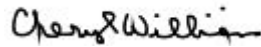ACCEPTANCE

This dissertation, THE IMPACT OF CAMPUS CLIMATE ON THE UNDERGRADUATE EXPERIENCE, was prepared under the direction of the candidate's Dissertation Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree of Doctor of Education in the School of Education, Concordia University Irvine.

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THE IMPACT OF CAMPUS CLIMATE ON THE UNDERGRADUATE EXPERIENCE

by

Lauren Mikki Gih

A Dissertation

Presented in Partial Fulfillment of
Requirements for the
Degree of
Doctor of Education
in
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School of Education
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ABSTRACT

Post-secondary graduation rates present significant disparities for students based on demographic variables, including ethnicity and socioeconomic status. The purpose of this study was to gain insight into the unique experiences undergraduate students face as a member of their respective institutions. The Perceived Campus Climate Inventory investigated the student experiences of 320 participants from 49 four-year universities within the United States. The results of this study indicated the most robust predictor of college performance was high school grade point average. Discriminatory sentiments regarding religious affiliation and ethnic preferences for peers and faculty were explored. Recommendations to alleviate challenges associated with the pursuit of post-secondary degree attainment for diverse students were discussed.

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CHAPTER 1: INTRODUCTION

As of 2012, the number of jobs requiring advanced skills has grown at twice the rate of jobs requiring basic skills (United States Department of Labor, 2013). In consideration of this shift, the United States is in dire need of an influx of college graduates to compete in a global market. Traditionally, an undergraduate degree can be completed in four years accounting for full-time studentship; yet only 19% of students complete their degree within this timeframe (National Center for Education Statistics, 2014).

The paradox of a low percentage of college graduates in four years does not stem from college enrollment itself. In fact, college enrollment in public universities has nearly doubled in the past forty years (Rosenbaum, Becker, Cepa, & Zapata-Gietl, 2015). The true concern is that over 30% of students drop out of their universities within the first year (National Center for Education Statistics, 2014). The shortage of a workforce with advanced skills continues to shrink, as only 23% of the American population has a college degree (National Center for Education Statistics, 2010).

Perplexed by the dwindling volume of college graduates, researchers have focused on potential explanations for such phenomena. Many originating studies on this predicament have examined student characteristics and their impact on student retention in isolation, whereas more recent research considers both institutional and student factors on the undergraduate experience. Perhaps, student retention does not have mutually exclusive roots, as the intersection of both institutional and student characteristics influence whether a student persists or drops out of a university.

The disparity of degree attainment is further exacerbated by multiple demographic factors. For example, a first-generation and low socioeconomic student of Latino or African-American heritage is five times less likely to complete his or her Bachelor's degree within six years, compared to a socioeconomically advantaged peer with college-educated parents (Engle & Tinto, 2008). Although not controlling for socioeconomic status, between 1990 and 2005, Latino and African-American students graduated with lower grade point averages and standardized test scores than Caucasian and Asian students (Nagaoka, Roderick, & Coca, 2009). Students with low pre-college admission competencies comprise student bodies entering non-selective universities with the highest attrition rates in the nation.

Even for the modest section of low-income, minority students who meet criteria for admission into the most selective universities, they continue to face unique barriers in the college arena. Compared to their peers, these students tend to bear fewer financial resources, experience discrimination, and possess multiple responsibilities outside of schoolwork, including family and employment obligations (Stephens, Fryberg, Rose-Markus, Johnson, & Covarrubias, 2012). Perhaps higher education is tailored to the privileged, demanding for less advantaged students to make leaps and bounds to receive the same college degree.

Statement of the Problem

Post-secondary graduation rates present significant variation based on institutional and student characteristics. Institutions with rigorous admission selectivity criteria boast the highest graduation rates, whereas student demographic variables, such as minority and low socioeconomic status, are affiliated with the highest attrition rates after the first year of post-secondary education (Nagaoka et al., 2009). These factors may further exacerbate degree attainment between the privileged and the disadvantaged, limiting the pool of diverse college-

educated men and women to aid the United States in remaining competitive within a global market.

Although many student demographic factors are largely outside of the control of the individual, several personal characteristics may contribute to a higher rate of Americans receiving Bachelor's degrees. Personality dimensions, such as work ethic and willingness to explore new and challenging material, as well as pre-college academic preparation, can better equip students to persist in a challenging college environment (Hazrati-Viari, Rad, & Torabi, 2012). Institutions may also play a role in helping students overcome hurdles that are unique to each individual, such as providing tailored academic advising and campus resources for basic necessities including food and shelter. Equal access to resources and opportunities in post-secondary education continue to create vacancies for considerable strides of improvement.

Although the existing literature explores how each factor, institutional and personal, influences degree attainment, this research purports to gain further insight into the unique experiences students face within their campus community. Students will be able to describe the challenges they have faced at their university, as well as have a platform to provide recommendations they may have for their institution to better support their student body.

Purpose of the Study

The purpose of this study was to explore the undergraduate experience for students at four-year post-secondary universities in the United States. Specifically, students were asked to indicate discrimination other students may face on campus based on ethnicity and what their own preferences are for roommates based on religious affiliation. Furthermore, factors that predict college performance were explored to compare the results of this study with existing literature on the topic. In addition, participants were invited to share the challenges they face as a college

student and the recommendations they have to improve their campus experience. Demographic variables examined include, but are not limited to: Gender, ethnicity, generation status, socioeconomic status, religious affiliation, and sexual orientation.

Significance

This study may contribute to a deeper understanding of the relationship between how a student experiences the undergraduate environment based on his or her personal characteristics. The significance of this research is indicated by the potential for creating awareness for risk factors students may face in college, as means to proactivity in overcoming related hurdles. Additionally, such insights will allow institutions to identify and address unique barriers, which continue to exist for their students during their journeys to degree attainment. Addressing the challenges students face in the undergraduate environment can help equalize post-secondary opportunities, while potentially increasing the number of college graduates in the nation.

Examining the fundamental challenges college students face can provide an authentic depiction of the undergraduate experience. For example, instead of attributing high drop-out rates to student ineptness in the face of arduous curriculum, this study intends to investigate if external factors present significant challenges for less advantaged students. The information provided by this study may help shape how university administrators consider supporting students within their campus community.

Operational Definition of Terms

Institutional Characteristic: Factors unique to the individual university, including admission selectivity, course modality offerings, campus housing, and opportunities for social and academic involvement (Astin, 2005; Pascarella & Terenzini, 2005; Tinto, 1997).

Personal Characteristic: Demographic profile of the student, including, but not limited to: Gender, age, ethnicity, socioeconomic status, generation status, sexual orientation, and work status (Astin, 2005; O'connor & Paunonen, 2007).

First-Generation Student: The first member of a family to earn a four-year college degree (Banks-Santilli, 2014; Blackwell & Pinder, 2014; Dennis, Phinney, & Chuateco, 2005; Stephens, Fryberg, Rose Markus, Johnson, & Covarrubias, 2012).

College Graduate: Earning a Bachelor's degree within six years from the first day of coursework (Engle & Tinto, 2008; Wagner, 2015).

Minority: Characteristic of an underrepresented group within the college environment in terms of size and perceived power (Chang, 2001; Nagaoka, Roderick, & Coca, 2009; Wagner, 2015).

College Performance: Indicator of scholastic attainment, measured by grade point average, GPA (Astin, 2005; Crozier, 1997; Hazrat et al., 2012; Wolfe & Johnson, 1995).

Theoretical Framework

This framework is based on research presented in the literature review, specifically Vincent Tinto and his four-decades of research on student retention. Tinto (1993) has indicated significant differences in college achievement between ethnic groups tie largely into socioeconomic factors and first-generation status. These barriers contribute to an unbalanced educational system where the experiences and outcomes of college students will greatly differ based on demographic factors outside of their control. Tinto advocates for university administrators to take a proactive approach to identify obstacles that may exist for their student body in the effort to provide necessary remedies.

Tinto (1997) asserts that while the characteristics of an institution are stable for all attending students, the interaction and culture within post-secondary education creates a large variation of success. For example, Tinto posits most, if not all, students will pass through five conditional stages outlined by social anthropologist, Van Gennep (1960), and will be delineated by success or failure based on their resources within each stage. Hence, some students will have an advantage over their peers based on considerations such as the level of formal education attained by parents and their family socioeconomic status; factors which tie largely into majority and minority classification.

Tinto (1997) outlines five conditions of success: Expectation, Clear and Consistent Information, Quality Support, Integration, and Active Learning. Students navigate these conditions according to their resources, which are catalysts for degree attainment. First-generation and low socioeconomic students will likely not only be limited in financial resources, they are also inclined to experience additional difficulty in maneuvering the central components of college (Tinto, 2007). These components include, but are not limited to: Financial aid literacy, enrolling in the correct courses for their major, and having family encouragement throughout challenging periods as a college student. In addition, these students may voluntarily withdraw from a university due to their external obligations, such as work and family responsibilities, rather than departing because of academic failure (Tinto, 1975).

According to Tinto (1997), students without appropriate support enter and explore the college arena at a disadvantage. They are more likely to work during college, live off-campus, and take a break between the completion of high school and before entering a four-year university. These factors have been attributed to student characteristics bolstering high attrition

rates due to external obligations and distractions that force students to depart from their universities (Tinto, 1988).

Research Questions

This study is guided by the following five research questions:

1. What are student perceptions regarding the discrimination other students may face based on ethnicity?

2. What preferences do students have for roommates based on religious affiliation?

3. What are some of the factors that predict college performance, as measured by grade point average?

4. What challenges do students report facing in college?

5. What do students recommend to improve their campus environment?

Limitations

This study has the following limitations:

1. In the effort to gain insight into the five research questions, the researcher solely sought participation from college undergraduates at traditional, four-year universities in the United States. Thus, the results of this research are applicable only to the institutions and student bodies of the participants who took part in the study. Additionally, the experiences of graduate students, as well as students at community colleges or universities outside of the United States, cannot be derived from this research.

2. Almost half of the participants within the sample were recruited from a four-year post-secondary institution by which the researcher was an employee and student of during the study. This led to unequal representation of students and institutions by demographic

factors, including ethnicity. Thus, the institutions and demographic factors presented do not equally represent the full breadth of universities within the United States.

3. Participant bias is a factor, as undergraduate students were not compensated for taking part in the study. This concedes the prospect of which highly motivated students were willing to devote their time to participate. Hence, underperforming students or students with lower motivation to participate may be underrepresented.

4. The structure of the inventory was contingent on self-report measures. As a result, participants may have exaggerated or softened their true representations of discriminatory feelings for their peers and faculty members. In addition, participants may have not fully disclosed the discrimination they personally received as a college student.

Delimitations

1. Although limited generalizability must be considered, this study sampled undergraduate students of diverse characteristics found throughout the United States. This study does not intend to generalize student experiences for institutions that were not represented in this research, especially for ethnic minorities, students attending geographically rural institutions, or for individuals who attended college in a different timeframe than 2017-2018.

2. Despite the limitation that not all universities in the United States were included in this research, students from the Southern California institutions that were included in this research boasted multiple realms of diversity, including ethnic, religious, and socioeconomic variations. The demographic breakdown for the most represented university in this study is discussed in Chapter 5.

3. Although participants were not compensated for taking part in this study, individuals who met criteria for participation had an equal opportunity to complete the inventory.

4. Due to the nature of an online inventory, the accuracy of self-report measures can be compromised. However, the researcher felt respondents would be more transparent in discussing difficult topics such as discrimination in an isolated location rather than potentially providing socially accepted responses in a face-to-face format. This design also allowed the researcher to reach the largest number of participants possible, considering the timeframe of the study and available resources.

Assumptions

This study encompassed the following assumptions:

1. The individuals who participated in this study were current college undergraduates at four-year institutions in the United States.

2. Participants reported accurate information entailing their personal characteristics such as age and gender, as well as their academic background including high school GPA and current college GPA.

3. The survey instrument accurately measured the college experience of each participant.

4. The interpretation of the data was correct and reflected the experience of the college undergraduates who participated in the study.

Organization of the Study

A total of five chapters guide this research, beginning with the introduction of this study and concluding with a discussion of the findings. Chapter 1 includes: Background of the Study, Statement of the Problem, Purpose of the Study, Significance of the Study, Operational Definition of Terms, Theoretical Framework, Research Questions, Limitations, Delimitations,

and the Assumptions of the Study. Chapter 2 encompasses a Review of the Literature on college student retention, subdivided into two themes.

The first theme of Institutional Characteristics includes topics on: Historical Perspective of Post-Secondary Retention Research, Course Modality, Faculty Views, Conditions of Success, and Rites of Passage. The second theme of Student Characteristics discusses: Reasons Students are Leaving, College Major, Sexual Orientation, Involvement, Personality, First-Generation Status, and Ethnic Minorities.

Chapter 3 details the methodology of the research design for this study. This section describes the Selection of Participants, Instrumentation, Data Collection, Data Analysis Procedures, Discussion of the Pilot Study, Ethical Considerations, and a Summary of Methods. Chapter 4 presents Findings of the Study, including: Demographic Characteristics, Testing the Research Questions, Data Analysis, and Results of the Data Analysis on the Research Questions. A complete summary of the research is presented in Chapter 5, as well as a Discussion on the Findings, Implications, Limitations, Recommendations for Future Research, and Conclusions generated by this study.

CHAPTER 2: REVIEW OF THE LITERATURE

This chapter discerns factors influencing retention and the student experience at the undergraduate level. Two themes are prominent throughout the literature in respect to their impact on the college experience: Institutional and student characteristics. Institutional characteristics include elements largely outside of a students' control, such as the university selectivity rate and campus opportunities for social and academic engagement.

Student characteristics are delineated into factors governed by the student, as well as personal characteristics of which neither the student nor the university has command over. For example, a student has authority in his or her pre-college course preparation, whereas a student's ethnicity is an attribute of which neither party has jurisdiction over. Institutional characteristics reference a university's admission selectivity, course offerings, and geographic location. Recent and more distant sources intersect the literature review to provide a broad scope of how undergraduate student retention has been studied in the past, which supplements the primary discussion on the modern exploration trends for this topic.

Historical Review of the College Experience

Research on college retention and departure before the 1970s focused on the characteristics of the individual as evidence for whether he or she would be likely to receive a degree from a post-secondary institution (Demetriou & Powell, 2014). For example, if a student did not graduate from an institution, it was posited he or she intrinsically lacked the work ethic, grit, or proper mentality to do so (Marsh, 2014). Research on college retention after the 1970s moved away from this outlook of whether the student has the tenacity to meet the expectations of the college, rather focusing on whether the college fully meets the expectations of their students. It should also be noted early research on this topic utilized data from students of ethnic majority

backgrounds in predominately high socioeconomic communities. Researchers have since attempted to include students from multiple ethnic backgrounds and those with diverse characteristics compared to their respective student body, in order to obtain an enhanced understanding of the college experience.

Rosenbaum et al. (2015) measured student persistence by assessing the degree to which students felt their college was meeting their expectations. The term "institutional confidence" was coined, which embodied a students' level of certainty their college will meet the expectations for future outcomes. Although institutional confidence is related to student satisfaction, the two concepts are distinct from one another. Student satisfaction, as defined in this study, refers to the evaluation of current and past experiences within the university. Institutional confidence implies an evaluation of future outcomes, such as a student's optimism about job prospects with a college degree awarded from a particular university.

Rosenbaum et al. (2015) randomly selected participants from eight colleges in Illinois and California, which were matched by size and socioeconomic community composition. Data from 757 students of the total population of respondents were used for analysis. The survey was comprised of 10 questions that had been identified as indicators of institutional confidence under three factors: Dependable progress, course relevance, and job contacts. An example question of a course relevance factor is: *Most of what I learn in my courses is relevant to my career goals*. Each variable was rated on a Likert scale of one to five with one indicating a "strongly disagree" response and five being a "strongly agree" response.

The results of this study indicated that of the three factors measured by surveys and interviews, course relevance was the most significant predictor of institutional confidence in college students. Of these participants, 77% affiliated with a theme that general education

courses felt irrelevant to their career preparation. Most students could not make a connection between the information they were learning in these courses and how it could be applied to a job in the future. It is important to highlight that as mentioned previously, students are at the highest risk of dropping out within the first year of college; 30% of students depart from the university within this timeframe (National Center for Education Statistics, 2014).

Since general education courses are typically completed within the first two years at an undergraduate institution, the 77% consensus of students whom indicated general education courses as being irrelevant, should be concerning to educators. The fact that course relevance was attributed highest with institutional confidence may potentially explain the high-percentage of dropouts of first year college students. Thus, those whom identify insignificant merit in their studies may drop out altogether.

Hagan (1991) found when a student loses confidence that his or her formal education provides career-relevant information, he or she becomes disengaged with the curriculum and will have an increased likelihood of dropping out. For example, many post-secondary institutions offer vague incentives for high-performance in coursework. Hence, when students realize many hiring managers do not consider an applicant's college grades, he or she is less likely to exert additional effort in the course. This attitude can be described as the college vernacular, "Cs get degrees" mentality. The concept of institutional confidence is prominent when studying the relationship between the confidences a student has in his or her university with student persistence of completing coursework and graduating.

College Course Modality

In the past decade, college courses have largely gravitated to encompass non-traditional formats including online learning. Between 1990 and 2002, the number of students enrolled in

an online course rose by 57% (Boton & Gregory, 2015). However, as of 2012, attrition rates for online courses continue to average 20% higher than traditional face-to-face coursework (Bart, 2012). Boton and Gregory analyzed the factors contributing to student attrition in online degree courses in terms of lecturers' style of teaching. This research explored the challenges lecturers experience on an online platform, such as constructing student engagement with course material.

Boton and Gregory (2015) analyzed four themes outlined in prior literature that examined student attrition: Culture, motivation, effective of learning management systems (LMSs), and online pedagogies. Participants included 18 online lecturers from six countries, including: Australia, Brazil, Canada, Norway, Spain, and the United States. All participants were lecturers for fully online undergraduate courses. Four questions were asked of each participant: How do lecturers engage culturally diverse cohorts? What are the strategies used to keep students motivated? How do lecturers make use of LMSs to foster online engagement? What pedagogies are used to foster engagement? The majority of participants instructed Education (44%) or Psychology courses (22%) with enrollment at a minimum of 54 to 355 students. These instructors taught between four and 16 years online, with an additional eight to 30 years of teaching experience in a traditional face-to-face course format.

The results indicated for the factor of cultural diversity, 16 out of 18 (89%) lecturers indicated it is unnecessary to use specific engagement strategies for diverse cohorts (Boton & Gregory, 2015). Responses to this open-ended question included the belief online classes and multiculturalism are synonymous and are already designed to offer a variety of activities for a wide audience of different learning types. Thus, additional strategies to target diverse students are redundant.

These responses are consistent with a study conducted by Levy (2007), which found online programs are "ensured" to accommodate cultural inclusivity using collaborative strategies, which promote cross-cultural communication amongst peers. The main strategies participants of the Boton and Gregory (2015) study indicated they use in their online courses to facilitate engagement included: Creating activities for different learning styles and using social interaction for the exchange of ideas, such as activities requiring teamwork.

A factor of low student motivation indicated 44% of lecturers believed their classes had higher attrition rates when students were not studying a core subject related to their major (Boton & Gregory, 2015). Seven out of 18 lecturers (39%) attributed low motivation to students who have many professional or personal commitments that distract them from engaging in course material. Strategies employed to create a highly motivated population of online students included using various strategies for engagement, such as multimedia platforms of audio and video. Additionally, 15 out of 18 lecturers (83%) indicated they were able to effectively motivate their students through their ongoing presence online, such as participating with students in chat rooms and providing weekly announcements to the class.

In the effort to explore lecturer's proficiency with the Learning Management Systems (LMSs), participants rated their abilities to use and integrate technology in their teaching strategies. The majority of lecturers (78%) indicated requiring formal training and ongoing technical support from their universities to teach online (Boton & Gregory, 2015). This group of lecturers indicated they often experienced technical problems during online courses, as they were not highly proficient with their LMSs.

Lastly, lecturers were asked about the online learning pedagogies they adopt. Most lecturers utilize a combination of constructivism and connectivism (61%), followed by

connectivism (17%), constructivism (11%), and a combination of humanistic and constructivist

theories (11%). Constructivism refers to an idea that learning is an active and contextualized

process of constructing knowledge rather than acquiring it, based on personal experiences and

the environment (Vrasidas, 2000). Connectivism emphasizes the role of social and cultural

context in learning, by which new information is connected with other information sets that

contribute to our current state of knowledge (Siemens, 2004). Humanistic theories advocate for

critical thinking using evidence and ongoing skepticism over dogma practices (Sahin, 2012).

Faculty Views

In a survey conducted by Massey (2015), college instructors were asked to rate the

greatest challenges their students face as barriers to success in traditional, face-to-face

classrooms. The challenges comprised of five factors and were rated by 200 instructors from an

unnamed university and student demographic information was not provided. The results

indicated instructors believed the greatest barrier to success for their students was balancing time

and priorities (90%). These participants noted many of their students struggled in their

coursework because of poor time management and procrastination.

For example, participants indicated many of their students wait until the last minute to

complete an assignment, only to realize they do not have enough time and are unable to complete

course activities (Massey, 2015). Lack of knowledge and unpreparedness (66%) was the second

most common barrier to student success. Participants believed their students did not extend their

learning beyond the classroom and were unrehearsed in important details of their coursework.

These instructors urged their students to read, recite, and review, especially in courses such as

mathematics and the sciences, but indicated the low likelihood students truly heeded such

recommendations.

Social distractors (66%) were equal indicators of barriers to success. Instructors attributed this factor to students having the inability to correctly estimate the time various social obligations require (Massey, 2015). Social distractions also encompassed online platforms, such as phone notifications and social media. Participants noted many of their students were unable to ignore notifications from these domains while completing assignments online, which hindered their focus on content.

The third most significant barrier to college success was comprised of students who do not know where to turn for help (17%). Many failing students did not reach out for assistance from their instructor until the end of the semester. The sixth and lowest rated barrier to success was the belief coursework was too difficult for their students (6%). Participants indicated if their students limited external distractions and devoted an appropriate time schedule to engaging with the lessons, their students would find they had the ability to master coursework (Massey, 2015).

Conditions for Success

Although many studies have focused on individual characteristics of the students in the field of student retention in higher education, Tinto (1997) suggests attrition is not solely related to student-level factors. He believes colleges are not invested with examining the deeper roots of student attrition because of their mentality that college failure is due to a student's attributes and not to the institutional structure itself. For example, instructors in the Boton and Gregory (2015) study felt that their classes were already designed for student diversity and additional supports were unnecessary.

This rationale adopts the antiquated perspective of colleges viewing attrition as student incompetency, not institutional ineptness (Tinto, 2007). Therefore, Tinto mandates it is not only the characteristics of a student that can predict whether he or she earns a degree, but the culture

of the institution itself. Five conditions are outlined to describe the stages a student will progress through, as the resources the student maintains in each category will determine success or failure.

The condition of expectation is when a student is placed in a setting where he or she is expected to succeed. Tinto (1997) argues students who have historically been excluded from higher education, namely ethnic minorities, need professors and staff whom make it evident to them that they are expected to persist and graduate even in the face of struggle. This exclusion is largely based upon representation by size of students who enter and remain in the post-secondary environment. Second, an institution is more likely to retain students when staff provides consistent and clear information about class requirements to their students. This includes employees in positions of academic advising to provide road maps to the students who are undecided on their major, uncertain of which courses to enroll in, and ambiguous about their future career plans.

Third, a college is urged to fulfill their duties of providing quality academic, social, and personal support to the student body. Tinto advocates for mentorship programs and clubs on campus to connect students to their collegiate experience (Tinto, 1997). Fourth, Tinto outlines the importance of frequent involvement of students and staff in order to increase retention. Students should feel as though they have regular access to their professors and administrators, as well as opportunities to interact with their peers both in and outside the class context. Tinto cites students are more likely to persist in post-secondary education when they feel like a valued member of the institution.

