COLLEGE PERSISTENCE, RESILIENCY, AND FACTORS CONTRIBUTING TO

THE LATINA COLLEGIAN EXPERIENCE

BY JENNIFER M. BUCALO

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ABSTRACT OF THE DISSERTATION

by Jennifer M. Bucalo

Dissertation Director: Mara Sidney

Disparities persist among college attendance and conferred degrees for Latinas in the United States. College enrollment is on the rise for Latinas; however, completion rates remain disproportionately lower. If educational outcomes are to improve for the Latinx community, the number of support systems for this population must increase at the university levels from a strength-based approach.

The purpose of this study was to examine factors associated with college persistence and resilience at four-year institutions among Latinas. This is a cross-sectional study of factors associated with college persistence and the resilience of Latina undergraduate students at four-year institutions. The study sampled and compared levels of resilience among Latinas enrolled in their third and fourth year of college versus those who dropped out in their first or second year. This study analyzed the online survey responses of 308 Latina females that enrolled in college during the fall of 2014.

Results from the bivariate and multivariate analysis indicated that college persistence was higher among younger students (18-21 years-old), bilingual students, single students, those who had awards/scholarships, and those who belonged to student and/or community organizations. The study findings for resilience indicated that belonging to student organizations and father's education were significant individual

predictors for Latinas. The significant sociocultural variables included sense of belonging, acculturation—mainstream culture subscale, and acculturation-heritage culture subscale. Having high levels of resilience was statistically associated with the university environment. It is recommended that higher learning institutions develop culturally appropriate supportive interventions to increase Latina graduation rates. Further research is needed to examine how hiring more Latinx professors to mirror the student population can improve the campus environment.

Dedication

To my wonderful parents,

Words cannot express how deeply I appreciate your love, selflessness, humbleness,

support, and generosity.

Los amo con toda mi vida.

Querer es poder.

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This dissertation was possible because of many people. My committee was composed of all women *AND* yes, that was intentional. I am forever grateful to my mentor and amazing co-chair, Dr. Rula Btoush. I respect you and admire the research you are conducting, especially regarding cancer prevention among Latinas. Thank you, Dr. Btoush, for hiring me as your research assistant and teaching me first-hand about qualitative and quantitative research. Thank you, Dr. Btoush, for caring enough to take the time to explain every question I had with grace and patience. Thank you, Dr. Btoush, for leading by example and for all the hugs when I needed them most. Thank you, Dr. Btoush, for your honesty, advice, and friendship.

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Chapter One: Introduction

Statement of the Problem

Latina college enrollment is on the rise, yet despite their growing presence, the

number of conferred bachelor's degrees remains low (Krogstad, 2016). In 2012,

undergraduate fall enrollment for Latina females in degree-granting institutions was

reported at a total of 16.6 percent compared to 57.9 percent for white females, as shown

in Table 1. According to the most recent data from The National Center for Education

Statistics (NCES, 2010), in 2008, fifty eight percent of the total Latino enrollment were

Latinas, compared to fifty five percent for white females, indicating that proportionally

more Latinas were enrolling than white females into postsecondary institutions (see

Appendix A).

Table 1

*Total Number, Total Percentage Distribution, and Percent Female of Undergraduate
Fall Enrollment in Degree-Granting Institutions, by Race/Ethnicity: Selected years,
2000–2012*

Race/ethnicity (Females)	2000	2007	2008	2009	2010	2011	2012
Percentage distribution							
White	68.7	64.2	63.0	61.9	60.1	58.6	57.9
Black	13.4	15.4	15.9	16.8	16.9	17.0	16.6
Hispanic	10.6	12.8	13.4	14.0	14.6	15.4	16.2
Asian/Pacific Islander	6.1	6.4	6.6	6.2	5.7	5.7	5.7
American Indian/ Alaska Native	1.1	1.2	1.2	1.2	1.1	1.0	1.0

Four years later in 2012, the percentage distribution of degrees conferred to

Latina females was paradoxically reported at 10.3 percent compared to 68.2 percent for

white females, as shown in Table 2. Failure to educate a fast-growing population will put

Latinas at a personal, intellectual, and economic disadvantage. The inequalities in

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education will result in an excessive number of Latinas working in low skilled jobs. As the world becomes more technology based, Latinas in the United States will have limited representation in the highly-skilled professions of the global economy.

Table 2

Bachelor's Degrees Conferred by Postsecondary Institutions, by Race/Ethnicity and Sex of Student: Selected Years, 2010-2015

Year and Sex	Percent distribution of degrees conferred to U.S. citizens		
Female	White	Black	Hispanic
2010-2011	69.4	11.9	9.8
2011-2012	68.2	12.3	10.3
2012-2013	67.3	12.1	11.0
2013-2014	66.1	11.9	11.8
2014-2015	65.0	11.8	12.5

Often research about Latinas in higher education includes deficit titles (Von Robertson, Bravo, & Chaney, 2016). In this dissertation, I examine college persistence and levels of resiliency among Latina college students at four-year colleges from an anti-deficit perspective by using resiliency, community cultural wealth, and critical race theories. By identifying factors that influence college persistence and resiliency among Latina collegians, this ground breaking research seeks to bring attention to the lack of research regarding successful Latina undergraduates using quantitative methods. Currently, there is a disproportionate number of research studies that focus on men of color and not Latinas in college.

National Statistics on Academic Achievement

The National Center for Education Statistics (2016) reports that the percentage of bachelor's degrees conferred by postsecondary institutions to Latinas in 2013 was only eleven percent compared to sixty seven percent for white females, and the gap for males

was greater with Latinos reporting almost ten percent compared to seventy one percent for white males (p. 601). While males have a different narrative than females for lower college completion rates, both stories begin in the same manner; these students are too often mislabeled as having a learning disability due to language differences, and then tracked as English Language Learners (ELL; Case & Taylor, 2005). According to census data, eighty percent of ELL students are Latino, and only nineteen percent of all ELLs were at or above grade level (National Education Association, 2019). An overrepresentation of ELL students often leads to a decrease in the number of those same students taking advanced placement courses in high school, decreasing the pathways to college. Research indicates that Latinx students are often not culturally being engaged with the curriculum, leading to behavioral problems in the classroom (Rubin, 2014). This disengagement with school has been associated with the school-to-prison pipeline. Minority adolescents are disproportionality impacted by incarceration (Osher et al., 2012). The discourse of academic achievement of Latinxs in college must include understanding the trajectory of many of these students before they reach the twelfth grade.

The NCES (2007) data indicates that from 1980-2005, Latinx students had the highest school enrollment between the ages of 16 and 17 years-old (high school age). For Latinx students between the ages of 18 and 19 years old (traditional first- time college age), almost half are not enrolled in school. While it is true that there is a gender gap among Latinos, Latinas enroll at a higher percent than Latino males in almost every age group. Trends suggest that Latina enrollment is on the rise, and that high school dropout rates are decreasing, yet, many of these same reports are misleading because they don't

explain the lack of 20 and 21-year-olds still enrolled in four-year schools. Therefore, the argument can be made from this data that post-secondary institutions need to be examined in terms of retention programs, as only twenty five percent of Latinos and thirty five percent of Latinas 20 and 21 years-old remain enrolled in school, respectively, as shown in Table 3.

Table 3

Percentage of the Latinx Population Enrolled in any Form of School by Age Group

Age	% Latinos			% Latinas		
	1980	1990	2005	1980	1990	2005
16 -17	81.5	85.5	92.5	82.2	85.5	92.6
18 -19	36.9	40.7	51.8	38.8	47.2	57.2
20 -21	21.4	21.7	25.2	17.6	33.1	35.3
22 -24	10.7	11.2	17.5	12.6	8.4	21.8
25 -29	6.8	4.6	5.6	6.9	8.1	10.4
30 -34	6.2	4.0	2.6	4.1	3.1	6.1

In 2008, NCES data revealed that Latinos enrolled disproportionally at different types of degree-granting institutions. The percent distribution of Latinos indicated that they are the largest group to enroll in public institutions and public two-year institutions. This same report indicates that Latinos are least likely to enroll in public research institutions. Latinos have the lowest enrollment in private, not for profit; research institutions; four-year; and two-year schools, as shown in Table 4. In other words, less research will be conducted by Latinos, considering this population is least likely to attend public research or private institutions.

Table 4

Institutional Type and Percent Distribution of U.S. Citizen Enrollment in Degree-Granting Institutions for White, Black, and Hispanic Students, 2008

Institution Type	Total	White	Black	Hispanic
	Percent Distribution			
All Types	100.0	100.0	100.0	100.0
Public Institutions	73.4	72.9	68.1	80.6
Research	19.6	21.6	13.8	13.0
Other 4-year	18.4	18.7	18.3	18.3
2-year	35.4	32.6	36.1	49.4
Private, not for profit	18.7	20.8	16.7	10.9
Research	5.5	5.7	4.0	3.8
Other 4-year	13.1	14.9	12.4	7.0
2-year	0.2	0.2	0.3	0.1
Private, for profit	7.8	6.3	15.2	8.4
4-year	6.2	5.1	12.1	6.0
2-year	1.6	1.2	3.1	2.4

Latinx Population in the United States

The Latino population in the United States was estimated at 58.9 million as of July 2017. According to the U.S. Census Bureau, in that same year, Latinos made up the largest ethnic or racial minority in the nation with 18.1 percent of the total population. In this same year, the poverty rate was 12.3% in the United States across all races; however, for Latinos it was 18.3%. There are twenty-six states where Latinos are the largest minority group, as shown in Figure 1. In New Jersey, the total Latino population is higher than the national average at 19 percent and that is expected to rise according to the Division of Labor Market and Demographic Research (Wu, 2010).

Latinxs of Mexican origin make up almost two thirds of the total Latinx population in the U.S. The second largest group consists of Puerto Ricans, followed by Cubans, Salvadorans, and Dominicans. Census data indicate that sixty four percent of Latinxs are of Mexican heritage, about thirty five percent were born outside the US, and

about seventy percent speak English. When it comes to the educational attainment, about sixty two percent of Latinos are high school graduates or less, twenty four percent hold a two-year degree or some college, and fourteen percent were awarded a bachelor's degree or more (Pew, 2016). More than half of Latinxs (sixty seven percent) work in the labor force.
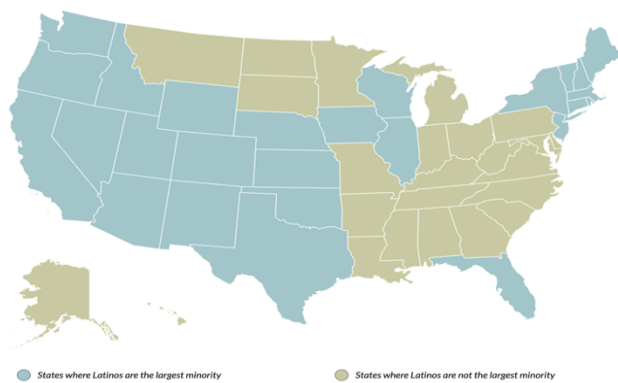
Figure 1. States where Latinxs are the largest minority.

Introduction to Latinx Collegians in New Jersey

While Mexicans make up the largest group of Latinxs in the U.S., eighty six percent of Latinxs identify as non-Mexican in New Jersey. The largest Latinx groups in New Jersey identify as Puerto Ricans followed by Dominicans. Latinos make up nineteen percent of the population in the New Jersey, which is slightly higher than the national average. Eighty percent of Latinxs living in New Jersey speak Spanish at home and of those, forty two percent are foreign-born (Pew, 2014). Recent research (Gandara, 2015) indicates that Latinas that maintain Spanish and English at high levels are more likely to attend four-year colleges compared to those that lose the Spanish speaking skill. While the national data has seen minimal increases in Latina educational attainment, New Jersey has an overall higher national college graduation rate (36%) compared to the

United States (28%). For Latinos, the national graduation rate is 22% compared to 33% in New Jersey. This is important because it indicates that New Jersey has good educational outcomes compared to nationwide averages for Latinos. In fact, U.S. News reports that New Jersey ranks number two in how well states are educating their students, following only Massachusetts (Ziegler, 2019). This dissertation focused on New Jersey because it is the state that ranked the highest for public education with the greatest number of Latinos. This research is in response to the development and growth that is needed to focus on Latinas from a strength-based approach.

According to the Chronicle of Higher Education (2018), which uses the National Center for Education Statistics database, New Jersey public colleges have relatively high rates of graduation compared to the national average. According to the most recent data collected, the top five schools in New Jersey enrolling Latino students in 2015-2016 were all community colleges, with the exception of Rutgers University (Excelencia in Education, 2019). The top institutions included Hudson County Community College (55%), Passaic County Community College (52%), Union County College, (33%), Bergen Community College (25%) and Rutgers-New Brunswick (12%), as shown in Table 5.

