 2016 FTIC undergraduate API students at an urban public university in Southeast Texas graduated in four years and 65% graduated in five years.

Residency status

In response to the question about differences in FTIC API student retention and graduation rates by residency status, all API students in the sample do not matter where their birth location was, graduated more within 4 years than the national average. It means that it supported the model minority myth. Compared to the overall sample of each residency status, there was no significant difference between U.S.-born, foreign-born, and

international students, although the U.S.-born were slightly higher in Fall 2020, and international students were higher in Fall 2021.

Regions of Asia and the Pacific Islands

In response to the question about differences in retention and graduation rates by region of Asia and the Pacific Islands, there were differences between students from the Pacific Islands region (18%), the unknown API region (25%), and any other regions (more than 42%). At higher education institutions, students from the Pacific Islands experience lower graduation rates, compared to other groups. The Pacific Islands had an 18% graduation rate in the study, which was the same as the national rate for the Pacific Islanders. Meanwhile, according to the National Commission on Asian American and Pacific Islander Research in Education (2011), 80% of East Asians enrolled in colleges earn a bachelor's degree, while more than half of the Southeast Asians drop out without a degree. It is in contrast with the study where both East and Southeast Asians had similar graduation rates of 42% in fourth-year and 61% in fifth-year.

Ancestral countries of origin

In response to the question about ancestral countries of origin and retention and graduation rates, the rates varied among the API subgroups. In the fourth year, graduation rates for Koreans, Pacific Islanders, Taiwanese, Malaysians, Cambodians, Thai, Burmese, and the unknown API ancestries were less than or the same as the national average of 33.3%, while the other API subgroups in the sample posted graduation rates between 35% and 100%. The Pew Research Center (2019) stated that the Vietnamese had low college graduation rates (22%), compared to Chinese, Japanese, and Korean Americans. In contrast, in this study, Vietnamese and Chinese students had

similar 44% graduation rates, Japanese had 46% and Koreans had 31%. Furthermore, the

completion rate for Filipinos is 38% on the national average, higher than in the study of

36%. Among South Asians, Asian Indians overall had a higher level of educational

attainment with 73% in the fifth-year in the study, similar to the national average.

Overall sample

The analysis of the data results in research questions 1 to 3 above of the 1,445

overall samples has confirmed the prior research on the negative effects of model

minority myth and why it is important to challenge the myth. The results show that

Asians and Pacific Islanders are not a monolith. API have different subgroups, not just

one 'Asian.' While data show that some API subgroups are consistently high-achieving

academically, some other API subgroups, especially Pacific Islanders are far less with

their lower academic outcomes. When the data was disaggregated, the academic

outcomes show significant differences among API regions and by ancestral countries of

origin.

First-Generation Students Sample

This section is in response to research questions 4 and 5 regarding the first-

generation API students. The graduation rates of 40.1% and 64.0% of first-generation

students' fourth and fifth years were impressive, as they were more than the national

averages of 27% and 45% for the four and five-year graduation rates. It shows that the

first-generation API students at an urban public university in Southeast Texas were doing

well. Overall, the graduation rates of the first-generation API students supported the

minority myth. However, this finding may contradict past research, such as the Inside

Higher Ed study (NCES, 2018) that found students whose families had no post-secondary

education had a difficult time finishing school when they went to college directly after high school. The first-generation API students were doing well might be due to the urban public university in Southeast Texas having several programs that assist the first-generation students. One of them was a program that was a former TRIO Project, designed to assist students who are primarily low-income and/or first-generation college students to complete their education.

Research Question 4

No significant relationship between parental academic achievement and GPA and credit hours earned by the student were noted. While the educational achievement of the father had an insignificant impact on the student's academic standing, the opposite was true for the mother's education in this study. There was a weak negative correlation between the mother's education and academic standing. Interestingly, the less educated the mother had, the higher the academic standing was for the first-generation API students at this institution.

Past research found that there is a strong correlation between parents' educational level and student academic achievement, which is contrary to the finding of the study. In prior work, students whose parents have bachelor's or graduate degrees will have an equal opportunity of succeeding academically (Hushak, 1973). Research by Idris, Hussain, and Ahmad (2020) also noted that the higher education of fathers and mothers positively contributes to their children's academic achievement. The results from this study showed that less educated mothers related to higher academic standing which have contradicted with what current literature has shown in other studies.

The following are in response to how different the first-generation API students by residency status, regions of Asia and the Pacific Islands, and ancestral countries of origin at a large urban 4-year AANAPISI in Texas.

Residency status

Similar to the overall sample, the GPAs and academic standing of first-generation API students were higher than 3.0 and between 88% and 91% in good academic standing. These results supported the model minority myth of high achievers. The credit hours in the first semester were also more than 15 credit hours as a result of dual credit courses and test credits taken while in high school, or departmental test credits taken at the urban public AANAPISI in Southeast Texas prior to the first day of class. The first-generation international students generally performed better than the first-generation U.S.-born and foreign-born students. Different from the overall sample, the U.S.-born and foreign-born first-generation API students reached the required targets for the first two years in 30, and 60 credit hours; however, the international students reached the required target for the first three years of college in 30, 60, and 90 credit hours. When responding to the fourth and fifth year, the first-generation API students, no matter where the birth locations were, did not reach the required 120 credit hours to graduate, similar to the overall sample. The results were not supporting the model minority myth of the API students who graduated on time.

Regions of Asia and the Pacific Islands

In contrast to the overall sample, all first-generation students had an overall GPA over 2.0, although East, Southeast, and South Asian students had GPAs above 3.0.

However, when considering the credit hours earned, the unknown API region was the lowest among all regions.

Many of API subgroups, such as Southeast Asians (Cambodians, Hmong, Laotian, and Vietnamese) and Pacific Islanders are from families of low-income, are first-generation in their family to attend college, and are struggling financially to support themselves while attending school, and are often stereotyped by being grouped with other Asian Americans (AAPA, 2014). These API subgroups are at higher risk for lower-income levels and poverty, language acquisition difficulties, lower graduation rates for high school and college, and occupational barriers. However, this is not the case for the Southeast Asian first-generation students in the study where their academic outcomes were high, similar to the East and South Asians. For the Pacific Islander, the GPA was good with more than 2.0 average, however, the credit hours earned and academic standing was low due to more than 44% dropping out. The U.S. Census (2010) shows that South Asian groups have more bachelor and graduate degrees than Whites, Asians, and the overall US population. It is the same case with the study where they have higher academic outcomes than any other API groups.

Ancestral countries of origin

All first-generation API subgroups with a sample of 6 or more had an overall GPA over 2.0. The unknown ancestry first-generation API students had the lower credit hours earned and academic standing status. As AAPA (2014) implied, Cambodians, Laotian, Vietnamese, and Pacific Islanders are struggling academically. This is contradicting with the study for Cambodians, Laotians, and Vietnamese. A majority of first-generation students in the study were Vietnamese and they had higher academic

outcomes overall. For Cambodian first-generation students, only one out of six students were not in good academic standing with the rest having good academic outcomes. For the Laotian, although we cannot generalize due to a very small sample, both Laotian students did not enroll back to the university in the fourth and fifth year during the COVID pandemic, even with a good academic standing. On the other hand, the first-generation Pacific Islanders were similar to AAPA's statement and that more than 44% of the first-generation Pacific Islanders in the study did not enroll back to the university.