The fifth and final condition is the culmination of each factor. This is where students must maintain the impression they are in a setting that fosters active learning. Undergraduates are more likely to stay at an institution where they feel the course lessons are applicable to the

careers they want in the future (Tinto, 1997). Tinto recommends for professors to move away from the "spectator sport" of a traditional college course, described as a faculty dominating the conversation with few students actively participating. He suggests students in this classroom structure will feel detached from the lesson and gradually disengage with learning altogether.

Tinto has devoted his research to understanding how the concept of student involvement, also commonly referred to as engagement, is a critical factor of retention. Student involvement has been identified as being most crucial for first year college students, especially for those who live off-campus (Tinto, 2007). Tinto postulated first year students who reside off-campus are at greatest need for active involvement within a classroom that fosters active learning. For these students, the classroom is perhaps the only place they can interact with their peers and professors. If involvement does not happen here, it is unlikely to happen anywhere.

This idea of involvement is delineated into two distinct categories: Academic and social engagement. The academically engaged student is one who actively addresses faculty, advisors, and their study groups to maximize learning (Flynn, 2014). A socially engaged student is dedicated to the social system of the college experience, evident through active participation in campus events, clubs, and sports. Academic and social engagements are not mutually exclusive; the "ideal" student will be simultaneously engaged in the behaviors of both categories. Together, the roles manifested from each category will help a student develop relationships with his or her peers, professors, and the institution in order to facilitate persistence for degree attainment.

Astin (2005) further analyzed institutional characteristics and their effects on student retention and degree completion. He found the greatest intuitional characteristic affecting baccalaureate degree completion was the university's admission selectivity. Astin highlighted numerous studies have also found this characteristic to be the greatest institutional predictor of

degree completion. This conclusion reflects Astin's assertion that highly selective institutions maintain superior resources to deal with issues influencing student retention and pre-college academic preparedness is the delineating factor of success between students.

The significant levels of undergraduate student attrition have affected not only the United States, but also other countries around the world. In order to combat these increasing percentages of student attrition, approximately 30% of universities in the United Kingdom have implemented formal peer mentorship programs to "provide a one-to-one supportive relationship between the student and another person of greater ability and experience" (Collings, Swanson, & Watkins, 2014, p. 928). This retention and enrichment strategy involves utilizing third and fourth year undergraduate students to support incoming first year students. These researchers postulated more experienced peer mentors can aid in the adaptation and integration of incoming students to the college environment.

In a study conducted by Collings et al. (2014), peer mentoring was examined to observe if any effects existed between student wellbeing, integration, and retention. Participants consisted of 109-college freshman from two universities in the United Kingdom. All participants were students in the Department of Psychology of their respective institutions. The undergraduate participants completed questionnaires at two points during the study: Once during their first week in college and once again, ten weeks later. The questionnaires measured the variables of perceived stress, self-esteem, integration to the university, and intention to leave.

The results of this study indicated students who had a peer mentor exhibited higher levels of integration to the university compared to the students who did not have a peer mentor (Collings et al., 2014). Peer mentored students showed a significant increase in self-esteem between week one when the first questionnaire was administered compared to week 10. There

was not a statistically significant difference between perceived levels of stress between the two groups. However, participants without a peer mentor indicated being four times more likely to drop out of their program compared to participants with a peer mentor.

Rites of Passage

Tinto (1998) recognized the majority of research on student retention and departure is conducted under a belief that there is little variation in why a student chooses to leave a university over the course of a college career. Tinto referred to this method as operating under an implicit assumption that the process and reason for student departure is uniform over time. The rationale for a student to depart after the first six weeks of the first semester may be vastly different than the circumstances that would warrant a student to depart after the second or third year. Drawing upon research in social anthropology, Tinto provided a conceptual framework for which a student will either pass or fail through distinct stages during the course of their college career.

Tinto (1998) cited and expanded the Rites of Passage Theory, outlined by the social anthropologist, Van Gennep (1960). Van Gennep posited the Rites of Passage mandate for an individual to change his patterns of interaction between himself and other members of the society. Thus, one will fail without the capacity or access to resources to properly manage each stage. Moving into adulthood first involves separation, which is having the ability to separate from past associations and to interact in new ways with members of a new group. Tinto believes a student who successfully completes this rite of passage will be able to acquire the skills and knowledge to perform his specific role in the new college territory.

The work of Van Gennep (1960) is used to model the first year experience of college students in which an individual will have to separate himself from his existing membership,

including childhood friends and family in order to explore his new role of membership in the college group. Tinto (1998) argued virtually all first-year students will experience stress while parting with their past. Those who cannot overcome this first stage of separation may have an early departure from the university.

Transition is the second step of the college experience, which entails establishing connections in a new community membership. Many students will experience stress, desolation, a sense of loss, and bewilderment, as they adjust to the social and intellectual responsibilities of college (Tinto, 1998). Those whom find transition measurably difficult are more likely to withdraw from their institution. Students with external responsibilities, such as employment or raising a family, may have fewer opportunities to fully transition into their new environment. For example, these students will likely not spend the same amount of time on campus as their peers, which limits their full transition and subsequent integration to their new role as a college student. This is highlighted by Incorporation, which is the final stage of Van Gennep's (1960) Rites of Passage Theory. Once the student has separated and transitioned, he must be able to appropriately accept the normal and behavioral patterns of his new group membership.

A student as viewed by the lens of Van Gennep (1960) will pass this incorporation phase if he establishes regular and quality relationships with his peers and faculty (Tinto, 1998). Separation, transition, and incorporation are not in themselves the reasons catapulting departure, but rather it is the student's response to these conditions that determines whether they stay or leave. Although not explicitly specified by Tinto, these stages may have a greater reflection on the experience of traditional students who attend college in a face-to-face format, rather than students with online course modality. Perhaps, transitioning into the face-to-face college environment is more difficult than a student taking online courses from the comfort of his or her

home. Additionally, a successful transition into the new college environment may be based on resources, such as ability to afford living on campus, which is reflected by differences in socioeconomic status.

Tinto (1998) utilized Van Gennep's Rites of Passage Theory to add a time dimension in describing the longitudinal stages of overcoming and persisting circumstances in college, which occur at various stages. Despite Tinto arguing most students proceed through each of these stages in their rites of passage, students are likely to experience each stage at different times and with a different severity of conflicts. This can be due to the resources at the disposal of the student, including financial, emotional, and institutional support, such as academic remediation.

Student Characteristics

Although recent research has focused more heavily on the analysis of institutional characteristics as factors of retention, many universities remain interested in the relationship between student characteristics and graduation rates. Demographic and personality factors, including level of involvement, remain the forefront of research investigating undergraduate retention and attrition.

Reasons Students are Leaving

Hoyt and Winn (2004) indicated scholarly literature on college attrition prior to the late 1990s, categorized non-returning students into a single population. However, the populations of students who did not return to their universities had distinct characteristics and reasons for withdrawal. Therefore, it was determined these students must be subjugated and studied in isolation, rather than itemized into one discrete category. The distinctions of non-returning students were labeled: The dropouts, stop-outs, opt-outs, and transfer-outs.

Dropouts were defined as, "students who do not return to the college in which they enrolled, have no definite plans to return, and do not transfer to another institution of higher education" (Hoyt & Winn, 2004, p. 397). Stop-outs were students who "begin a plan of study, leave for a period of time, and then reenroll in their plan of study" (Hoyt & Winn, 2004, p. 397). Students in this study were defined as opt-outs because they may take courses for vocational purposes, but did not graduate with a degree. Finally, transfer-outs embody a student who began their college coursework at one university then transferred and graduated from a different institution.

Hoyt and Winn (2004) utilized a phone interview method to assess the reasons why undergraduate students at Utah Valley State University indicated they were not returning to the university for the following year. They found in 2004, of the 22,609 total student body population, most of their students were Caucasian (92%) males (56%) and over half of first-year students required remedial coursework. Roughly 35% (986 students) indicated that they would not be returning to UVSU for the following year out of the total 2,767 freshman students.

Dropouts, opt-outs, and stop-outs tended to be older, married, held full-time jobs, attend college on a part-time basis, and had children. More than 50% of dropouts, opt-outs, and stop-outs who were 25 years old or greater cited family and professional responsibilities as the main reason for leaving. However, younger students in the same category cited academic difficulty as their fundamental explanation for not returning to the university.

Forty-five percent of the transfer-out participants were nonresidents of Utah whom indicated they were moving back to their hometown in order to save money. Saving money included living at home with their parents and paying a lower in-state tuition at a university where they originally resided. Transfer-out students were likely to be under 25 years old,

unmarried, had no children, worked part-time or unemployed, and attended school full-time. For any of the four categories (dropouts, stop-outs, opt-outs, and transfer-outs), the most significant predictor of leaving the university was student financial concerns. The order of reasons for leaving a college included: High tuition, large class sizes, campus safety issues, and an unfavorable social environment. Students who left the university because of academic difficulty indicated they were likely to transfer out to a community college rather than to another four-year institution, as further means of financial responsibility (Hoyt & Winn, 2004).

College Major

Between 2003 and 2009, 48% of Science, Technology, Engineering, and Math (STEM) students at a four-year institution and 69% of STEM students at a community college had left their fields by the end of 2009 (Chen, 2013). In 2008, 14% of STEM students accounted for all undergraduates at any post-secondary university in the United States. Chen sought to identify the characteristics of STEM students who did not complete their college degrees compared to students in non-STEM fields. Data for this study were extracted from the National Center for Educational Statistics database. Participants for this study included 16,700 students who began college courses at universities in the United States in 2003. Researchers with the National Center for Educational Statistics studied student data and conducted interviews with these participants on three occasions over six years: 2003, 2006, and 2009.

Chen (2013) found almost half of students (48%) with a declared STEM major switched to a non-STEM field after their first year of coursework. Mathematics had the highest attrition rate in which 78% of students who majored in this field in 2003 did not have a Bachelor's degree in Mathematics by 2009. Most first-year STEM students (22%) switched to a degree in Business. Education as a major received the least percentage of transfers at 6%.

Asian students left STEM fields at the lowest rates compared to any other ethnic group (10%). High School GPA and prior coursework also had statically significant impacts on attrition. For example, 46% of STEM undergraduates with less than a 2.5 GPA and lacked coursework in Algebra II or Trigonometry dropped out of college. This is compared to 14% of STEM students with a high school GPA of 3.5 or higher and had taken at least one course in Calculus had dropped out of college. Additionally, 38% of STEM students who attended institutions that were minimally selective, did not graduate with any degree at all compared to 11% for highly selective four-year colleges.

A background in advanced mathematics, including Calculus or higher, distinguished STEM leavers from STEM persisters (Chen, 2013). This supplements research conducted by Shaw and Barbuti (2010), which found the principles of Mathematics provide the foundation for all fields of STEM. Mathematics courses for STEM majors can quickly determine whether a STEM student with contribute to either attrition or retention rates. About 40% of students who dropped out of college or switched majors after the first year attributed their decision to their inability to cope with the advanced mathematics courses of their field. Most students who dropped out of their STEM major between 2003 and 2009 were women of ethnic minority and low-income backgrounds.

During the three interviews conducted between 2003 and 2009, several themes for college attrition emerged. STEM participants felt they had inadequate academic advising, low institutional support, and feelings of isolation. These students indicated their feelings of isolation were rooted in having few peers to take STEM courses with, as most of their college friends were non-STEM majors. Women indicated they had limited female professors and role models in the field to help them persist with their coursework (Chen, 2013).

Xu (2016) also explored the relationship between college major and attrition rates, with a particular interest in those whom declared a STEM major. The President's Council of Advisors on Science and Technology (2012) predicted by 2022, there would be a shortage of over one million STEM college graduates in the national workforce. Xu hypothesized retention for a STEM student will depend on their academic and social integration with the university. According to Tinto, students who are satisfied with their academic performance and their social relationships are less likely to depart from college (Tinto, 1997).

STEM students were interviewed about their academic and social experiences at their undergraduate institutions using a 57 item, multiple-choice questionnaire. In addition, participants responded to questions about financial pressures, perceptions of their academic environment, and support received by faculty. Two statements were used to measure a student's likelihood to drop out, including: "I have seriously considered dropping out of college" and "I may drop out of college if there are good-paying jobs available."

Participants included 702 individuals who were recruited via an email invitation sent to all full-time undergraduate students at a public university in the Southeast United States. Participants were divided into two groups: STEM students (554) and non-STEM students (148). The total enrollment base of the university, accounting for STEM and non-STEM students was 11,265. Most participants were first year students (26%), female (54%), and Caucasian (59%).

Results indicated the most influential factor of STEM student retention was institutional control over academic quality and learning environment (Xu, 2016). Such factors included student satisfaction with class size and quality of teaching. These results are consistent with research by Lichtenstein, Loshbaugh, Claar, Bailey and Sheppard (2007), which found students who perceived their institution as providing an academically supportive learning environment

had stronger commitment to degree completion. Supportive learning has been defined as reasonable class sizes and quality professors. Other studies describe supportive learning, such as, having academic advising and "roadmaps" to degree completion.

In addition, participants with a self-reported high GPA identified decreased intentions to drop out. Xu (2016) concluded, "the common component of all theories on college retention, be it sociological, organizational, cultural, and psychological, is the interaction of individual students with the academic institute" (p. 69). In other words, the culture of the institution has significant influence on a student's decision to persist through college.

Non-STEM students whom indicated financial pressures to fund their college education had the most significant impact on likelihood to depart (Xu, 2016). Xu hypothesized students in STEM majors may not feel the same financial pressures as their non-STEM counterparts based on a greater availability of financial scholarships and fellowships for STEM students. In addition, non-STEM students indicated lower drop out intentions when they rated their faculty as being accessible for support and advice. These results were different for STEM students in which finding course material pertinent to a future career was more important than social relationships with peers and professors.

Sexual Orientation

Traditional-age, first-year college students find themselves in the unique territory between adolescence and adulthood, referred to as the emerging adulthood (Alessi, Sapiro, Kahn, & Craig, 2017). Although the newfound freedom college cultivates for young adults can be liberating, many first-year students are fraught with stress and anxiety, especially for lesbian, gay, bisexual, and transgender students. These students will confront not only new academic and

social experiences, but will contend with the additional prejudices brought on by a deviation from the heterosexual orientation.

The motivation for this study was based on the tragic story of Tyler Clementi, a first-year university student who committed suicide after his roommate streamed footage of Tyler's sexual encounter with a partner of the same gender. Hence, the researchers wished to explore not only the experiences of first-year LGBT students, but also to develop methods to alleviate another similar tragedy in the future. Participants included 11 females and 10 males. Their average age was 19 years old and most reported being gay or lesbian. Additionally, the majority of participants were Caucasian or Hispanic/Latino.

Participant responses indicated the strongest anxiety experienced by the LGBT college students surrounded the selection of a roommate. Participants were unsure if their heterosexual roommate would be tolerant of their sexual orientation and also noted a preference for a nonreligious roommate. Gay men from ethnic minorities were particularly concerned about their academic success in college. For example, several participants noted they were motivated to excel in school for their parents to compensate for being looked down upon as a gay man (Alessi et al., 2017). These participants also acknowledged describing themselves as bisexual rather than gay to their new peers.

Issues of disclosure were prominent, as the students spent most of their first year navigating to whom and when it would be safe to disclose their sexuality to others. Experiences with marginalization behaviors were reported the highest by gay men, as targets of derogatory terms or being directly threatened and harassed by campus community members. Several lesbian participants mentioned they were afraid of stereotype threat and took measures to not conform to their sexual orientation. For example, one student said she refused to continue to ride a

skateboard or wear non-feminine clothes because she did not want to be seen as a stereotypical lesbian (Alessi et al., 2017).

Developing supportive relationships with both homosexual and heterosexual peers demonstrated the most successful adaptation to the college environment for participants. They indicated benefitting from campus events, which allowed them to interact with other students regardless of sexuality. LGBT students reported having the most difficult time "coming out" to new friends, as they were continuously aware of their stigmatized status as a member of the LGBT community (Alessi et al., 2017).

Microaggressions have also been reported by gay and lesbian students. For example, the expression, "That's so gay!" is a popular example of heterosexist language, which can communicate anti-gay sentiment toward the LGBTQ community (Woodford Howell, Silverschanz, & Yu, 2012). Within the college environment, such an expression can be seen as simply tolerated "background noise," despite its' ability to serve as an intentional slight against a lesbian, gay, or bisexual student. Although research on the college experience for LGBT students has documented blatant and physical behaviors including violence, many studies have glossed over sexual orientation microaggressions, as evidenced in the popular expression described.

Woodford et al. (2012) set to examine the incidence and effects of 114 LGB students from their exposure to the "that's so gay" expression. The mean age of participants was 19 years old, and most participants were Caucasian (74%) and female (62%). Of the respondents, 90% indicated they had heard the expression, "that's so gay' at least once in the past year. Additionally, 20% of all participants noted they had not used the same expression within the last year. The students who heard this expression the most often reported feeling isolated from their

peers, as well as expressing psychosomatic symptoms, including headaches and stomach pain. In addition, participants reported the phrase created feelings of being unsafe and unwelcomed by their peers.

Involvement

The relationship between college student persistence and the level of social involvement was analyzed in research conducted by Milem and Berger (1997). Milem and Berger based their study on observations made by the work of Astin (1975) and Tinto (1993). Astin (1975) referred to student involvement as, "the amount of physical and psychological energy a student devotes to the academic experience" (p. 641). Tinto advocated student involvement with peers and faculty is related to learning and persistence. Therefore, students who learn how to persist are more likely to graduate.

Milem and Berger (1997) utilized longitudinal data to study student persistence at the undergraduate level. Participants attended a highly selective private residential institution in the southeast United States, although the name of the exact university was not disclosed. Out of a 10,000 overall student population, 6,000 of the students at this university were undergraduate students and 90% of the undergraduates at any level lived on campus. Data were collected on three separate occasions from 718 students; about 46% of the original entering class at the beginning of this study. Most participants were female (51%), Caucasian (84%), had family incomes of $100,000 per year or more (53%), self-reported having a Conservative political ideology (64%), and a 3.5 high school GPA or higher (77%).

Three questionnaires were administered throughout this study. The first questionnaire students completed was the Student Information Form (SIF) in August 1995 after their first-year orientation. Following the SIF, students completed the Early Collegiate Experiences Survey

(ECES) in October 1995. The Freshman Year Survey (FYS) was the final survey participants completed in March 1996. Each questionnaire analyzed student institutional commitment, academic integration, social integration, and level of school involvement during various period of the program.

Milem and Berger (1997) found Caucasian women from affluent families were more likely to have strong institutional commitment, academic integration, social integration, and a high level of school involvement during all three stages of the study, compared to any other student demographic variable. Even accounting for non-Caucasian male students, family income was also highly predictive of the level of school and social involvement in the first year of college.

Participants who indicated having a strong level of social and school involvement reported the highest level of institutional commitment and academic integration. In contrast, students with a Liberal political ideology had the lowest institutional commitment, academic integration, social integration, and level of school involvement. Less than 17% of participants reported having a Liberal political ideology compared to 64% of students from the university who had a Conservative political ideology. 19% of students did not report having any specific political ideology. Although, the students' SES and ethnic background were not controlled for and covariance between these factors could have contributed to these differences.

Personality

Examining student retention rates has often been viewed through the lens of Psychology, namely assessing individual personality characteristics as indicators of success. Researchers advocate academic motivation is the most critical factor on learners' achievement; Learners need to be interested in learning and without this motivation, all efforts of the educational system

would fail (Hazrati-Viari et al., 2012). Individual ability and intelligence have been postulated as predictors of academic achievement; however, prior research provides evidence that personality variables also play a role in academic success and graduation (O'connor & Paunonen, 2007).

Student characteristics that have been studied in the academic realm include the categories of the Big Five Factor Model of Personality. Over the past decade, there has been abundant empirical literature providing evidence of the Big Five Factor Model of Personality for its' concurrent, construct, convergent, divergent, incremental, and predictive validity (Chamorro-Premuzic & Furnham, 2003). The big five traits have been proven to apply across cultures and nations, as researchers have demonstrated these five traits accurately describe universal personality characteristics.

The Big Five Factor Model of Personality can be traced back to the work of Allport and Odbert (1936). Selecting over 4,000 psychological trait terms from the 1925 Webster's International Dictionary, Allport and Odbert asserted these terms encompassed personality types of individuals (Franić, Borsboom, Dolan, & Boomsma, 2014). In the 1940s, Catell narrowed down the psychological trait terms posited by Allport and Odbert to 35 variables and 12 primary factors. Over the next half century, Norman (1963), Tupes and Christal (1992), Golberg (1992), and Costa and McCrae (1992) further delineated the variables to derive a five-factor model of personality. These five-factors are currently referred to as: Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism.

Openness to Experience reflects the degree of intellectual curiosity and imagination, creativity, and variety of experiences an individual has in order to feel fulfilled (Hazrati-Viari et al., 2012). A student ranking high in openness to experience may be unpredictable, while a low

score may indicate close-mindedness and pragmatisms. Conscientiousness entails organization, dependability, and self-discipline. The characteristic of high conscientiousness is stubbornness but high achievement, while low conscientiousness results in flexibility but unreliability.

Extraversion reflects energy, sociability, and assertiveness (Hazrati-Viari et al., 2012). A highly extroverted student would be perceived as someone who requires the company of others to be stimulated and is someone who thrives on attention seeking. Low extraversion demonstrates a reflective personality and is someone who can be perceived as aloof. Agreeableness illustrates compassion, cooperation, and temper control. A high agreeableness score reflects someone who is trusting and helpful in nature, whereas a low agreeableness score can imply having a competitive and argumentative personality. Finally, Neuroticism refers to emotional stability and impulse control. A person with high neuroticism will tend to have a stable and calm personality, whereas a low neuroticism score may encompass an individual with a reactive and excitable personality.

It is imperative to note each of the big five factors are not types of personalities, but dimensions of personalities. Therefore, an individual's personality is the combination of each of these big five personality characteristics. Repetitive research on the Big Five Factors Theory have indicated personality is relatively stable throughout life and is associated with important life outcomes such as occupation and marital stability (Hazrati-Viari et al., 2012).

In a study conducted by Hazrati-Viari et al. (2012), the effect of personality on academic motivation and educational performance were investigated. Data were collected from 250 college students, of which 217 responses were screened for usability. There were 98 females and 119 male participants in this study who ranged from 19 to 35 years of age. The average age of the student was 23 years old and all participants were recruited on a voluntary basis.

Personality traits were assessed using the Big Five Factor Model, specifically the NEO FFI questionnaire. The NEO FFI questionnaire (1992) stands for Neuroticism-Extraversion-Openness Five-Factor Inventory and was developed by Costa and McCrae. Although the NEO questionnaire has been revised as recently as 2010, Hazrati-Viari et al. (2012) chose the 1992 NEO FFI for the study because it is a shorter version and primarily focuses on the assessment of neuroticism.

In addition, this inventory also evaluates the personality dimensions of openness to experience, conscientiousness, extraversion, and agreeableness (Costa & McCrae, 1992). The inventory included 12 questions for each factor with 60 total questions. Participants rated each question in relation to how well he or she thought the question described him/herself. All questions were answered using a five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree." Academic performance was self-reported and measured by the participant's college grade point average over the last two consecutive semesters.

The results of the study indicated conscientiousness and openness to experience were the most significant personality predictors of academic performance (Hazrati-Viari et al., 2012). This suggests students who score higher in conscientiousness and openness to experience will have higher success in college, based on grade point average. These results replicate the work conducted by Crozier (1997). Students who rank high in conscientiousness are likely to meet deadlines for assignments, exert higher than average effort for a task, and can apply him/herself without continuous supervision.