Table 5

Top Five Schools in New Jersey Enrolling Hispanic Students in 2015-2016

Rank	Institution	Sector	Grand Total	Hispanic Total	% Hispanic
1	Hudson County Community College	Public, 2-year	9,203	5,073	55%
2	Passaic County Community College	Public, 2-year	8,968	4,638	52%
3	Rutgers University-New Brunswick	Public, 4-year	34,544	4,291	12%
4	Union County College	Public, 2-year	11,781	3,936	33%
5	Bergen Community College	Public, 2-year	15,651	3,904	25%

The top five New Jersey institutions awarding bachelor's degrees were all public institutions: Rutgers University with a Latino total of 867, followed by Montclair State University at 781, Kean University at 595, William Paterson University of New Jersey at 477, and New Jersey City University with 460, as shown in Table 6 (Excelencia in Education, 2019).

Table 6

Top Five Schools in New Jersey Awarding Bachelor's Degrees to Hispanic Students, 2015-2016

Rank	Institution	Sector	Grand Total	Hispanic Total	% Hispanic
1	Rutgers University-New Brunswick	Public, 4-year	7,569	867	11%
2	Montclair State University	Public, 4-year	3,392	781	23%
3	Kean University	Public, 4-year	2,712	595	22%
4	William Paterson University of New Jersey	Public, 4-year	2,134	477	22%
5	New Jersey City University	Public, 4-year	1,482	460	31%

It is well documented that test scores from SAT and ACT set limitations for minority students and are less-effective predictors for college success (Camara, 2005). As of 2015, Montclair State University became the first test-optional school in New Jersey, no longer requiring SAT/ACT for admission. This has resulted in an increase in Latina admission according to Jeff Indiveri-Gant, the university's director of admissions. As of the fall of 2019, William Paterson University of New Jersey also became a test-optional school. There were more than 1000 four-year colleges and universities that did not use SAT or ACT scores for admission in 2019, according to the National Center for Fair and Open Testing (FairTest, 2019).

Latino Educational Disparities

The educational disparities for Latinxs became a national priority in 1990 with the introduction of the White House Initiative on Educational Excellence for Hispanics under the Bush Administration. Executive Order 12729 was signed to improve K-12 and college access. Every president to date (including Donald Trump) has since signed this initiative. By the 25th anniversary of this initiative in 2015, data showed improvements in terms of the numbers of students enrolling in early childhood programs, the number of Latino teachers in K-12 schools, high school graduation rates, and conferred Bachelor's degrees or higher, as shown in Table 7.

Table 7

White House Initiative on Educational Excellence for Hispanics, 1990 and 2015

Initiative	1990	2015
Early Childhood Enrollment	29.8	45.4
K-12 Teachers of Hispanic Heritage	3.4	7.8
Students with H.S. Diplomas	58.2	75.8
Bachelor's degree or Higher	8.1	15.7

Table 7 indicates that the largest gain was with students earning a high school diploma, followed by early childhood enrollment. Modest improvements were made with the number of Latino teachers in K-12, and for those who earned bachelor's degree or higher. While results indicate a slight improvement, the Department of Education under the Obama Administration made a national call for a Commitment to Action. This call was made to public, private, and non-profit organizations to invest in Latino educational programs with a collective investment of $335 million, referred to as the cradle-to-career commitment. The focus areas included Early Learning, K-12 Education and College Access, Post-Secondary Completion, STEM Education (Prek-20), and Latino Teacher Recruitment. As of 2019, according to the U.S. Department of Education, the Commitments to Action for Hispanics in Education included thirty-nine organizations focusing on Early Education, eighty nine lead organizations committed to K-12 Education and College Access, eight programs aimed at STEM Education (Pre-K to age 20), and fourteen organizations supporting Latino Teacher Recruitment. What is missing from these efforts is a commitment from organizations to post-secondary completion. Currently, there are no organizations or funders listed as supporters for this area. This

dissertation addresses this important initiative by including research on college persistence and resiliency factors contributing to the Latina collegian experience.

While Hispanics are the largest ethnic minority in the United States, they have lower graduation rates compared to whites in all states. Latino adults also have a low graduation rate compared to all adults in New Jersey. Yet, trends suggest that Latina college enrollment is at an all-time high across the country, but still they continue to lag in earning college degrees, remaining underrepresented relative to the share of their population (Fry, 2011). Female students—be they Latina, Black, White, or Asian— outpace males in college enrollment (Lopez & Fry, 2013). The critical issue is that the Latinx population is increasing in New Jersey. Although New Jersey currently has the 7th largest Latino population in the U.S., only 14.7 percent of Latino males and 18.9 percent of Latina females earned a bachelor's degree or higher in the Garden State (U.S. Census Bureau, 2017).

Changing Deficit Research with Resiliency

Research indicates that higher education institutions lack knowledge and understanding of the challenges and issues Latina females face as collegians both individually and collectively (Lozano-Rodriguez, Guido-DiBrito, Torres, & Talbot, 2000). A disproportionate number of studies focus on a deficit discourse to examine Latinxs' educational outcomes, while, historically, this type of deficit thinking has impacted the education of people of color with racist and segregated polices that undervalue their culture (Harper, 2013; Valencia, 1993). Despite demands to better understand Latina educational outcomes in higher education, this dissertation examines the gap in the literature with regards to college persistence and resiliency among Latina

collegians. There are few studies that examine how these factors contribute to the performance of Latina college students in postsecondary institutions. Perhaps that is because resiliency has been defined in many different ways to express *bouncing back*.

According to the National Institute of Health, after World War II, resiliency was studied in psychology "as coping factors needed to survive an array of risk factors." Resiliency was used to explain family dysfunction, disease, illness, and poverty from a deficit perspective. Prior to 1998, researchers have been known to explain resilience by focusing on deficit models and mental health. It was Martin Siegel, president of the American Psychological Association, who encouraged a shift in thinking and research that focused on positive psychology. Patterson and Kelleher (2005) defined resiliency "as using your energy productively to emerge from adversity stronger." This definition provided a positive perspective on what was originally defined negatively in the field of psychology. Resiliency, according to Patterson and Kelleher (2005), is rooted in personal values, efficacy, and energy. The dimensions of personal efficacy include *confidence* and *competence*. Confidence refers to believing "I am capable" and competence means using necessary tools and reaching out for support. In other words, with this definition, asking for help is a sign of strength instead of weakness.

Generally, the importance of this explanation encompasses dimensions, interpretations, and action (see Appendix B). Dimensions of resiliency are based on a cause and effect concept. When adversity strikes, this leads to an interpretation of adversity (past and present) which includes resilience capacity (personal values, efficacy, and energy). The action taken to achieve resiliency includes enacting personal values, employing personal efficacy, and investing personal energy. Simply put, adversity is met

with different levels of resiliency based on one's past and present experiences by using personal efficacy. Using this type of definition permitted this study to survey Latinas from an anti-deficit perspective.

Few studies examine Latina collegians from a strength-based approach to understand resiliency factors that are associated with college completion (Zimmerman, 2013). This dissertation addresses this critical problem by examining resiliency in association with the individual, psychosocial, and environmental factors contributing to the Latina collegian experience. Understanding these predictors are of paramount importance to change the stereotypes, discourse, and policies being implemented in educational institutions.

Many colleges in the United States are becoming more diverse; specifically schools emerging as Hispanic Serving Institutes (HSI) as discussed in Chapter Two. In 2016-2017, The Hispanic Association of Colleges and Universities (HACU) listed a total of 492 HSI in 21 states. HACU data disseminates information about fall enrollment across the country, but research should focus more on explaining how they serve and retain their Latino students (Dayton, Gonzalez-Vasquez, Martinez, & Plum, 2004). In other words, many scholars are reporting on the improvements among Latina enrollment rates but fail to indicate why they are not graduating at the same rate. It is well known that having a college degree allows all students the opportunities to improve personal, social, and economic lifestyles. On average, a bachelor's degree holder earns eighty four percent more than someone with a high school diploma (Carnevale, Strohl, & Melton, 2011). According to the U.S. Department of Education (2015), by 2020 two thirds of job opportunities will require a post-secondary education. Understanding the factors that

improve and support Latinas in college will prepare them for careers, civic participation, and access to better living conditions.

Study Purpose and Research Questions

The purpose of this research study is to examine resilience factors contributing to Latina success in college. The specific aims of the study are to:

- Assess college persistence and levels of resilience among Latina college students at four-year colleges.

- Identify factors that influence college persistence and resilience among Latina collegians.

The factors examined in this study included individual, social, and environmental factors. Individual factors include demographics. The sociocultural factors examined psychosocial and cultural sociocultural factors. Psychosocial variables included: sense of belonging, family, peer, and psychosocial stress. Survey responses used continuous data to measure these responses. The sociocultural cultural predictors—acculturation and cultural congruity—used continuous data. Environmental factors explored the campus climate, including perceived ethnic discrimination.

The study addressed the following research questions:

- Is there an association between resilience and college persistence among Latinas in college?

- Are there associations between resilience and *individual factors* (e.g., demographics, involvement in organizations, and parental education) among Latinas in college?

- Are there associations between resilience and *sociocultural* factors (i.e., sense of belonging, familial and peer support, psychosocial stress, acculturation, and cultural congruity) among Latinas in college?

- Are there associations between resilience and *environmental factors* (e.g. university environment and perceived discrimination) among Latinas in college?

- Are the predictors of resilience different by college persistence (i.e., for Latina students who continue to be enrolled in their third or fourth year of college versus those who drop out of college in their first or second year)?

This study strives to bring together theories of resilience, community cultural wealth, and critical race theory as a means of studying Latinas from a strength-based approach. Cultural capital is also examined in this research, to examine how scholars have used it from a deficit perspective in the past.

Having positive self-esteem, self-efficacy, and social resources are among some of the variables that make up resilience. In addition, resilience is also "the ability to regenerate power in response to internal or external environments for development" (Ledesma, 2014). Based on resilience research, it is my hypothesis that Latinas with high levels of resilience will remain in school regardless of negative internal or external experiences (Wagnild, 2009). As Latinas complete their third or fourth year of college, resilience levels may increase as the goal of graduating becomes closer. Consequently, I expect the inverse to be true for Latinas with low levels of resilience: negative external and internal experiences will decrease resilience and increase the rate of dropping out of college (Yosso, 2005).

Critical race theory (CRT) developed as a result of frustration with white privilege and power struggles that oppressed people. Allen (2017) states that "in order to make changes in the educational system, educators are encouraged to examine teaching and learning through a CRT lens." This dissertation focused on the experiences of Latinas in college and gives a voice to marginalized groups in order to understand and improve educational outcomes.

Community cultural wealth (CCW) is a framework designed to capture the strengths and experiences that students of color bring to college, encompassing cultural capital in aspirational, linguistic, familial, social, navigational, and resistance forms. Using this theory to understand Latinas shifts the deficit narrative to one that encourages learning from different cultures and their beliefs, instead of imposing the mainstream culture (Yosso, 2005). Cultural capital originally critiqued the notion that schools were not institutions of social neutrality (Lamont & Lareau, 1988). However, Bourdieu's theory has since been used by academic institutions to blame students and people of color for entering schools with less cultural capital. This dissertation realizes that the concept of cultural capital did not intend to separate people by race, and instead uses community cultural wealth to embrace different heritages.

Central to the use of these theories is my hypothesis based on exclusivity and inclusivity. Exclusive factors for this dissertation include cultural capital and student assimilation which manifested as part of the deficit discourse. Inclusive refers to resilience models, critical race theory, and community cultural wealth as forms of strength-based approaches to research.

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The next chapter provides a critical examination of the literature on educational trends among Latinas and women in higher education. This research relied on ways of re-shifting the academic perspective of the Latina collegian to an etic point of view, which often compares different cultures instead of using an emic approach for studying one culture in detail and learning the value of those experiences. This research extended traditional insights and paid specific attention to the gaps in the literature by looking at two groups of Latina collegian cohorts simultaneously; the first group of students consisted of those who enrolled in the fall of 2014 but are no longer in school, and the second group of students were those who enrolled at the same time but are continuing with their education.

Chapter Two: Literature Review

This chapter provides context about Latinas in the United States and in higher education in five sections. The first begins with examining the Latina background, followed by types of institutions they attend. The third section presents a critical review of the resilience literature among Latina college students. Resilience is discussed relating to four domains: first generation Latinas and resilience, personal resilience, academic resiliency, and success factors. Next, Latina educational achievements are described in terms of Latina enrollment, experiences, and graduation rates in college from an antideficit perspective. Finally, the individual, social, and environmental factors associated with college persistence and resilience are discussed. The individual factors include the demographics and characteristics of the study sample. The sociocultural factors examined will include: sense of belonging, family support, peer support, psychosocial stress, cultural factors, acculturation, and cultural congruity. The environmental factors for college persistence and resilience look at campus climate and perceived discrimination.

I argue that if we are to truly address the college attainment gap for Latinas in the United States, we must change the narrative that exists in the literature and explain how deficit models actually perpetuate a concept of Latinas as problems that add to the microaggressions that already exist on college campuses with real consequences on student attrition rates. For that reason, it was critical for this dissertation to compare levels of resilience among Latinas enrolled in their third and fourth year of college with those who stopped attending in their first or second years by using a strength-based approach. The strength-based approach was carefully considered when identifying tools

used to measure the study outcomes of college persistence and resilience. The notions of community cultural wealth and critical race theory informed this research design.