Three South Asian groups in 2010. U.S. Census were Asian Indian, Bangladeshi, and Pakistani, have more bachelors and graduate degrees than Whites, Asians, and the overall US population. This implies that they have high academic outcomes, which was also the same case within the first-generation API subgroups.

Research Question 5

In response to the relationship between the parents' income level and credit hours earned for first-generation API students and the results found no significant correlation at both the fourth and fifth-year graduation marks. The income level of parents, therefore, had little influence on the student's credit hours earned. Cushman (2006), however, has a different perception of this, with first-generation students are more likely to live outside the campus and work while taking classes because their parents have low incomes. As a direct consequence, they may have lower credit hours due to missed classes as they attempt to find a balance between work and school.

Conclusion

The South Asian groups–Asian Indians, Pakistani, and Bangladeshi, and the East Asians–Chinese, Korean, and Japanese, had the higher academic outcomes for both the

overall sample and first-generation students in their groups. For Southeast Asians, only Vietnamese in groups had the higher academic outcomes for both the overall sample and first-generation sample.

Pacific Islanders were the lowest academic outcomes with a GPA of less than 2.0, lower credit hours earned, and lowest academic standing among the overall sample. The unknown API ancestries were the lowest in the first-generation API students' sample.

From the results, we can see that there is wide variation among the API students indicating that they are not monolith and that it is important to challenge the model minority myth. The Asian/Pacific Islander community has been grouped with one monolithic group for a long time. The "monolithic" view of API is inaccurate and can be harmful. Some API groups were consistently high-achieving academically in the study, while other API subgroups, especially from the smaller groups, were lower academically. The model minority myth misrepresents the experiences of these smaller API subgroups resulting in their academic needs being ignored.

Results from this study show the importance of disaggregating the data. According to Jacobson (2019), based on the Statistical Policy Directive 15 that was issued in 1997 by the White House's Office of Management and Budget, the Asians were generalized. They realized that the model minority myth that resulted from the aggregated data had adverse psychological impacts on the students since they internally faced different challenges that impacted their performance. The converging opinion and findings by these researches were that disaggregating the data would be beneficial in finding out the differences within the API subgroups that extended to their academic performance. As seen in chapter 4, the academic outcomes, therefore, support these

researches because the API performance differs according to the students' regions that they originated from. Similarly, these differences are also visible when comparing the API students by their ancestral countries of origin.

As suggested by Museus & Buenavista (2016), aggregated data shows an API population as having exceptional high economic and academic attainment rates, while masking the differences that exist between subgroups. There exist differences in these students' academic performance and graduation rates, and the aggregated data do not reveal the differences among API subgroups. Having disaggregated data is perceived as a positive step towards greater knowledge and understanding of the API communities. If it were applied in this case, it would reveal the differences between the performances of the various API subgroups, leading to more personalized interventions by AANAPISI institutions such as the urban public university in Southeast Texas.

Disaggregated data highlights how data can be utilized to examine opportunities for pinpointing academic barriers that particular API subgroups face. The data featured in this report offer several different types of analyses that demonstrate a range of possible applications. This report can inform efforts by policymakers and institutional leaders to reform how data is collected, reported, and disseminated to better address the needs of the API community at the national and state level. Ultimately, this report aims to demonstrate why and how data disaggregation is a critical tool for closing the academic opportunity gaps through the advancement of equitable educational practices. Data disaggregation is important because it matters where students come from, and it matters what their race/ethnicity and cultures are. As a culturally diverse country, it is crucial that we

emphasize the importance of recognizing our differences can be our strength by creating data that includes all the students' different ethnic groups.

API struggles are often masked and misconceived due to the monolith and model minority myth. Data disaggregation will give visibility to APIs and their needs so they can be addressed.

Implications for Practice

Results of this study can have a potentially positive impact on the practice of the AANAPISIs with regards to how universities and institutions serve their API student population. The overarching theme and trend from the results of the study are that there exist differences in the graduation rates and academic outcomes of API students. However, these differences have been masked for a long time and hidden by the aggregation of API data. With the disaggregation of data, previously hidden differences come to the forefront and need to be addressed by higher level institutions. These differences in their graduation rates and academic performance give the AANAPISIs, such as the large urban public university in Southeast Texas, research-based data that can be utilized to support the changes they make. The ideal implications of practice for these institutions is to implement a CECE model to ensure that all their students, irrespective of their diversity, have an inclusive environment that gives them a platform to thrive. Implications for practice, based on this study should inspire social and academic changes that ensure a positive impact on the lives of the APIs in these AANAPISIs.

In Texas, disaggregation does not occur since the state only collects and aggregates data of API in general terms. The current education policy lacks disaggregation of data and fails to identify and deal with the differences among diverse

API sub-groups. Since education is primarily the responsibility of the states, the policy proposal is for Texas to adopt disaggregation of data of the many subgroups of the API students in higher education. This education policy recommendation is doable in Texas since, in December 2018, five states had introduced disaggregation of data on AA and NHPI which include California, Hawaii, Minnesota, Rhode Island, and Washington. The disaggregation of the data will expose the differences among the different API sub-groups and aid in personalizing and providing differentiated learning approaches, which in turn will improve their educational outcome in higher education. We hope that this can eliminate the model minority myth, which is currently working against the API students.

Limitations of the Study

There are a few limitations associated with the current study. First, this study was limited to first-year undergraduate API students at an urban AANAPISI public university in Southeast Texas, which is based on one university and one cohort. As diverse as this public university is, it is not representative of the whole population. Additionally, 40% of the sample came from a family with an income over $60,000 or parents with higher educational attainment. We should not generalize these findings to the general population of API students who may come from different socioeconomic backgrounds.

Second, another limitation was noted in the ancestry differences of API students for this study. A majority of API students for this study came from these ancestry groups: Vietnamese, Indian, Pakistani, Chinese, Filipino, and Korean that accounted for 86.9% of the 1,445 subjects. With a larger representation of these Asian ancestries, the results from this study were more applicable to these Asian ancestries than to others. We should not

generalize these results to all API subgroups. Additionally, the total sample included 30 ancestral countries of origin plus the unknown ancestry, of which 19 ancestral countries of origin in the sample had a low number of students.

Third, the Pacific Islander students in the study were aggregated data. No self-reported languages of the 15 countries in the Pacific Islands were listed. Without this information, we will not know which students from the ancestral countries of origin in the Pacific Islands need academic and social supports.

Fourth, there was a limitation of inclusion of data of West Asian or Middle Eastern students. They considered themselves as "White;" therefore, many were excluded from the preliminary data extraction, as the study only included those who self-identified as "Asian."

Fifth, the COVID-19 pandemic in Spring 2020 to Fall 2021 may impact the enrollment and performance of API students who were first enrolled at the urban public AANAPISI in Southeast Texas in Fall 2016, which may impact the retention and graduation rates.

Sixth, this study was using names and self-reported language for the U.S.-born to define ancestry. This study may not have provided an entirely accurate representation of regions and ancestral countries of origin.

Recommendation for Future Research

APIs are heterogeneous in many aspects, including their needs and the barriers they face in their academic and social environment in school. Provision of knowledge and information on these issues through disaggregated data helps the AANAPISIs towards

developing relevant higher education policies, programs, and services for the diverse group of API students.