Hazrati-Viari et al. (2012) postulated students with high openness to experience tend to be intellectually curious, insightful, and show a desire to gain a deep understanding of abstract concepts, leading to higher course performance and higher grade point averages. This idea was

based on research conducted by Chamorro-Premuzic and Furnham (2008) whom postulated students with an openness to experience had higher IQs due in part to their "investment" in following through with learning and developing skills presented in college courses. The investment of openness to experience and engagement can affect deep learning, leading to higher grades.

These results were similar to a study conducted by Wolfe and Johnson (1995), which also intended to identify the strongest predictors of grade point average for college students. Participants consisted of 201 undergraduate students from the Department of Psychology at the State University of New York, College at Geneso; 157 female and 44 male students took part in this study. The researchers obtained SAT scores, high school GPA and college GPA from each of their participants. The standardized tests utilized in this study consisted of the Jackson Personality Inventory (1976), The Big Three (1985), and The Big Five (1990) Personality Questionnaires.

The strongest student characteristic predictor of grade point average in college was high school GPA. Second to high school GPA, the most robust predictor of college GPA was the characteristic of Conscientiousness, followed by SAT score (Wolfe & Johnson, 1995). This finding that high school GPA and the personality dimension of Conscientiousness as the most significant predictors of college GPA replicates the work by Hazrati-Viari et al. (2012) and Crozier (1997).

Komarraju et al. (2009) asserted academic success is strongly influenced by individual differences in motivation and achievement. Komarraji et al. (2009) used personality variables to determine the dimensions of personality that are most highly correlated to college success and graduation. Participants in this study included 308 undergraduates (48% male and 52% female)

from various majors at Southern Illinois University. Participants completed the Five Factor

Inventory (NEO-FFI) and the Academic Motivations Scale (AMS), along with a self-report

measure of their current GPA. Most participants were freshmen (56%), Caucasian (66%), and

between 18 to 24 years old (95%).

In accordance with prior research, students who rated high in the personality dimension

of Conscientiousness displayed higher scores on both intrinsic and extrinsic motivation and had

the highest current grade point averages of the participant population (Komarraji, 2009).

Students who ranked high in Extraversion also had high extrinsic motivation and a low

likelihood for disengagement. Students with the lowest grade point averages ranked low in

agreeableness, reflecting disengagement and poor socialization to academic norms.

Not only did college students who ranked high in conscientiousness have higher grade

point averages than students who ranked low in conscientiousness, they also reported less

anxiety and feelings of stress. The results from this study concluded predicting a student's

college academic achievement involves more than mere individual IQ and standardized test

scores and should also encompass personality considerations (Komarraji, 2009).

First-Generation Status

Dennis et al. (2005) explored the role of motivation, parental support, and peer support in

the academic success of first-generation ethnic minority college students. Participants included

100 first-generation students from a diverse and urban university on the West Coast of the

United States, whom completed a questionnaire during two times of their college experience. 84

participants were Latino and 16 participants were Asian with the average age of 19 years old.

Accounting for both groups, 12% had parents who completed at least once college course, but

none of the parents had a college degree. Half of the Latino participants (50%) had family

incomes that were considered at the national poverty level compared to (31%) of Asian families who met these criteria. By the second year of the study, 39% of participants had dropped out of college.

As prior studies have suggested, high school GPA was the strongest predictor of college GPA for both Latino and Asian participants. For both groups, the significant motivation to attend college was based on personal interest, such as attaining a degree for a high-paying career. Individual motivations involved attending college for personal gains and personal interests, compared to collectivistic motivations that are aimed to please the family (Dennis et al., 2005). An emerging theme between participants of both ethnicities was a post-secondary education was a means to escape the harsh lives their parents experienced. This personal interest motivation was correlated with a students' likelihood to have efficient time management skills, organization, and realistic coursework planning to earn a degree.

Although statistically significant, this study found that for first-generation students, family motivation was not as strong of a predictor of college success as the personal interest motivation. Asian participants indicated at higher levels than Latino students that their family is collectivistic, however, individualistic traits were prominent in this sample. Instead, first generation Latino and Asian students indicated having peer support was more important for their success in college than family support. Participants stated their families provided strong emotional support, but their peers provided necessary instrumental support. Instrumental support encompasses forming study groups and working on assignments together during difficult courses (Dennis et al., 2005).

Blackwell and Pinder (2014) analyzed how socioeconomic background and ethnicity affects the type of challenges a student faces during college degree attainment. Of the high

school graduating class of 2008, 16% in the United States derived from families with an annual income of $20,000 or less. The majority of these students were ethnic minorities whom lacked adequate resources as the first-generation student of their families. In 1990, 20% of college freshmen were the first in their family to attend college, compared to 2002 where 22% were first-generation students. Therefore, between 1990 and 2002, the amount of first-generation students who entered college grew only by 2%.

The overarching question guiding this research was: What were the factors that motivated first-generation minority college students to overcome their family histories and to become the first in their family to pursue a college education? The participants consisted of six African-American females who were divided into two groups of three. Group one consisted of three African-American first-generation students, whereas group two consisted of three African-American third-generation college students. Both groups were administered survey questions and interviews to grant insight into their college experiences.

Three themes emerged in group one as to the factors that motivated them as first-generation minority students to pursue a college education. The first factor was a love for reading from an early age. These participants indicated reading was an escape from their reality as a child, as they each attended school only three months out of the year. Group one indicated they spent the rest of their time reading as an escape from poor living conditions. The second theme that emerged was a feeling they were different than their siblings in terms of their passions and what they wanted from their future.

One participant noted she was the only female in her family who did not aspire to be a mother and a wife and was looked down upon for even speaking about the possibility of attending college. The third and final condition posited by the participants in group one entailed

a motivation for a college education as a path to a better life than the one they grew up in. All three participants were reared in poverty-riddled areas of North and South Carolina in project housing and on farms.

The three first-generation participants indicated how their families stressed work over an education. Each participant worked full-time and fulfilled household duties in addition to taking courses. The participants spoke about the conditions that motivated them to graduate: If their work performance at their family businesses suffered, their parents would not allow them to continue with their post-secondary education. Each participant ranked their college experience as the "toughest experience of their life," but that they "would not trade their education through this experience for anything." These participants also spoke about the struggles they experienced within their college courses. They admitted a realization of being behind their peers in baseline knowledge when entering into the institution and had to work twice as hard just to catch up.

The three, third-generation African-American college graduates from group two reported an experience on the opposite spectrum. These participants mentioned attending college was ingrained from an early age because of the high level of education their family members had attained. Group two participants were rehearsed in the requirements for applying for college and had already chosen a major before orientation for the undergraduate freshman year. They rated their parents as highly supportive, both emotionally and financially and experienced less stress in college than group one.

Banks-Santilli (2014) explored the challenges first-generation students faced at Wheelock College in Boston, Massachusetts. In 2006, first-generation students comprised 16% of the freshman class at Wheelock College. However, by 2012, 90% of these students did not have college degrees. This historically steep dropout rate of first-generation students can be attributed

to significant academic struggles compared to their non-first generation peers due to having fewer financial resources and working while attending college.

In addition, high attrition rates can be explained by a higher likelihood that a first-generation student has lower high school grades and preparation, which becomes a barrier of being accepted into a high quality institution (Banks-Santilli, 2014). Participants included 68 college freshmen who were the first in their families to attend college. Each participant completed both a 13-item questionnaire and an in-person interview in 2011 and was contacted again in 2012 for a final interview.

An emergent theme of the first-generation experience was that most students (75%) currently held a full-time job and needed a bachelor's degree to advance themselves in their chosen profession. During the in-person interviews, participants spoke about the struggles of managing their professional and academic workload. Several participants mentioned they worked over 60 hours per week and sent some of their money back to their parents. This sample (92%) indicated they believed they would graduate with a degree within four years. 94% of participants also mentioned they had strong support from their parents to attend college. For the 6% of participants whom indicated a lack of parental support, an overarching theme was that he or she struggled to be away from their family. Both groups reported feeling guilty for being far away from home and not being able to provide for their family.

While most participants rated high family emotional support for attending college, 87% reported they were on their own to fulfill this dream. For example, the families of 73% of the participants had never gone on campus tours with their child or researched information for the application process. The majority of these students belonged to families where English was a second language.

When asked to explain how attending college has affected a student's relationship with their parents, 86% of participants mentioned negative feelings of separation and concern for their parents during college absence. 84% were confused during financial aid processes and did not have enough money to supplement coverage for miscellaneous university fees. In addition, 41% of the sample lacked understanding in how to navigate creating a schedule for their first semester of courses and did not know whom to turn to for assistance. Despite these setbacks, 80% of participants rated their faculty highly and respected their teaching methods.

When contacted a second time in 2012 for a second and final interview, over 20% of the original sample of first-generation students had already left the university. Of the remaining 50 students, a theme that emerged about their college experience entailed having a further strained relationship with parents. For example, several participants spoke about how their progression through different courses had changed their perspective and willingness to talk about otherwise taboo subjects. A participant indicated in one of her courses, there was a provocative discussion about homosexuality and feminism. This participant deeply immersed herself in these topics and decided to cut and dye her hair a neon color. In turn, her parents were deeply offended by this change and labeled her as radicalized, urging her to depart from college. Although the participants indicated the same feeling of guilt of being away from their families to attend college, the level of guilt decreased between their first interview in 2011 and at their second interview in 2012. Their compliance for long-held familial beliefs, including religion, also subsided and they gained confidence in their ability to persist for graduation.

Pascarella, Pierson, Wolniak and Terenzini (2004) sampled 3,331 college students who participated in the National Study of Student Learning by the National Center for Education Statistics between Fall 1992 and Spring 1995. A total of 18, four-year universities throughout

the United States participated and were chosen to represent demographic variances between institutions throughout the nation. For example, private and research universities were included, in addition to historically black universities (HBU) and highly selective institutions.

Participants completed surveys, which sought information on student demographic variables such as age and ethnicity and an inventory on academic motivation. In addition, participants completed Form 88A of the Collegiate Assessment of Academic Proficiency (CAAP), which was developed by the American College Testing Program (ACT) to assess competency on general skills that are likely acquired within the first two years of college.

Students who had parents with a postsecondary education indicated significantly higher admittance rates into selective universities compared to first-generation students (Pascarella et al., 2004). First-generation students had lower overall grade point averages during every year of their college experience and higher attrition rates. On average, first-generation students completed significantly fewer college credit hours and worked significantly more hours per week than their peers whose parents had a postsecondary education. First-generation students were also significantly less likely to live in on-campus housing and had lower levels of extracurricular involvement. These students also indicated they had lower levels of interactions with peers in all domains, including athletic participation, volunteer work, and university events.

The CAAP demonstrated the first-generation sample had lower science reasoning scores than students with college-educated parents. Relative to their peers, first-generation students had significantly lower levels of degree plans after their second year of college and reported a higher likelihood of dropping out of school (Pascarella et al., 2004). Consistent with previous research, this study also found first-generation students had lower high school grade point averages and

precollege scores in writing, critical thinking, and math skills in addition to lower academic aspirations, such as confidence in degree completion or future enrollment in a graduate program.

Engle and Tinto (2008) explored the barriers low income, first-generation students experience to formulate recommendations to help these students combat their unique obstacles. The dataset used for this study encompassed the Beginning Postsecondary Study from the National Center for Education Statistics (BPS:96/01), which reviewed data from over 4.5 million first-generation students.

Engle and Tinto (2008) found first-generation students dropped out of college after their first year at four times the rate compared to non-first-generation students. Only 11% of first-generation, low-income students completed their Bachelor's degree within six years compared to 55% of their more advantaged peers. Although first-generation students were more than seven times more likely to earn a Bachelor's degree if they started their education at a four-year institution, only 25% of this population were accepted into and enrolled into this type of university.

Low income, first-generation students tended to be 22 years of age or older, female, had a disability status, came from an ethnic minority background, was a non-native English speaker, had children, had not earned a high school diploma, and financially independent from their families. These factors were identified by the National Center for Education Statistics in 1995 as risk factors for leaving postsecondary education without earning a degree (Engle & Tinto, 2008). For all institution types, including public and private two and four-year universities, low-income and first-generation students were 11% more likely to require remedial courses than their peers. Additionally, 63% of first-generation students worked over twenty hours per week compared to 42% of non-first-generation students.

Engle and Tinto (2008) concluded with recommendations as to address the unique barriers which low income, first-generations students may face in the effort to increase bachelor degree attainment. One of these recommendations included easing the transition to postsecondary education, which entails exposing elementary students to college tours to inspire their interest about the process of college. Engle and Tinto (2008) encouraged personalized attention from administrators for students at risk of academic failure, such as establishing realistic steps to reach admittance into a university. This is especially pertinent for students who may think they are inept for college success. Helping students and families through workshops to understand college processes including financial aid are encouraged as a way to promote literacy about the admission process.

Astin (2005) analyzed student data from the entering class of 1999 at the University of California, Los Angeles. He was interested in encountering the multiple factors that can predict a student's likelihood of college degree attainment. Participants in this study included 56,818 first-time, full-time, undergraduate students. Once again, high grade point average in high school was correlated with a higher likelihood of graduating from college within a four-year timeframe. Following a student's grade point average, higher scores on the standardized college test, the SAT, were correlated with college retention and graduation. As the literature has continuously demonstrated, pertinent demographic factors were found to be predictors of completing a bachelor's degree in four years. For example, the father's level of education was positively correlated with a higher likelihood of graduating in the traditional timeframe. Students who belonged to well-educated and socioeconomically enriched families also had an advantage in degree attainment over their less affluent peers.

Astin (2005) postulated students from well-educated and higher socioeconomic families are impacted by their social capital, which contributes to adjustment in college. Such students are likely to have superior academic preparation and resources over their peers. The statistically significant racial and gender variables identified in this study indicated Caucasian females graduated at the highest percentage compared to all other students.

The only self-rating measure with a positive correlation on degree completion was emotional health. Several behavioral measures that had small, but statistically significant results included: Smoking and hours worked outside of school per day. Consistent with other studies, working during college reduces a student's probability of graduating (Astin, 2005). Participants who were regular smokers were less likely to graduate in a four-year timeframe.

On a different dimension, attending religious events was positively correlated with college graduation. Environmental contingencies were also correlated with degree completion. Students who lived in a campus residence hall enhanced a student's likelihood of completing college. These findings replicate previous results from numerous research studies presented in this chapter, as well as in the literature regarding student retention at the post-secondary level (Astin, 2005).

Ethnic Minorities

Ingram, Chaudhary and Jones (2014) explored the effect that being a biracial or multiracial student has in the college environment. The differences between cultures of a biracial student can be examined through their physical appearance, cultural upbringing, practices, and values. Participants consisted of 201 students at the University of Pennsylvania whom identified themselves as being two or more races.

71% of participants were female, 29% were male, and 82% were 21 years old or younger. 88% of participants were born in the United States and the most common level of education for parents was four years of college (28%). The majority of respondents were freshmen (30%) and the biracial composition for most participants was Caucasian and Hispanic. The testing instrument consisted of a self-report questionnaire that investigated the experiences of being a biracial college student.

70% of participants indicated they "rarely or never" felt unwelcomed in social groups outside of their ethnicity. However, 25% of participants had social groups with limited to no ethnic diversity. Participants who were mixed with African-American genes reported experiencing hostility from classmates who were fully African-American, but not the same hostility from classmates who were full Caucasian. These participants also indicated often feeling pressured to choose a social group based on one part of their ethnicity.

The majority of respondents (87%) noted they are most likely to seek out friendships with Caucasian peers over any other ethnicity. Biracial participants (70%) were also most likely to seek out Caucasians as romantic partners than any other ethnicity. Of these participants, 49% indicated they rarely or never sought out membership in cultural groups. Additionally, 56% were "regularly asked" by both their peers and professors about their ethnicity, which was occasionally viewed as intrusive (Ingram et al., 2014).

In 2011, college enrollment by Hispanic students age 18-24 surpassed all other minority groups (Wagner, 2015). Despite this landmark achievement, as of 2013, Hispanic students in the United States comprise less than 9% of a graduating college class. Students of majority ethnic backgrounds have dominated past research in the field of retention. Therefore, Wagner was

interested in determining the unique factors that may affect degree completion by Hispanic students.

Wagner (2015) constructed the assumption Hispanic students face unique barriers to completing their college degree based on research by Chang (2001). Chang found the perception of minority students on the racial campus climate could affect their academic experience and adaptation to the university. This campus climate prejudice exacerbates alienation and stress on minority students at predominately Caucasian institutions.

Wagner (2015) utilized a public data set from the National Longitudinal Survey of Freshmen (NLSF). The NLSF contains 150 questions, which assess a student's attitudes, aspirations, and motivations at the time of entry into college, as well as the social, psychological, and academic experiences on campus. The participants comprised of 711 Hispanic students from 28 highly selective institutions in the United States. Most students accepted into these 28 universities ranked in the top 10% of their graduating high school class.

When holding all other variables constant, a Hispanic student had a 73% higher likelihood of completing a degree within six years if he or she attended a private liberal arts college versus a public college (Wagner, 2015). Research into why ethnic minority students report higher graduation rates at private colleges have been a topic of debate. Pascarella and Terenzini (2005) attributed a private college has certain characteristics that benefit students from minority backgrounds. These characteristics include: Smaller class sizes, types of degrees offered, and faculty support of students.

Social capital was also found to be a significant predictor for Hispanic students graduating within six years. In past studies looking at factors of student retention, researchers traditionally defined social capital as extending oneself beyond the social groups they are

traditionally comfortable with, which is necessary to make a successful transition into college (Tinto, 1993). This singular definition did not necessarily apply to ethnic minority students and was therefore expanded in the study by Wagner (2015).

The Hispanic culture places a heavy emphasis and expectation on maintaining ties to family and the social community, even after the student departs for college (Wagner, 2015). Severing these expected social ties is likely to cause Hispanic students to suffer from additional stress and can contribute to a student's decision to withdraw from college. Therefore, Wagner found Hispanic students whom rated having high social capital, hence, extended their relationships beyond family members, were more likely to not only graduate with a degree within six years, but also maintain a higher grade point average.

Additionally, Matthews-Whetstone and Scott (2015) explored the institutional factors affecting the attainment of a Bachelor's degree among African-American males, particularly, those who dropped out and returned later to complete their degree. Although American higher education has observed an increase in the proportion of college degrees awarded to African-Americans, for more than seventy years, African-American women have steadily surpassed African-American men in degree attainment. As of 2000, about 10% of African-American men and 15% of African-American women hold Bachelor's degrees in the United States. Thus, this study sought to understand the institutional factors that led African-American men to depart from college.

Participants in this study included 10 African-American males who were at least 25 years old and had dropped and stayed out of college for at least one year before reenrolling and eventually completing a bachelor's degree (Matthews-Whetstone & Scott, 2015). The average participant was 33 years old and spent 11 years as an undergraduate to complete their degree.

All students were alumni of Texas A & M University. The researchers followed a script in a formal, 30-minute interview with open-ended questions divided into two sets. The first set asked questions about the participant's experience when he first enrolled in college and the second set addressed the participant's experience once dropping out and returning to the university.

Most participants who began college at a four-year institution spent a shorter amount of time to graduate from college than participants who originally enrolled in a two-year institution (Matthews-Whetstone & Scott, 2015). Participant demographics that resulted in the longest duration to graduation included having children and getting married during college. Participants who were both married and had children averaged 18 years to graduation compared to ten years for students who were unmarried and were not fathers.

The University of Chicago explored the barriers to college attainment for ethnic minorities in Chicago, Illinois. In 2005, 96% of Caucasian Chicago seniors indicated they aspired to earn a college degree compared to only 75% of Latino students who aspired for degree attainment (Nagaoka et al., 2009). As of 2004, less than 40% of Latino and African-American students attend a four-year institution immediately after high school graduation. Perhaps as a result of low enrollment, only 11% of Latino and 17% of African-American students who enrolled in a four-year university graduate with a degree within six years.

Nagaoka et al. (2009) found the strongest predictor of college performance, as measured by college grade point average, was high school GPA. Although GPA provides an imperfect assessment of college readiness, it has been attributed to the level of mastery a student has for the material they are expected to know before entering college. This level of mastery as indicated by high school GPA is further supplemented by the magnitude of effort a student is believed to possess for more rigorous college coursework.

Although not controlling for socioeconomic status, the majority of Latino and African-American students in Chicago (58%) graduated from high school with the lowest grade point averages and standardized test scores compared to their peers of every other ethnicity (Nagaoka et al., 2009). For example, in 2005, 40% of Latino and African-American students graduated with a 2.0 GPA or less and were limited to post-secondary options of two-year community colleges or non-selective and high attrition four-year universities.

Approximately 30% of Caucasian and Asian students in Chicago at the time of this study had the grade and standardized test qualifications required for admission into the most selective institutions in the nation, compared to less than 5% of Latino and African-American students (Nagaoka et al., 2009). Although ACT scores were not strongly correlated with college performance, ACT scores were correlated with high school GPA once again, on average, Latino and African-American students held the lowest ACT scores in 2005. The intersection of these factors may limit post-secondary access for minority students, which influence overall representation of diversity in universities in the United States.

Summary

The large body of literature dedicated to delineating the factors which influence student retention at the undergraduate level, indicate the gravity of improving current outcomes for college students. In the effort to spawn higher graduation rates, it is imperative to understand the relationship between a student's persistence in respect to university characteristics and the student's demographic profile.

The prominent themes affiliated with institutional characteristics for student retention include: University selectivity, course relevance, and social and academic opportunities for involvement. Selectivity refers to the caliber of criteria a university employs in their admission

decisions. Researchers have indicated the most powerful institutional predictor of degree completion is university selectivity (Astin, 2005). This finding reflects students who are able to meet criteria of the most selective universities in the nation tend to be academically well prepared and equipped with resources to overcome challenges in a new educational environment. Such students are more likely to have college educated parents with appropriate financial and emotional resources to navigate college compared to students entering minimally selective universities.

Course relevance entails a students' confidence he or she is learning material that will be applicable to a career in the future (Rosenbaum et al., 2015). Many students are likely to show a greater interest for material with direct influence for their career aspiration rather than engaging in courses evoking abstract thought and low applicability. This factor has been demonstrated to play a significant role in student retention, especially when considering general education courses are completed within the first two years of the college experience. Therefore, lower division students will not necessarily have the opportunities to participate in courses of their major and may lose interest in persisting in the evidence of irrelevant material. This modality places students in danger, as undergraduates are at the highest risk of dropping out within the first year (National Center for Education Statistics, 2014).

Involvement, as it refers to institutional characteristics, is delineated into social and academic involvement. The institution has a role in supporting student retention by providing opportunities for students to experience social involvement on campus. Tinto (1997) further suggested a university is liable for creating conditions where students are expected to succeed, such as providing mentorship programs and campus activities to promote a positive collegiate experience.

Academic involvement encompasses possessing quality staff members who help guide students throughout their academic journey. Professors must be conscientious about providing frequent access for their students, such as encouraging students to visit their office hours and fostering a proactive learning environment (Tinto, 1997). College staff should also be compelled to adapt their teaching pedagogy to diverse students in order to reach each student effectively through differentiation.

The presented literature on student characteristics provided significant groundwork for understanding the factors influencing retention. The most compelling student characteristics in respect to college graduation differences included: Ethnicity, first-generation status, and socioeconomic status. Ethnicity, generation status, and socioeconomic status are interrelated characteristics impacting college graduation differences. Studies presented in the literature did not control for socioeconomic status on ethnicity, as these studies reported academic achievement indicators, such as grade point average, in isolation. For example, achievement was categorized by ethnicity or socioeconomic status and not the interrelation of these factors.