Vulnerable groups are identified as statistically less likely to succeed in college (Morales, 2014). However, colleges need to disseminate information about how many students of color they enroll and explain more clearly how well they serve and retain their Latina students. We know that Latinas are underrepresented as administrators and faculty members despite being the largest minority group. Research also suggests that diverse communities (including faculty and mentors) are more conducive for Latina learning. With lack of role models and policy makers addressing the concerns of Latina education, the onus is on the graduating Latinas to raise their voice and change the antiquated institutional policies. Latina students want to ameliorate these inequalities, but the argument remains: "How can I become what I cannot see?" Advocacy often surrounds notions of inclusion, but as Latinas reach higher levels of educational attainment, they feel the need to desegregate from the unwelcoming campus climate and create one that is more conducive to happiness while navigating multiple cultures.

Latina Background: Hispanic or Latina?

Throughout the history of the United States Census, the terms Hispanic, Latino and Spanish have been used interchangeably to describe this group. Initially, the United States Census in 1930 used the category or label of "Mexican" to identify this group (Pew, 2010). The term *Hispanic* was added to the U.S. census by 1980, to identify a broad range of people with a Latin American heritage. By 2000, the word *Latino* was added to the U.S. census. It should be understood that the Latinos are a heterogeneous group that oppose easy generalizations (Hernandez & Lopez, 2004). While the U.S.

mandated these terms, there is an ongoing debate for people within the Hispanic/Latinx community over the use of these pan-ethnic terms. There are those that prefer to identify with their family's country of origin to describe their identity instead of using the terms Hispanic or Latinx (Talyor et al., 2012). However, the overly-used term Hispanic remains unpopular among activists who see its meaning as associated with a political party. The word Hispanic has been favored by the political right and has been barred from use in the Los Angeles Times due to strong opposition for more than 35 years. The term is considered an attempt by the government to impose assimilation, while the term Latino is viewed as developing commonalities across social classes, sides more with the political left, and embraces cultural heritage (Alcoff, 2005). This paper will not use the term Latino and Hispanic interchangeably as indicated by the United States Census; but will instead defer to the terms Latina, Latino, Latinx, and Latinxs. Understanding the terms is important to distinguish in this research because as Alcoff (2005) stated, "students, intellectuals, and political activists are concerned with how we are named and with avoiding pejorative names."

Types of Institutions Latinas Attend

Almost half of all Latinxs attend public community colleges, and whites are most likely to attend four-year schools, as shown in Table 4. Research indicates Latinas are least likely to attend college full time and twice as likely to live with their parents when enrolled at a four-year institution compared to white, black, or Asian students (Fry, 2004). They are also the least likely group to live on campus at a four-year institution. As for two-year institutions, black students are three times more likely to live on campus compared to Latinxs, as shown in Table 8.

Table 8

Percent of Undergraduate Living Arrangements for Students 18-24 Years Old

Local Residence while Enrolled				
Race/ethnicity	On Campus	Off Campus	Living with parents	Total
4-year Institution Enrollment				
Latinx	16.9	34.3	48.8	100.0
White	38.3	42.5	19.2	100.0
Black	49.0	27.8	23.2	100.0
Asian	33.4	42.4	24.2	100.0
2-year Institution Enrollment				
Latinx	2.0	35.2	62.9	100.0
White	3.8	40.1	56.1	100.0
Black	6.9	36.8	56.3	100.0
Asian	2.8	38.5	58.7	100.0

Reasons for choosing to attend community colleges include the strong family and community attachment regardless of family income or national origin (Perez & McDonough, 2008). For many Latinas in the United States, there is an expectation to live in two worlds: torn by identities (bicultural) and gender (Miller, 2013). Perez & McDonough (2008) conclude with descriptive analysis that Mexican American students cite living close or at home as "very important" when considering college choice (p. 259). This expectation or feeling often results in collegians not living on campus, not applying to competitive schools, and attending local postsecondary institutions. In addition, the appeal of community colleges for Latinxs is the cost of lower tuition, flexible classes that allow for part-time work, and evening classes that accommodate students with full-time jobs (Fry, 2004).

Community colleges often accept students with lower academic achievement or aptitude and offer classes for ELL students. Receiving an associate degree from a community college is often a less expensive way to earn a bachelor's diploma, as many

four-year schools accept transfer students and their credits. Figure 2 demonstrates

postsecondary enrollment by race, ethnicity, and school type in 2014.
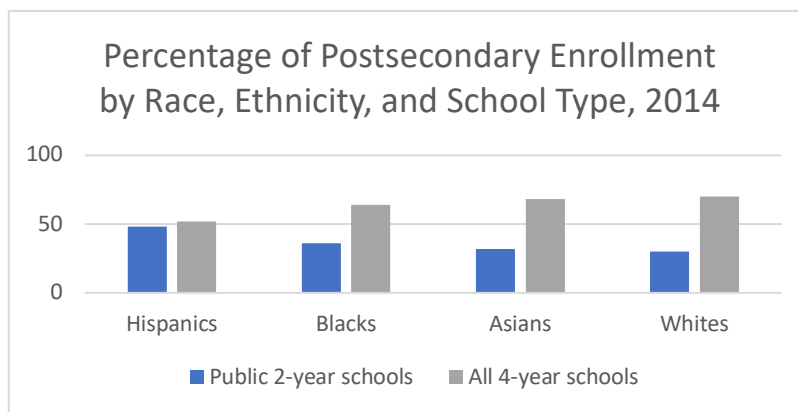
Figure 2. Postsecondary enrollment by race, ethnicity, and school type, 2014

Yet, the prediction for community college students to succeed remains precarious

because of the large number of part-timers. Attending school part-time is considered a

risk factor for dropping out, according to the U.S. Department of Education. The

Community College Research Center (CCCR) reported that in the fall of 2014, fifty six

percent of Latinxs were enrolled in Community Colleges compared to thirty nine percent

of white students. National data on term-to-term enrollment is scant, but the CCCR

indicates that twenty five percent of students that enroll in the fall do not return in the

spring, and of those that return, twenty percent will not return for the following fall

semester (Xu & Jaggars, 2011). Rivera (2014) also highlights disparities in graduation

rates: only twenty two percent of Latino students graduate from Community Colleges,

compared to thirty seven percent for whites.

Changing Four-Year Institutions

Universities are changing in terms of their student demographics and slowly-

diversifying faculty. According to Pew (2015), college enrollment data now indicates that

Latinxs are the largest minority group on college campuses. Progressive leaders in education believe in intercultural understanding, which calls on universities to embrace their institutions as anchor institutions—entities whose engagement profoundly impacts the community's prospects and prosperity, while valuing diversity (Lewis & Cantor, 2016). This school of thought consists of *remaking America* and the ideology that inclusion over exclusion will increase the number of conferred degrees, especially for women and women of color.

Inclusion at the university level is exemplified by schools offering students mentoring and counseling services providing academic and personal assistance that caters to those with psychological, social, and cultural concerns. Mentoring and counseling have a positive influence on student retention (Gloria & Rodriguez, 2000). The dimensions for psychological, social, and cultural concerns can vary but often incorporate support both on- and off-campus (Gloria et al., 2005). Many scholars agree on the benefits of diversity; however, they appear to differ on retention conditions.

Nonetheless, many scholars believe that students who refuse to assimilate (completely absorbing and adapting another culture as one's identity) to the norms and values of the university will not succeed in college (Barajas & Pierce, 2001). It is a fact that the college culture and the Latina experience often results in conflict, and that this conflict can lead to high attrition rates. The college culture values individualism and the Latina culture values collectivism. Often, Latinas find themselves torn between two cultures: school culture and their own culture. Balancing two cultures is stressful and Latinas often find themselves *pulled home* to attend to family needs (Castellanos & Gloria, 2007). This conflict leads to stereotypes from the faculty and peers questioning

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their competency and doubting them and their commitment as serious students. This lack of understanding of the Latina culture is what Yosso explores in her theory of community cultural wealth (described in detail in Chapter Three).

Research has yet to agree whether biculturalism (co-existing in two cultures) leads to higher or lower levels of perceived distress. For instance, Cuellar (2000) indicates that biculturalism and lower levels of acculturation (retaining one's culture and adapting some values of a different culture) are associated with high levels of distress; Miranda and Umhoefer (1998) contend that it leads to lower distress. Gloria and Robinson Kurpius (2001) contend that having a counselor or mentor who shares the same cultural values as Latinas is critical in helping students with the psychological effects of assimilation, acculturation, and biculturalism.

Hispanic Serving Institutes (HSI)

In 1986, the Hispanic Association of Colleges and Universities (HACU) was formed with the objective of increasing Hispanic enrollment at higher learning institutions. The new development of Minority Serving Institutes (MSI) in 1992 was also proof that the educational levels of students of color were not on par with those of white students at predominately white institutions. The mission for the MSI was to support and enhance daily experiences for college students of color. The lack of Hispanic college conferred degrees remained problematic, and resulted in the HACU and Senator Claiborne Pell introducing the Hispanic Serving Institutes (HSI) to Congress in 1992, in recognition of the "Strengthening Institutions Program." The United States Department of Interior (DOI) and the HACU partnered in 2012 to provide access to Hispanic Serving

Institutes for Latinx community members and to promote educational success and expand

career opportunities to the students that they serve (Memorandum, 2012).

Hispanic Serving Institutes must have enrollment of at least twenty five percent

fulltime Latinx undergraduates at an accredited college or university. In 2012-2013, sixty

percent of Latinxs attended an HSI, half of them being women and the majority enrolled

part-time. Over fifty percent of the 370 HSIs were two-year institutions, with 178 of

those being public and 15 private. There were 105 four-year private and 72 four-year

public institutions that were awarded HSI status. These numbers represented eleven

percent of all higher education institutions.

The HSI mission is to support schools financially via programs, facilities, and

services to promote Latinxs while increasing their educational opportunities. Institutions

that receive HSI funding must apply at the end of the grant's duration and remain eligible

every five years. In 2013, the total appropriation was $95,178,637, and this money was

designated to support institutions through programs, curriculum, and resources to retain

Hispanic students (US DOE, 2015). The concern is that the leeway that schools have to

spend the money will not benefit the Latinx community directly and that restrictions need

to be implemented for use and accountability echoed by Margarita Benitez, former

Director of Higher Education for The Education Trust, a national non-profit advocacy

organization promoting higher academic achievement for students of color and low-

income students.

Resilience among Latina College Students

This section introduces resilience and how it works in tandem with Latinas in

higher education. The literature on first generation Latinas is discussed, followed by three

types of resilience: personal, extrinsic, and academic. The word resilience is derived from

the Latin for *to jump again.* This dissertation uses resilience to represent favorable

outcomes; a person who triumphs through hardships is considered resilient. Resiliency is

a metatheory, a concept currently being tested and used to characterize individuals and

communities; linked to many kinds of positive policy outcomes from disaster recovery, to

soldiers returning home, to building resiliency through the cancer experience

(Richardson, 2002). Resilience is well documented as the way in which a person reacts to

adversity.

Research indicates that many Latinas living in the United States have felt

discrimination, racism, sexism, acculturative stress, and poverty. These stressors have

been associated with mental health issues. Strength-based theorists discuss how cultural

considerations are assets and not deficits for confronting and coping with stress,

particularly by looking at the family unity (Zimmerman, 2013). While it is important to

understand the challenges that Latinas face, the focus of this study is to examine

resilience.

First Generation Latinas and Resiliency

It is common practice for immigrants to learn and adjust to the norms of the

mainstream culture. Many parents of Latinx children have experienced the demands to

assimilate to the U.S. norms, especially if they live in one of the 30 English-only

Educational Law states. These are states that do not offer any form of bilingual

programming. However, being bilingual, using bicultural skills, and familismo are all

assets for coping with challenges, and these assets increase personal resiliency (Villalba,

2007).

While many Latinas attend community college, Bui (2002) describes how first-generation students have a better chance of graduating from a four-year-university than from community college. A major reason for this relates to the students' goal of being able to help support their families. However, the ability to help the family financially is evident in their first year of college for many Latinas. First-generation students work longer hours and mostly off campus compared to other students (Martinez et al., 2012). There is an ongoing debate about the effects of working while in college on college persistence. Martinez (2012) indicates that students that worked off campus had a higher level of resiliency and college persistence than work-study students. In other words, while students spend less time involved with school activities due to work commitments, the desire to succeed in school is intentional for the success of the family.

First generation Latinas often associate their resiliency and college success with their family. This is discussed by Yosso (2005), with regards to aspirational and resistant capital. Ceja (2004) states that Mexican parents are often misunderstood, and their voices are rarely examined in scholarly literature. Latina collegians indicated that their parents' lived experiences were motivators to aspire to earn a college education (Ceja, 2004). Findings suggest that the role of parents was key in developing educational aspiration and educational resiliency. Interestingly, the research indicates that Latino parents with limited formal education were most influential in the reasons for their daughters attending college. Through storytelling, parents were able to create a "culture of possibility" which spoke about experienced marginalized struggles. Latinas were able to find strength and motivation in those stories. Taken together, while first-generation students express great challenges they must overcome while in college, the shared stories of resiliency included

the support of the family as the greatest reason for overcoming barriers (Gardner &

Holley, 2011).