Based on the findings, below are the recommendations for future research.

Continue the research to the sixth-year graduation rate. The research should continue until the beginning of Fall 2022 to calculate the sixth-year graduation rate to compare with the national average.

Verification of API students' regions and ancestral countries of origin. One of the challenges encountered in the analysis of the APIs is in the verification of the students' regions and ancestral countries of origin. This is for 48 U.S.-born students whose regions and ancestral countries of origin cannot be verified, as well as the Pacific Islander students' ancestries. The data on the languages spoken at home were missing from the datasets, as this information was self-reported.

If the research's outcome is to have actionable solutions to the issues faced by these APIs, it is prudent to find out the origin of the targeted sample of students. The primary strategy to solve this inconclusiveness and gap in the data is to email a link to a short survey to these 48 students asking them for their regions and ancestral countries of origin. There is no not guarantee that all of these students will respond to these emailed surveys with. The backup option would be to conduct telephone interviews with them. The emailed surveys and telephoned interviews will explain to them the rationale behind the question being asked of the students.

Interview the struggling API students. The second recommendation is to conduct an interview with the struggling students. The main aim of the interviews will be to find out the challenges these students face. Without interviews, it would be impossible

to decipher and find out the challenges these struggling students face. The outcomes will yield better results on most or all the struggles they face, including the most recurring issues. This ensures that when a solution is being crafted, it is conclusive and realistic in solving the most recurring and prevalent issues these struggling students face.

Survey on well-performing by unenrolled students. Apart from the struggling students enrolled, it is prudent to interview the students with good academic standing, but who did not enroll in school again. The ideal scenario is that the students with good academic standing would be enrolled in the institutions of higher learning after graduating from high school. However, this is not always the case for some of the API students. Some were enrolled in the universities but left midway before graduating and are yet to be re-enrolled back (APARC, 2021). The interview, therefore, means to find out the reasons for their non-enrollment. The reasons may vary from one student to another, thus is it not advisable to come up with a hypothesis of the likely reasons. The interviews will also aim at finding out what they were doing after leaving the university, including if they had attended and graduated from different schools. These interviews will be both structured and unstructured. These interviews will focus on the non-educational challenges faced by the APIs in the institutions of higher learning, including the social and financial context.

Survey on well-performing first-generation students. The first-generation API students were doing well in this study. It might be due to this urban public university in Southeast Texas having several programs that assist first-generation students. In figuring out if this is the case, a survey of these students is recommended and follow-up with an interview or focus group whether the university's programs assisted them in any way and

whether there are any other additional services can be provided to these first-generation students. These services then can be provided for other minority students at this public university.

Contrast in linear modeling statistics for first-generation students. The results from this study show that less educated mothers related to higher academic standing which contradict what current literature has found in other studies. The recommendation can include performing a contrast in linear modeling to allow us to express the sum of squared differences between the means of sets of treatments between fathers and mothers level of educations. The statistical analysis is to find out whether having a less educated mother motivates the first-education API student to study harder or to do better.

Additional variables of admission test scores, test credits, Texas Success Initiatives, English composition grades. The recommendations above are ideal for finding out the current issues faced by the APIs as minority groups in the AANAPISI. The variables above through the surveys and interviews are ideal for finding out the challenges faced by the students and solving these issues in the short run. The medium-term and long-run approach to this issue needs deeper and more detailed analysis. Therefore, future studies on these issues should be directed at variables such as admission test scores, such as SAT, ACT and TOEFL/IELTS; test credits, such as Advanced Placement, International Baccalaureate, CLEP, and the university's departmental test credits; Texas Success Initiatives (TSI), and grades for English composition.

It is important to note that most of the above variables are connected to the learning English as a Second Language. Many of these students' parents were born outside the United States where English was a second language. These are TOEFL,

IELTS, TSI, English composition grades, and several AP courses. It would be good to know whether the social and academic issues faced by these API students are connected to proficiency in English which may shed light on the context for non-traditional students (APIs) who are sometimes known as converters. According to Nguyen et al. (2018), converters are the students or individuals in a new jurisdiction who need to be incorporated into the new environment as they catch up with their studies. The English language is one of the areas in which they may be weak. These future studies should therefore focus on looking into how these variables negatively impact the API students and come up with practical solutions to solve the issues in the future. These actions may help to ensure that the success rate of all the API students improves, irrespective of their internal differences such as language, region, financial status, or family supports.

Chapter VI

Action Plan

This study showed that overall, API students are high achievers with an average GPA of more than 3.0 and 90% are in good academic standing, with an average of more than 100 credit hours earned. However, when the data was disaggregated, several API subgroups were struggling academically. Similarly, in terms of graduation rates, overall for API students the rate was higher than the national rates. On the other hand, several API sub-groups were less likely to graduate in six years or drop out completely from college. One actionable goal of this study is to disseminate the findings of this study and create a cultural awareness of the diverse needs of API students. The following are suggested components of Action Plans which relate to the Dissemination of Results and Professional Development. While the Development of an API Student Affairs Center is a prioritized suggestion which could include dissemination and professional development, those action steps include a proposal about the center to the University administrators.

Dissemination of Results

There are several formats in disseminating the results of this study.

National journals and statewide publications

The first format would be publishing results of the study in national journals and statewide publications, such as AAPI Nexus Journal, Journal of Asian American Studies, and the Amerasia Journal.

National conferences and professional associations' meetings

The second format to share the findings from this study would be presented at national conferences and professional associations' meetings, such as the APAHE (Asian

Pacific American in Higher Education) and the American Educational Research Association (AERA) conference.

Stakeholder meetings

The third format is presenting the findings from this study to the university administration about the following including two-page summaries of the research and recommendations, from items below:

1. About the importance of disaggregated data in a 4-year AANAPISI and recommend implementing and collecting disaggregated API data in the university admission process.

2. Professional development opportunities for faculty and staff on cultural awareness of the needs of API students.

3. Proposal of developing an API Student Affairs Center.

Policy briefs in Texas Legislation

One format for disseminating the findings of this study is policy briefs in Texas Legislation. Texas has a high percentage of API students in the population, especially in Houston, who pursue their higher education, (Texas Education Agency, 2020). More research on disaggregated data still needs to be done. We can present the findings to the state officials in the future about the lack of disaggregated API data in higher education in Texas. We emphasize the importance of disaggregated API data is. We need to persuade them to implement the disaggregated API data in higher education. Data disaggregation is necessary to ensure the fairness and awareness of all types of API students attending universities. Without disaggregated data, many API communities will

be left out of the financial and educational support that APIs qualify for, such as lack of scholarships and tutoring supports.

Professional Development Opportunities

Sharing the outcomes and results could have a positive impact on the faculty and staff, which in turn may positively impact the API students at an Asian Serving Institution. The research identifies several non-completion and drop-out incidences by these API students. A multi-pronged approach to solving the issue is proposed.

The multi-pronged approach is intentional and necessary since different API students are affected differently and maybe for varying reasons and issues. Consequently, the researcher's proposition on focusing on many issues affecting API students in the Asian Serving Institutions ensures that all the target groups are covered, thus comprehensively solving the issues progressively.