Ethnicity, first-generation status, and socioeconomic status profoundly bisect one another. For example, the majority of first-generation college students are ethnic minorities with a lower-standing socioeconomic status (Banks-Santilli, 2014). An interrelation of these three characteristics can make a student five times less likely to graduate from college within six years compared to their peers (Engle & Tinto, 2008). This can primarily be attributed to students having fewer financial resources, experiencing discrimination, having lower academic preparation, and possessing additional responsibilities outside of schoolwork compared to ethnic majority students with college-educated parents (Stephens et al., 2012). The barriers to degree attainment for minorities may rest largely outside of institutional control and instead be

culminated through pre-college factors such as unequal resources in primary and secondary education.

Personality variables have been widely discussed in their pertinence to the college experience. Of the Big Five dimensions, the majority of personality theorists agree openness to experience and conscientiousness are the most important characteristics that predict student retention. Ranking high in openness to experience reflects an intellectually curious individual with high creativity. A highly conscientious person is profoundly organized, dependable, and self-disciplined (Hazrati-Viari et al., 2012). These traits appear conspicuous for success in college, as students are challenged to apply themselves to engage with new material and to take charge of their learning.

Although the literature presented multiple institutional and student characteristics as they pertain to college retention, it remains unclear of how each factor directly impacts degree attainment on an individual basis. There are indeed blurred lines between how much control a student possesses over his or her integration into the college environment and the efforts an institution can take to alleviate diversified stressors. Further research is required to generate recommendations for improving graduation rates for students of diverse backgrounds, as well as to maintain or create a welcoming campus climate for all members of the community.

Gaining an understanding of how perceived discrimination may affect college performance indicators, such as grade point average, is an existing gap within the literature demanding further exploration. For example, Chang (2001) found the perception of minority students on their racial campus climate could affect their academic experience and adaptation to the university. Thus, a focus on how campus climate prejudice may exacerbate alienation or

stress on minority students, contributing to lower college performance, is of interest to this

research.

CHAPTER 3: METHODOLOGY

As presented in Chapter 1, the primary goal of this study was to examine the college experience for undergraduate students in four-year universities within the United States. Topics of discrimination, preferences for roommates, and perceptions of the college environment were explored. In addition, factors for predicting college performance were investigated. The following five research questions guided this study:

1. What are student perceptions regarding the discrimination other students may face based on ethnicity?

2. What preferences do students have for roommates based on religious affiliation?

3. What are some of the factors that predict college performance, as measured by grade point average?

4. What challenges do students report facing in college?

5. What do students recommend to improve their campus environment?

The Perceived Campus Climate Inventory was utilized to answer these questions. Chapter 3 is divided into four categories: (a) Sampling Procedures, (b) Instrumentation, (c) Data Collection, (d) Data Analysis, (e) Pilot Study, and (f) Ethical Considerations. The conclusion of this chapter summarizes each of these sections.

Sampling Procedures

The target population of this study was undergraduate students who attend four-year universities within the United States. Per request of the researcher's IRB committee, Concordia University Irvine students were excluded from participation. Participants were invited to partake in the study through four social media platforms: Facebook, LinkedIn, Twitter, and email. All

participants received the same recruitment flier on each of these media sites inviting those whom met the criteria to complete the questionnaire online.

These four private platforms belonged to the researcher and were further disseminated by the researcher's professional network. The individuals who participated in this study were selected by meeting two criteria. First, the participant must be at least 18 years old at the time of the study. Second, the participant must be a current undergraduate student at a four-year university within the United States.

Instrument

The instrument utilized for this study was adapted from an existing questionnaire, entitled, The Campus Diversity Survey. The Association of Independent Colleges and Universities of Pennsylvania (AICUP) granted the researcher full permission to both use and modify the inventory as necessary for doctoral research. Five universities were involved in the creation of the Campus Diversity Survey: College Misericordia, King's College, Marywood University, University of Scranton, and Wilkes University. The Campus Diversity Survey includes six sections containing 49 questions total, with multiple sub questions. This questionnaire assesses the nature of student experiences as a member of a particular subgroup, addressing topics pertaining to prejudice and discrimination. All questions are Likert scale or multiple-choice and administered through a paper-based, scantron format.

The Campus Diversity Survey was selected as the instrument to model the finalized questionnaire for this research because it assessed items of interest to the research questions guiding this study. For example, experiences with diversity on the college campus were assessed, in addition to personal attitudes toward other students and faculty based on factors such as ethnicity and religious affiliation. Although validity and reliability measures were unavailable

or unreported for The Campus Diversity Survey, an exceptionally similar survey indicated measures of validity.

The General Campus Climate Survey (GCCS) created by Missouri State University, assessed the degree to which participants felt their university was welcoming and inclusive of students from diverse backgrounds (Missouri State University, 2014). GCCS demonstrated excellent internal consistency in all samples for which it was used with Cronbach's alpha estimates ranging between .80 to .95 (Missouri State University). The General Campus Climate Survey and The Campus Diversity Survey assessed the same themes using Likert scale and multiple-choice responses.

To expand on The Campus Diversity Survey, the researcher adapted the questionnaire to create the Perceived Campus Climate Inventory (PCCI). PCCI largely drew from The Campus Diversity Survey items, but expanded on the experiences of student characteristics, such as including first-generation status. PCCI also included two open-ended questions to allow participants the opportunity to develop a qualitative narrative about their undergraduate experience.

The Perceived Campus Climate Inventory was significantly shortened from the original Campus Diversity Survey for the following reasons. For example, although The Campus Diversity Survey is only 49 questions in length, over half of these items include at least one dozen sub questions within one central question. Thus, the Campus Diversity Survey is 19 pages in length when printed in Microsoft Word format. During the initial pilot testing, participants indicated the instrument felt overwhelming in which attrition was highlighted.

The researcher was informed by the first pilot group that most anonymous participants would likely not commit to completing the inventory due to its' length and time commitment. A

second reason why the Perceived Campus Climate Inventory was shortened, entailed a focus on the research question. For example, the Campus Diversity Survey assesses variables that were not of the research focus for this particular study. These items included perceived discrimination of students and professors with HIV, opinions about removing graffiti from a university, and sentiments for students of varying physical ability statuses. Thus, these items were removed during the creation of the Perceived Campus Climate Inventory to maintain focus on the central research questions guiding this particular study.

PCCI is a 38-question inventory with an average completion time of 10 minutes. It was made available to be taken online using the survey software program, Qualtrics. PCCI was adapted to allow participants the freedom and convenience to complete the inventory on either a computer or personal cellular device. The questions include Likert scale, multiple choice, text entry, and open-ended responses.

PCCI is divided into the following sections, which mimic the original Campus Diversity Survey: Demographic questions about the student, characteristics of the institution, personal experiences of discrimination, personal opinions about other students based on their characteristics, satisfaction with the campus climate, and recommendations for university administrators. Demographic questions about the participant include, but are not limited to: Ethnicity, generation status, socioeconomic status, religious affiliation, and sexual orientation.

Personal experiences of discrimination request participants to disclose if they had ever felt discriminated against, how the discrimination was expressed, and why they believe they were subjected to discrimination. Participants were also asked to identify the perpetrator according to a provided category, such as a peer, professor, or campus police officer. Additionally, participants were invited to share not only if they were a victim of discrimination,

but if they had ever participated in discriminatory behavior toward a member of their campus.

Finally, the open-ended items on the PCCI allowed participants to share the unique challenges

they have faced at their post-secondary institution, as well as to provide recommendations to

alleviate barriers which continue to exist in their college education.

Data Collection

This study employed a mixed-methods research design. Responses within the Perceived

Campus Climate Inventory consisted of Likert scale, multiple-choice, and fill-in-the-blank

options. Response options were selected according to the type of statistical analyses to be

performed on each item. Finally, the two open-ended responses in the PCCI were coded by

prominent themes and presented first in isolation, as well as in relation to one another.

The first step in the data collection process entailed recruiting participants through social

media platforms belonging to the researcher. Users of these platforms were invited to participate

if they met two criteria: the individual must be at least 18 years old and a current student at a

four-year university in the United States. Participants who met these criteria were immediately

granted access to the inventory through a link. The inventory was hosted on the online software

program, Qualtrics. Tracking information of each participant, such as IP address, were not

included to preserve participant anonymity and confidentiality.

Data Analysis

Data analysis was conducted through the following methods. Responses to the two open-

ended responses were coded by themes and the quantitative items were explored through

statistical analyses. The software packages that were utilized for this research included SPSS, R,

Microsoft Excel, and StatPlus.

A One-Way ANOVA was conducted to explore the relationship between socioeconomic status and grade point average and a Two-Way Independent Effects ANOVA was utilized for investigating the relationship between socioeconomic status and ethnicity. A Pearson Correlation explored the relationship between perceived respect by professors with time spent as a student at a university, as well as perceived gender equality and peer acceptance. A Chi-Square Test of Independence was conducted to explore the relationship between ethnicity on perceived discrimination and Multiple Regression was performed to analyze regressors on college grade point average. A description of the analysis for qualitative items is outlined in the following section for the two-open ended items:

1. Please describe any challenges you have faced while earning your college degree at this university

2. Please offer any suggestions you may have for your university to improve the campus environment for people of diverse backgrounds.

Data analysis for these items consisted of three stages. Stage one began on February 1, 2018, in which recruitment ceased and the inventory was no longer made available online. In this initial stage, the researcher read each individual response to gain a general sense of how participants responded. After reading a section of responses, the researcher identified terms used by other participants. For example, the "find" function on Microsoft Excel explored responses where the term "Money" was also located.

In this preliminary interaction with the data, the researcher also made minor alterations to several comments to gain uniformity across the same response. For example, numerous participants indicated variations of "Not applicable," "No response," or "No answer" to signify they did not have a recommendation to improve their campus climate. Thus, responses within

this category received a "N/A" for declining to state a response. All other comments were preserved and presented verbatim.

In the second stage of qualitative data analysis, the researcher aimed to immerse herself in the thoughts, feelings, and emotions participants indicated in their responses. The researcher used dozens of hard copies of the comments to the open-ended items and separated each participant individually. The first theme that emerged was, "Money Struggles," in which participant narratives fitting this theme were placed under the category. Each response received a code to describe the essence of the narrative, using the actual terms participants stated. Segments of these transcripts can be found within the qualitative item discussion in Chapter 4.

After all responses received a code, the researcher reviewed the codes to both eliminate redundancy and to group similar codes into one overarching theme. In the previous stage, 16 themes were identified, although the essence of multiple themes overlapped. Thus, themes were merged while preserving the unique structure within the responses. For example, one theme progressed from, "Parking Issues" to "Transportation Challenges" to "Commuter Challenges," and finally resulted in "Challenges Faced by Commuter Students." A narrative account was drafted to provide a detailed description of the essence for each theme. For example, the researcher included verbatim sections of salient participant responses to communicate how appropriate replies fit within the theme.

The researcher chose to conduct analysis for the qualitative section of the PCCI without the assistance of software because of her views on interacting with qualitative data by hand. Although the researcher interpreted roughly 600 responses for the two open-ended questions, exploring the data without relying solely on technological assistance allowed her to be completely immersed into the emotions and thoughts of participants. The researcher did not

wish to accord exclusive responsibility to a software program to detect a full understanding of each response, especially in consideration that this study produced a manageable amount of data.

Pilot Study

An initial pilot study was conducted for the Perceived Campus Climate Inventory to gain a foundation for validity and reliability of the revised instrument. Additional pilot studies were conducted after the first pilot study to make final adjustments for the inventory. The Perceived Campus Climate Inventory was also reviewed extensively with the research's dissertation committee over the course of one year. Ten participants were recruited for the first pilot study and represented a diverse group of undergraduate students. Six of the ten participants studied at University of California Institutions, two attended school through the California State University system, and two were students at a private university.

The 10 participants of this pilot study consisted of a diverse representation of undergraduate students. Significant characteristics of participants are as follows: Undergraduate student at a four-year U.S. university (10). By ethnicity: Caucasian (3), Asian, (2), Hispanic (4), and African-American (1). By gender: Male (4), Female (6). By sexual orientation: Heterosexual (9), Lesbian, gay, or bisexual (1). By generation status: First-generation (4), Second-generation or greater (6). Most participants were between 18-20 years old (6), unmarried (6), did not have children (9), unemployed (4), and held full-time academic status (7), as college juniors (3).

It is important to note several items assessed with the original pilot study were modified for the inventory used within the formal study. Additionally, basic statistics were conducted for the pilot study, whereas analyses with higher statistical power were utilized for the formal study. Rationale for these adjustments are discussed in the next section.

First, to determine student perceptions regarding discrimination on campus, participants were asked to rate the following conditions wherein they personally heard a fellow student make an insensitive remark about a group. Most students had never or rarely heard a remark made about another student of a different socioeconomic status (80%), occasionally witnessed a remark about a person of a particular religion (25%), and very often heard a remark based on ethnicity (36%). The most frequent remarks were equally related to factors encompassing religion and ethnicity of other students.

Participants also indicated the frequency of university staff members who made remarks about students. For example, participants indicated students of a particular economic background never received insensitive comments (38%). However, staff member remarks were made most frequently about students of a particular religious background and about women (66% and 33%, respectively). Additionally, 60% of participants noted college staff "very often" made insensitive remarks relating to ethnicity.

Within the pilot study, 40% of participants stated they had felt discriminated against on campus at least one time, however, 100% of participants indicated they have never discriminated against neither their peers nor college staff. The primary reason participants felt discriminated against was attributed to their ethnicity. Verbal comments (50%) in the college classroom (50%) by classmates (60%) were the primary form, environment, and medium where discrimination was expressed.

The qualitative items of the PCCI assessed any barriers the participants have faced and recommendations for improving the campus for diverse students. The following three themes emerged from the first question assessing barriers the participants have faced: Feelings of being

an outcast, struggles managing external obligations with academic responsibilities, and difficulty with accessing help from the university.

Participants reported their age, sexual orientation, and religion were reasons why they believed social integration had not been successful. For example, one participant revealed being above the age of a traditional college student made her feel like classmates did not want to associate with her. A self-disclosed gay male indicated he felt he was seen only by his sexual orientation and not for any other elements of his character. He further explained frustration of being asked invasive questions about being a gay man and desired to be viewed for more than his sexuality.

The second theme demonstrated the perceived detrimental effects of being employed as a college student. For example, participants noted their grades were compromised because of time as a finite resource. These participants also mentioned low sympathy from their professors, especially pertaining to making due date accommodations for assignments. Participants did not feel that they had genuine access to their professors and viewed faculty support as nonexistent outside the classroom.

Suggestions for improving the campus climate were delineated into two similar themes: Multicultural sensitivity and considerations of diverse students. Multicultural sensitivity was reported by participants who felt their universities should incorporate diverse elements into their structure. For example, campus events with multicultural themes were encouraged, in addition to showcasing a diverse college staff to instruct courses with prominent cultural themes, such as ethnic studies classes. Considerations of diverse students were focused on building class schedules for students who can only attend courses at night and providing opportunities for "nontraditional" students by age or parental status to interact with their peers.

Although 40% of participants perceived being discriminated against at least one time, they also held high undergraduate grade point averages. For example, 90% of the sample reported a 3.0 GPA or higher. It should also be noted that 80% of these participants also indicated graduating with a 3.0 GPA or greater in high school. This is consistent with the study by Wolfe and Johnson (1995) who found the most robust predictor of undergraduate grade point average is pre-college preparation, specifically, high school grade point average (Wolfe & Johnson, 1995).

As mentioned in the previous section, 0% of participants indicated ever having discriminated against staff or students. However, when asked how comfortable one would be to live with or be friends with a particular type of student, responses demonstrated potentially discriminatory sentiments. For example, respondents would be "a little uncomfortable" living with or being friends with an openly gay, lesbian, or bisexual student (57%), with an individual of a different religious background (27%), and with an international student (14%). Participants were the most comfortable having a roommate or being friends with a student of Asian descent (12%).

Participants were also asked if their attitudes had changed in response to their experience within a university. Responses illustrated, "extremely less accepting" attitudes were reflected for students who held different religious backgrounds. "Much more accepting" attitudes as the result of university experience were granted to how participants viewed first-generation students.

At the completion of the pilot study, several revisions were incorporated into the overall inventory. Participants were initially asked to indicate for each item, "Action" or "No Action." An action item meant the participant believed the question either did not add any significant information to the inventory or needed a specific revision. Hence, revisions and comments were

noted on the inventory. No action meant the participant felt the item was meaningful to the overall study and did not require further revision.

A substantial revision of the inventory encompassed decreasing the amount of items and making questions more concise. Participants required over 30 minutes to complete the original PCCI and noted feeling "burned-out" halfway through their inventories. At this stage of the study, the inventory closely mimicked the original Campus Diversity Survey, a 19-page document. Additionally, participants indicated many of the items felt repetitive and unnecessary. In the effort to ensure low participant dropout during the study, the final inventory was shortened to capture data required by the study without compromising the central research questions. Suggestions from the pilot study were incorporated into the PCCI, finalized as a 38-item inventory.

Ethical Considerations

The researcher considered ethical contentions, which may bias the interpretation of findings. Specifically, the experience of being an ethnic minority at each of the post-secondary institutions the researcher attended, provided significant curiosity in exploring the undergraduate experience for other minority students. In the effort to inhibit her own experience from influencing responses for this study, the researcher took careful consideration in framing questions on the Perceived Campus Climate Inventory to minimize any leading narrative.

For example, the researcher modified the original inventory, The Campus Diversity Survey, to provide alternatives for participants to describe the affirmative components of their universities. This is especially important considering not all students have an unfavorable undergraduate experience. Furthermore, in no capacity did the researcher assume campus climate is homogenous for all members within a specific group identity. Instead, the intention of

this study was founded on exploring how undergraduate students perceive their campus climates in the effort to expand the literature on our understanding of challenges associated with post-secondary degree attainment.

Summary

This chapter recapitulated the purpose of the research and presented the appropriate methodology and rationale for achieving such purpose. Participants were recruited through four media platforms belonging to the researcher and further disseminated by professional connections. The validity and reliability of existing surveys on campus diversity were discussed to provide a foundation for the inventory created for this research. The Perceived Campus Climate Inventory measures the experience of the undergraduate student based on personal and institutional characteristics. A pilot study was conducted for the PCCI in which recommendations resulted in multiple revisions of the inventory. Results of the data analysis are presented in the following chapter.

CHAPTER 4: RESULTS

This research intended to investigate the undergraduate experience for students attending four-year universities in the United States. Specifically, five questions guided this study, which sought to provide insight into the college experiences of the individuals who participated:

1. What are student perceptions regarding the discrimination other students may face based on ethnicity?

2. What preferences do students have for roommates based on religious affiliation?

3. What are some of the factors that predict college performance, as measured by grade point average?

4. What challenges do students report facing in college?

5. What do students recommend to improve their campus environment?

This chapter presents the results of the data analysis for each of these five research questions.

Participant Demographics

A total of 320 participants completed this study between November 2017 and February 2018. Participants consisted of current students at four-year post-secondary universities within the United States. A total of 49 universities were represented in this research. The demographic profiles of participants are outlined in the following section.

The ethnic breakdown of participants in this study are as follows: 6% African American, 28% Asian, 43% Caucasian, 21% Chicano/Hispanic/Latino, and 2% Mixed. Participants ranged in age from 18 to 35 years old, with a median age of 24 years of age. Average age of participants by ethnicity are as follows: African-American ($M= 22$), Asian ($M= 23$), Caucasian

(*M*= 25), Chicano/Hispanic/Latino (*M*= 25), Other (*M*= 24). Additionally, 65% of participants

were female and 35% were male with 96% of the sample identifying as heterosexual and 4%

indicated being gay, lesbian, bisexual, or questioning. A total of 35% of participants held a

Christian or Catholic ideology, followed by 21% non-religious or Atheist, 5% Hindu, and 1%

Buddhist. First-generation students comprised 48% of the sample compared to 53% whom

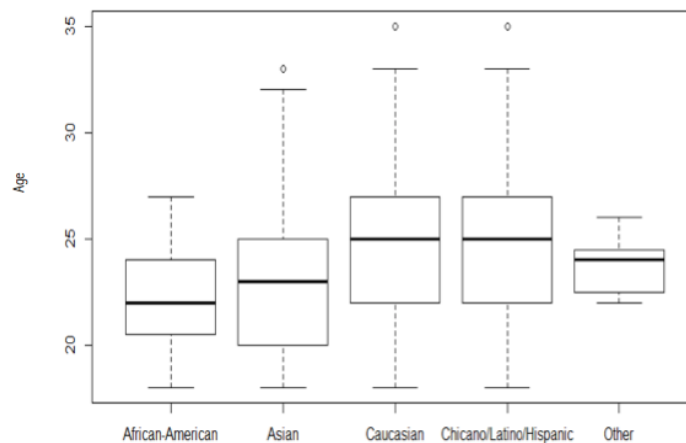indicated they would not be the first in their families to earn a college degree.

Figure 1. Age of Participants by Ethnicity

Regarding socioeconomic status, 58% indicated their socioeconomic category as a true

middleclass family, compared to 13% of an upper middleclass background, and 5% from a lower

middleclass family. 24% of respondents classified themselves as being in the lowest

socioeconomic tier provided on the inventory.

The median duration participants reported being a student at their current university was

between two to two and a half years (*n*= 105), with a range of four and a half years. For

employment status, 30% of participants indicated not being employed (*n*= 97), 42% worked

between 10 to 35 hours (*n*= 135), and 27% worked 40 hours per week or greater (*n*= 88). A total

of 161 participants were full-time students (50.3%) compared to 159 part-time students (49.7%).

Course modality, defined by how students take the majority of their courses, were divided as

follows: 36% face-to-face, 33% online, and 31% hybrid. Additionally, the median grade point averages for both high school and college in this sample were reported as a 3.4 GPA.

Participants were asked to indicate how they pay for college-related expenses, such as tuition, room and board, and textbooks. A total of 26% of participants paid for college completely by themselves with no external assistance (*n*= 84) compared to 11% of participants whom reported their college education was paid for exclusively by their parents (*n*= 36). The average percentage students paid for college by themselves was 62%, whereas 38% was the average financial contribution received from parents.

Additionally, age groups segregated sources of financial support with 18-24 year olds financing an average of 46% of their college expenses by themselves and working an average of 14 hours per week. This is compared to students 25 years old and greater who financed 85% of their education and worked an average of 32 hours per week. In regard to living accommodations, 44% of participants lived off-campus, 35% resided with family at home, and 21% lived in university-affiliated housing.

A total of 49 four-year universities in the United States were represented in this study. According to institution type, 61% of colleges represented were public institutions and 39% were private. By frequency of respondents, three institutions comprised a large percentage of the universities participants currently attended. For example, 45% of participants were students at California State University, Long Beach (*n*= 145), 11% from the University of California, Irvine (*n*= 35), and 7% were students at California State University, Channel Islands (*n*= 21). A total of 38 college majors were reported in this study, with Education (19%) and Psychology (17%) encompassing the majors frequently reported by participants.

Testing the Research Questions

Research Question One

What are student perceptions regarding the discrimination other students may face based on ethnicity?

The first research question was assessed in a mixed-methods approach, utilizing both quantitative and qualitative items. The ethnicities analyzed in this study included: African-American, Asian/Pacific Islander, Caucasian, and Hispanic/Chicano/Latino (*N*= 320). Although the category of Native-American was provided within the demographic variables, zero participants indicated Native-American as the primary ethnicity for which they identify.