Personal Resiliency

Personal resiliency has been defined as the ability to weather adversity or to

bounce back from a negative experience (Smith et al., 2016). The efficacy of personal

resiliency is perceived to be associated with coping strategies. The coping strategies

described by Baker & Berenbaum (2008) were dependent on the emotional competencies

and vulnerabilities. Research indicated that individuals who were aware of their emotions

had better resiliency outcomes than those with poor emotional competencies. Having

high levels of personal resiliency can lead to reducing psychological distress. In addition,

according to Prince-Embury (2015), students with high personal resiliency levels report

less frequent risk behaviors.

Personal resiliency is divided into three developmental systems. This includes

sense of mastery, sense of relatedness, and emotional reactivity. Sense of mastery is "an

important component of psychological health and well-being across the life-span;

however, relatively little is known about the development of mastery during childhood

and adolescence" (Conger et al., 2009). What is known is that sense of mastery implies

that an individual has control over their own life.

According to Furrer and Skinner (2003), sense of relatedness may function as a

motivational resource when students face difficulties. Results indicate that sense of

relatedness in academic settings is associated with motivation and performance. Positive

relatedness to teachers was associated with increases in student engagement and

participation. Emotional reactivity has "been characterized as the emotional response to

an event that may vary between individuals in terms of intensity, the speed at which it reaches peak, and return from this peak back to baseline" (Shapiro, Abramson, & Alloy, 2016). In other words, this is when your feelings respond uncontrollably. Being able to control emotional reactivity leads to positive resilience.

Academic Resiliency and Motivation

Academic resilience is understood as the "process and results that are part of the life story of an individual who has been academically successful, despite obstacles that prevent the majority of others with the same background from succeeding" (Khalaf, 2014). The term exceptional has been used to describe Latina students that anomalously display high academic performance despite having challenges (Morales, 2014).

Researchers indicate that academic resiliency is associated with motivation. Intrinsic motivators are individuals that are self-determined and do not need rewards to succeed. Intrinsic motivators at a Hispanic Serving Institute were reported as: having better study habits, persisting longer, and having more thoughtful questions about the curriculum or subject matter rather than the exam (Simons et al., 2004). Promoting intrinsic motivators has resulted in positively influencing academic achievement despite personal challenges (Trevino & DeFreitas, 2014). Prospero et al., (2012) reported that Latina first-generation students, who had higher aspirations also had a supportive family. Pascarella et al. (2003) sampled first-generation students and showed that these students had greater resiliency and an openness to diversity and challenges compared to their peers.

In contrast, extrinsically-motivated students explain academic motivation as a desire for wealth, fame, popularity, and tangible rewards. These students show less

persistence and engagement, and have higher levels of negative academic outcomes (Crumpton & Gregory, 2011). Lower levels of intrinsic motivation are associated with lower levels of resiliency. In this study, I argue that understanding resiliency and the factors that affect it within the Latina collegian experience can be used as a type of intervention. Even though few studies examine increasing resiliency or intrinsic motivation among Latinas, research does suggest that when Latinas build a relationship with their professors it influences academic motivation and resiliency (Trevino & DeFreitas, 2014).

Success Factors Associated with Latina Academic Resiliency

Research on academic resiliency often cites factors related to success, allowing for a strength-based paradigm. The following literature will review success factors associated with Latina academic resiliency. Arellano and Padilla (1996) described parental support, encouragement, personal optimism, drive to succeed, and ethnic pride as positive indicators for academic resiliency. Ceballo et al. (2010) acknowledge parent's commitment to education, autonomy, and faculty and mentors (role models) as reasons for college persistence. Gloria et al. (2005) recognized that cultural congruity, positive perception of the university, increased sense of self-efficacy, and social support from family and friends was associated with academic resiliency. McHatton, Zalaquett and Cranson-Gingras (2006) also noted positive self-perception, strong family ties, and school experience as factors related to success. These studies discuss some of the individual, sociocultural, and environmental factors examined in this dissertation.

Resiliency is something that people must actively practice, and it comes easier for some than others. Increasing resiliency includes building a supportive system, both

internally (self-care) and externally (encouragement from work, school, friends, and family). Many scholars agree that resiliency consists of psychosocial adjustments when faced with adversity, and the ability to bounce back (Wagnild, 2009). Resiliency is complex, as it is always changing in response to the environment (Coutu, 2002). Scholars have examined the qualities that seem to give rise to resiliency in students. The qualitative study of Resilient Latinx College Students informs that Latinxs are often considered *at-risk* and have a greater probability of dropping out due to adverse circumstances (Cavazos et al., 2010). In that study, two factors that provided insight to resiliency included students having high educational goals and support and encouragement from parents.

Latina collegians express that by learning more about the Latina culture and surrounding themselves with other Latina peers, they felt a greater sense of cultural pride and empowerment which increased college persistence. Research suggests that cultural awakening or cultural identity is enhanced when students participate in cultural courses or join cultural organizations (Storlie, Moreno, & Portman, 2013). Successful Latina collegians tend to serve as mentors for other students; having support systems within the university increases students' sense of belonging. Rivera (2014) explains that when support structures are in place at the university, individual resiliency, otherwise known as agency, helps Latinas to succeed.

Latina Educational Achievement

Students of color are identified as statistically less likely to attend and succeed in postsecondary educational institutions (Morales, 2014). Amplifying dismal data of people of color has constantly been reported in academic research journals and educational

practices despite recommendations by some scholars within social sciences to build on the strengths students possess (Akos & Galassi, 2008; Harper, 2010). The problem identified in the literature was the lacuna of research on educational experiences and resiliency among Latinas not enrolled and those still enrolled in college.

The college attainment gap for Latinxs is a national priority (Kelly, Schneider, Carey, & American Enterprise Institute for Public Policy Research, 2010). Gandara and Contreras (2009) argue that the inequalities in the Latino educational outcomes are an educational crisis. Yet, trends suggest that Latina college enrollment is at record high levels, Latinas continue to lag in earning college degrees and remain underrepresented (Fry, 2011). Latinas often attend less-selective schools than they are qualified to attend (Fry, 2004). Less-selective schools have a higher probability of attrition.

The discrepancy between enrollment and graduation demands acculturation for the university; some Latinas (particularly first-generation students) express that this does not match their own cultural values (Hernandez & Lopez, 2004). The debate in education has been ongoing; Tinto's well-known theory of student integration (within the field of education) has dominated literature since the 1970's and places the onus on the students to assimilate and persist into the dominant school culture (Braxton, Hirschy & McClendon, 2011). Criticism and opponents of Tinto's theory explain that diverse students (e.g. first generational, ethnic, and non-traditional) are not accounted for because their cultural and social background is different from those of the traditional college student (Reyes & Nora, 2012). Instead, Tierney advocates that universities become more inclusive and a model of cultural integrity, more welcoming and accepting of diverse students and imposing less assimilation (Reyes & Nora, 2012). I will argue that the

responsibility of retention and academic achievement should be shared between the student and the university.

Recently scholars have started to explore positive aspects as they examine the Latinx collegian experience. With an inundation of failure stories and stereotypes, understanding resiliency, ethnic identity, and family have been added to the educational discourse (Castellanos & Gloria, 2007). In response to the Latinx educational achievement crisis, Perez (2015) launched the first and largest national qualitative study on Latino male achievement in higher education concentrating on how Latino males conceptualize educational achievement. Results from his study indicate that nurturing cultural wealth prior to and during college are integral for success. Perez refers to Yosso's (2005) community cultural wealth framework to understand how different forms of capital (e.g., aspirational, familial, and linguistic) empower students to develop the resiliency needed in predominately white institutions. National studies on Hispanic females and how they embody achievement in higher education has not been published.

Among marginalized groups, the narrative of Black male collegians has been analyzed in more journals and books than any other diverse groups in higher education; yet, even well-intentioned researchers focus on the undercurrents and troubles pertaining to black undergraduates (Harper, 2014). Although Harper's studies report on black male undergraduates from a strength-based approach, I agree with his argument that there needs to be a shift in the discourse which amplifies deficits in achievement to instead include success factors which are critical and lacking about Latina collegians. This study serves to understand Latina collegian achievement and resiliency using individual, social,

and environmental factors. It also informs universities of support systems that are resulting as positive predictors for graduation rates.

Latinas Enrollment and Experiences in Higher Education

The total number of enrolled undergraduate Latinas has been on the rise since 1976 in degree-granting institutions. Table 1 describes institutional type and the percent distribution of U.S. Citizen enrollment in degree-granting institutions for White, Black, and Hispanic students in 2008. While Latina enrollment numbers remain low and add to the achievement gap, they represent a six percent increase within a twelve-year span, which was the highest for any group of females. White female college enrollment was six times greater than Latinas and five times more likely than blacks in 2000. Black females started with a 13 percent enrollment rate in 2000, attained 17 percent in 2011, and then down to 16.6 percent in 2012. As for Latinas, their enrollment increased from 10.6 percent in 2000 to 12.8 in 2007, and continues to rise. White females were the only group to see a decrease in enrollment from 68.7 percent in 2000 to 57.9 percent in 2012. Even with the decline of female white enrollment, they still had rates almost four times higher than blacks and Latinas. Latina enrollment remained low within the twelve-year span, with only a six percent increase. However, this increase was enough to reach parity with black females. This indicates that while women of color are enrolling in postsecondary institutions, their experiences need to be analyzed to explain positive outcomes.

Banda (2013) examined Latinas pursuing undergraduate engineering degrees (traditionally a male- dominated field) and concluded that successful Latinas reported that support from their family, peers, and student organizations increased their sense of belonging and college persistence. Little is known about the impact that father's

education has on Latinas' educational outcome. However, this same study indicated that Latinas reported tension in the campus climate within departments, classrooms, student organizations, and internships. Latinas indicated that student organizations were both positive and negative in terms of college persistence. Hunter and Hughey (2013) explain that when undergraduate students of color join a multicultural organization, they are more likely to feel a sense of belonging as opposed to when students join an Anglo-conformity organization, which ignores other cultures. In other words, students that encounter spaces where their ethnic pride is valued are more likely to persist.

Latinas in higher education indicate the benefits of *mujerista* mentoring. This type of mentoring has been defined as a "collectivist, assets-based model that values lived experiences and multiple ways of knowing Latinas, focused on the building of communities and reciprocal mentoring relationships" (Villasenor, Reyes, & Munoz, 2013). Mujerista is the result of the *mestiza consciousness.* The mestiza consciousness is a survival strategy described by feminist Gloria Anzaldua that mitigates duality (Aigner-Varoz, 2000). In other words, Latinas in college often feel that if they do not conform to the socially-enforced norms, then they will be ostracized. The Latina collegian according to this paradigm is constantly criticizing herself and society based on cultural differences. They have conflicting views due to family and school demands that are in tension with one another. In other words, mentoring that does not expect assimilation, but instead is a relationship among Latinas, is best suited for college persistence.

Latina Graduation Rates in Higher Education

Latinas saw the largest increase across all levels of conferred degrees when compared to whites and black females, as shown in Table 9. However, these statistics are

also telling another story. The data explains that as Latinas attain higher degrees, fewer gains have occurred. This means that while Latinas are earning their bachelor's degrees, they are less likely to persist to graduate school or professional school (Espinoza, 2010). With only 7.8% of conferred PhD degrees going to Latinas, it behooves scholars to understand the strategies used by those with academic success to improve Latina educational outcomes. The focus should no longer be on lack of representation of this population at higher levels of education or the barriers that exist, but rather on the pursuit of knowledge.

Researchers cannot deny that Latinas are putting their education on hold to manage family responsibilities. Espinoza (2010) refers to this delay as the "the Good Daughter Dilemma." Latinas often find their cultural value of *familismo* in conflict with the culture of academia, which expect her to be completely devoted to school. Familismo is rooted in loyalty, reciprocity, and prioritizing family over individual interests. Espinoza (2010) also refers to the mestiza theorist, who actively uses negotiations of self with social identities to blend the "good daughter" with the "good student." In other words, Latinas place a high value on family obligations and aspire to attain higher levels of education and do so successfully by balancing both worlds.

Table 9

Percent Conferred Degrees to Female U.S. Residents (White, Black, and Latina) 1999-2010

Percent Conferred to Females		
Level of degree and race/ethnicity	1976-1977	2015-2016
Bachelor's		
Whites	88.2	63.7
Blacks	8.0	11.8
Latinxs	2.0	13.4
Master's		
Whites	87.3	65.4
Blacks	9.1	15.2
Latinxs	1.9	9.9
Doctor's		
Whites	89.6	66.1
Blacks	6.5	10.3
Latinxs	1.7	7.8

Among Latinas with bachelor's degrees or higher, Venezuelans have the highest rate at fifty percent, followed by Argentineans with thirty nine percent and Chileans with thirty six percent. Three themes that contribute to the success models for Latinas include meaningful relationships with faculty, family support, and campus engagement support. The literature indicates that Latinas feel a greater connection with the campus climate when they are involved with culturally-relevant campus projects (Sandoval-Lucero, Maes, & Klingsmith, 2014).