At the university level, administrators could implement research-based approaches to provide intervention strategies for underrepresented and underperforming Asian/Pacific Islander students. One actionable goal of this study is to increase faculty and staff awareness of different API groups. To reach this goal, the faculty and staff need to understand the different cultures of API students and their struggles, and how the learning styles of API students are different from western society through cultural awareness training. This training is described next.

Session Description

Through this training session, the faculty and staff should be able to help Asian and Pacific Islander students more effectively in completing their 4-year degrees at Asian Serving Institutions. There is little understanding about the struggles these students go

through, thus the importance of this training. The training for the faculty and staff is to develop cultural awareness which will then help the Asian and Pacific Islander students in their social and academic success in college.

Session Title

The session title for the faculty and staff training will be "Understanding the Different Cultures of the Asian and Pacific Islands students".

Measurable Objectives

- Explore the Differences in Learning Preferences of the Asian and Pacific Islanders
- Identify Different Cultures within the Asian and Pacific Islands Regions
- Identification of the Culture-Related Struggles Faced by the Asian and Pacific Islanders

These are the measurable objectives regarding the training of Faculty and Staff on cultural awareness. The achievement of these three measurable objectives by the end of the training will be a testament to the success and important professional development for faculty and staff. The perception of Asian/Pacific Islander students often is that the faculty and staff members do not provide any support. The goal is for the faculty and staff to understand the different cultures of Asian/Pacific Islanders, their struggles, and their different learning needs.

Through this training session, the faculty and staff should be able to help Asian/ Pacific Islander students more effectively in completing their 4-year degrees at an Asian Serving Institution. The training for the faculty and staff is to develop cultural awareness

which will then help the Asian/Pacific Islander students in their social and academic success at college.

Explore the Differences in Learning Preferences of the Asian Pacific Islands

The first measurable objective is for the faculty and staff to explore the differences in learning preferences of the API culture and compare that with the western culture. Preliminary study and samples from the current faculty and staff reveal a generalization of learning preferences. Most research studies conclude that Asian students tend to be passive learners and hardly participate in class discussions. In an attempt to help API students in their learning, it is necessary to provide greater insight into why students behave in a certain way. The session will equip the staff and faculty with in-depth knowledge of these differences.

Identify Different Cultures within the Asian Pacific Islands Regions

After learning about the difference in learning preferences between the western and Asian/Pacific Islander students, the next measurable outcome isolates the Asian/Pacific Islands and focuses on the regions. Faculty and staff need to note that even within the Asian Pacific Islanders, differences in culture and learning preferences also exist. Specifically, faculty should be able to identify the different cultures of the five Asian regions and the Pacific Islands group. With such capability, the faculty and staff would identify and deal with the issues faced by different students from the many Asian and Pacific Islands regions.

Identification of the Culture-Related Struggles Faced by the Asian Pacific Islanders

Finally, the faculty and staff should have the ability to identify the culture-related struggles faced by Asian/Pacific Islander students. From the previous two measurable objectives, the faculty and staff should be familiar with the culture of the students. Through critical thinking connected with the information already available, it becomes possible to identify the struggles and challenges encountered by these students. A good example of such challenges that can be measured is the identification of a lack of English proficiency. With cultural awareness, the objective is that the faculty and staff would use simple language, avoid complicated jargon, and speak slowly to these students.

Delivery

The initial cultural awareness training is scheduled for one day and can be adjusted. The adjustments and increase in cultural awareness training will depend on the changes and improvements observed, especially by the Asian Pacific Islanders students. Periodic questionnaires will thus be distributed to the Asian Pacific Islanders to gauge changes in the cultural awareness of the staff and faculty.

Levels of Use Process

A survey needs to be conducted to determine the usage and success of a learning tool and strategy. Specifically, the learning and training strategy adopted is to focus on the idea that learners can adjust their thinking based on new information. This is meant to ensure that the faculty and staff learn about cultural awareness and the other specific issues and challenges the API students face. The specific activities in use through training strategies can be small group discussions, case study activities, and think-pair-

share activities. At the end of the training on cultural awareness, two surveys are given to the participants involved in the training. The first survey, which will be given at the end of the training, will examine how effective the training instructor was in teaching cultural awareness to the faculty and staff. The second survey will then be administered after the faculty and staff have gone back to their work. This second survey aims to determine how the participants use the training at their job.

Professional Development Evaluation

The initial survey on the success of cultural awareness looks at discussions and case studies used in the participants' training. The first part of the survey looks at two parts. The first part is to assess the quality of training and the overall teaching effectiveness of the instructor (trainer). The effectiveness of the instructor is to assess his/her competence as the extent to which the instructor possesses the requisite knowledge and skills, as well as how well the instructor performs their duties in the process of training the participants. An effective instructor achieves goals that focus on the learning of their participants. The second part of the survey asks about the content and learning strategies. The questions ask the participants their thoughts and insights on the different elements of the content. This helps the participants to question their own understanding and move through the process of learning. The learning strategy also includes case studies used in the participants' training. The next step is for the instructor to consider think-pair share groups based on their experience level. There will be a combination of think-pair groups based on the four levels of experiences: prior experience, current experience, new experience, and learning from experience.

Developing an API Student Affairs Center

The action plan below gives the specifics on the actions to the University

Administrators under the Division of Student Affairs that could be taken in developing a

proposal of an API Student Affairs Center (APISAC). The aim of this proposal is to

address and resolve the issues faced by the API students in AANAPISI. The proposal will

address the distinctive needs of the growing API student population and connect API

alumni and communities to the university. In the early developmental period, the

proposal established by the APISAC will develop a scholarship endowment fund. The

proposal will also include an annual scholarship fundraising dinner honoring API

community leaders, community and professional speakers, as well as regular meetings

with API student organization leaders, and a holiday alumni-student mixer. The proposal

will state the problems and possible solutions to the issues faced by the API students

below.

Increase Awareness on Issues Faced by the APIs

An important role in this process will be creating the API Student Affairs Center

to increase awareness of the issues faced by API students. Without the student center, the

issues faced by the API students may have been ignored. One of the main reasons for this

is that API students were being considered to be represented by one monolithic minority.

The outcome of this is to break the model minority myth, which assumes that all Asians

are the same and that they are doing great and are high achievers, and that this myth make

some groups face a high degree of pressure to excel.

API students should embrace their heritage while appreciating the cultural

differences in their new environment, as well as raise awareness through events that are

organized to celebrate their API heritage. In these events, the APIs talk about their issues and the common assumptions made about them, such as the model minority, rich Asians, tiger parents, or children of tiger parents (Cherwin et al., 2021). It is critical that students from different API regions articulate and share their experiences with the wider public, and show that there are huge differences between API subgroups. As an example, Southeast Asian students are lumped into one group despite the presence of many ethnic backgrounds under this group, differing gender identities, socio-economic status, and various religious faiths. These differences exert a distinct influence on Southeast Asian students, and they adjust and perform differently when they enroll at universities (Chan et al., 2021). The teachings and information laid out dispels and proves these assumptions to be wrong.