Student perceptions regarding the discrimination students may face based on ethnicity were recorded on a Likert scale. For example, participants were asked to rate their level of agreement for the statement, "I believe students of these ethnicities are discriminated against at this university." A score of "1" indicated the participant "Completely Disagreed" students of a particular ethnicity were discriminated against, compared to a score of "4," which identified the participant "Completely Agreed" students of a particular ethnicity were discriminated against on their campus. Participants were also asked to identify their level of perceived discrimination for students of their own ethnicity.
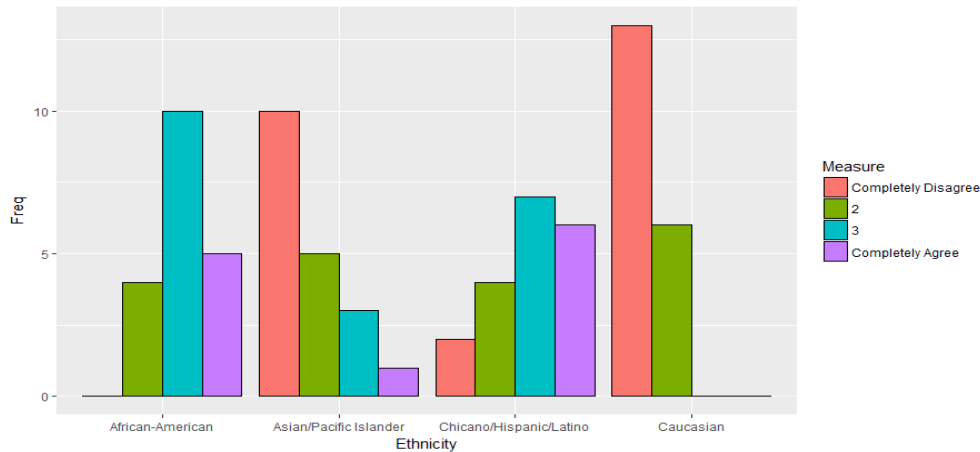
Figure 2. Perceived Discrimination of Other Ethnicities by African-Americans

Figure 2 displays the raw data for how African-American participants (*n*= 19) perceived discrimination for other students based on ethnicity. The null hypothesis was the proportion of students who indicated discrimination for other students based on their ethnicity would be uniform across all ethnicities. However, a Chi-Square Goodness of Fit test indicated the effect of ethnicity on perceived discrimination for other ethnicities was statistically significant for African-Americans, χ^2 (3, *n*= 19) =33.25, *p* < .05.
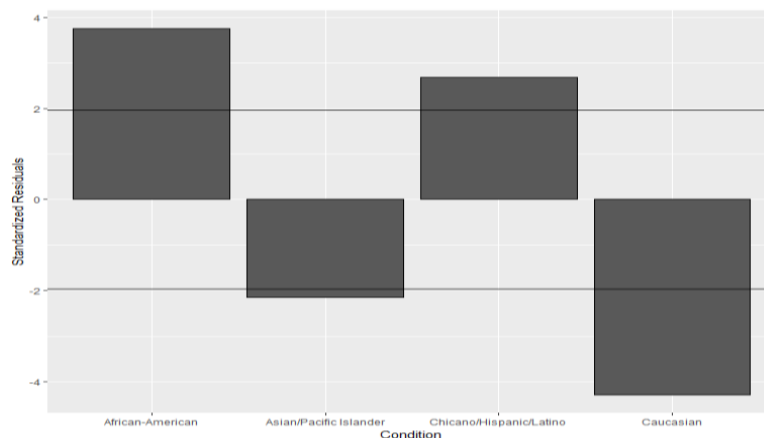

Figure 3. Standardized Residual Plot African-American Perceived Discrimination

The standardized residual plot in Figure 3 demonstrated a greater proportion of African-Americans felt that African-Americans and Chicanos are discriminated against at a statistically

significant level. Additionally, African-Americans did not perceive Asians and Caucasians as being discriminated against on campus at statistically significant levels.

Figure 4. Discrimination Against African-Americans According to Other Ethnicities

Figure 4 displays the level of agreement by other ethnicities in this study, regarding if they perceive African-American students are discriminated against. For example, although 79% of African-Americans agreed students of their own ethnicity are discriminated against, 86% of Asians, 63% of Chicanos, and 80% of Caucasians disagreed African-Americans are discriminated.

Figure 5. Asians' Perception of Discrimination Against Other Ethnicities

Figure 5 displays the raw data for how Asian/Pacific Islander participants perceived discrimination for other ethnicities (*n*= 88). A Chi-Square Goodness of Fit test demonstrated the

effect of ethnicity on perceived discrimination for other ethnicities was statistically significant,

$\chi2$ (3, *n*= 88) =8.35, *p* < .05.
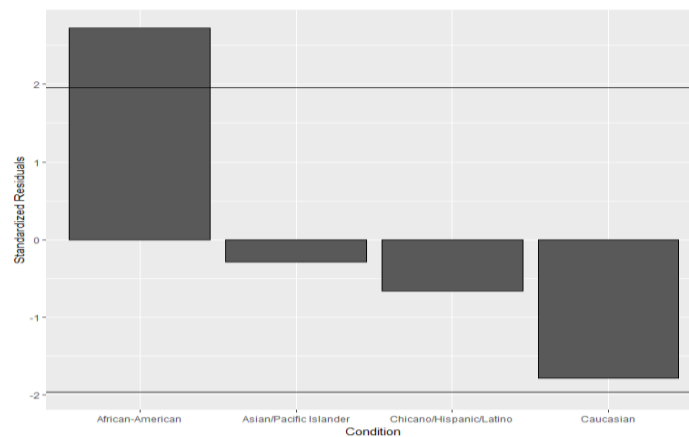
Figure 6. Standardized Residual Plot Asian Perceived Discrimination

As displayed in Figure 6, a standardized residual plot indicated a greater proportion of

Asian/Pacific Islanders felt African-Americans are discriminated against at a statistically

significant level. However, Asian/Pacific Islander participants did not perceive differences in

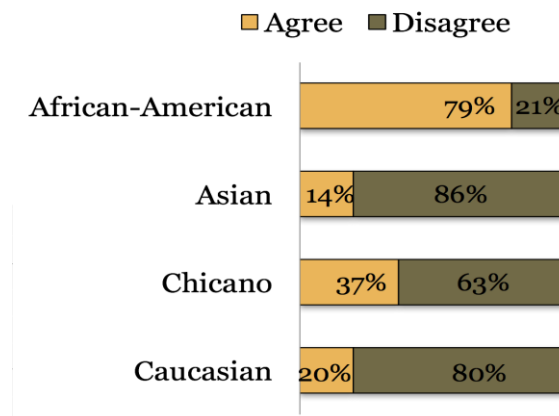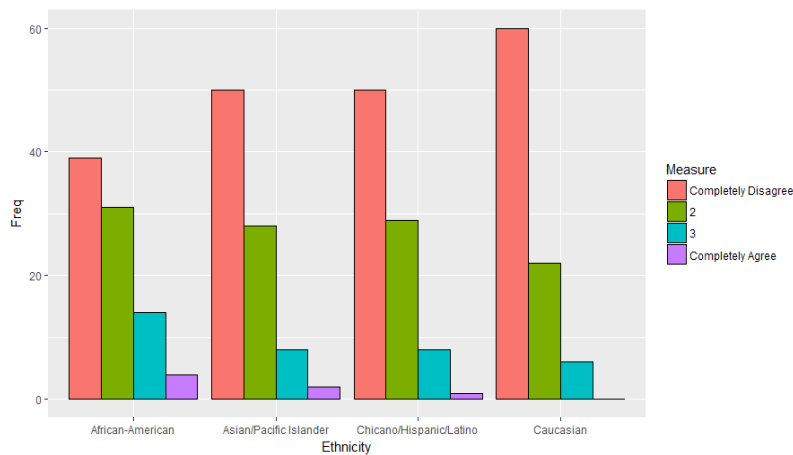discrimination for the other ethnicities at a statistically significant level.

Figure 7. Discrimination Against Asians According to Other Ethnicities

Figure 7 displays the level of agreement by other ethnicities in this study, regarding how

they perceive discrimination for Asian/Pacific Islander students. Interestingly, 37% of Chicanos

agreed Asian/Pacific Islanders are discriminated against, compared to 21% of African-

Americans and 9% of Caucasians who agreed with this statement. Additionally, 22% of

Asian/Pacific Islander participants agreed students of their ethnicity were discriminated against.
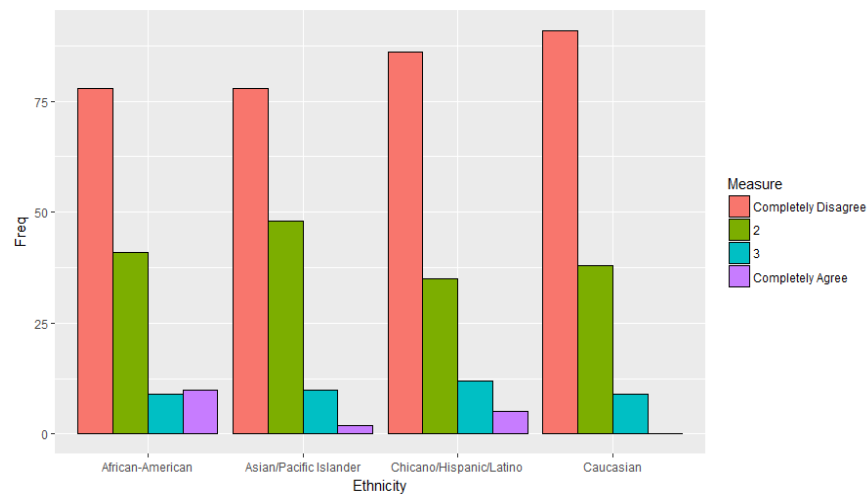
Figure 8. Caucasians' Perception of Discrimination Against Other Ethnicities

The perception of discrimination for Caucasian participants is displayed in Figure 8 (*n*=

138). A Chi-Square Goodness of Fit test revealed the effect of ethnicity on perceived

discrimination for other ethnicities was not statistically significant for Caucasians, $\chi2$ (3, *n*= 138)

=4.91, *p* > .05. Thus, differences for Caucasian participants' perception of discrimination based
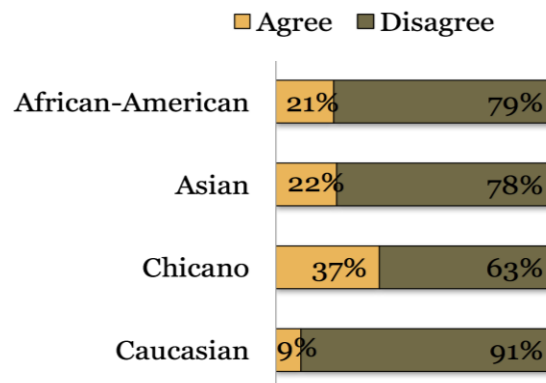
on ethnicity could not be derived.

Figure 9. Discrimination Against Caucasians According to Other Ethnicities

Figure 9 displays the level of agreement by other ethnicities in this study, regarding if they perceive Caucasian students are discriminated against. A total of 100% of African-Americans and Chicano students disagreed Caucasian students are discriminated against. Even 94% of Caucasians disagreed students of their own ethnicity are discriminated against on campus.
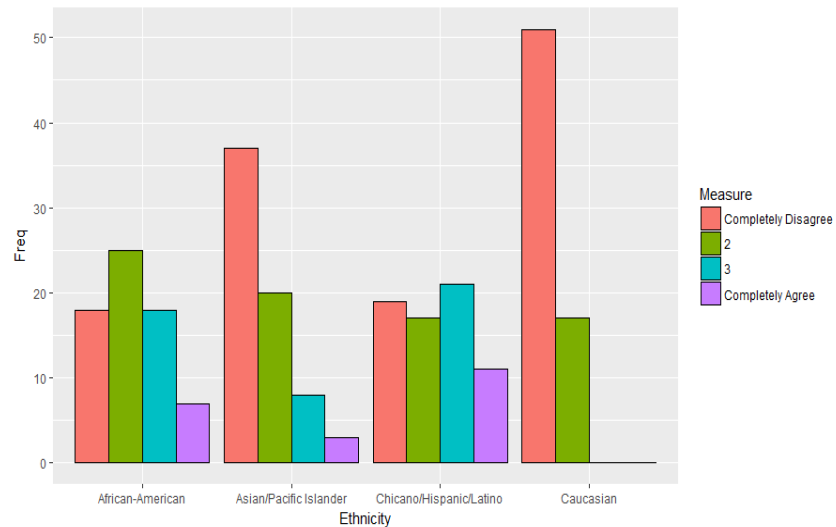
Figure 10. Chicanos' Perception of Discrimination Against Other Ethnicities

Finally, the perception of discrimination for other students by Chicano/Hispanic/Latino participants was analyzed and displayed in Figure 10. A Chi-Square Goodness of Fit test demonstrated the effect of ethnicity on perceived discrimination for other ethnicities was statistically significant for Chicano/Hispanic/Latinos, $\chi2$ (3, *n*= 68) =48.16, *p* < .05.
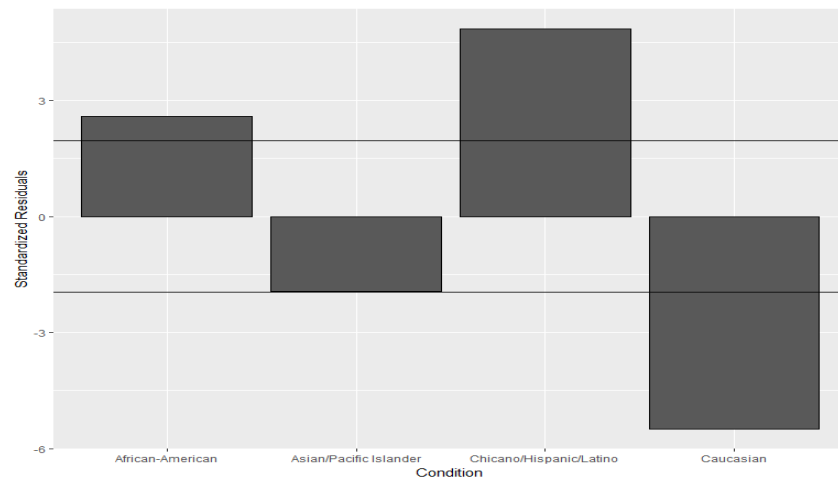
Figure 11. Standardized Residual Plot Chicano Perceived Discrimination

A standardized residual plot demonstrated a greater proportion of

Chicano/Hispanic/Latino participants agreed African-American and Chicano/Hispanic/Latino

students are discriminated against at a statistically significant level (see Figure 11). In addition,

the lack of perceived discrimination for Caucasian participants was evident at a statistically

significant level. Conclusions on discrimination for Asian/Pacific Islanders were not statistically

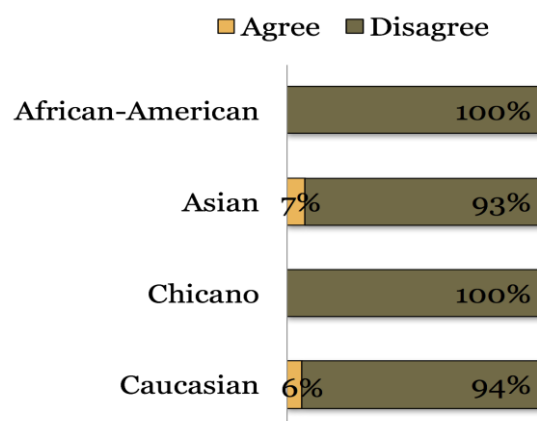significant in either direction.
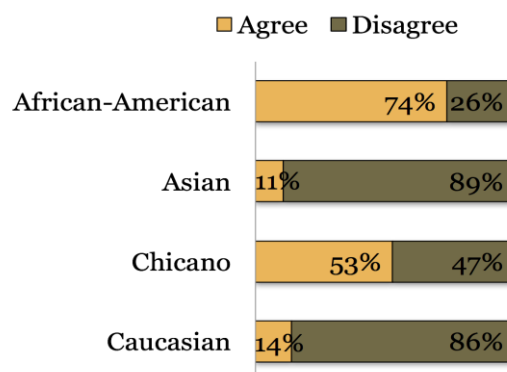
Figure 12. Discrimination Against Chicanos According to Other Ethnicities

Figure 12 displays the level of agreement by other ethnicities in this study, regarding if

they perceive Chicano/Hispanic/Latino students are discriminated against. A total of 73% of

African-Americans agreed Chicano students are discriminated against, compared to 53% of

Chicanos whom identified students of their own ethnicity are discriminated against.

Additionally, 11% of Asians and 14% of Caucasians agreed Chicanos are subjected to

discrimination on campus.

Research Question Two

What preferences do students have for roommates based on religious affiliation?

To answer the second research question, the Perceived Campus Climate Inventory first

assessed the behaviors and attitudes participants held for members of their campus, including

students and staff. One item of the questionnaire simply stated, "I have discriminated against

others on this campus," in which respondents would indicate either a "Yes" or "No." Out of a

study with 320 participants, not a single participant indicated they had ever discriminated against

others on campus.

Although data were unavailable for how and who participants had discriminated against

on their campus, an additional item within the Perceived Campus Climate Inventory assessed

attitudes participants held for members of their campus communities based on religious

affiliation. Their preferences are explored within the following section.
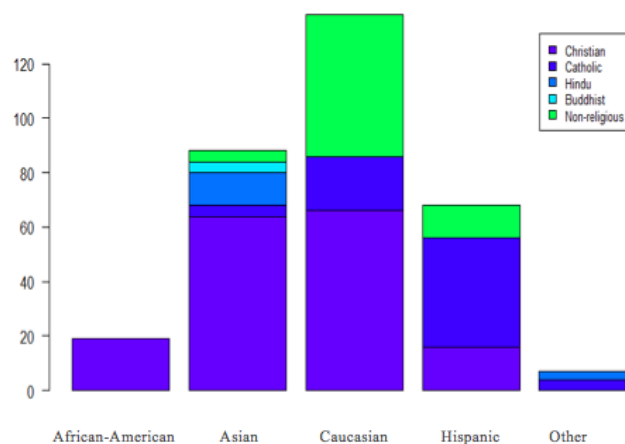
Figure 13. Religious Affiliation by Ethnicity

For example, to assess possible discriminatory sentiments, participants were asked to identify their religious affiliation, as well as their preferences for a roommate based on his or her religion. For this study, a lack of religious affiliation was identified as "Non-religious." Figure 13 displays the religious affiliation by each ethnicity. As displayed in Figure 14, the y-axis corresponds to the participant's religion and the x-axis indicates the religion of a hypothetical roommate. The proportion and color also provide an indication of preference. For example, a red box with a "0" value would indicate zero respondents of a certain faith were "uncomfortable" being roommates with a student of a certain faith, whereas a green box with a "1" value indicates 100% of participants of a certain faith were "comfortable" being roommates with another student of a certain faith.
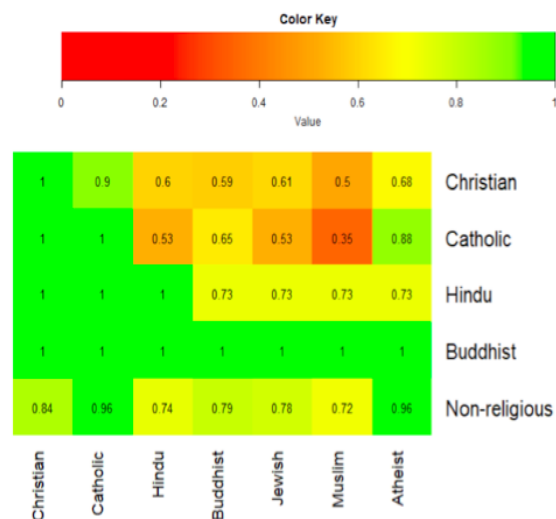
Figure 14. Roommate Preferences Based on Religious Affiliation

Considering the religions surveyed in this study, 100% of Christian participants identified other Christian students as desirable roommates they would be comfortable living with. The only exception occurred for 96% of non-religious participants whom indicated they would be comfortable living with another an Atheist student. Zero participants in this study identified as Muslim, however, the Perceived Campus Climate Inventory asked participants to rate their

comfort with a Muslim roommate. Within the sample, 50% of Christians and 35% of Catholics indicated they would be comfortable with a Muslim roommate. Buddhist participants (100%) indicated they would be comfortable living with a Muslim student.

Christian participants reported the following "levels of comfort" for other students based on their religion: Catholic (90%), Hindu (60%), Buddhist (60%), Jewish (61%), Muslim (50%), and Atheist (68%). Finally, non-religious and Atheist participants reported preference for living with Muslim and Hindu participants at 72% and 74%, respectively.

Preferences for a roommate based on religious affiliation were further analyzed for the 21% of participants whom live on campus (*n*= 67). The four religions of participants included: Christian, Catholic, Hindu, and Non-Religious. The same seven religious preferences, or lack thereof, from the previous item were analyzed for this sample.

The results displayed in Figure 15 demonstrate differences in the religious preferences according to comfort level by participants who live on their college campus. For example, 60% to 62% of Christians rated being comfortable living with a Buddhist, Hindu, Jewish, Muslim, or Atheist student. For Catholics, 50% expressed being comfortable living with a Buddhist, Jewish, or Muslim roommate. Non-religious students also expressed low comfort levels of living with Christians (43%), as well as Buddhist, Hindu, Jewish, and Muslim roommates at 57% for each religion. Furthermore, 57% of non-religious students identified being comfortable living with an Atheist roommate.
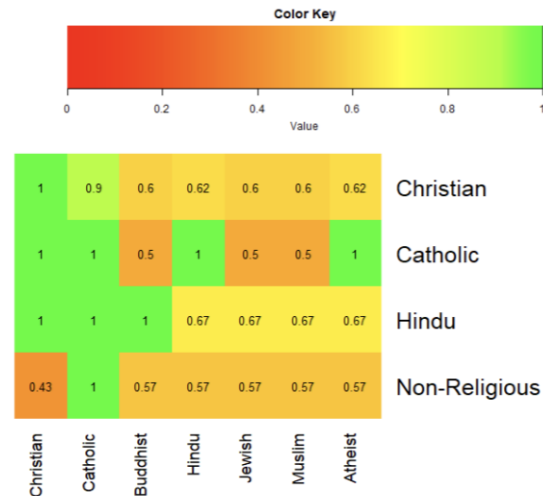
Figure 15. Roommate Religion Preferences for Students who Live on Campus

Participants were asked to choose from a list of five choices for the ethnicity they prefer their professors to be. 90% of respondents had no preference for the ethnicity of their professor, followed by 5% who preferred Caucasian instructors, 2% for both African-American and Asian instructors, and 1% for Chicano/Hispanic/Latino instructors. 81% of participants agreed or completely agreed their social circles have become more diverse since attending their current university (*n*= 260) compared to 19% who disagreed or completely disagreed with this statement.

Research Question Three

What are some of the factors that predict college performance, as measured by grade point average?

In the effort to explore factors that predict college performance, grade point averages were explored on several factors. The first factor was the comparison of grade point average for students who indicated they had been discriminated against (*n*= 15) compared to the grade point averages of students who had not felt discriminated against (*n*= 305). Group differences are displayed in Figure 16.