Individual, Social, and Environmental Factors Associated with College Persistence and Resilience

For this study, I measured resiliency, individual, social, and environmental factors that I predicted should contribute to Latina achievement. Individual factors vary because people vary physically, emotionally, and in terms of life experiences. Vygotsky (1980) believed that individual development happened first during childhood with the social

interactions of parents, caregivers, and peers followed by individual development, which affects personality factors of individuals. Rutter (1993) explains this idea that the individual believes they or others have the *Locus of Control* (Huizing, 2015). The internal locus allows for individuals to believe that they have control over events affecting them in life. The external variables include the social and environmental factors (e.g., involvement in sororities, community organizations, and taking care of family members). External locus of control shifts the responsibility of what is happening to the individual as a consequence of social and environmental factors.

Research states that individual factors may hinder or facilitate college competition and resilience. Personal factors such as age have been positively and negatively associated with college persistence for undergraduates. Students who enroll in undergraduate programs prior to age twenty-three have an increased chance of graduating as opposed to those that enroll later. Older students often enroll as part-time students and work status has been indicative of inhibiting the chances of graduating (Jacobs & King, 2002). Indirect relationships to attrition include being married (or divorced), as those students also enroll part-time. Students with low socioeconomic status remain underrepresented in four-year colleges and especially at selective four-year institutions in terms of enrollment and college completion (Walpole, 2003).

Additional factors that lead to persistence for Latinas in college include: living on campus, contact with faculty, involvement with institutional clubs or programs, being bilingual, and having a mother with a higher education level (Flores, 1992). In addition, eighty percent of students with loans graduate with a bachelor's degree, but the twenty

percent that do not are often students from low socioeconomic status and fifty percent of those students have parents with a high school degree or less (Gladieux & Perna, 2005).

Sociocultural Factors for College Persistence and Resilience

Sociocultural factors are a combination of social and cultural beliefs. In terms of Latina collegians having a sense of belonging, positive family and peer support enhances the student's informal and formal integration with the college experience and the successful pursuit of the baccalaureate degree. Psychosocial stress factors are a hindrance to college persistence.

Sense of belonging. For college students, sense of belonging encompasses perceived social support on campus, connectedness, acceptance, and feeling respected and valued by peers and faculty (Strayhorn, 2012). The feelings of alienation, poor support systems, and cultural conflict are not new to Latinas in college (Sotomayor, 2013). Colleges do not acknowledge that racially-tense environments complicate integration for diverse students and therefore transition to college for many Latinas is difficult (Hurtado & Carter, 1997). The idea of being an *inside outsider*—that is, a Latina collegian student in a mainstream institution with an outsider's perspective—often leaves the student's culture undervalued. One example is when Latinas with Spanish accents are pointed out and are reminded of their less-than-perfect English accents (Hurtado & Carter, 1997). Mainstream college environments do not reflect specific interests of many Latina students (e.g., religion, community service, ethnic dance, and music), especially in predominantly white institutions. First-year students in these situations have discussed interpersonal tensions with White students and faculty due to perceived racism and discrimination. Sense of belonging to the university increased when students belonged to

sororities and religious organizations. Social community organizations were the most significantly associated with a sense of belonging.

Family support. Upon review of the parental literature, parents are often misunderstood and dismissed as not valuing the importance of education and not participating in the education of their children (Valencia & Solorzano, 1997). Yet, successful Latinas often credit their parents' influence and encouragement as one of the most important reasons for their college attainment and resiliency (Ceja, 2004). Often, parenting styles are discussed as a deficit because of their lower levels of education and income; yet, Mexican parents have articulated the importance of college via *consejos* or advice to emphasize the importance of an education (Delgado-Gaitan, 1994).

Latino families in the working or poor classes feel the disparities in the quality of education their children receive. Debunking stereotypes and myths that Latino parents do not care about their children's education provides a starting point to understand the role they play in terms of college involvement. Research shows that family is a protective factor and contributes to academic success (Esparaza & Sanchez, 2008). As critical stakeholders for their children's education, some Latino parents reiterate the struggles their children face because their forms of cultural capital are not valued (Yosso, 2005).

The Latina culture is built on collectivism that inevitably becomes a reason for tension and stress as personal/cultural changes are required for Latinas in order to succeed in college, while ameliorating those changes with family members. A supportive academic environment that resembles family-like structures has shown to be best suited for Latinas to succeed.

This collectivist culture with strong traditional family values affects many decisions concerning higher education. As a group, Latino families often make decisions and consult with each other. Therefore, it is to no surprise that the Latina educational achievement has been associated with students joining organizations, joining sororities, seeking mentoring, embracing family involvement and accepting their mothers' encouragement.

Garrett et al., (2010) found that Puerto Rican children also credit their mothers for their success, as they feel compelled to make their families proud. Latina collegians often rely on the experiences of other family members or friends to help them make decisions about college especially if those trusted went to college (Pérez & McDonough, 2008). There is a high degree of *confianza* (trust) between the mothers and their children. In addition, the four attributes that contributed to academic success include: (1) the acquisition of social capital through religion and participation in school and community-based extracurricular activities; (2) having a strong ethnic identity; (3) the influence of these students' mothers on their academic achievement; and (4) the potential for caring teachers and other school staff to influence high academic achievement.

Research shows that older brothers were more likely to advise their younger sisters to go to college but one that is close to home (Pérez & McDonough, 2008). Another common theme that emerges in research is the Latinx parents' strong preference for female children to live at home during college and attend a local university (Swail, 2004). Latinas indicate how females and males are treated distinctly:

> Oh yeah, the boys could do whatever they wanted. They could leave when they wanted. They did not have to go to school to leave the house. One of my brothers left the house without even being married. It was not a big deal. But for us, the only way you can leave the house is to go to school or get married. Even now, my

mom feels like she is still taking care of me because I am not married. It's like; the girls have to be taken care of until there is a man to do it. It's different for the boys; they can leave the house without being married or going to school. It's because everyone thinks they can take care of them- selves, but not us (González, Jovel, & Stoner, 2004, p. 17).

Latinas face tension with their parents over the idea of wanting to leave their family environment to attend a non-local school. The Latina culture creates a sense of interdependence, which often leaves students torn with their families because many want to live on campus or go away to school to gain independence (González et al., 2004). This does not imply that Hispanic parents do not care about education; in fact, studies are well documented that the amount of encouragement and support by parents is the most important reason for Latinas going to college.

 Peer support. Peer relationships have been positively associated with academic success and resiliency (Bakadorova & Raufelder 2017). Having high achieving friends will have a positive impact on remaining in college and social capital (Ream & Rumberger, 2008). Peers are also known as institutional agents with the ability to communicate resources, programs, counseling, advisement, and information available on campus (Stanton-Salazar, 1995). Forming these types of relationships adds to the cultural capital of students and indicates a higher likelihood of graduating. Latinos who are more engaged with peers and actively connect with peer networks are the students who display the characteristics to remain in school (Nuñez, 2009)

 Malaney & Shively (1995) discuss the first- year experiences of White, Black, Asian, and Latino students at the University of Massachusetts-Amherst. The Latinos held the highest expected GPA, while extracurricular activity decreased from the first to second semester. This study indicates that about 30% of Latinos felt they did not make

the right decision by attending this college. Another study compared friends and family of Latino collegians and concluded that friend support made a slightly greater contribution to the well-being of the student than family support (Rodriguez, Mira, Myers, Morris, & Cardoza, 2003).

Harper (2013) discusses the experience of black undergraduates at predominately white colleges (PWC) as: feeling alienated, facing racism, and belonging to a toxic campus racial climate. Research indicates that white students in PWC are less likely to pick students of color to work on group projects especially if it will affect their grades (Fries-Britt & Griffin, 2007; Fries-Britt & Turner, 2001; Valencia & Solórzano 1997); this is described as part of the *anti-intellectual myth*, presuming that blacks are not smart or serious learners (Cokley, 2003). The types of microaggressions that exist on campus have real consequences and students in study groups and ethnic student organizations credit the support of peers of the same background for not leaving the institution. In other words, white peers who are accepting of diversity will have positive impacts on Latina success, and Latinas who work with other students of color will also facilitate the process of completing college.

Psychosocial stress. Psychosocial stress may be defined as aversive or demanding conditions that tax or exceed the behavioral resources of the organism (Lazarus, 1966). In other words, it is the perceived threat in one's life that requires resources the individual does not have at the moment. The National Institute of Health (NIH) states that there may be acute, episodic, or chronic stressors. Acute stressors are short lived and are treatable and manageable (e.g., loss of an important contract or rushing to meet a deadline). People who display episodic acute stress are often worrying

about something and disorganized. These types of people are referred to as having a lot of nervous energy or a Type A personality, and are seen as resistant to change. Individuals with chronic stressors endure stress daily and yearly. Examples are living in poverty, having a dysfunctional family, being trapped in an unhappy marriage, living during the tensions of war (e.g., the Middle East and Jewish ethnic rivalries).

Millennials (ages 18-33 years) are reported to be the generational group with the highest level of stress of all age groups (Coccia & Darling, 2016). Research indicates that stressors for college students are often related to academics, finances, time constraints, or relationships (Dusselier, Dunn, Wang, Shelley & Whalen, 2005). Undeniably, millennials are surrounded by social media and spend a great deal of time using it. Results indicate that stress was positively correlated with texting, phone use, and studying. Coccia & Darling (2011) examined the relationship among social interactions and time and overall, the amount of time that females reported on non-verbal social interactions (e.g., texting, social media, studying, and watching TV alone) was negatively related to a students' life satisfaction.

To add to the stress of social media on young adults, Latinas indicate that perceived educational barriers, cultural fit, coping with responses, having few mentors and the unwelcoming university environment can all add to the collegian stress which is often a motivation for dropping out (Gloria, Castellanos, & Orozco, 2005). Stress that leads to positive outcomes can create physical and psychological problems that affect well-being (Klainberg, Ewing, & Ryan, 2010). These may include overeating, smoking, anxiety disorders, depression, and alcohol/drug use (Ewing et al., 2007). Similar studies with African Americans are consistent with substance abuse as a result of ethnic/racial

discrimination (Fuller-Rowell, et al., 2012). Latina collegians report that joining student organizations, having pride in being the first family member to attend college, and the ability to motivate other Latinas have positive effects on lowering stress and increasing resiliency (Mount, 2015).

Cultural factors. Culture is difficult to define; one study identifies over 164 different definitions (Spencer-Oatey, 2012). Zimmerman (2013) explains that it is difficult to define any culture in only one way: "culture appears to have become key in our interconnected world, which is made up of so many ethnically diverse societies, but also riddled by conflicts associated with religion, ethnicity, ethical beliefs, and, essentially, the elements which make up culture, but culture is no longer fixed, if it ever was. It is essentially fluid and constantly in motion." Culture will be described as a learned system of knowledge, behaviors, attitudes, beliefs, values, and norms that is shared by a group of people (Smith, 1966). It includes the shared knowledge and schemes created by a set of people for perceiving, interpreting, expressing, and responding to the social realities around them (Lederach, 1995).

We all belong to a number of cultures that may include national, regional, ethnic, religious, linguistic, gender, generational, social class, educational, occupational, or organizational, to list a few (Hofstede, 1991). Traditionally, Latinx have a collectivist culture with strong family values (familismo), one that is based on a hierarchical culture that values respeto (respect); respeto entails a patriarchal culture that grants the father or eldest male the greatest power while expecting women to show submission (Kemp & Rasbridge, 2004). Respect is exemplified in this culture as elders and people in leadership

positions are addressed differently with titles such as Don (older males) or Dona (older females). These titles do not carry the same meaning as Senor (Mister) or Senora (Mrs.).

The Latinx culture is well known for its machismo and marianismo, which culturally define desirable male and female roles, respectively. Children are a big part of the Latinx household. In 2008, sixty two percent of families included children younger than 18 living in the home and seventy percent of Latinx children live with two married parents. The collectivistic culture groups adhere to the value of familismo and display four tenets, *belief that family comes before the individual, familial interconnectedness, belief in family reciprocity, and belief in family honor* (Calzada, Huang, Linares-Torres, Singh, & Brotman, 2014). When Latinas take on the transformational role as leaders, they often leave their traditional gender role. This change is difficult for many Latinas because they defy their cultural expectation (Hite, 2007).

Latinx culture is often referred to as an alternative culture (Yosso, 2005). Latinos have a strong belief that you cannot control fate and therefore believe to take each day as it comes; this is known as fatalismo. This type of attitude contributes to a more relaxed attitude. For example, not being punctual is culturally acceptable. Latinxs (especially recent immigrants from Mexico, Central and South America) are more religious (Catholic) and many espouse traditional indigenous views of medicine, including that the use of herbs plays a significant role in healing (more so than going to a doctor initially for medical advice). The Hispanic culture focuses on simpatia (kindness) with an emphasis on politeness and pleasantness (Triandis, Marin, Lisansky, & Betancourt, 1984). Many of these factors contribute to Latino women and their college going behavior. Educational

aspirations were the most important predictor of college and resiliency according to Cassidy (2015).