Optimize Academic Success of the Students

One of the most important components in creating the Student Affairs Center is optimizing the API students' academic success. More than 24% of this study sample did not return to the urban AANAPISI public university in Southeast Texas and nearly 10% were either on academic probation or suspension. The student interaction programs and events are another crucial indirect effort to improve the academic success of the API students. The Student Affairs Center creates a sense of community. Some of the Student Affairs Centers created in the past have been a successful. For example, the Asian Pacific American Student Services (APASS) at the University of Southern California (APASS, 2021) provides a mentoring program that focuses on transition, success, and growth and enables the APIs to interact and become friends. It is inclusive, and the

students have a sense of community. These friendships proceed to outside the programs, and they help each other maneuver all other aspects of campus life.

Increase resources for first-generation API students

The Asian American Psychological Association (AAPA) suggested increasing resources for the first-generation API students in supporting their transition into college, encouraging language competency, providing adequate health/mental health services (via collaboration with the counseling services), increasing financial aid/scholarships, and initiating mentorship. These suggestions, provided under the proposed API Student Affairs Center, will be in collaboration with the program, such as a TRIO program, at the university.

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Appendix A

Demographics Variables of FTIC Asian/Pacific Islander Students Fall 2016

Variable	n=1,445	%
Gender		
Female	684	47.30%
Male	761	52.70%
Age in Fall 2016		
16 years old	1	0.10%
17 years old	148	10.20%
18 years old	1168	80.80%
19 years old	110	7.60%
20 years old	12	0.80%
21 years old	1	0.10%
22 years old	1	0.10%
24 years old	1	0.10%
25 years old	1	0.10%
26 years old	1	0.10%
27 years old	1	0.10%
Academic Load in Fall 2016		
Full-time	1,385	95.80%
Three quarter time	33	2.30%
Half-time	15	1.00%
Less than half-time	12	0.80%
Father's education		
No High School (NHS)	68	4.70%
Some High School (SHS)	119	8.20%
High School (HS)	173	12.00%
Some College (SC)	186	12.90%
Associate Degree (AD)	106	7.30%
Bachelor Degree (BD)	366	25.30%
Graduate/Professional Degree (GPD)	288	19.90%
Unknown	139	9.60%
Mother education		
No High School (NHS)	78	5.40%
Some High School (SHS)	137	9.50%
High School (HS)	221	15.30%
Some College (SC)	176	12.20%
Associate Degree (AD)	112	7.80%
Bachelor Degree (BD)	417	28.90%
Graduate/Professional Degree (GPD)	182	12.60%
Unknown	122	8.40%

Variable	n=1,445	%
Family income		
< $20,000	113	7.8%
$20,000 - $39,999	222	15.4%
$40,000 - $59,999	178	12.3%
$60,000 - $79,999	109	7.5%
$80,000 - $99,999	119	8.2%
$100,000 - $149,999	204	14.1%
$150,000 - $199,999	74	5.1%
> $200,000	69	4.80%
none or unknown	357	24.7%
First-Generation Status		
Yes	531	36.70%
No	922	63.80%
Residency Status		
U.S.-born	988	68.40%
Foreign-born	375	26.00%
International	82	5.70%
Region		
Southeast Asia	599	41.50%
South Asia	530	36.70%
East Asia	212	14.70%
West Asia	42	2.90%
Pacific Islands	11	0.80%
Central Asia	3	0.20%
Unknown API Region	48	3.30%
Ancestral Countries of Origin		
East Asia		
China	147	10.20%
Korea	36	2.50%
Taiwan	13	0.90%
Japan	11	0.80%
Hong Kong	5	0.30%
Southeast Asia		
Vietnam	450	31.10%
Philippines	118	8.20%
Malaysia	9	0.60%
Cambodia	7	0.50%
Indonesia	6	0.40%
Thailand	4	0.30%
Myanmar	3	0.20%
Laos	2	0.10%

Variable	*n=1,445*	%
Ancestral Countries of Origin		
South Asia		
India	310	21.50%
Pakistan	194	13.40%
Bangladesh	18	1.20%
Nepal	6	0.40%
Sri Lanka	2	0.10%
West Asia		
Saudi Arabia	10	0.70%
United Arab Emirates	9	0.60%
Iran	8	0.60%
Kuwait	4	0.30%
Lebanon	3	0.20%
Turkey	3	0.20%
Bahrain	2	0.10%
Israel	2	0.10%
Syria	1	0.10%
Pacific Islands		
Pacific Islands	11	0.80%
Central Asia		
Kazakhstan	2	0.10%
Uzbekistan	1	0.10%
Unknown API Region		
Unknown ancestry	48	3.30%

Note. FTIC = First time in college

Appendix B

Demographics Variables of First-Generation Asian/Pacific Islander Students Fall 2016

Variable	*n=531*	%
Gender		
Female	259	48.78%
Male	272	51.22%
Age in Fall 2016		
16 years old	1	0.19%
17 years old	37	6.97%
18 years old	445	83.80%
19 years old	41	7.72%
20 years old	6	1.13%
22 years old	1	0.19%
Academic Load in Fall 2016		
Full-time	509	95.86%
Three quarter time	9	1.69%
Half-time	7	1.32%
Less than half-time	6	1.13%
Father's education		
No High School (NHS)	67	12.62%
Some High School (SHS)	112	21.09%
High School (HS)	143	26.93%
Some College (SC)	147	27.68%
Associate Degree (AD)	62	11.68%
Mother education		
No High School (NHS)	70	13.18%
Some High School (SHS)	114	21.47%
High School (HS)	157	29.57%
Some College (SC)	131	24.67%
Associate Degree (AD)	59	11.11%
Family income		
< $20,000	88	16.57%
$20,000 - $39,999	166	31.26%
$40,000 - $59,999	109	20.53%
$60,000 - $79,999	47	8.85%
$80,000 - $99,999	38	7.16%
$100,000 - $149,999	31	5.84%
$150,000 - $199,999	7	1.32%
> $200,000	8	1.51%
none or unknown	37	6.97%

Variable	*n=531*	%
Residency Status		
U.S.-born	374	70.43%
Foreign-born	149	28.06%
International	8	1.51%
Region		
Southeast Asia	280	52.73%
South Asia	143	26.93%
East Asia	73	13.75%
West Asia	11	2.07%
Pacific Islands	9	1.69%
Central Asia	1	0.19%
Unknown	14	2.64%
Ancestral Countries of Origin		
East Asia		
China	46	8.66%
Korea	18	3.39%
Taiwan	3	0.56%
Japan	3	0.56%
Hong Kong	3	0.56%
Southeast Asia		
Vietnam	255	48.02%
Philippines	12	2.26%
Cambodia	6	1.13%
Laos	2	0.38%
Malaysia	2	0.38%
Myanmar	2	0.38%
Thailand	1	0.19%
South Asia		
India	70	13.18%
Pakistan	63	11.86%
Nepal	5	0.94%
Bangladesh	4	0.75%
Sri Lanka	1	0.19%
West Asia		
Saudi Arabia	3	0.56%
United Arab Emirates	2	0.38%
Iran	2	0.38%
Kuwait	1	0.19%
Lebanon	1	0.19%
Bahrain	1	0.19%
Israel	1	0.19%

Variable	n=531	%
Ancestral Countries of Origin		
Pacific Islands		
Pacific Islands	9	1.69%
Central Asia		
Central Asia's country[a]	1	0.19%
Unknown API Region		
Unknown ancestry	14	2.64%