GPA if discriminated against

GPA if not discriminated against
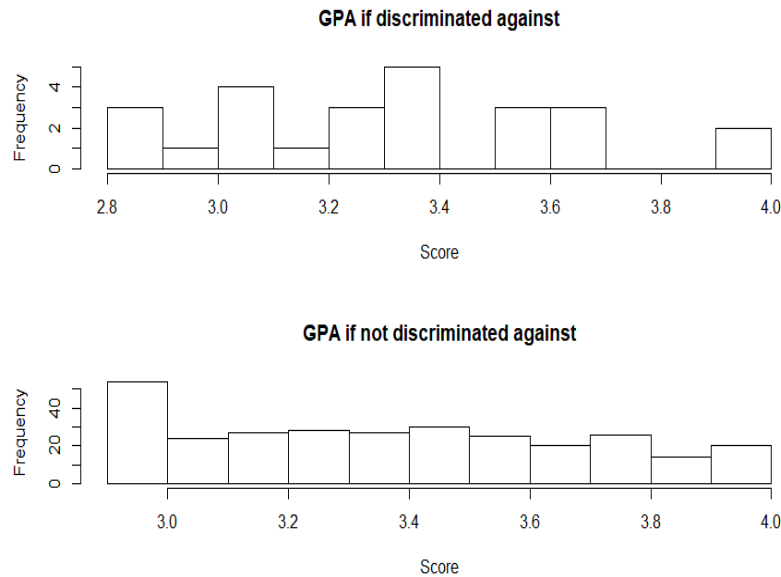
Figure 16. GPA Differences based on Discrimination

As displayed in Table 1, an independent samples t-test indicated there were no statistically significant differences in grade point averages for students who felt discriminated against (M=3.44, SD=.37) compared to students who did not feel discriminated against at their current universities (M=3.4, SD=.33), $t(28.59)$=-.73, p = .47. The disparate group sizes between students who perceived discrimination compared to those who did not perceive discrimination should be noted; 305 compared to 15.

Additionally, a one-way ANOVA compared the effect of socioeconomic status on college grade point average. The effect of socioeconomic status on college grade point average was not statistically significant, $F(1, 318)$ = .29, p = .59. Grade point averages for each of the socioeconomic statuses are displayed in Figure 17.

Table 1

GPA by Discrimination

Discrimination Category	*n*	*M*	*SD*
Discriminated Against	15	3.44	.37
Not Discriminated Against	305	3.4	.33
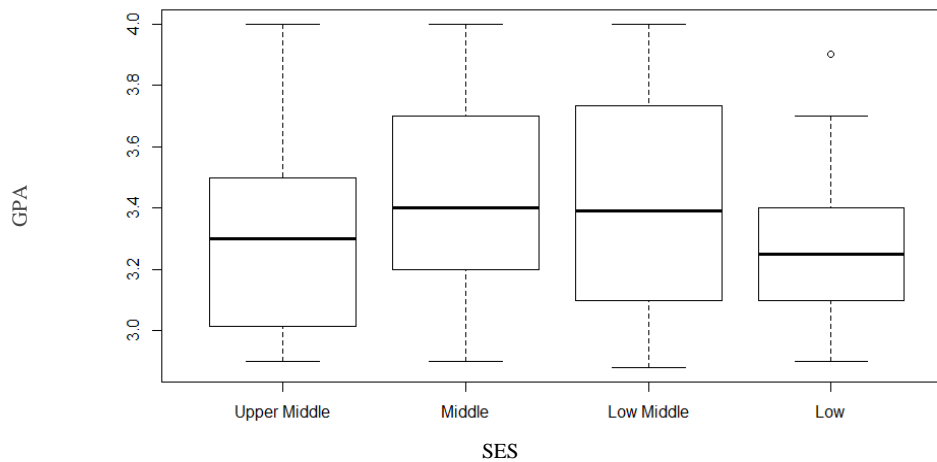
Figure 17. GPA by SES

A Two-Way Independent Effects ANOVA analyzed the main effects of ethnicity and socioeconomic status, in addition to the interaction between these two variables in terms of current grade point average. Socioeconomic status was coded with four socioeconomic tiers: Upper Middle Class, True Middle Class, Low Middle Class, and Low Socioeconomic Status. Note that High Socioeconomic Status was not included in this analysis, as zero participants identified with this classification. The results indicated that while participant socioeconomic status did not have a statistically significant on grade point average, there was a significant difference between grade point average by ethnicity, $F(4, 318) = 3.22$, $p = .01$. However, no interaction effect between ethnicity and socioeconomic status on grade point average was indicated.

A Post-hoc Tukey HSD analysis examined the differences between the grade point averages of Caucasian and African-American students. Statistically significant differences were identified between the grade point averages of these participants ($p < .05$). In addition, the differences in grade point averages for Chicano/Hispanic/Latino participants compared to African-American students were also statistically significant. Thus, the sample of 19 African-American participants had higher grade point averages than the Caucasian and Chicano/Hispanic/Latino participants, as displayed in Figure 18. Grade point averages for each ethnicity are highlighted in Table 2.
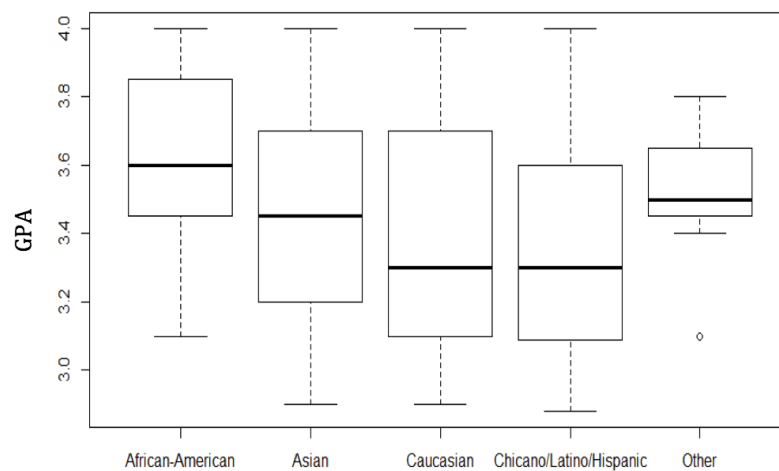
Figure 18. GPA by Ethnicity

Table 2

GPA by Ethnicity

Ethnicity	N	M	SD
African-American	19	3.62	.27
Asian	88	3.43	.31
Caucasian	138	3.38	.34
Chicano/Hispanic/Latino	68	3.34	.34

Other	7	3.51	.23

An independent samples t-test was conducted to analyze grade point averages between students based on their generation status. The results indicated there was not a statistically significant difference in the grade point averages between first-generation students and second generation students, $t(315)=.54$, $p = .59$. Grade point averages based on generation status are presented in Table 3. Additionally, course modality (Table 4), sexual orientation (Table 5), and institution type (Table 6) did not indicate statistically significant differences between groups.

Table 3

GPA by Generation Status

Generation Status	*N*	*M*	*SD*
First-Generation Students	152	3.39	.32
Second Generation or Greater	168	3.41	.33

Table 4

GPA by Course Modality

Course Modality	*N*	*M*	*SD*
Face-to-Face	116	3.45	.32
Hybrid	98	3.41	.32
Online	106	3.35	.34

Table 5

GPA by Sexual Orientation

Sexual Orientation	N	M	SD
Heterosexual	308	3.4	.33
Lesbian, Gay, Bisexual, Transgender, Questioning	12	3.47	.33

Table 6

GPA by Institution Type

Institution Type	N	M	SD
Public	274	3.4	.33
Private	46	3.5	.33

As displayed in Table 7, a Multiple Regression Analysis and Hierarchical Model was calculated to predict current college grade point average based on six predictor variables: High school GPA, socioeconomic status, ethnicity, course modality, generation status, and gender. For the purpose of Multiple Regression Analysis, socioeconomic status was recoded from five levels to two. For example, the original socioeconomic statuses included, High SES, Upper Middle SES, True Middle SES, Lower Middle SES, and Low SES, in which they were converted to two levels- High SES and Low SES. High SES was categorized by participants who identified as being in one of the top three socioeconomic brackets of High, Upper, and True Middle, whereas Low SES was identified by Low Middle and Low SES.

Table 7

Hierarchical Model Predicting College GPA

	Df	Deviance	Residual *df*	Residual Deviance	AIC
Major	58	6.13	308	31.15	-717.47
Generation Status	1	0.04	309	31.19	-719.05
Course Modality	1	0.12	310	31.31	-719.85
Socioeconomic Status	1	0.19	311	31.50	-719.90

A stepwise procedure was used for model comparison in both directions using Akaike's Information Criterion (AIC), as a measure of how well each model fits the data relative to one another. This procedure removed the following four conditions: Gender, socioeconomic status, course modality, and generation status. As displayed in Table 8, the original hierarchical model proposed demonstrated the two strongest predictors of current college GPA for the sample were high school GPA and ethnicity.

Table 8

Multiple Regression High School GPA and Ethnicity on College GPA

	Beta Estimate	Standard Error	*t* value	*p* value
Intercept	2.50	0.19	13.02	2e-16
High School GPA	0.26	0.06	4.59	6.59e-06*
Low SES	0.07	0.05	1.55	0.12
African-American	0.23	0.08	2.89	0.004*
Asian	0.027	0.045	0.61	0.54
Chicano/Hispanic/Latino	-0.05	0.05	-0.98	0.33

A model diagnostic for multicollinearity was evaluated using the variance inflation factor (VIF) of each regressor. Since all VIFs were less than two, an issue was not anticipated with correlated regressors (Table 9). A Q-Q plot of residuals revealed slightly heavier tails than a normal distribution (Figure 19), which is consistent with a histogram of the studentized residuals (Figure 20). Despite this, the model is expected to have produced reliable estimates given a large sample size and symmetric residual distribution. A visual evaluation of residuals and fitted values reveals no discernable issue with heteroscedasticity.

Table 9

Variance Inflation Factor of Three Regressors

Regressor	VIF
High School GPA	1.103895
D Ethnicity	1.422074
SES	1.430223
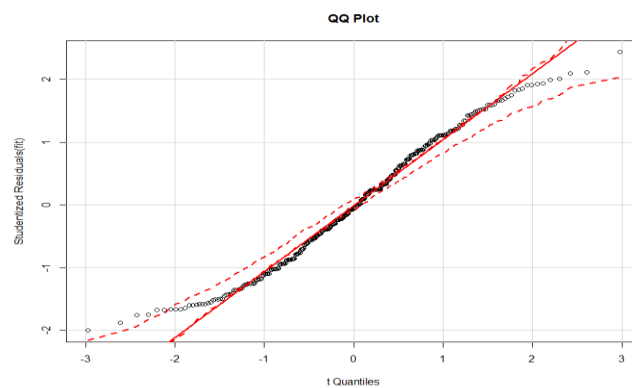
Figure 19. QQ Plot of Residuals
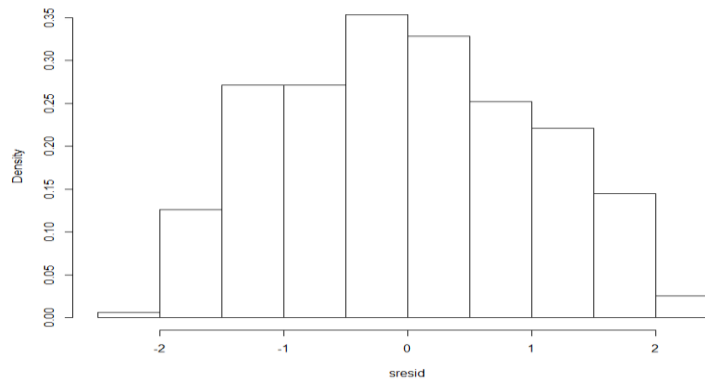
Figure 20. Distribution of Studentized Residuals

The final model found that even when controlling for socioeconomic status and ethnicity, high school GPA remained the most statistically significant predictor of current college GPA, $F(6, 310) = 5.85$, $p < .05$), with an adjusted R^2 of 0.08. The second most statistically significant predictor variable of current college GPA was ethnicity for African-Americans with Caucasians as a reference variable.

Research Question Four

What challenges do students report facing in college?

To further explore challenges students face in college, participants indicated if they had ever felt discriminated against at their current university. In addition, participants were asked to specify how the discrimination was expressed, in which environment the discrimination was perceived, and the category of the perpetrator, such as a professor or student. Out of a total of 320 participants, 5% acknowledged they have personally felt discriminated against as a student at their institution (*n= 15*).

By ethnicity, of the students who felt discriminated against, five were Chicano/Hispanic/Latino, four were African-American, three were Asian/Pacific Islander and three were Caucasian. In respect to age, these participants were an average of 24.8 years old

(*SD*= 5.2) compared to non-discriminated participants (*M* age= 23, *SD*= 3.6).   Additionally, 73% of the reported discrimination occurred at public institutions.

Figure 21 displays descriptive statistics for group differences based on discrimination status. For example, for the 15 students who perceived discrimination, 73% identified as being the first member of their family to enter college and earn a four-year degree compared to 47% of non-discriminated students whom identified as being a first-generation academic. The 15 discriminated students reported paying an average of 74% of their college expenses without any assistance from parents compared to 61% of their peers who paid for college themselves. Furthermore, 60% of these students indicated they belonged to the two lowest socioeconomic tiers provided on the Perceived Campus Climate Inventory, compared to 27% of the non-discriminated students whom identified as a low middle or low socioeconomic student.
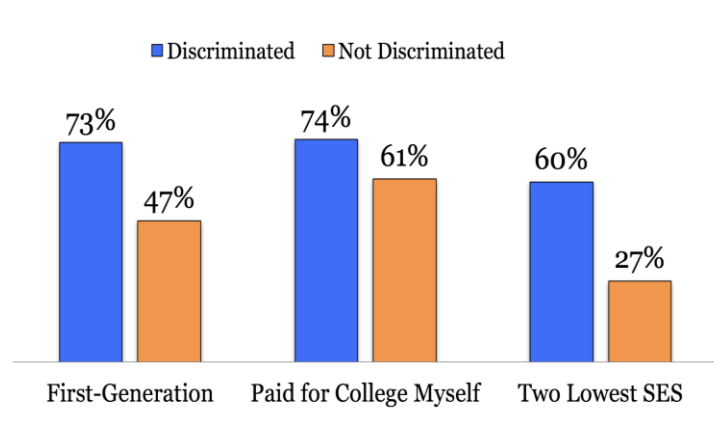
Figure 21. SES, Paying for College, and Generation Status on Discrimination

A predominant theme for the African-American, Asian, and Latino participants who were discriminated against related to their ethnicity. For example, these students identified being excluded from social groups and conversations, as their opinions were not validated due to their race.

An African-American student spoke about being discriminated against by campus police. At California State University, Long Beach, this student felt he was perceived with suspicion by police officers when he walked around campus in the evening. An African-American female student stated being excluded from campus organizations, particularly a sorority, attributing this to "*not being white like every other girl there.*" Finally, one participant's response outlined students "*asking me questions they would never ask another race, especially pertaining to the [fetishization] of Asian women.*"

Participants also highlighted how frequent protests on their university territory affected their feelings of safety in relation to the campus climate. For example, protestors not affiliated with the university instructed one participant to "*go back to Mexico.*" A 22-year-old student at UC Davis also experienced protestors assuming she was Muslim, while making "*loud and derogatory comments*" at her. "*There were some protestors on campus who were shouting at me about how my people are terrorists and we need the Muslim ban. I am not even Muslim!*"

Although not related to ethnicity, discrimination by gender was also highlighted as sources of hostility for one female student. She indicated, "*not being taken seriously enough,*" by her male counterparts in a male-dominated field of Engineering. Discrimination was expressed through verbal comments and in socially exclusionary behaviors.

Regarding sexual orientation, two gay participants disclosed their open sexuality "*visibly makes people uncomfortable.*" They often received "*dirty looks*" from peers in response to their "*very obvious sexual orientation.*" These participants stated "*people don't want to talk to me sometimes or be my friend; I hear and see all the judgmental comments.*"

Finally, two participants felt discriminated against because their ideals and morals differed from their peers. As one student stated, "*On the first day of one of my classes I*

disagreed about the colonized version of European immigration into the US. Now it's like I have

a target on my back for being someone who is hard to get along with or has an agenda." As

further summarized by another participant, *"I've definitely been discriminated against because*

my ideas vary from my peers, like people aren't interested in my opinion because I'm not one of

the sheep blindly following the crowd."

Reponses to the following open-ended question provided insight into challenges students

face in college:

> *Please describe any challenges you have faced while earning your college degree at this*
>
> *university*

In the effort to explore this qualitative item with objectivity, interrater reliability was

established between the researcher and a colleague at California State University, Long Beach.

For the first item, both the researcher and her colleague individually chose 50 random data points

to code. These data points consisted of the open-ended items regarding challenges students

faced at their universities. Each reviewer established their own codes during the first phase.

For example, the researcher established six codes at the end of reviewing the 50 data

points, whereas her colleague established five. The six codes for the researcher were as follows:

Course Relevance, Money, Caring Faculty, Time-Management, Non-traditional, and Obligations.

Her colleague established ten: Tuition Difficulties, Time Struggles, Academic Advising Needed,

Job Concerns, Professors who Care, Older Students, Preparedness, Mental Health, Distractions,

and Boring Classes.

The researcher and her colleague met to discuss their differences and similarities in

codes. The codes that were similar and thus were combined included: Course Relevance, Time-

Management, Financial, and Caring Faculty. For example, "Tuition difficulties" was summed

into "Financial Struggles," which encompassed financial difficulty in more domains than tuition, such as challenges affording textbooks and university-related expenses. "Caring Faculty" was the result of responses such as, "Teachers have no sympathy for me and my inability to pay for things like books and lab fees" and "I bet my professors wouldn't know my name or face outside of the classroom." These responses also encompassed "Older Student Challenges," as non-traditional students by age indicated how their professors seemed insensitive to their needs and obligations outside of the classroom. Obligations included being a parent and having a full-time occupation.

There were also several themes that were removed because they did not inform the overarching goal of this research. For example, the item of "Mental Health" was only found in one response, which the researcher's colleague identified in the random selection of coding. The intention of this research was to find thematic challenges faced by the overall sample undergraduate students, thus items such as this response with only one individual, were not categorized as an overarching theme reported by students. Other items that encompassed five or fewer responses included: "Distractions" and "Preparedness." Examples of these items included, "I commute and often forget my assignments at home" and "I have other things I want to do."

After reviewing the entire data set once again, three major themes were applied to the overall data set: Diathesis between coursework and career relevance, struggles relating to monetary expenses, and strife with a college community that is unsympathetic to student needs. For each of these themes regarding challenges, 63% identified financial difficulties, 17% indicated unsympathetic faculty, and 14% identified a lack of course relevance as an undergraduate challenge. Additionally, 6% of the sample did not fall into any one of these major themes, as responses were on an individual basis that did not apply to other students. Although

each of these themes will be discussed in isolation, struggles relating to monetary expenses and a college community that is unsympathetic to student needs will also be examined in relation to one another.

Course and Career Relevance

A total of 271 responses were analyzed, as 49 participants did not indicate a challenge they have faced or typed a variation of "Not applicable" or "Don't know." The incongruence between coursework and career relevance was a prominent theme within responses to this item (14%). Participants whom indicated divergence between the courses they have been mandated to take and the career they aspire to have, exhibited frustration with their college experience, as well as doubt of the efficacy of a college degree. For example, a 21-year-old Psychology student at the University of California, Irvine responded, "*Imagine studying all day for stuff you will never use in life and paying tens of thousands of dollars for stuff you can learn on the Internet yourself. Oh I'm sure knowing the names of these rocks in geology is going to set me up for success. Yes that is college*."

A 22-year-old Criminal Justice student at California State University- Fullerton echoed this sentiment stating, "*There's a lot of requirements for my major that I don't agree with such as the amount of math and finance classes, which are things I will never use in the field*." Within this theme of low course relevance to career intentions, skepticism brewed amongst the efficacy of a college degree. For example, "*The only thing college has taught me is that the world is bureaucratic and you have to be willing to jump through some mindless hoops to get a degree. At the end of the day the degree means nothing to me but everything to an employer*."

A 26-year-old Sociology student at California State University, Long Beach divulged the heightened frustration of being mandated to take certain courses to fulfill degree requirements.

He stated, "*It bothers me I don't have the freedom really to choose what classes I want because it is my money and I should get to decide on what I want to learn.*" Additional statements encompassed "*Mandatory attendance for college seems like a complete joke- we aren't kids and it is our choice to decide when or if we want to come to a particular class.*" Boredom within classes the students would not have voluntarily enrolled in was discussed including, "*I don't really care about my classes, these classes are a waste of time,*" and "*[I'm feeling] burnout because some of my classes are so boring and unnecessary.*"

Monetary Struggles

The second theme relating to challenges students have faced can be ascribed to a common college affliction: Monetary struggles (63%). Struggling to finance college-related expenses including tuition and rent were the most widely cited challenges by participants. With the rising costs of university expenses, participants expressed distrust as to how their universities were using the money. University fees were described as "*changing so often that I can never prepare for how much money I have to take out for loans the next semester*" and the increase of "*miscellaneous student fees that I have no idea are for what.*" In seven responses, students mentioned not being literate in the processes of financial aid, as they felt they were being withheld grants and scholarships they should qualify for. One participant described offering scholarships as, "*another false promise from the university.*"

Within the theme of monetary struggles, participants cited displeasure in how many of their textbooks are monopolized by the university. For example, participants indicated the resources required by their courses were university-specific, such as textbooks that are only produced through the college. Thus, prices for course materials were not competitive, as their institution was the only source where these items could be purchased. For example, a 22-year-

old California State University, Long Beach student majoring in Spanish commented, "*The bookstore forces and traps us to buy their version of books and each semester it's almost $500 just for books*."

Participants described additional university fees as, "*outrageous*" and "*criminal*." A 24-year old student at the University of Massachusetts expressed, "*Everything here costs money to do. I have had to pay up to $50 to take a test here, which is like robbery to me. How these people sleep at night is beyond me*." Even for the nonspecific responses relating to expenses, participants indicated how it affects them as more than just a student. For example, "*Financial stress takes a toll on my body including my weight and sleep*." This was further highlighted by a 23 year old Chicano Male at Loyola Marymount University who said, "*Honestly probably nutrition is a big issue because I don't eat enough nutritious stuff. How can college students be expected to have healthy diets when we can't even afford basic things like healthy food? College is choosing between A. Paying tuition and not ending up taking out millions of loans and B. Having basic necessities*."

Unsympathetic College Community

The third and final theme indicated students who felt their college community, specifically professors and administration, were unsympathetic to the needs of their students (17%). One pertinent comment included, "*I don't really think my professors care about my opinion because I'm an older student, I'm female and I don't have the same degrees they have.*" There was also a sentiment of detachment between student and professor, which was evident in, "*I don't know my professors at all and I bet they don't even know my name or would be able to recognize me outside the lecture classes.*" This depersonalization was palpable for participants who attend universities with a large student population. For example, a student at the University

of California- Riverside also reported, "*My classes are so big that I haven't had the chance to get to really know anyone. Not a single professor in 4 years has taken the time to get to know my name*."

The intersection between the two final themes, challenges with monetary expenses and an unsympathetic college community, was highlighted in the challenges participants most commonly reported. The inability to fund course-related expenditures such as textbooks and laboratory fees, interfered with how participants felt their professors viewed them as a student. For example, "*Teachers have no sympathy for me and my inability to pay for books and lab fees. Even my classes got dropped this semester because I had too many late fees*." This has also affected the depth students can divulge with course content. One student reported, "*I haven't been able to afford books for many classes so I have to accept not knowing all the material*."

In addition, unexpected expenses have hindered students from participating in class, including, "*My computer wasn't working for almost a month and I couldn't afford to buy a new one or replace it so I couldn't study or work on assignments for a while*." Commuter students also reported not having reliable transportation to campus has been a "*hit or miss if I will make it to campus or not*." As one student tersely described the financial struggles students faced, "*Most students simply just don't have enough money.*"

Research Question Five

What do students recommend to improve their campus environment?

For the second item, 253 responses were analyzed, as 67 participants did not indicate any suggestions to improve their campus environment. The open-ended item stated:

Please offer any suggestions you may have for your university to improve the campus environment for students of diverse backgrounds.

In the effort to establish interrater reliability, the same colleague who participated in coding the first qualitative item was once again involved with the final open-ended response. They each randomly selected 50 responses to code individually. The researcher established the five following codes: Concerned/Caring Professors, Accommodations, Political/Social Issues, Money, and Networking. Her colleague highlighted the following five codes: Protests on Campus, More Resources, Interactions with Faculty, Academic Advising, and Networking.