       Acculturation. Acculturation is defined as a process of incorporating values, behaviors, ways of thinking, and language from one culture into another culture (Shah, Zhu, Wu, & Potter, 2006). Research indicates that in the 1960's, Latinas were expected to assimilate or adopt the *middleclass cultural patterns of largely white Protestant origins* (Gordon, 1964) but today, assimilation has been challenged as institutions are fostering inclusion rather than exclusion of multi-cultures. Research shows that Latinas selectively assimilate into the dominant culture, while continuing to place a strong emphasis on family and caring for their elderly (PEW, 2004). The problem that many Latina collegians face is balancing traditional gender-role expectations with the goal of a pursuing a college degree (Cano & Castillo, 2010). Less acculturated parents and the expectations of the university can be taxing and create family tension for these women, especially second -generation females who have acculturated faster than first generation Latinas and their families Gloria, et al. (2001). Familial conflicts or isolation from the Latinx community occurs when Latinas immerse themselves in white American norms for professional advancement and abandon their culture (Hite, 2007).

      Institutions of higher learning have been known to be places that have a meritocratic ethos that is shared by the dominant culture. Many scholars believe that students who refuse to assimilate to the norms and values of the university will not succeed as students (Barajas & Pierce, 2001). The college culture and the Latina experience often result in conflict. For instance, the college culture values individualism where the Latina culture values collectivism. Research has yet to agree whether

biculturalism leads to higher or lower levels of perceived distress. For instance, Cuellar (2000) indicates that biculturalism and lower levels of acculturation are associated with high levels of distress; whereas Miranda & Umhoefer (1998) contend that it leads to lower distress. Researchers do agree that having a counselor or mentor that shares the same cultural values as Latinas is critical in helping them with the psychological effects of assimilation, acculturation, or biculturalism Gloria, et al. (2001). A hindrance for Latinas is the lack of role models as leaders in college (Dominguez, 2013).

Cultural congruity. Cultural congruity refers to the students' sense of fit between their cultural values and those of the university (Gloria & Kurpius, 1996). First generation Latinas living away from home expressed feelings of isolation and stress because of their mothers' expectations. Middle class students who follow white norms in college have the freedom to attend social events and experience the college life as they please. Torres (2006) found via interviews that cultural congruity was lacking due to family expectations. Latina mothers were more prone to calling daily and checking in on their daughters nightly with the idea that their daughters were in their room. Latina collegians felt the pressure to comply with being in their dorms and as a result were missing out on social events and the college experience. Balancing home and college values creates conflict for the Latina and increases a sense of disconnection from both environments. Research indicates that having a high sense of cultural congruity was associated with a positive perception of the university and less stressors (Gloria & Kurpius, 1996).

Another study examined Mexican American undergraduates and graduate student levels of cultural congruity. Lango (1995) found that graduate students were 90% more

comfortable with white college peers in contrast to undergraduate students that indicated 58% were feeling somewhat comfortable with white peers. In this same study, graduates identified their mothers as their strongest support system with higher cultural congruity. The positive or negative perception of the university will affect the Latina's perception of cultural congruity or incongruence (Gloria & Kurpius, 1996). Psychological well-being and completion of college was associated with higher cultural congruity. Obgu (2008) would argue that cultural congruity or incongruence does make a student successful but instead looks at the concept of resiliency in an unwelcoming environment to explain college persistence. In other words, the campus climate must engage in making college experience inviting and inclusive in order to retain Latina students.

Environmental Factors for College Persistence and Resilience

      Campus climate. Campus climate is defined as the current attitudes, behaviors and standards of faculty, staff, administrators, and students concerning the level of respect for individual needs, abilities, and potential. Historically, the university environment and polices were designed for white males, but now more women and women of color are enrolling. The university environment affects both students and faculty positively and negatively, especially those of color. A positive climate allows for respect, learning, diversity, and inclusion. Valuing diverse populations increases the learning outcomes for students (Rankin, 2005). A healthy campus for Latinas, indicates having more women as faculty mentors, especially women of color as mentors to positively impact campus climate (Settles et al., 2006). Likewise, research with a direct relationship to discrimination has increased the college dropout rate for students of color as well as faculty of color (Waldo, 1998).

Research indicates that higher education institutions lack knowledge and understanding of the challenges and issues Latino females face as collegians (Rodriguez, Guido-DiBrito, Torres, & Talbot, 2000). As a result, the campus climate has been referred to as a hostile environment for many students of color (Hurtado & Ponjuan, 2005). Yet, studies have found that when institutional interventions are created to affect social integration and cross-racial interactions, students feel a greater sense of belonging. In fact, having high levels of sense of belonging is positively associated with persistence. The impact of promoting programs that intentionally engage students' culture increases college success Museus et al. (2017). Therefore, it is recommended that culturally engaging campus environments move away from the notion that assimilation benefits students of color. Instead, scholars are starting to focus on cultural integrity by creating culturally-validating environments where diverse knowledge, backgrounds, and identities are respected on campuses (Museus et al., 2017) Campus climate matters because students thrive in healthy environments and the lack of institutional support for diversity and racial equality have detrimental effects on students' learning and retention (Rankin & Reason, 2005).

However, university studies have found that people of color attending predominately white institutions continue to experience interpersonal tensions with white students and faculty, creating a stressful environment. This is especially true for commuter students that lack time on campus to engage with professors, students, and attend extracurricular activities. These students often have a lower sense of belonging on campus (Museus et al., 2018). Latinas noted feeling unwelcomed and marginalized, as they have encountered discrimination and feeling alienated (Gloria, Castellanos, &

Orozco, 2005). Similar to previous research, Rodriguez et al. (2000) contend that barriers before entering college (e.g., low socioeconomic status, effects of gender and cultural stereotyping) and those faced upon entering college (e.g., financial concerns, family obligations, cultural incongruity) affect college transition. The separation of precollege environments and the transition to college has been the discourse for decades under Tinto's theory of student integration, which suggests that student success is based on dissociating from their own cultural communities. Scholars are changing the discourse and adding that culturally conscious views of college success cultivate a sense of belonging which increases positive educational outcomes.

Environmental factors for college resilience include peer and academic support. In particular, having racially and ethnically similar peers matriculating in colleges increases support systems on campus for Latinas. Yeager and Dweck (2012) argue that mindsets of students promote academic and social resiliency and that these mindsets are malleable. Schools are places where students can learn to be change agents, and this has positive effects on resiliency. Talbert (2016) suggests that resiliency is higher among students taking leadership roles in schools. While Strage (2008) noted that differences in the perceived ideal four-year university among younger and older students. Younger students expressed wanting the college campus to feel like an extension of high school, where professors were less challenging. Older students (transfers) indicated that they wanted their professors to be more rigorous and serious in preparation for the workplace. Yet, little is known about the Latina collegian experience as it pertains to resiliency and success factors.

Perceived Discrimination. It is well known that discrimination is the devaluing of a group of people. Rejection identification and social identity theory explains that discrimination is harmful to the groups' psychological well-being. Cronin, Levin, and Branscombe (2012) explain that discrimination has negative effects on the individual, yet it indirectly creates positive relationships within the group through enhanced minority group identification. When individuals have a low identification within their own group, coping strategies include attempting to disengage from the perceived discriminated group. However, when the individuals have a favorable identification within the group being discriminated against, studies suggest that a collective mindset forms activists. This type of response has enhanced psychological well-being within the group (Cronin et al., 2012).

Managing diversity and discrimination even with the best of intentions has left universities struggling to promote a positive campus climate. Regardless of race or ethnicity, students that reported discrimination on college campus indicated that having friends of their ethnic group increased social involvement in racially-focused activities. Research indicates that students that were members of the same ethnicity increased academic persistence and performance (Levin, Van Laar, & Foote, 2006). These same researchers stated that students that had more in-group friendships also perceived more ethnic discrimination and isolation on campus. The more hostile the university is perceived, the weaker the academic commitment will be for Latinxs. In other words, students of color that feel discriminated against often find support in peers of the same ethnic group; yet, the more isolated the groups become from the university, the greater the likelihood for students to dropout.

Other researchers described how perceived discrimination decreases over time for Latinos in college, but not without depressive and somatic symptoms (Huynh & Fuligni, 2012). Emerging research has indicated that interactions with supportive individuals on campus contribute to meaningful persistence and coping decisions. Latinx students at Predominantly White Institutions indicate that mentoring relationships, especially ties to professors increase retention (Crisp, Taggart, & Nora, 2015), While it is common knowledge that racism and perceived discrimination have negative effects on students, Crisp et al. (2015) states, "it is not clear how or what institutional policy and practices might be effective in limiting these harmful experiences."

In summary, vulnerable groups are identified as statistically less likely to succeed in college (Morales, 2014). College need to disseminate information about how many students of color they enroll, and need to explain more clearly how well they serve and retain their Latina students. We know that Latinas are underrepresented as administrators and faculty members despite being the largest minority group. Research also suggests that having diverse communities (including faculty and mentors) are more conducive for Latina learning. With lack of role models and policy makers addressing the concerns of Latina education, the onus is on the graduating Latinas to raise their voice and change the antiquated institutional policies. Latina students want to ameliorate the inequalities, but the question remains, "How can I become what I cannot see?" Advocacy often surrounds notions of inclusion, but as Latinas reach higher levels of educational attainment, they feel the need to desegregate from the unwelcoming campus climate and create one that is more conducive to happiness while navigating multiple cultures.

In summary, Latinas are increasing their presence in four-year institutions. Resiliency amongst first-generation students was closely associated with family encouragement despite the parents' own level of education. In addition, research indicates that intrinsic resiliency leads to academic resiliency and persistence. The Latina educational achievement is strongly associated with familismo. This is evident with the few numbers of Latinas continuing to graduate and post graduate schools. The individual, social, and environmental factors indicate that college persistence and resiliency are most positive when Latinas experience cultural awakening or cultural identity at universities. In other words, when the Latinx culture is enhanced within the curriculum, supported by peers, staff, and faculty, students may begin to feel a sense of belonging. Sense of belonging is positively associated with increasing graduation rates.

The next chapter discusses the theoretical models that guided this dissertation: resiliency (Wagnild & Young, 1993), cultural capital (Bourdieu, 1986), critical race theory (Delgado, 1989), and community cultural wealth (Yosso, 2005). These frameworks address Latina collegian outcomes by examining the individual, sociocultural, and environmental factors that contribute to academic retention.

Chapter Three: Theoretical Model

In this chapter, I discuss the development of my integrative conceptual framework. This section focuses on examining how deficit theories have led to strength-based approaches in education. Three theories comprise the development of this research: resiliency, critical race theory, and community cultural wealth.

Integrative Conceptual Framework

The integrative conceptual framework (see Figure 3) for this study was built upon the theories described above and employs a strength-based approach as discussed in the next section and the Model of Resilience (see Figure 4). The integrative conceptual framework creates multiple independent domains within the resiliency framework to examine factors that influence college persistence among Latinas. This model incorporates five domains: resiliency, individual, psychosocial, cultural, and environmental factors that promote or hinder college outcomes. The individual factors are: country of birth, language, marital status, living with children under the age of 18, means for paying for school, belonging to student, community, and/or religious organizations, parental education, household income, and employment. The social factors are both psychosocial (sense of belonging, family, peer, and stress) and cultural predictors (acculturation and cultural congruity), while the environmental factors comprise the campus environment and perceived discrimination.

The Model of Resilience (MR) as seen in Figure 4 measures the resiliency theory with a score. It indicates that having a higher score (score closest to 175) describes being able to respond to adversity with a greater amount of resiliency. Likewise, having a weak resilience score (score closest to 25) infers that when one is confronted with adversity,

the response is often giving up. The Model of Resilience begins with resilience supports

which yield to the resilience core, this indicates either a strong or weak score for

resiliency. The result of the score is associated with how the individual responds to

adversity. There are four outputs: respond with resilience, stay the same, lose ground, or

give up. Similar to the Model of Resilience, I begin with individual or demographic

characteristics, then move to the social which includes psychosocial and sociocultural

variables. Finally, I examine the environmental factors which include the university

environment and perceived discrimination. In summary, my model links variables

derived from the bodies of literature explained with resiliency and with college

persistence. It also links resiliency to college persistence. My model also recognizes the

assets that marginalized communities bring with them to school as discussed by Yosso,

Smith, Ceja, & Solorzano (2009) late in this chapter.
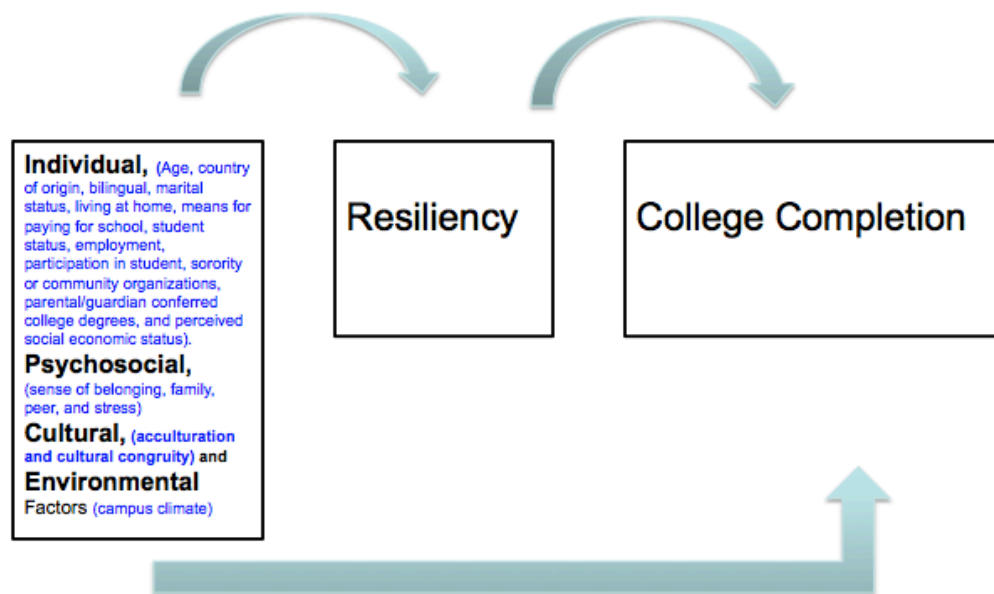
Figure 3. Integrative conceptual framework.