Note. [a] The name of *Central Asia's country* is redacted due to small sample

Appendix C

Academic Outcomes Based on Residency and Region

Residency	Region	N	Fall 2016–Fall 2021					
			16	17	18	19	20	21
			Grade point average					
	Target		2.000	2.000	2.000	2.000	2.000	2.000
U.S.-born	Southeast Asia	427	3.088	3.086	3.079	3.076	3.110	3.127
	South Asia	356	3.161	3.155	3.133	3.151	3.187	3.203
	East Asia	127	3.279	3.217	3.200	3.210	3.240	3.255
	West Asia	21	3.011	2.893	2.832	2.858	2.908	2.913
	Pacific Islands	8	2.545	2.514	2.311	2.329	2.437	2.487
	Central Asia	1	3.689	3.757	3.866	3.892	3.900	3.900
	Unknown	48	2.686	2.598	2.594	2.602	2.622	2.637
	Total	988	3.114	3.096	3.080	3.088	3.122	3.139
Foreign-born	Southeast Asia	155	3.158	3.125	3.060	3.032	3.056	3.072
	South Asia	150	3.076	3.073	3.030	3.023	3.045	3.063
	East Asia	54	3.224	3.241	3.196	3.169	3.193	3.216
	West Asia	11	3.048	3.016	3.067	3.123	3.164	3.190
	Pacific Islands	3	0.972	0.778	0.659	0.659	0.659	0.659
	Central Asia	2	2.854	3.299	3.313	3.331	3.341	3.419
	Total	375	3.112	3.100	3.050	3.034	3.057	3.075
International	Southeast Asia	17	3.361	3.388	3.337	3.310	3.336	3.355
	South Asia	24	3.091	3.149	3.059	3.099	3.146	3.164
	East Asia	31	2.920	2.935	2.919	2.917	2.968	2.995
	West Asia	10	3.099	3.016	3.029	3.092	3.148	3.179
	Total	82	3.083	3.101	3.060	3.073	3.118	3.142
Total	Southeast Asia	599	3.114	3.105	3.081	3.071	3.102	3.119
	South Asia	530	3.134	3.132	3.100	3.112	3.145	3.162
	East Asia	212	3.213	3.182	3.158	3.157	3.188	3.207
	West Asia	42	3.042	2.954	2.941	2.983	3.033	3.049
	Pacific Islands	11	2.116	2.040	1.860	1.874	1.952	1.989
	Central Asia	3	3.132	3.451	3.497	3.518	3.527	3.579
	Unknown	48	2.686	2.598	2.594	2.602	2.622	2.637
	Total	1,445	3.112	3.098	3.071	3.073	3.105	3.122
			Credit hours earned					
	Target		15	30	60	90	120	120
U.S.-born	Southeast Asia	427	28	43	68	89	104	109
	South Asia	356	28	44	70	96	112	117
	East Asia	127	29	44	69	91	106	111
	West Asia	21	23	37	59	79	94	96
	Pacific Islands	8	18	29	46	64	84	90
	Central Asia	1	31	52	82	114	131	131
	Unknown	48	23	33	50	64	74	78
	Total	988	28	43	68	90	105	110
Foreign-born	Southeast Asia	155	29	44	68	90	104	110
	South Asia	150	28	44	70	92	108	113
	East Asia	54	26	42	66	87	102	109
	West Asia	11	25	40	66	86	102	109
	Pacific Islands	3	6	10	16	16	16	38
	Central Asia	2	42	61	86	109	132	150
	Total	375	28	43	68	90	105	110

Residency	Region	N	Fall 2016–Fall 2021					
			16	17	18	19	20	21
			Credit hours earned					
	Target		15	30	60	90	120	120
International	Southeast Asia	17	26	42	71	96	112	119
	South Asia	24	19	34	59	83	104	111
	East Asia	31	17	32	56	77	93	99
	West Asia	10	19	33	60	87	112	117
	Total	82	20	35	61	84	102	109
Total	Southeast Asia	599	28	43	68	89	104	109
	South Asia	530	27	43	70	94	110	116
	East Asia	212	26	42	67	88	103	109
	West Asia	42	22	37	61	83	100	104
	Pacific Islands	11	15	24	38	51	65	76
	Central Asia	3	38	58	84	111	131	144
	Unknown	48	23	33	50	64	74	78
	Total	1,445	27	42	67	90	105	110
			Academic Standing (%)					
	Target		100	100	100	100	100	100
U.S.-born	Southeast Asia	427	90	88	89	90	91	91
	South Asia	356	90	90	92	92	92	92
	East Asia	127	93	91	91	91	91	91
	West Asia	21	86	71	76	76	76	76
	Pacific Islands	8	75	75	63	63	63	63
	Central Asia	1	100	100	100	100	100	100
	Unknown	48	79	77	73	75	75	75
	Total	988	90	88	89	90	90	90
Foreign-born	Southeast Asia	155	91	94	91	90	92	92
	South Asia	150	89	89	89	89	90	90
	East Asia	54	91	93	94	94	94	94
	West Asia	11	91	100	100	91	91	91
	Pacific Islands	3	33	33	0	0	0	0
	Central Asia	2	50	100	100	100	100	100
	Total	375	89	91	90	90	91	91
International	Southeast Asia	17	94	100	100	100	100	100
	South Asia	24	83	83	92	92	92	92
	East Asia	31	87	84	84	87	87	87
	West Asia	10	90	90	90	90	90	90
	Total	82	88	88	90	91	91	91
Total	Southeast Asia	599	90	90	90	90	91	91
	South Asia	530	89	90	91	91	92	92
	East Asia	212	92	90	91	91	91	91
	West Asia	42	88	83	86	83	83	83
	Pacific Islands	11	64	64	45	45	45	45
	Central Asia	3	67	100	100	100	100	100
	Unknown	48	79	77	73	75	75	75
	Total	1,445	89	89	90	90	90	90