With the same considerations of the previous open-ended item, codes that only applied to five or fewer responses were not encompasses as an overarching theme of this research. Additionally, several of the differences in codes by the researcher and her colleague were combined into one. For example, Caring Professors encompassed "Interactions with Faculty" and "Academic Advising," as responses included, "A big step would be for all professors to get to know their students as more than just a name" and "I need more access to my professors and advisors to help me when I'm struggling in a class." Protests and social issues were also combined into one theme, which encompassed responses such as, "Protestors don't belong on our campus if they make people of color feel unsafe" and "Administrators need to be mindful of the government trying to take our rights away."

When these codes were applied to the entire data set, two themes emerged from this question: Take a genuine interest in supporting your diverse students (57%) and protect the safety and well-being of the campus community during a tumultuous political environment (34%). An additional 9% of the data did not fit into these two overarching themes, which encompassed five or fewer responses such as, "Parking should be expanded." There were also items that lacked specificity and could not be included into any one category, as they were not

interpretable. Such responses included: "Cheaper rates," "Update the university with new

protocol," and "Explore multiple options."

Genuine Interest in Students

The 57% of participants who reported a desire for their university to take a genuine

interest in supporting their diverse students encompassed issues related to student challenges

previously reported within the first open-ended item. For example, the inability of students to

pay for fees outside of their capacity, created hostility between many students and his or her

institution. Students felt their professors saw them as apathetic or unmotivated because they did

not participate in class discussions about an assignment, when the truth was the students could

not afford the course reading materials. As multiple students indicated, "*Money shouldn't be the

thing keeping people back from a degree.*"

Suggestions to improve this challenge encompassed allowing students to have multiple

options to purchase course textbooks and materials instead of mandating certain items to be

purchased. Students also requested for their "*Professors to be more understanding of our

financial situations*" and for their universities to be "*more proactive with outreach.*" For

example, "*Get to know your students because they all have individual struggle. Many of us can't

do college without some help. So the university should look for more ways to ensure we have

shelter over our head and food on our table.*"

Non-traditional students supplied their perspective on navigating college as an older

student with many responsibilities outside of the academic realm. They encompassed

individuals who held full time employment, were parents, had to commute to campus, and were

older than their peers. The largest theme within this group was for their universities to provide

more options for night and online classes. Employed students indicated their inability to enroll in full-time status by class units was due to "*course offerings only catering to the unemployed*."

For example, "*My college needs to be more considerate to students who have more responsibilities than just being a student*." Students with children responded with, "*Childcare on campus would be very helpful because there are so many of us who are parents who can't always make classes when we don't have someone to watch out children*." One student explained, "*More class options for students are necessary if a school proclaims to care about non-traditional students and diversity*."

Additionally, non-traditional students mentioned feeling socially ostracized on campus for their age difference. Several participants suggested providing class sections for older students "*So I don't feel so judged for my age*." These students indicated a desire to participate in campus activities, yet events organized by the university were primarily conducted during the day when older students were likely working. Thus, these non-traditional students yearned for their universities to be more inclusive and responsive to the needs of students outside of the typical college age range.

Protecting Student Safety

Protecting the safety and well-being of campus community members was the second theme of this final open-ended item (34%). Reponses aligned with the overarching research question of this study, which relates to perceived discrimination and the campus climate. Political issues were highlighted within this item, including the distraction and safety compromises protests on campus had on students. For example, "*I really don't like the amount of protests that go on here on campus. I want to be more protected from people protesting who hate POC [people of color]*."

Participants also requested for opportunities to discuss political and social issues with the campus community in a constructive manner. One student suggested, "*Having open conversations about the things on our minds can help alleviate some of the political tension we are all feeling right now*." Multiple participants paralleled this suggestion, encompassing recommendations to allow for serious conversations on campus that address issues including racism and prejudice.

Safety was also highlighted within this theme, as an increased representation of campus police was requested. Students generally not only wanted to personally feel safe regardless of how they look or what they believe in, but they also wanted their peers to benefit from the same experience. Comments such as, "*Discrimination should never be tolerated,*" became a focal point of the protections students are asking from their universities.

A related response urged for university staff to take initiative in protecting their student body: "*Make sure faculty is up to date on major political issues so they can see how it affects certain students. It's almost like a responsibility to protect people who don't have it as well as you do*." Students who felt endangered indicated the desire to be included in conversations that directly impact them, such as immigration issues. They asked for people to "*stop pretending to be colorblind*" and for the university to take action against anyone who violates the social rights of any campus member.

Additional Analyses
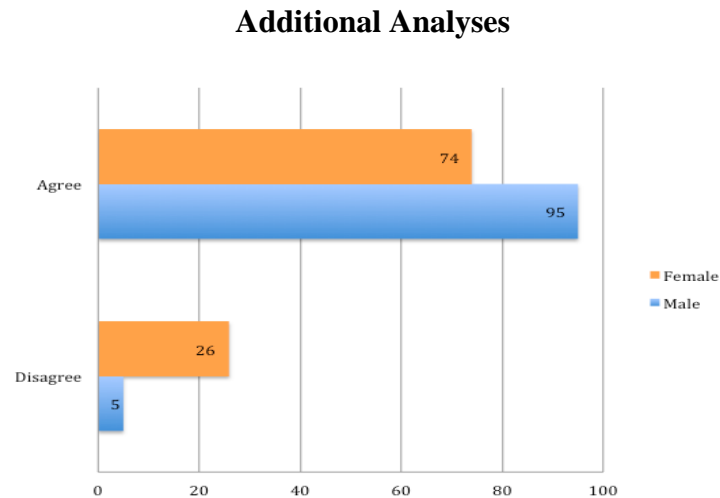
Figure 22. Gender Equality

An item assessing differences in how participants perceive gender equality on their campuses stated, "I feel men and women are treated equally on this campus." Participants were asked to indicate their level of agreement on a Likert scale of four choices. Figure 22 indicates female and male participants disagreed that women and men are treated equally on campus at a statistically significant level, $\chi 2$ (1, $N = 320$) = 19.45, $p < .05$.

Descriptive statistics were calculated for a Likert scale item stating, "Most of my friends at this university are of my own ethnicity." As displayed in Figure 23, 31% of participants "completely disagreed" most of their friends were of their own ethnicity compared to 23% who "completely agreed" the majority of their friends comprised students of the same ethnicity. Finally, 77% of participants agreed or completely agreed their opinions were valued by their peers, compared to 80% who agreed or completely agreed their opinions valued their opinion.
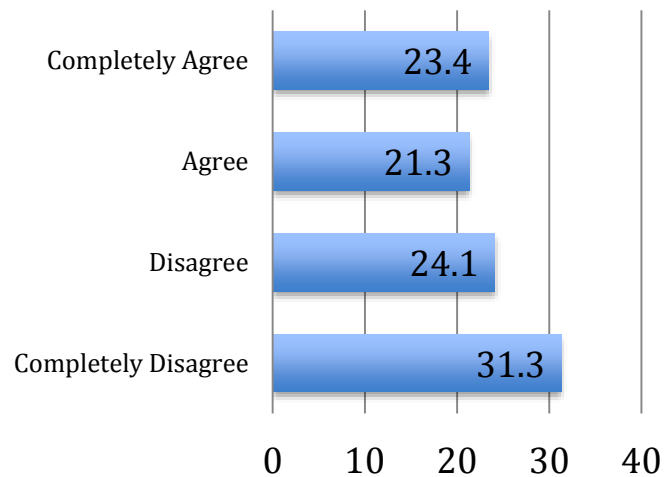
Figure 23. Mostly Friends of the Same Ethnicity

A Pearson Correlation was calculated to explore the relationship between perceived respect by professors and the amount of time a participant has been a student at the university. For the data set (*N*= 320), there was a statistically significant, but weak positive correlation between the two variables, *r*(318)= .13, *p* = .02. A second weak positive, but statistically significant relationship was found for gender equality and peer acceptance, *r*(318)= .14, *p* = .02, as well as for gender equality and professor respect, r(318)= .26, p = .00.

California State University, Long Beach

Due to the fact students of California State University, Long Beach (CSULB) comprised 45% of the sample, this institution was further analyzed in isolation to find if differences existed between the CSULB student population compared to the other 55% of the sample. Descriptive statistics were calculated for CSULB participants in the following table.

Table 10

CSULB Compared to the Other Institutions

	CSULB (*n*= 145)	Universities Excluding CSULB (*n*= 175)
	M	*M*
Age	24	24
Ethnicity	African-American: 6% Asian: 28% Caucasian: 42% Chicano: 22% Other: 2%	African-American: 6% Asian: 30% Caucasian: 41% Chicano: 21% Other: 2%
College GPA	3.42	3.41
Middle Class SES	58%	57%
First Generation	52%	44%
Percentage Students Paid for College	68%	59%
Employment Hours	22.46	20.90
Diverse Social Circle Score	3.32	3.17
Accepted by Peers Score	3.47	3.49
Respected by Professors Score	3.41	3.46

Table 10 displays the differences of CSULB students compared to students of the other

48 institutions. The average age, middle class SES percentages, hours worked per week,

representation by ethnicity, and college GPAs were similar for both groups. Additionally, student social circles in terms of diversity and the scores indicating an agreement of being accepted by peers and respected by professors are also similar. However, CSULB student paid an average of 68% of their college education completely by themselves compared to 59% of students at universities excluding CSULB. Additionally, 52% of CSULB students were first-generation compared to 44% of non-CSULB students.

Six students at CSULB indicated they had been discriminated against on campus out of a total of 15 participants in the study who identified as receiving discrimination at their university. The average age of these students was 23 years old and by ethnicity, two participants were African-American and four were Chicano/Hispanic/Latino. All six students were employed with the average hours worked per week at 30 hours.

A 24-year-old African-American female student described how discrimination has affected her at the university. She described that being a low-income and first-generation student made her feel that graduating from college was not feasible in the near future. This student stated she has attended CSULB for four years at the time of the study, yet she was still "nowhere near" graduating. Although she was an Honors Student with a 3.6 GPA, the number of units she had were minimal considering her class standing. For example, she simply could not afford the cost of taking 15 units to be considered a full-time student because she did not have the finances to support the additional tuition and course-related fees.

A 24-year-old Chicano/Hispanic/Latino student also described how being a low-income student affected his experience as an undergraduate. He worked 40 hours per week to support himself, but observed how quickly university fees accumulated. He also spoke about an experience wherein he was passed over for an internship opportunity, which he attributed to his

accent as a non-native English speaker. He felt frustrated with the university for their claims about supporting diverse students when he did not feel his college provided him personally with adequate resources.

One African-American student spoke about how her opinions in class were often silenced. She attributed this to the sentiment her peers and faculty believed she had an "*agenda to meet*." This student also indicated how protests on the CSULB campus were distracting and felt threatening to students of color. She also acknowledged protestors were often not affiliated with the university and that these were groups of people who simply enjoyed harassing minority students with "*no actual message*."

A 19-year-old Chicano/Hispanic/Latino female also highlighted the presence of protestors on the CSULB campus. She was subjected to comments from protestors such as, "*Go back to Mexico*!" on how she describes as a regular basis. This student admitted to struggling in her first year at the university, demonstrated by her 2.8 GPA.

An 18-year-old African-American male described how he felt stereotyped by campus police officers for his gender and ethnicity. He described campus police as often looking at his suspiciously and following him around on campus at night. This student found the situation perplexing, as he was a Criminal Justice major himself, yet he was subjected to the effects of racial profiling in a career he wanted to pursue. This student did not describe experiencing significant financial challenges as a middle socioeconomic status individual, however, he noted how working 30 hours per week affected his opportunities to complete class assignments. Thus, he was unsatisfied with his current 3.0 GPA.

Two Chicano/Hispanic/Latino males who identified as gay, described how their sexual orientation subjected them to judgmental comments and looks from multiple campus community

members. They often felt ostracized and alienated by their peers or were judged solely on their sexual orientation. Both men identified in the two lowest socioeconomic tiers and worked 40 hours per week each. Yet even in the face of discrimination and external obligations, these students held a 3.3 and 3.7 GPA, as Environmental Science and History majors. They described the need for their campus to be more accepting of gay students and to provide opportunities for faculty and students to discuss human rights issues.

Ratings for diversity in terms of social circles and how accepted or respected students felt by their peers and faculty members also were similar between CSULB students and participants at other universities. For example, CSULB students indicated a 3.32 mean score for their social circles, which demonstrated an agreement their social circles were diverse. This is compared to 3.17 for the same question of students at other institutions. CSULB participants held a mean score of 3.47 for how accepted they felt by peers compared to 3.49 of non-CSULB students. Finally, CSULB and non-CSULB students agreed they were respected by their professors with mean scores of 3.41 and 3.46, respectively.

The importance of comparing the descriptive statistics between a university with a large representation in this study with the other 48 institutions was necessary to explore if the student experiences and demographics were vastly different in this study. However, the demographic profile and experiences of the items addressed within this section appear to demonstrate similarities between institutions. This may be due to the fact the universities in comparison largely consist of diverse colleges in a close proximity to CSULB. Thus, the characteristics these post-secondary institutions share seem to apply to CSULB and many of the Southern California universities represented in this research.

Summary

This chapter presented the major findings of this study, which investigated five overarching research questions. The intention of this research was to discern student perceptions regarding discrimination on their campuses, preferences for roommates based on religious affiliation, and factors that predict college performance for this sample. In addition, challenges students face, as well as recommendations to improve their campus environments were explored by this study.

Results of the first question indicated African-American and Chicano/Hispanic/Latino students were rated as the two ethnic groups which experienced discrimination in college. Participants who identified being a member in these two ethnic groups, as well as Asian/Pacific Islanders agreed with this result. Asians and Caucasians were two groups who were not identified as being subjected to discrimination in college. Caucasians did not perceive discrimination for any other ethnicity at a statistically significant level, including students of their own background.

A discussion entailing zero participants indicating they had ever discriminated against a peer or faculty member at their current university was supplemented by responses to preferences for roommates based on religious affiliation and ethnicity. The results of these analyses concluded participants were the "least comfortable" living with a Muslim student. This held true for participants who both lived in on-campus housing and for those who resided at home with their family. Buddhist participants held the highest comfort levels for living with students of other religions. Christian participants reported being the least comfortable group to live with roommates of other religions, including non-religious students and Atheists.

Even when controlling for socioeconomic status and ethnicity, the most statistically significant factor that predicted college GPA for this study was high school GPA. Additional factors such as socioeconomic status, discrimination classification, generation status, sexual orientation, and institution type did not predict college performance at the same statistically significant level as high school GPA.

The two open-ended items within the Perceived Campus Climate Inventory highlighted the unique challenges participants have faced as a college student, further supplemented by their recommendations for their university to better support a diverse student body. The predominant challenge participants faced at their current universities related to monetary struggles, such as the inability to afford tuition, textbooks, and living expenses. Participants urged their respective university faculty to be more sympathetic to the difficulties students of lower socioeconomic backgrounds encounter, in the effort for administrators to be proactive in supporting each student.

The differences in how men and women perceived gender equality were statistically significant, indicating women did not perceive equal treatment compared to their male counterparts. For example, in male-dominated majors such as the STEM field, women felt their credentials were questioned by peers simply due to being a minority by gender.

Additional challenges included reports about how a tumultuous political environment affected them as college students. For example, frequent protests on campus made participants fear for their safety, as they were subjected to taunting comments by protestors who were not affiliated with the university. Thus, participants highlighted the importance for the faculty at their institutions to stay up-to-date on current issues directly affecting students and to provide necessary supports for all members of the campus community.

The following section outlines a discussion of the major findings within this study, in addition to limitations and implications of the research. Finally, Chapter 5 concludes with recommendations for further research to gain a greater understanding of the impact of campus climate on the experience for undergraduate students.

CHAPTER 5: DISCUSSION

The presentation and analysis of the five research questions guiding this study were reported in the previous chapter. Within the final chapter, Discussion of the Findings, Implications for Practice, Limitations, Recommendations for Further Research, and Conclusions are discussed. The intent of this chapter serves two purposes. The first purpose is to compare and expand upon concepts discussed within each of the previous chapters, specifically, how this study has contributed to the literature pertaining to the campus climate for undergraduate universities within the United States. The second purpose is to provide an overview of how further research in this field is required.

Discussion of the Findings

The purpose of this study was to investigate the undergraduate experience for students at four-year universities in the United States. Participants were asked to share the challenges they have faced and how they believe other students may face discrimination based on ethnicity. Additionally, participants indicated preferences for roommates based on religion and provided recommendations for their universities to alleviate post-secondary hurdles. College performance indicators, as measured by current grade point average, was explored to determine the strongest predictors of GPA for this sample.

The differences in how participants perceived discrimination for other ethnicities provided an interesting overlap. For example, all four ethnicities including Caucasians, displayed an agreement that Caucasians students are the least discriminated group on campus. In contrast, African-Americans were indicated as the ethnic group, which receives the most discrimination on a college campus. Chicano/Hispanic/Latino students were also identified as a

discriminated group at the post-secondary level. Thus, the awareness of how discrimination may impact ethnic groups at a different level seemed to be consistent across the four ethnicities.

Interestingly, Asians and Caucasians were identified by participants as the two ethnic groups that are unlikely to experience discrimination on campus. Although Asians were not discriminated against, participants in the Asian sample were still able to identify discrimination against two minority groups: African-Americans and Chicano/Hispanic/Latinos. This is a fascinating result, as the awareness of discrimination faced was similar between these three minority groups, whereas Caucasians did not report sentiments that minorities are discriminated against at a statistically significant level.

The finding that African-American participants in this sample had the highest college grade point averages compared to all other ethnicities surveyed, was distinct compared to the literature analyzing minority status on college performance. African-American males have been cited as the ethnic and gender category with the lowest college graduation rates of any other group demographic, with less than 17% of African-American college students graduating within a six-year timeframe (Nagaoka et al., 2009). The discrepancy of the results of this study compared to research presented in the literature review highlights that ethnicity alone did not account for patterns of achievement reported by other research. This is further highlighted by the fact that a small number of African-American participants were represented in this research compared to the three other ethnicities.

The high level of performance for African-Americans in the face of discrimination, provides a stimulating confliction to the notion in which a hostile campus climate affects the academic experience and adaptation to a university (Chang, 2001). Prejudice can exacerbate alienation and stress for minority students at predominately Caucasian institutions, yet these

participants indicated impressive dominance over curriculum. Once again, it is important to caution generalizing the results of this finding, as there were disparate group sizes between African-Americans and the other ethnicities surveyed.

Furthermore, Chicano/Hispanic/Latino students were the second ethnicity, which each group in the study rated as being discriminated against. Interestingly, Chicano/Hispanic/Latino students are not the minority population at a university with the largest representation in this study, California State University, Long Beach. In fact, students of this background are the majority by population size within this post-secondary institution, yet many participants indicated Chicano/Hispanic/Latino students are subjected to discrimination.

At California State University, Long Beach, there are fewer Caucasian and Asian/Pacific Islander students than there are students from a Chicano/Hispanic/Latino background. The fact that participants rated Asian/Pacific Islander and Caucasian students as not receiving strong discrimination on campus is intriguing, as these students would be considered the ethnic minority. An investigation into the power dynamics of ethnic groups within post-secondary education is an avenue for future research, as this study may indicate that while an ethnicity is the minority by size, it can indeed remain the majority by power.

This finding is also applicable to gender status relating to perceived equality in education. For example, although many of the institutions included in this study have a higher population of female students, this research indicated females feel their campuses have gender inequality at a statistically significant level. Thus, while women are the majority gender on a campus, they may feel they are treated unequally compared to their male counterparts.

However, it is important to distinguish the direction of equality was not predicted by this research. The study made no indication as to participants perceiving more favorable or less

desirable treatment as a college student based on gender. Participants were simply asked to rate their agreement pertaining to if gender equality is evident at their universities. The potential for future research to investigate how and why male and female students perceive gender inequality, is an avenue for further exploration.

As reported in Chapter 4, both the median high school and college grade point averages for this sample was a 3.4 GPA. The importance of highlighting a consistency between a high school and college grade point average was indicated within the review of the literature. The strongest predictor of college performance in this sample was high school grade point average, which is a tool that can attribute the level of mastery a student has for content knowledge and is a measure of readiness regarding rigorous college coursework (Nagaoka et al., 2009).

The results of this study also replicated the research presented in the review of the literature by Dennis et al. (2001) who found high school grade point average was the strongest predictor of college grade point average for Asian and Latino students at an undisclosed diverse and urban university. Within this current study, high school GPA was also the strongest predictor variable of college GPA, even when controlling for socioeconomic status and ethnicity.

A potential explanation for the similar grade point averages in this study may be due to the universities represented in this research. For example, three universities with rigorous admission standards and pre-college requirements comprised almost 50% of the institutions participants reported being a student at. California State University, Long Beach, the University of Southern California, and University of California, Irvine have a combined average acceptance rate of 30% (Acceptance Rates, 2018). Compared to the national average of a 56% college acceptance rate, students at these universities have likely demonstrated the appropriate content knowledge and preparation in high school to meet admission standards for these universities.

Thus, their pre-college preparation aided in their continued successes as a post-secondary student.

The finding that minority students held high grade point averages from high school to college contradicts research by Banks-Santilli (2004). For example, Banks-Santilli indicated students from minority backgrounds, such as ethnic minority, socioeconomically disadvantaged, and first-generation students, tend to have lower grades and pre-college preparation before entering the university. These factors impede students from attending highly selective and high-quality universities. However, in this sample, participants entered selective post-secondary institutions with strong high school grade point averages and maintained this performance indicator at the time of the study.

Additional results of this study minimally supported literature indicating students from disadvantaged backgrounds, such as by socioeconomic status, tend to have higher grade point averages and post-secondary degree attainment rates at private universities compared to public institutions (Pascarella & Terenzini, 2005). For this sample, the 14% of participants who attended a private university had an average of a 0.1 additional grade point compared to students at a public institution. Although this was not statistically significant, private colleges tend to have certain characteristics that may benefit students from minority backgrounds. These characteristics include: Smaller class sizes, types of degrees offered, and faculty support of students.

In addition, the comparison of two groups boasted large differences in the amount of participants. For example, 15 participants out of a 320 sample felt discriminated against. Thus, deriving statistically significant differences between grade point averages between the two groups were not furnished. Perhaps a larger comparison group of students who felt

discriminated against would produce differences in college performance, not fully captured within this sample size.

The results of an item, which asked participants to indicate a "Yes" or "No" to the statement, "*I have discriminated against others on campus*," produced zero agreements of "Yes." Thus, despite 5% of the participants indicating they had personally been discriminated against on their campus, not a single participant in this study believed they had committed any type of discrimination against others.

Although participants may not have physically acted upon a discriminatory belief for their peers or faculty, several of the items measured sentiments participants held for members of their campus community. For example, for all religions excluding Buddhism, participants indicated the lowest level of comfort for living with a Muslim roommate. Thus, while a participant may not equate dislike or uncomfortable sentiments about another person based on their demographic profile, these underlying biases may be exacerbated in other domains.

For example, 5% of the sample preferred for faculty members at their universities to be Caucasian, 2% each for African-American and Asian instructors, and 1% for Chicano/Hispanic/Latino faculty. Although these are not large differences compared to 89% of respondents who did not have a strong preference for their instructors' ethnicity, such desires for college faculty were indeed captured. Additionally, 19% of participants either disagreed or completely disagreed their social circles were diverse and mostly encompassed peers outside of their own ethnicity. While this item in itself in no way suggests discrimination, socialization for almost one-fifth of the sample was limited to members of their own ethnic background.