Figure 4. Model of resilience.
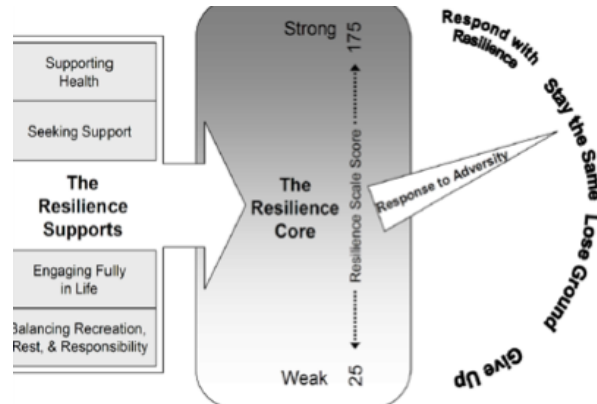
From Deficits to Strength-Based Approaches in Education

In this section, I explain the origins of deficit thinking and how it contrasts with strength-based approaches. While the focus of this dissertation is from an anti-deficit perspective, it mandates understanding the history of what has existed in higher education. Racism and sexism were dominant in higher education, and while changes are occurring slowly to reverse the effects of both, it does not erase the results of years of discrimination and the current graduation gaps that exist within the Latinx community. In the 1960s, scholars began to assert the belief that children who fail in school do so because of cognitive or motivational limits. Contemporary deficit thinking models use neo-hereditarianism, which argues that people of color are genetically inferior, and the culture of poverty paradigm which blames poor people for their environment, parenting skills, and home relationships, instead of examining structural institutions for social and economic injustices (Valencia & Solorzano, 1997). In higher education, a deficit perspective blames the students (often of color) for their academic outcomes and ignores the university climate, faculty-student interactions, or lack of culturally-appropriate programs (Castellanos & Gloria, 2007).

In other words, the root of deficit thinking is racism and the (mis) perception towards racial minorities since the beginning of schooling in the United States. Racist theorists such as Henry Garrett and Arthur Jensen made assertions that people of color have inferior intelligence compared to whites in their academic writing (Garrett, 1961; Jensen, 1969). This type of deficit thinking pushed for school segregation based on skewed research that focused on skin color and perceived intelligence. Anti-deficit thinkers Hick and Pellegrini (1966) argued against this notion by concluding that there was no objective way of determining innate intellectual inferiority of people of color. Further investigations proved that Garret and Jensen exaggerated their internationally-published research findings based on personal prejudices rather than scientific designs and methods (Valencia & Solorzano, 1997).

Deficit thinking is not only racist but also sexist. Educational policies have determined the fate of women since their establishment. Harvard, founded in 1636, had policies in place for white men of "good character" while preparing them for the clergy Kates (2001). Sexism in higher education institutions prevented women from studying business, law, or medicine, which were deemed male professions. This social system (otherwise known as the Cult of Domesticity) excluded women of color, working class females, and immigrants because true womanhood—known for virtues of piety, purity, submissiveness, and domesticity—was attributed exclusively to white Protestant women (Mackethan, 2011). This led to what scholars have referred to as a separate female culture (Watkins, 1979).

Smith-Rosenberg (1986) argues that female culture started when women acted together during important life moments of weddings, child rearing, caring for the sick,

and preparing the dead for funerals. These close-knit interactions not shared with men are examples of devotion and solidarity and created a sense of inner security and self-esteem among women, which were so strong that even marriage ties took a second place to female support, trust, and friendship. Douglas (1998) agrees with Smith-Rosenberg that oppression and male hegemony created a female culture that was based on being confined and isolated due to times of weakness not based in amicable relationships. Cott (1997) agreed that the process for women to bond and form friendships was due to male repression during the 19[th]century, but she argues that the female culture is based on the transformation of sisterhood, an active innovation for crossing the social norms of true womanhood to women's rights. Deficit thinking is deeply embedded in our country's history and has shaped national policies towards school, economic and immigration reform. It includes: lower and negative expectations, lack of opportunities, and negative experiences and behaviors.

Deficit theorists have used and manipulated cultural capital by blaming mainly immigrants, people of color, and the poor for their deficiencies based on stereotypes, juxtaposed to ignoring the overt sources of social inequalities such as poverty, lower educational opportunities, and reduced access to healthcare, to name a few. Cultural capital is a theory that was developed in France by Pierre Bourdieu and Jean-Claude Passeron. It has been operationalized as the "knowledge of high culture and educational attainment and as the curriculum of the elite" Lamont and Lareau (1988). Bourdieu and Passeron interchangeably used the term "legitimate culture" with cultural capital in their writing. The innuendo has become that if one does not belong to the elite social class, then one is part of the "illegitimate cultures."

Cultural capital focuses on three states: embodied state, objectified state, and institutionalized state. The embodied state is the formal education (that begins at home and in school). The objectified state are the materialistic objects that symbolize social class and institutionalized state are ways that capital may be stratified through educational degrees. Cultural capital often refers to social networks that provide information, reciprocity, collective action (relationship building), and identity within a group.

Another theorist, Vincent Tinto, originally postulated that minority students need to disconnect from their home culture and completely integrate into a college culture; this has been criticized as a form of cultural suicide (Gonzales, 2012). Present university norms have not changed significantly from the past. There is high demand for students acculturate into the college culture, I argue, as do other strength-based theorists such as Delgado (1989), Ladson-Billings (2010) and Yosso et.al. (2009) that the mainstream university life is largely based on hegemonic ideals, white male privilege, and a capitalistic society (Gonzales, 2012).

Contrary to deficit theories in education, this research uses a strength-based approach that views cultural diversity as a positive asset. A strength-based approach aims to avoid or reduce pathologies and instead works in tandem with resiliency to enhance positive outcomes. The strength-based approach is rooted in the paradigm shift from a focus on problems to a focus on centered to one that focuses on strengths, empowerment, and capacity building (McMillen, Morris, & Sherraden, 2004). This is used across disciplines in sociology, psychology, health, and education to remove barriers and add positive approaches to help build assets (Day-Vines & Terriquez, 2008). The notion of

strength-based approach is international with the principles of respect, self-determination, social justice and sharing of power (McCashen, 2005).

Strength based approaches in education conceptualize an environment composed of all members of the school community, which nurtures academic and personal/social competence while appreciating diversity (Akos & Galassi, 2008). There are mixed reviews of pinpointing exactly when strength-based approaches started in the literature because it has many origins depending on the educational stakeholders. What cannot be denied is that strength-based approach developed as a response to deficit theories. In 1920, while the term "strength-based approach" was not yet in use, Karl Wilker wrote about youth: "What we want to achieve in our work with young people is to find and strengthen the positive and healthy elements, no matter how deeply they are hidden. We enthusiastically believe in the existence of those elements even in the seemingly worst of our adolescents" (Roebuck, 2007, p.3). In the 1950s, Positive Peer Culture began which started to implement programs that helped troubled youth from a strength's developmental standpoint.

Other researchers argue that the strength-based approach was a result of student-led efforts to improve school discipline in the affluent town of Oakland Hills, California in the late 1990's (Day-Vines & Terriquez, 2008). Low-income students were being bused into an urban high school and teachers were disproportionally taking punitive disciplinary actions against black and Latino males, while white students were given referrals for more serious infractions. A strength-based approach was implemented as students in a youth group organized with teachers, school staff, counselors, parents, and other students to examine the strengths of the school and the unhealthy practices being

implemented. Collectively, combined interventions developed critical consciousness and social action. By 1997, the onset of the strength-based approach occurred when Charles Rapp wrote the psychology classic, *The Strengths Model.* The focus of the book was "amplifying the well part of the patient." By 1999, the president of the American Psychological Association, started what we call today, "positive psychology." Since then, strength-based approaches continue to emerge as professionals and scholars shift and research resources, skills, and resilience (Roebuck, 2007).

Best practices in higher education require (re)definition of success for Latinxs (Castellanos & Gloria, 2007) as the paradigm shifts from focusing on Hispanic students as problematic or deficits to more strength-based, inclusive approaches. Strength-based practices include familial, mentorship, cultural congruity, and professional development for university staff and faculty (Fenton, Walsh, Wong, & Cumming, 2015). Using strength-based approaches supports inclusion rather than exclusion and allows researchers to intentionally change the narrative. This dissertation adds to the literature by examining factors that contribute to college persistence and resiliency among Latinas in college.

In summary, deficit models have historically been racist and sexist, as noted with academic writing and polices. Changing the narrative to strength-based models allows for all groups of people to be promoted and empowered, especially in understanding resiliency and the individual, social, and environmental factors that contribute to the success of Latina collegians. I argue that if we examine Latinx research from a strength-based approach, the recommendations for polices, programs, and practices will be revolutionary.

Resiliency Theories

For this research, I chose to use the definition described by Wagnild & Young (1993) for resiliency: resiliency is a personal characteristic of an individual that facilitates the ability to make the required psychosocial adjustments when faced with adversity and not simply a response to a threat. This definition emerged from grounded theory in original research. The theoretical framework for resiliency is based on the capacity that almost everyone can be measured, recognized, built, and strengthened.

Pioneers of resiliency theory—such as clinical psychologist Garmezy (1991) and his graduate students—referred to resiliency as a dynamic process encompassing positive adaptation within the context of significant adversity (Luthar et al., 2000). As the first to look at cognitive skills and protective factors—the elements of an individual's background or personality that could enable success despite the challenges they faced— Garmezy shifted the paradigm from problem-oriented to a strength-based approach and this aligns with my anti-deficit perspective in trying to understand college persistence among Latinas. Too often researchers have concentrated on underachievement instead of understanding the trajectory of achievement.

While some researchers believe that resiliency is an individual developmental process, other studies indicate that there are genetic and biological predispositions to pathologies which effect resiliency. In contrast, some recent studies attribute support systems such as familial or societal factors as being associated with increasing resiliency (Cicchetti & Garmezy, 1993). Debates also include defining resiliency from external criteria (e.g. academic success), and internal criteria (psychological well-being), or both (Luthar, Cicchetti, & Becker, 2000).

Masten (2001) defines resiliency as: good outcomes in spite of serious threats to adaptation or development. Yeager and Dweck (2012) built on this definition, stating that resiliency is any behavioral, attributional, or emotional response to an academic or social challenge that is positive and beneficial for development (such as seeking new strategies, putting forth greater effort, or solving conflicts peacefully). Challenges in life are omnipresent and for children deemed, at-risk, it is known that incredible hardships begin with living in poverty where, social, and academic environments are subpar (Ravitch, 2013). Yet, according to McMillian, & Freed, (1994), resilient students do not believe that the family, neighborhood, or school is critical in either their successes or failures. They acknowledge that a poor home environment can make things difficult, but they do not blame their performance on these factors. Instead, resilient students are successful because of their positive and optimistic perspective and credit themselves for doing well in school.

Rutter (2013) defines resiliency as the dynamic process involving interaction between risk and protective processes–internal and external to the individual–that act to modify the effects of adverse life events and connotes that resilience is a person's ability to adapt to stress or chronic forms of adversity.

All of these definitions are important to understand because of the scholarly discussion surrounding resiliency. There is no consensus on a definition for resiliency. The definition of Wagnild & Young is therefore more relevant to this study, given the importance of understanding and measuring factors that are associated with Latina college persistence. The emphasis of Wagnild & Young is that resiliency has five characteristics: self-reliance, purpose, equanimity, perseverance, and existential

aloneness. Self-reliance is the belief to depend on oneself and acknowledge one's strengths and weaknesses (questions 2, 9, 13, 18, & 23 on Resiliency Scale or RS, as shown in Appendix D). Purpose is the realization that one has meaningful contributions for which to live (questions 4, 6, 11, 15, & 21 on Resiliency Scale). Equanimity is the balancing of life's experiences and taking what comes by moderating responses to adversity (questions 7, 12, 16, 19, & 22 on Resiliency Scale). Perseverance is the willingness to continue despite adversity or discouragement (questions 1, 10, 14, 20, & 24 on Resiliency Scale). Existential aloneness confers a feeling of uniqueness and the realization that life's path may be shared with others and that being alone is a sense of freedom (questions 3, 5, 8, 17 & 25 on the Resiliency Scale). The Measures of Resilience and an Evaluation of the Resilience Scale (RS) by Scoloveno (2018) indicated that the RS has also been used with content validity amongst diverse groups. In addition, the RS was noted as being the best instrument to examine resiliency in young adults due to the psychometric properties (Ahern, 2006).