Appendix D

Academic Outcomes Based on Ancestral Countries of Origin and Residency

Ancestral countries of origin	Residency	*N*	Fall 2016–Fall 2021					
			16	17	18	19	20	21
			Grade point average					
Vietnam	U.S.-born		3.14	3.13	3.12	3.12	3.15	3.17
	Foreign-born		3.25	3.20	3.12	3.10	3.13	3.14
	International		3.27	3.33	3.31	3.29	3.30	3.32
India	U.S.-born		3.14	3.15	3.13	3.14	3.18	3.19
	Foreign-born		3.14	3.12	3.09	3.10	3.13	3.14
	International		3.14	3.14	3.05	3.08	3.13	3.15
Pakistan	U.S.-born		3.16	3.15	3.11	3.14	3.18	3.19
	Foreign-born		2.92	2.96	2.89	2.85	2.87	2.88
	International		2.73	3.01	2.89	2.98	3.03	3.03
China	U.S.-born		3.32	3.28	3.26	3.28	3.31	3.33
	Foreign-born		3.09	3.17	3.12	3.12	3.15	3.18
	International		2.92	2.95	2.93	2.92	2.95	2.97
Philippines	U.S.-born		2.92	2.91	2.92	2.91	2.94	2.96
	Foreign-born		2.98	2.99	2.94	2.92	2.95	2.98
	International		3.40	3.30	3.40	3.25	3.31	3.32
Korea	U.S.-born		3.06	2.94	2.89	2.92	2.97	2.98
	Foreign-born		3.75	3.60	3.48	3.39	3.40	3.43
	International		3.07	3.03	2.95	2.95	2.99	3.03
Bangladesh	U.S.-born		3.30	3.24	3.30	3.33	3.38	3.37
	Foreign-born		1.88	2.40	2.49	2.53	2.54	2.67
	International		4.00	4.00	4.00	4.00	4.00	4.00
Japan	U.S.-born		3.17	2.97	2.99	2.90	2.89	2.89
	Foreign-born		3.08	2.95	2.92	2.85	2.87	2.90
Pacific Islands	U.S.-born		2.54	2.51	2.31	2.33	2.44	2.49
	Foreign-born		0.97	0.78	0.66	0.66	0.66	0.66
Unknown ancestry	U.S.-born		2.69	2.60	2.59	2.60	2.62	2.64
Taiwan	Foreign-born		3.16	3.23	3.22	3.24	3.24	3.26
	International		2.00	2.61	2.99	3.07	3.25	3.29
Saudi Arabia	U.S.-born		2.62	2.59	2.54	2.57	2.57	2.58
	Foreign-born		2.67	2.95	3.28	3.45	3.47	3.47
	International		2.35	2.19	2.26	2.25	2.27	2.27
Malaysia	Foreign-born		3.48	3.34	3.17	3.08	3.07	3.08
	International		3.61	3.59	3.39	3.40	3.44	3.46
United Arab Emirates	U.S.-born		3.63	3.58	3.38	3.40	3.47	3.47
	Foreign-born		1.92	2.01	2.54	2.72	2.88	2.88
	International		3.12	3.13	3.23	3.34	3.39	3.39
Iran	U.S.-born		3.54	3.44	3.38	3.43	3.50	3.51
	Foreign-born		3.58	3.78	3.82	3.86	3.88	3.88
Cambodia	U.S.-born		2.42	2.72	2.79	2.75	2.77	2.77
	Foreign-born		2.72	2.72	2.60	2.61	2.59	2.59
Indonesia	Foreign-born		3.23	3.12	3.14	3.11	3.09	3.06
Nepal	U.S.-born		4.00	3.85	3.69	3.66	3.73	3.73
	Foreign-born		3.54	3.30	3.19	3.06	3.08	3.08
Hongkong	U.S.-born		3.93	3.97	3.97	3.97	3.97	3.97
	Foreign-born		3.07	3.32	3.37	3.35	3.35	3.35
	International		3.71	2.61	2.32	2.25	2.62	2.77

Ancestral countries of origin	Residency	N	Fall 2016–Fall 2021					
			16	17	18	19	20	21
			Grade point average					
Kuwait	Foreign-born		2.58	2.17	2.18	2.28	2.33	2.43
	International		3.40	3.14	3.07	3.14	3.25	3.39
Thailand	U.S.-born		2.53	2.71	2.79	2.84	2.85	2.88
Turkey	U.S.-born		3.05	2.80	2.85	2.82	2.97	2.97
	Foreign-born		3.80	3.80	3.84	3.82	3.82	3.82
Lebanon	U.S.-born		3.16	2.20	2.20	2.20	2.20	2.20
	Foreign-born		3.79	3.74	3.65	3.65	3.68	3.70
Myanmar	U.S.-born		3.75	3.70	3.72	3.77	3.82	3.82
	Foreign-born		2.55	2.59	2.68	2.68	2.68	2.68
xxxxxxx	U.S.-born		0.00	0.00	0.00	0.00	0.00	0.00
	Foreign-born		3.09	3.07	2.97	2.95	3.10	3.14
xxxxxxx	Foreign-born		2.19	2.10	1.95	1.95	1.95	1.95
	International		3.90	3.86	3.49	3.45	3.49	3.52
Laos	U.S.-born		3.17	2.93	2.98	2.94	2.88	2.88
Sri Lanka	Foreign-born		3.60	3.33	3.03	3.11	3.11	3.15
xxxxxxx	Foreign-born		3.54	3.63	3.69	3.74	3.70	3.70
Kazakhstan	Foreign-born		2.85	3.30	3.31	3.33	3.34	3.42
xxxxxxx	U.S.-born		3.69	3.76	3.87	3.89	3.90	3.90
Total	U.S.-born	988	3.11	3.10	3.08	3.09	3.12	3.14
	Foreign-born	375	3.11	3.10	3.05	3.03	3.06	3.08
	International	82	3.08	3.10	3.06	3.07	3.12	3.14
			Credit hours earned					
Vietnam	U.S.-born		29	44	69	91	107	111
	Foreign-born		29	44	69	92	108	114
	International		22	37	64	89	103	111
India	U.S.-born		29	45	73	98	113	117
	Foreign-born		28	45	72	96	111	117
	International		19	35	66	93	119	127
Pakistan	U.S.-born		25	41	66	92	110	116
	Foreign-born		27	40	64	83	100	105
	International		21	35	46	59	69	76
China	U.S.-born		29	45	70	93	108	113
	Foreign-born		27	43	66	86	103	110
	International		17	32	55	78	92	97
Philippines	U.S.-born		24	38	60	79	92	99
	Foreign-born		30	45	69	90	103	108
	International		42	58	89	97	122	123
Korea	U.S.-born		28	42	62	78	91	96
	Foreign-born		22	39	62	80	87	93
	International		18	34	56	73	88	94
Bangladesh	U.S.-born		34	51	80	110	126	128
	Foreign-born		13	25	39	51	57	68
	International		12	12	12	12	12	12
Japan	U.S.-born		23	40	68	90	110	120
	Foreign-born		24	41	69	97	122	130
Pacific Islands	U.S.-born		18	29	46	64	84	90
	Foreign-born		6	10	16	16	16	38
Unknown ancestry	U.S.-born		23	33	50	64	74	78
Taiwan	Foreign-born		28	42	68	90	106	111
	International		10	25	57	76	107	120