One possible explanation as to why social circles may not be ethnically diverse encompasses the demographic breakdowns of the universities represented. For example,

participants may simply attend institutions wherein the majority of their student body constitutes members of their same ethnicity. Thus, these participants are not intentionally adhering to social circles within their familiar ethnicity, they simply may have less exposure to students of other cultures.

A relevant element to address is while participants may not have attributed preferences in their social groups or faculty members to standards such as ethnicity and religion to discrimination, choosing levels of comfort for others based on these factors may indicate partiality. Again, preferences should not automatically be equated to discrimination, however, it is imperative to be mindful of how our inclinations and favoritisms can lead to discriminatory behaviors.

The differences associated with age and financial support for college was evident in this study. For example, students aged 18 to 24 years old reported an average of personally contributing 45% to their college education compared to 85% of college personally financed by students 25 years old or greater. The older sample also worked an average of 32 hours per week compared to 14 hours for students under 25 years old. This relates to Astin's (2005) assertion that older students are likely to work during college and have additional responsibilities outside of the classroom compared to their younger peers.

Themes Relating to the Theoretical Framework

Three themes were produced by participants who disclosed the challenges they faced as a college student: Diathesis between coursework and career relevance, struggles relating to monetary expenses, and strife with a college community that is unsympathetic to student needs. The first theme, diathesis between coursework and career relevance, supplements existing literature suggesting course relevance is the most significant predictor of institutional confidence

for college students (Hagan, 1991). Students must feel their formal education is providing

relevant and applicable information, or else they can become disengaged with the material,

which elevates them to a high risk of dropping out.

Course relevance is associated with the theoretical framework by which this study is

grounded in. For example, Tinto's (1997) Conditions of Success posited Integration and Active

Learning, as vital components to maintaining persistence toward degree attainment. Tinto

describes the importance of aligning course curriculum with applicability for the career a student

wants for the future; the further courses gravitate away from meaningful and applicable

knowledge, the more disengaged and detached the student will become.

Course relevance may be further decisive for non-traditional students who have taken a

leave of absence between high school and continuing their education at the post-secondary level.

Many of these students have found employment between this transition and rely on the college

degree as a tool to further them in their career. These students may search for the applicability of

their coursework and feel heightened frustration for abstract curriculum presented in general

education courses outside of their major. Thus, this research encourages universities to explore

adult programs that can be tailored to non-traditional students, including flexible modality

options and courses with direct applicability to the workforce.

The final two themes participants reported as significant college challenges related to

strife with a campus community that is unsympathetic to student needs and monetary struggles.

Specifically, students felt their university faculty was intolerant of obstacles accumulated by

diverse student needs. For example, students cited the consequence of an inability to purchase

expensive college textbooks meant their professors would deliberate negative assessments of the

student. The students felt unfairly judged by professors attributing this behavior to laziness rather than to understanding textbooks were out of the budget for many students.

Unsympathetic staff replicated Tinto's (1997) assertion that students who have historically been excluded from higher education, namely ethnic minorities and socioeconomically disadvantaged academics, require and deserve professors to aid in the persistence toward graduation. Thus, university leaders are tasked with increasing compassion and understanding for students with less affluent backgrounds.

Tinto's (1997) Conditions of Success highlight the importance of a university in fulfilling their duties of providing quality academic, social, and personal support to the student body to retain student enrollment. Responses within this theme relating to college challenges, indicate students do not always feel their university is supportive of their unique circumstances. Thus, post-secondary institutions are tasked to consider the additional resources they must deploy to better facilitate their students toward degree attainment.

While the economic toll of a post-secondary degree is commonplace for college students, financial burdens can especially affect first-generation and socioeconomically disadvantaged students (Xu, 2007). Stephens et al. (2012) attributes the historically steep dropout rates of first-generation students can be attributed to having fewer financial resources and working while attending college. Participants expounded the toll finances have taken on their undergraduate paths, as they now put the responsibility on their universities to address barriers between the socioeconomically privileged and disadvantaged.

The results from this study indicated a high percentage of students feel their campus climates are favorable, derived from scores of peer and faculty acceptance. Although this is a pleasant indication of the college environment for post-secondary students, the breakdown of the

major institution represented must also be highlighted. Over 45% of participants attended California State University Long Beach, a geographic location rich with diversity. Hence, students who may be an ethnic minority at a geographically isolated institution can indeed become the ethnic majority as a student within the California State University system.

Chicano/Hispanic/Latino students are the ethnic majority at California State University, Long Beach (40%), followed by Asians (23%), Caucasians (19%), and African-Americans at 5% (College Factual, n.d.). California State University Long Beach has an 87% diversity score for ethnicity, compared to the national average of 40%, which ranks the institution at 184th out of 2,718 universities for diversity. Thus, ethnic representation of students at Southern California universities may not be generalizable to colleges outside this region.

The college experience may be vastly different for students who are truly the minority at their respective institutions. For example, the campus climate can largely differ for students based on their specific ethnicity, religion, and sexual orientation depending on their geographic surroundings and peers. Hence, the results of this study may be pertinent to diverse Southern California institutions, while non-generalizable to colleges with less diversity.

Answering the Research Questions

The first research question sought to understand student perceptions regarding discrimination other students may face based on ethnicity. This inquiry was answered through participants indicating if they perceive that students of other ethnicities are discriminated against in college. The four ethnicities assessed were: African-American, Asian/Pacific-Islander, Caucasian, and Chicano/Hispanic/Latino.

Caucasian students were rated as the ethnicity that receives the least amount of discrimination in college, whereas African-American students were identified as the most

discriminated ethnic group at the post-secondary level. Even Caucasian participants indicated members of their own ethnicity were not discriminated against at their universities.

In addition, perceived discrimination on the college campus was delineated by the reasons students felt discriminated against. For example, in the open-ended item, non-Caucasian participants attributed the discrimination they faced was based on being an ethnic minority. These participants indicated being excluded from social relationships with their peers and providing opinions in the classroom that were not validated by their peers or faculty directly because of their ethnicity. They also felt they were not provided the same opportunities for career advancement, such as to fill an internship vacancy because of an accent associated with being a non-Native English speaker. Furthermore, these participants highlighted racially-charged protests on their campus were directed to intimidate students of their background, such as Mexican immigration opponents.

The three Caucasian students who felt discriminated against attributed this behavior to their gender and opinions. For example, one Caucasian female participant responded that she was socially excluded from her male counterparts in an Engineering major because she was one of the few females within the discipline. She did not feel her talents were "taken seriously" by her male counterparts and discussed discord between her field of study and social opportunities. Two Caucasian males perceived discrimination based on their ideas and morals differing from their classmates. One participant described "having a target on his back" for having different opinions than the university. These two students did not provide specifics on the topics where their ideas and morals differed. Thus, in the effort to deter speculation, the content of these opinions could not be fully derived or reported from their responses.

The second research question explored preferences for roommates based on religious affiliation. Christians and Catholics had a 50% and 35% agreement they would be comfortable living with a Muslim student. Additionally, 72% of Atheists expressed comfort of living with a Muslim student, compared to 100% of Buddhist participants who indicated they would be comfortable living with a student of any religious background or lack thereof.

Preferences for faculty were further explored using ethnicity as a favoritism variable. Interestingly, not a single participant in this study indicated having ever enacted on discriminator behavior against a faculty member or student on campus. This result may be held with some suspicion, as discriminatory for faculty were expressed using descriptive statistics. For example, although 90% of participants had no preference of the ethnicity of their professors, 5% preferred a Caucasian instructor compared to 2% each for African-American and Asian, and 1% for a Chicano/Hispanic/Latino educator. Thus, while participants may not believe they held or acted on any discriminatory feelings, responses to their level of comfort of living with someone based on religion and preferences for faculty by ethnicity may have indicated otherwise.

The third research question investigated the factors that predict college performance. Consistent with research discussed in the literature review, high school GPA was the most robust predictor of college performance. Perceived discrimination did not have a statistically significant difference between groups on current college grade point average. Instead, African-American participants held a higher grade point average than both Caucasian and Chicano/Hispanic/Latino students at a statistically significant level.

Additionally, socioeconomic and generation status did not provide statistically significant group differences for college grade point average. The caveat to this conclusion is that the inventory did not ask participants to indicate perceived discrimination based on these two

factors, socioeconomic and generation status. Thus, these results are presented without the indication of the relationship between perceived discrimination of a student based on his or her generation and socioeconomic status. Rather, these conclusions indicate the sample did not have statistically significant differences based on these two factors.

Additional conclusions derived as a result of this study included challenges students face and recommendations they have for their university. For example, a consensus with most participants revealed financial difficulty and diathesis with course relevance were primary challenges with the college experience. Participants reported a desire to have genuine access to faculty who care about their success even outside of the classroom. In addition, students suggested prominence of diverse staff members to fully encapsulate the unique student and faculty body of their post-secondary institution.

Limitations

Several limitations exist within this study. The first limitation of this study relates to the demographic variables of participants. As discussed in Chapter 5, course modality was differentiated in three categories: 36% of participants primarily took face-to-face courses, 33% had mostly online courses, and 31% had a hybrid course sequence, entailing taking courses both online and face-to-face. The notion of roughly one-third of the sample who took online courses is a limitation of this study, as their experience and interactions with the university is likely to be minimal compared to students who take the majority of their classes in a face-to-face format on campus. It is logical to assume these students spend less time on campus with fewer opportunities to explore the climate and culture of their peers and faculty. Thus, online students may not fully comprehend their campus climates to the same capacity as face-to-face and hybrid students because of limited interactions with the institution.

A second limitation encompasses the median age of participants in this study at 24 years old. Although this aligns with how the literature defines a traditional college student at 25 years old or less, the experience of an 18-year-old student who recently completed high school and has entered the university, may be vastly different than a 24-year-old transfer student who resides off university-affiliated property and does not spend much time on campus. Thus, it would be inappropriate to conclude the experiences of older participants in this sample are reflective of how younger students may perceive their universities.

Age of participants by ethnicity and by grade point average may have been the result of sampling bias. For example, a large percentage of participants were recruited directly by the researcher through means of convenience sampling. Thus, the researcher selected participants who were available to her through her professional and academic associations, including students the researcher interacted with at her university. Future research in this domain should explore the campus experience for students using a larger representation of universities in the United States with means other than convenience sampling.

A third limitation is the level of depth that was gained throughout this study. Due to the sizable number of participants that were required to conduct analyses with higher statistical power, the inventory mandated continuous modification. Thus, feedback from multiple pilot studies entailing the original length was too extensive for voluntary participation resulted in minimization of the inventory to ensure adequate participation. As a result, the level of depth into student experiences was compromised. Future research on this topic is encouraged to explore extensive qualitative items to gain a deeper understanding of the authentic experiences of undergraduate students.

Implications for Practice

This study helped bridge several gaps existing in the literature regarding the college experience for undergraduate students. Specifically, this study surveyed a diverse population of students throughout the United States with a considerable portion comprising diverse universities in Southern California. The ethnic diversity within this research was more representative than many of the studies presented in the literature review, as ethnic minority and first-generation status students allocated a large percentage of participants.

The number of participants who felt discriminated against comprised 5% of the overall sample. Although further research is required to determine if discrimination impacts college performance at a significant level, this statistic may be considered low compared to the overall college population. Perhaps these results are partially due to the ethnic, religious, and large socioeconomic variations found in Southern California post-secondary institutions that may not hold true for universities outside of this region.

The challenges faced in college and recommendations for supporting students that participants reported, indicate the continued struggles students face. These include the difficulty in financing a college degree, fulfilling external obligations, and maintaining interest in courses that feel irrelevant to career intentions. Participants have urged for their university faculty to be more sympathetic to the challenges students face.

Finally, the importance of this study is highlighted by the five overarching research questions, which focus on how multiple factors influence the college experience for undergraduate students. University administrators are tasked with staying informed on current political issues affecting their students and to ensure all campus members feel safe in their respective communities.

Recommendations for Further Research

The purpose of this study was to investigate the impact of campus climate on the undergraduate experience. Additional research is recommended to gain further insight into the college experience for students at four-year universities in the United States. A longitudinal study conducted for one university would provide a deeper and more comprehensive impression of the college experiences for its students. This longitudinal study can begin tracking a cohort of freshmen students throughout their first four years at the university. Topics that can be explored with this group include: their motivations for enrolling at the institution of interest, unique challenges faced with each year, and retention status, as measured by enrollment numbers at the end of the study.

Furthermore, a longitudinal study for one university can aid faculty in providing more immediate and tailored supports to their students. This would also allow for improved generalizability for a small sample to extend to the larger university, as the participants surveyed would be representative of the overall student body. This research would be especially pertinent during political events, to track how tumultuous circumstances can alter the perceived campus climate for students.

Conclusion

This study highlighted the importance of analyzing the experiences for undergraduate students in four-year universities within the United States. Post-secondary attainment rates continue to present significant discrepancies based on demographic factors such as generation status, socioeconomic tier, and ethnicity. Thus, examining the rooted antecedents for academic disparities is the responsibility of 21st century educators to bridge the gap between post-secondary degree attainment for students of minority or disadvantaged classifications.

The results of this study indicated while college performance, as measured by grade point average, may not have statistically significant differences between students whom perceive and do not perceive discrimination, navigating the challenges of a post-secondary education can be impacted by demographic factors. These factors include socioeconomic status and responsibilities outside the classroom for non-traditional students. Students plead for the administrators at their universities to be transparent with financial decisions, to remain informed on political issues that may impact their student body, and to exercise empathy for those who derive from less advantaged backgrounds.

An undergraduate education may be fraught with episodes of challenges and growth, yet many participants within this study demonstrated the proper grit and tenacity to greet challenges with confidence. As educators, we must remain cognizant that the responsibilities of retention are not mutually excluded to the student. Instead, the intersectionality of our efforts to support students can aid in their successful completion of an undergraduate degree. For many members of our underserved student body, a post-secondary education may be the singular option for social and financial mobility.

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Appendix A

The Perceived Campus Climate Inventory

1 I affirm that I am at least 18 years old and consent to participate in this study. I understand that my participation is voluntary and I can withdraw at any time without penalty.

○ Yes

○ No

2 What is your age?

_____

3 Please indicate the primary racial/ethnic group with which you identify

○ African-American

○ Asian/Pacific Islander

○ Caucasian

○ Chicano/Latino/Hispanic

○ Native-American

○ Other

4 What is your gender?

○ Male

○ Female

○ Other

5 What is your sexual orientation?

○ Heterosexual

○ Gay, Lesbian, Bisexual, Questioning

○ Other

6 What is your religion?

○ Christian

○ Catholic

○ Hindu

○ Buddhist

○ Jewish

○ Muslim

○ Non-religious

○ Other

7 Do either of your parents have a Bachelor's degree?

○ Yes

○ No

8 Which category best describes the socioeconomic status you were raised in?

○ High socioeconomic status

○ Upper middle socioeconomic status

○ Middle socioeconomic status

○ Low middle socioeconomic status

○ Low socioeconomic status

9 Are you a transfer student?

○ Yes

○ No

---

10 What was your unweighted high school GPA?

_____

---

11 What is your current college GPA?

_____

---

12 What is your major?

_____

---

13 What is the name of your university?

_____

---

14 How many years have you been a student at this university? Please include label of time (ex: 2.5 years or 6 months)

_____

---

15 Which category best describes your average enrollment status?

○ Full-time student

○ Part-time student

---

16 Which modality best describes how you take the majority of your classes?

○ Face-to-face

○ Online

○ Hybrid

---

17 If you are employed, how many hours do you work per week? (If you do not have a job and do not work, type "N/A")

_____

---

18 What is your current residential status?

○ On-campus housing

○ Off-campus housing (not affiliated with the university)

○ Reside with family at home

○ Other

---

19 Please estimate the percentage of how you pay for college (tuition, books, rent, and school-related expenses)

Myself (including financial aid rewards in your name) : _____
My parents : _____
Other : _____
Total : _____

---

20 I feel my student peers are accepting of who I am

○ 1: Completely Disagree

○ 2

○ 3

○ 4: Completely Agree

---

21 I feel my professors treat me with respect

○ 1: Completely Disagree

○ 2

○ 3

○ 4: Completely Agree

---

22 I feel women and men are treated equally on this campus

○ 1: Completely Disagree

○ 2

○ 3

○ 4: Completely Agree

---

23 I believe students of these ethnicities are discriminated against at this university

	1: Completely Disagree	2	3	4: Completely Agree
African-American	○	○	○	○
Asian/Pacific Islander	○	○	○	○
Caucasian	○	○	○	○
Chicano/Hispanic/Latino	○	○	○	○

---

24 I have been discriminated against at this university

○ Yes

○ No

---

25 What do you believe is the primary reason you were discriminated against or harassed on this campus?

_____

---

26 How was the discrimination or harassment mainly expressed? (Ex: Verbal comments, excluded from conversations, etc.)

_____

---

27 To which group did the person who was the primary source of the discrimination or harassment belong?

- ○ Students
- ○ Professors
- ○ Administration
- ○ Campus police
- ○ Other

---

28 I have discriminated against others on this campus

- ○ Yes
- ○ No

---

29 What is the primary reason you have discriminated against others on this campus?

_____

---

30 Most of my friends at this university are of my own ethnicity

- ○ 1: Completely Disagree
- ○ 2
- ○ 3
- ○ 4: Completely Agree

---

31 I prefer for my professors to be of this ethnicity

- ○ African-American
- ○ Asian/Pacific Islander
- ○ Caucasian
- ○ Chicano/Hispanic/Latino
- ○ I do not have a preference

---

32 Select all that apply: I would be comfortable being roommates with a student of the following religious backgrounds

- ☐ Christian
- ☐ Catholic
- ☐ Hindu
- ☐ Buddhist
- ☐ Jewish
- ☐ Muslim
- ☐ Non-religious/Atheist

---

33 Select all that apply: I would be comfortable being roommates with a student of the following ethnic backgrunds

☐ African-American

☐ Asian/Pacific Islander

☐ Caucasian

☐ Chicano/Latino/Hispanic

☐ Native-American

---

34 My social circle is more diverse now than it was before I began my education at this +`university

○ 1: Completely Disagree

○ 2

○ 3

○ 4: Completely Agree

---

35 I feel my opinion is valued by my student peers

○ 1: Completely Disagree

○ 2

○ 3

○ 4: Completely Agree

---

36 I feel my opinion is valued by my professors

○ 1: Completely Disagree

○ 2

○ 3

○ 4: Completely Agree

37 Please describe any challenges you have faced while earning your college degree at this university

_____

38 Please offer any suggestions you may have for your university to improve the campus environment for students of diverse backgrounds

_____

Appendix B

Informed Consent

Informed Consent

The Impact of Campus Climate on the College Experience

INTRODUCTION:
    You are invited to participate in a study investigating the campus climate of universities in the United States. This research is conducted by a Doctoral Candidate, Lauren M. Gih, M.S., under the supervision of Blanca Quiroz, Ph.D., Associate Professor in the Doctor of Education Program at Concordia University Irvine.

In order to participate in this study, you must be BOTH: 1. 18 years old or older 2. A current student at a four year university in the United States

PURPOSE:
    The purpose of this study is to explore the role of the campus climate on factors including student retention and academic performance. You will be asked to complete a 5-10 minute online survey at: <http://tinyurl.com/laurengih> assessing topics such as discrimination and your interactions with multiple cultures at your university.

PARTICIPATION:
    Participation in this study is completely voluntary and a refusal to participate or discontinue participation will involve no penalty or loss of benefits to which the subject is otherwise entitled.

ANONYMITY:
    Your responses to the survey are anonymous and there will be no identifiable information connected to you and this study. All responses will be stored on Qualtrics.com under a password-protected computer, by which only the researcher has access to.

RISKS:
    The anticipated risks of this study are minimal. However, risks may include, but are not limited to: Emotional discomfort and anxiety from disclosing personal experiences regarding discrimination.

CONTACT:
      If you have any questions or concerns about the study, please contact the doctoral researcher or her dissertation chair, Dr. Blanca Quiroz. They will be able to answer your rights as a research subject, as well as respond to any events in a research-related injury.

      Lauren M. Gih, M.S.
      Doctor of Education Candidate
      lauren.gih@eagles.cui.edu

      Blanca Quiroz, Ph.D.
      Associate Professor of Education
      (949) 214-3540
      blanca.quiroz@cui.edu

RESULTS:
      The results from this study will be used to complete a doctoral dissertation. The dissertation can be obtained through the academic database, ProQuest, entitled: "The Impact of Campus Climate on the College Experience," by Fall 2018.

Appendix C

Permission to Use The Campus Diversity Survey

CONCORDIA
UNIVERSITY IRVINE

Gih, Lauren <lauren.gih@eagles.cui.edu>

Permission to Use The Campus Diversity Survey

Ron Uroda <uroda@aicup.org>
To: "Gih, Lauren" <lauren.gih@eagles.cui.edu>

Mon, Jun 12, 2017 at 7:58 AM

Lauren,

On behalf of the Associa4on of Independent Colleges and Universi4es of Pennsylvania (AICUP), I grant permission for you to u4lize the Campus Diversity Survey developed by member ins4tu4ons of AICUP. This permission includes using any or all of the ques4ons on the survey and includes modifying the ques4ons on the survey in any way deemed necessary to meet the needs of your doctoral research.

I do ask that you acknowledge AICUP in the methodology sec4on of your disserta4on and any other paper or report that results from your use of ques4ons from the Campus Diversity Survey.

Good luck with your research and I am glad that we can be of assistance.

Ron Uroda

AICUP Research Center

From: Gih, Lauren [mailto:lauren.gih@eagles.cui.edu]
Sent: Friday, June 09, 2017 7:46 PM
To: Ron Uroda
Subject: Permission to Use The Campus Diversity Survey

[Quoted text hidden]

Appendix D

Institutional Review Board Decision

CONCORDIA
UNIVERSITY IRVINE

INSTITUTIONAL REVIEW BOARD DECISION

☑ Exempt Review 45 CFR 46.101   ☐ Expedited Review 45 CFR 46.110   ☐ Full Board Review 45 CFR 46

Review Date	June 14, 2017
IRB#	3575
Title of Project	An Examination of Student and Institutional Characteristics and their Impact on College Performance
Researcher/s	Lauren Gih

☑ **APPROVED**

Effective duration of IRB Approval: 06/14/2017 _____ to 06/14/2018 _____

Congratulations! Your research proposal has been approved by Concordia University-Irvine's IRB. Work on the research indicated within the initial e-mail may begin. This approval is for a period of one year from the date of this e-mail correspondence and will require continuation approval if the research project extends beyond a year.

If you make significant changes to the protocol during the approval period, you must submit a revised proposal to CUI's Institutional Review Board (IRB). Please write your IRB # and "EdD IRB Application Addendum in the subject line of any future correspondence.

For Exempt Approved, please note: while your project is exempt from providing Informed Consent information to the IRB, your project must still obtain participants' informed consent.

Please also note: Per IRB regulations, all data must be kept for 3 years, then destroyed thereafter.

If you have any questions regarding the IRB's decision, please contact me by replying to this e-mail or by phone at 949-214-3598.

Kind Regards,
Catherine Webb Ed.D.
EdD IRB Reviewer

For Exempt Approved, Please Note: *while your project is exempt from providing Informed Consent information to the IRB, your project must still obtain participants' informed consent.*
For Expedited and Full Board Approved, Please Note:
a.The IRB's approval is only for the project protocol named above. Any changes are subject to review and approval by the IRB.
b.Any adverse events must be reported to the IRB.
c.An annual report or report upon completion is required for each project. If the project is to continue beyond the twelve month period, a request for continuation of approval should be made in writing. Any deviations from the approved protocol should be noted.

☐ **NEEDS REVISION AND RESUBMISSION**

☐ **NOT APPROVED**

Printed Name IRB Reviewer   Catherine Webb Ed.D

Signature of IRB Reviewer   Catherine Webb, Ed.D