Ancestral countries of origin	Residency	N	Fall 2016–Fall 2021					
			16	17	18	19	20	21
			Credit hours earned					
Saudi Arabia	U.S.-born		21	35	54	67	82	84
	Foreign-born		17	35	65	96	128	128
	International		22	30	49	64	70	70
Malaysia	Foreign-born		19	30	48	61	73	76
	International		37	54	88	116	135	142
United Arab Emirates	U.S.-born		24	41	68	101	127	127
	Foreign-born		19	31	63	98	129	129
	International		20	36	67	98	125	125
Iran	U.S.-born		25	41	68	93	107	112
	Foreign-born		36	51	85	118	121	121
Cambodia	U.S.-born		26	40	62	79	99	102
	Foreign-born		59	64	77	95	101	101
Indonesia	Foreign-born		31	46	72	96	106	111
Nepal	U.S.-born		38	53	78	110	139	139
	Foreign-born		35	53	80	100	109	109
Hong Kong	U.S.-born		44	64	98	122	122	122
	Foreign-born		25	44	74	96	100	100
	International		17	30	61	82	124	142
Kuwait	Foreign-born		18	34	49	60	69	85
	International		15	27	56	81	110	127
Thailand	U.S.-born		35	45	68	85	95	101
Turkey	U.S.-born		38	53	82	107	121	121
	Foreign-born		24	41	79	104	153	153
Lebanon	U.S.-born		13	20	20	20	20	20
	Foreign-born		37	52	68	81	90	100
Myanmar	U.S.-born		58	80	116	149	137	137
	Foreign-born		13	21	34	34	34	34
xxxxxxx	U.S.-born		0	0	0	0	0	0
	Foreign-born		40	53	85	114	137	148
xxxxxxx	Foreign-born		13	26	32	32	32	32
	International		16	30	58	96	137	148
Laos	U.S.-born		27	42	64	70	71	73
Sri Lanka	Foreign-born		63	82	109	137	147	153
xxxxxxx	Foreign-born		15	37	80	100	105	120
Kazakhstan	Foreign-born		42	61	86	109	132	150
xxxxxxx	U.S.-born		31	52	82	114	131	131
Total	U.S.-born	988	28	43	68	90	105	110
	Foreign-born	375	28	43	68	90	105	111
	International	82	20	35	61	84	102	109
		N	Fall 2016–Fall 2021					
			16	17	18	19	20	21
			Academic standing (%)					
Vietnam	U.S.-born		91	90	90	91	91	92
	Foreign-born		91	95	94	92	94	94
	International		92	100	100	100	100	100
India	U.S.-born		89	89	92	93	93	93
	Foreign-born		91	91	92	92	93	93
	International		83	83	94	94	94	94

		N	Fall 2016–Fall 2021					
			16	17	18	19	20	21
			Academic standing (%)					
Pakistan	U.S.-born		91	92	92	91	91	91
	Foreign-born		83	83	80	83	83	83
	International		80	80	80	80	80	80
China	U.S.-born		94	93	93	93	93	93
	Foreign-born		88	92	92	92	92	92
	International		86	81	81	81	81	81
Philippines	U.S.-born		90	81	87	86	87	87
	Foreign-born		89	91	87	87	89	89
	International		100	100	100	100	100	100
Korea	U.S.-born		84	79	79	74	74	74
	Foreign-born		100	100	100	100	100	100
	International		100	100	100	100	100	100
Bangladesh	U.S.-born		86	100	100	100	100	100
	Foreign-born		67	67	67	67	67	67
	International		100	100	100	100	100	100
Japan	U.S.-born		100	86	100	100	100	100
	Foreign-born		100	100	100	100	100	100
Pacific Islands	U.S.-born		75	75	63	63	63	63
	Foreign-born		33	33	0	0	0	0
Unknown ancestry	U.S.-born		79	77	73	75	75	75
Taiwan	Foreign-born		89	89	89	89	89	89
	International		50	50	50	100	100	100
Saudi Arabia	U.S.-born		71	57	57	57	57	57
	Foreign-born		100	100	100	100	100	100
	International		50	50	50	50	50	50
Malaysia	Foreign-born		100	100	100	100	100	100
	International		100	100	100	100	100	100
United Arab Emirates	U.S.-born		100	100	100	100	100	100
	Foreign-born		0	100	100	100	100	100
	International		100	100	100	100	100	100
Iran	U.S.-born		100	86	86	86	86	86
	Foreign-born		100	100	100	100	100	100
Cambodia	U.S.-born		40	80	80	80	80	80
	Foreign-born		50	50	50	50	50	50
Indonesia	Foreign-born		100	100	83	83	83	83
Nepal	U.S.-born		100	100	100	100	100	100
	Foreign-born		100	100	100	100	100	100
Hong Kong	U.S.-born		100	100	100	100	100	100
	Foreign-born		67	67	100	100	100	100
	International		100	100	100	100	100	100
Kuwait	Foreign-born		100	100	100	100	100	100
	International		100	100	100	100	100	100
Thailand	U.S.-born		75	75	75	75	100	100
Turkey	U.S.-born		100	50	100	100	100	100
	Foreign-born		100	100	100	100	100	100
Lebanon	U.S.-born		100	100	100	100	100	100
	Foreign-born		100	100	100	100	100	100
Myanmar	U.S.-born		100	100	100	100	100	100
	Foreign-born		100	100	100	100	100	100

		N	Fall 2016–Fall 2021					
			16	17	18	19	20	21
			Academic standing (%)					
xxxxxxx	U.S.-born		0	0	0	0	0	0
	Foreign-born		100	100	100	100	100	100
xxxxxxx	Foreign-born		100	100	100	0	0	0
	International		100	100	100	100	100	100
Laos	U.S.-born		100	100	100	100	100	100
Sri Lanka	Foreign-born		100	100	100	100	100	100
xxxxxxx	Foreign-born		100	100	100	100	100	100
Kazakhstan	Foreign-born		50	100	100	100	100	100
xxxxxxx	U.S.-born		100	100	100	100	100	100
Total	U.S.-born	988	90	88	89	90	90	90
	Foreign-born	375	89	91	90	90	91	91
	International	82	88	88	90	91	91	91

Note. xxxxxxx The names of countries are intentionally redacted due to a small sample.

Appendix E

Letter of Approval for Using Student Data

April 5, 2021

Subject: **Approval of Using the University's Student Data**

Dear Nia Soeharto:

 The Office of the University Registrar is pleased to inform you that your request for the use of the student data for Fall 2016's first-year undergraduate students for your doctoral dissertation research has received approval to support your research below:

 Title: "Academic Performance Differences of First-Year Undergraduate Asian and Pacific Islander Students in a Large Urban Four-Year AANAPISI in Texas."

 Purpose: The purpose of your study is to analyze academic performance differences that exist between the three Asian/Pacific Islander (API) student groups at AANAPISI in Texas: U.S.-born, foreign-born, and international students. AANAPISI stands for Asian American and Native American Pacific Islander-Serving Institution or abbreviated as Asian Serving Institution, one of four types of Minority Serving Institutions. Your study further examines the academic performance outcomes based on their ancestral county of origin and five regions of Asia and the Pacific Islands.

 Procedures involved in the research: As per your request letter, you are using causal-comparative and correlation research designs. The quantitative archival data will be collected from first-year Fall 2016 undergraduate FTIC and transfer, who identified as API students, enrolled at the university, a designated AANAPISI in the State of Texas. These students will be followed annually to calculate the retention and the 4-year, 5-year, and 6-year graduation rates. The tables that you need from PeopleSoft are listed below:
- *The Student Data* table will include demographic data: PSID, name, ethnicity, gender, date of birth, and home country.
- *The Student Semester* table will include the academic information of major of study, academic classification, academic load (full-time vs. part-time), transfer credit hours, academic standing, cumulative GPA, credit hours attempted and passed, and graduation dates.
- *The Admission* table will include the admit term, admission status, high school information, the last school attended, birth country, citizenship country, residency, US Citizenship Status, visa type, father's education, mother's education, family gross income, language(s) spoken at home, FTIC status, and first-generation status.

We trust that you will maintain the confidentiality of the data and the data must be stored in a secure place.

Your efforts are appreciated. We are happy to cooperate with you and we wish you luck and success in the future. Please do not hesitate to contact me at xxxxxxxxxx or xxx.xxx.xxxx for any further questions.

Thank you.

Sincerely,

xxxxxxxxxxx
Phone: xxx.xxx.xxxx
Email: xxxxxxxxxx