Wagnild & Young describe resiliency not only as a positive personality characteristic, but also as a product that enhances individual adaptation. This definition emerged from grounded theory in original research. The theoretical framework for resiliency is based on the capacity that almost everyone can be measured, recognized, built, and strengthened. The definition of Wagnild and Young is therefore more relevant to this study, given the importance of understanding and measuring factors that are associated with Latina college persistence.

In summary, my integrative conceptual framework was based on the Model of Resilience which was created from the Resilience Scale. This instrument has been widely approved in the literature for having content validity among diverse groups.

Critical Race Theory

The reason I am using CRT for this study is because it provides context of diversity and inclusivity in higher education (Hiraldo, 2010). For my study, critical race theory informs how the psychosocial predictors effect students' outcomes in higher education. Critical Race Theory (CRT) is defined as an analytical framework that stems from the field of critical legal studies which addresses racial inequities in society (Hiraldo, 2010). It emerged in the 1970s spearheaded by Alan Freeman and Derrick Bell. Critical race theory rejects the idea of meritocracy because that would imply agreement that hard work leads to success for everyone. Until all men and women are treated equally, marginalized groups will advocate for reforms as institutional racism and sexism are a part of culture (Bernal, 2002). The slow response to change since the civil rights movement is evident as CRT has become a tool for deconstructing the meaning of educational achievement, reconstructing social and racial power in oppressive structures and discourse (Ladsen-Billings, 2010). Racism continues to be a normal fixture in American culture and race continues to be a powerful social construct and signifier that one is either white or not white (Delgado et al., 1994).

Critical race theory uses storytelling as a technique or method of examining racism with a focus on the experiences of people of color and subordination. Delgado (1989) used CRT in a procedure called counter storytelling, which analyzes the experiences of the marginalized groups and challenges the racism of the dominant

culture. Delgado uses the term "voice" to tell the individual stories of racism and the sustained inequalities of marginalized people. Story telling has been a well-known and rich part of the culture of ethnic groups and Delgado stated, "Oppressed groups have known instinctively that stories are an essential tool to their own survival and liberation." Story telling is part of the Latinx culture. The word consejos translates to advice in English–but it is more powerful than just advice. Delgado-Gaitan (1994) explains it is a cultural narrative that is part of the identity of the Latinx family's force and unity in support of one another while challenging the schools' notions of learning.

The stories and counter stories of affirmative action benefiting one group over another have resulted in a dichotomous debate felt in America. Many whites that lose out in a position or access to a university based on affirmative action believe that they are being discriminated against and consider it a form of reverse discrimination (Soloranzo & Yosso, 2002). Yet, the courts have upheld decisions based on trying to correct decades of discrimination against people of color, as in the landmark case of Grutter v. Bollinger (2003) that ruled in favor of the admissions policy at the University of Michigan Law School using affirmative action. Eleven years later, the Supreme Court ruled in favor of Michigan having the right to ban affirmative action, which was passed through voter referenda. California was the first state to ban affirmative action and also has the nation's largest Latinx population. Now there are eight states in total that have followed in their lead, Washington, Florida (via executive order), Nebraska, Colorado, Arizona, New Hampshire (Legislation), and Oklahoma.

The disparities that exist at the university level include taking a closer look at the faculty, the driving forces of higher education. Hiraldo (2010) explains that when the

curriculum is created by mostly White professors, they have autonomy, which can work against students of color. While the term colorblindness allows people to ignore racist practices, higher institutions of education must work towards eradicating it by hiring more people of color with tenured tracks to reduce racism in the classroom (Harper & Davis, 2016).

Microaggressions are subtle insults that people of color or marginalized groups encounter every day by the dominant culture. These encounters may not even be perceived by whites as being racial epithets because the intention is often not malicious. Yet, the effects are demeaning to the minority group and are a form of racism/sexism (Solorzano et al., 2002). The campus racial climate is no exception to microaggressions, starting from the top down. CTR argues that universities need to provide positive environments for both students and faculty of color which both report higher numbers of leaving their positions disproportionally to whites.

The significance of CRT in education is different because it highlights the gaps in curriculum, assessment, and funding. Curriculum in higher education often omits the instruction of historical and contemporary experiences of people of color, and CRT contends that colleges and universities place more value on the dominant culture. Assessment of the universities is critical in terms of program evaluations that institutions provide to students and faculty of color as a means of inclusion. Funding and maintenance of social and learning spaces for ethnic cultures promotes and isolates them as "others" to the universities. The critical race framework aims to desegregate the institutional designs that are often distorted with stereotypes.

There are five tenets of CRT that are often applied to education. These include: a) intercentricity of race and racism, which describes racism and the intersection of gender, class, sexuality, language, culture, immigrant status, phenotype, accent, and surname as embedded and permanent ideas in American society; b) The challenge to dominant ideology which argues that meritocracy, colorblindness and equal opportunity do not apply to people of color, and these notions are explained to those that believe in race neutrality; c) The commitment to social justice exposes those that have an "interest to convergence," a term coined by Bell, which states that whites support civil rights agenda only if there is something in it for them; d) The centrality of experiential knowledge carefully listens to counter-story telling of family histories, proverbs, testimonies, and chronicles (Yosso, 2009) as imperative to teaching about racism; and e) The interdisciplinary perspective looks at racism through a legal, sociological, and educational lens and focuses on civil rights issues both historically and in the present day. The goal of these tenets is to reduce microaggressions, racism, and hostile campuses (Savas, 2013).

Community Cultural Wealth

The purpose of using Community Cultural Wealth (CCW) for this study is to honor the Latinx culture. CCW is known to challenge racist frameworks in higher education by examining whose culture has capital (Yosso, 2005). My study uses strength-based approaches to identify factors that assist in college persistence and examine levels of resiliency among Latinas especially with respect to the individual, social, and environmental factors.

The epistemology of Community Cultural Wealth (CCW) is an extension of critical race theory that Tara Yosso developed to identify the cultural and social skills of people of color that go unacknowledged. Yosso draws on the wealth from the works of Oliver and Shapiro, *Black Wealth/White Wealth-A New Perspective on Racial Inequality* (1995), which articulates with empirical data the economic inequalities that exist between races and classes in the United States. Yosso also examines Moll and Gonzalez's (2004) "Funds of Knowledge," which contends "that existing classroom practices underestimate and constrain what Latino and other children are able to display intellectually" (p. 1). Moll's research was groundbreaking because it changed the structure of lesson plans and the role of teachers from experts in the classroom to active learners in the homes and communities of their Mexican-American students. Moll argues that making a concerted effort to understand different cultures by using ethnographic methods change the pedagogy into one that is more inclusive and connects the home with the school. This grassroots approach allows for a community-based school culture that draws on students' strengths (Liou & Antrop-Gonzalez, 2009).

Contrary to Bourdieu's cultural capital theory, which values the white, upper class culture, CCW uses critical race theory to listen to and give value to marginalized groups by adding nontraditional forms of capital to the academic discourse. They include: aspirational, linguistic, familial, social, navigational, and resistant capital, as shown in Figure 5. Aspirational capital is when people demonstrate high hopes and dreams of attaining a better life for themselves or their children despite multiple barriers and educational inequalities. Zell (2014) used CCW and CRT to understand the experiences

of Latinx Graduate Health Care Programs. The words of aspirational capital are understood by a bilingual research participant of Zell's in her semi-structured interview:

> I always wanted to go back to be a doctor. But in high school, maybe because my parents didn't have money…I dropped out and got married at 17. I was still thinking about being a doctor when I went back to school at 22, and I was just taking a class at a   time. I had to work...it took me four years to finish my associate degree. (Zell, 2014, p. 7)

Another form of Yosso's community cultural wealth is linguistic capital, which suggests that being bi-lingual or having multiple languages is an intellectual and social skill that is valuable. This skill is associated with a culture that includes storytelling: "This repertoire of storytelling skills may include memorization, attention to detail, dramatic pauses, comedic timing, facial expression, vocal tone, volume, rhythm and rhyme" (Yosso, 2005, p. 79). Linguistic capital includes a proficiency and experience with another culture and the ability to cross-culture; Zell explains how this capital is beneficial to occupational attainment as another participant commented:

> When I was working in (community) I noticed there were not enough speech therapists...much less bilingual. So it was something I always wanted to be able [to do] and offer to people who were disadvantaged or [had] the language barrier. (Zell, 2010, p. 10)

> Navigational capital refers to the ability of people of color to operate in institutions that are racially hostile. University campuses are known to be places that traditionally do not embrace nonwhite cultures and maneuvering through these structures with levels of achievement despite the conditions are exemplified with individual agency and resiliency (Williams, 1997). Luna and Martinez' (2013) research demonstrated this when a participant explained:

> In high school I was not taught what you needed to be college-bound as far as what you needed to do, letters of recommendation, what courses you were required to take, signatures you might need and how to get them or where to get

finances," said Alfredo, yet he and others found a way to persist. "I started becoming involved in the community, in school when I was a junior in high school and through that I met a lot of mentors and leaders in the community that helped me through the process of going to college. (Luna & Martinez, 2013, p. 10)

These three forms of capital, I would argue, are internal forms of capital. The remaining three are external capitals.

Familial capital is the knowledge that one has based on the cultural, social, and historical concepts. This capital is acquired by the relationships with family, extended family and friends who are considered like family that are a healthy connection to the community and its resources. Yosso borrows from works of scholars who looked at communal bonds within African American communities (Foley, 1997) as well as in Mexican-American communities and pedagogies of the home, which were referred to as the different cultures that children of color bring into the classroom. Familial capital focuses on the caring and nurturing environments that are provided. Zell's participants shared an example of familial capital:

> ...they [family members] helped a lot...My mom helped with the kids when I needed to get to the library or if I had class. Even my brother-in-law watched them while I'd go to class...even though they were going to eat chocolate for dinner, or be soaked wet through their clothes [when I got home]. Without my family I couldn't have done it. (Moll et al., 1992, p. 11)

Yosso's description of social capital is about the networks and community resources communities of color own and how those are used to help people become who they are vis-à-vis providing emotional support. Zell's respondent discusses how peer networks in a graduate program aided academic success: "... we took all our classes together, we helped each other out, we called each other with homework questions, so we both helped each other, so that was a motivation to me" (p. 13). Luna and Martinez

(2013) describe how students of color are pushed into joining the military instead of college by school agents and explain that Latinos enrolled in college seek other Latino organizations for support and social networks.

Resistant capital has a legacy of oppositional behavior towards inequality and injustices. Yosso posits that African American mothers use verbal and nonverbal cues consciously to create daughters who are resistors to the people or institutions that belittle or devalue black women (Ward, 1996). Transculturation is a form of resistance that embraces and incorporates cultural integrity while integrating them into another culture. Latinx students at risk for dropping out that use mentoring or tutoring demonstrate resistant actions (Yosso et al, 2001). Academic achievement includes helping others by guiding them with vital resources, which include recruiting and retaining Latinxs.

Yosso's collection of different theorists helped to form a collective identity committed to conducting research toward social justice by understanding people of color and not looking at them as deficient and culturally-poor. Creating a space in scholarship that empowers people and their knowledge is transformative and like critical race theory, community cultural wealth is mobilized from oppression and racism. It debunks the incumbent beliefs that people must possess Bourdieu's values. This is empowering for people of color because when others hear similar stories of resistance to racism, it becomes a legacy of resistance.
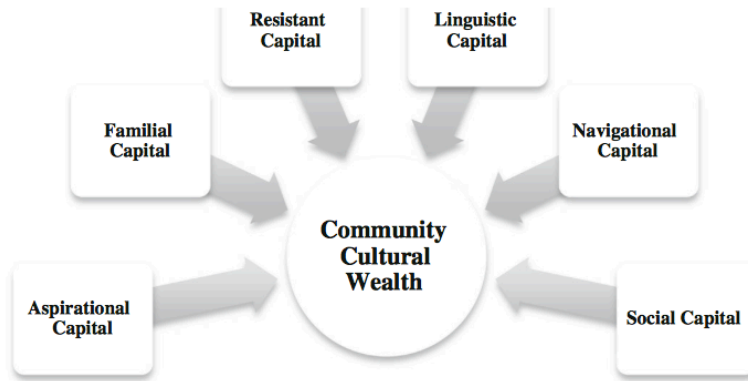
Figure 5. Community cultural wealth framework (Yosso, 2005)

The next chapter will discuss the methods applied to this study based on the literature review and the theoretical models. Careful consideration was placed on the design study of factors associated with college persistence and resiliency among Latina undergraduate students at four-year institutions.

Chapter Four: Methods

Design

This is a cross-sectional study of factors associated with college persistence and resiliency among Latina undergraduate students at four-year institutions. The study compares Latinas who continued to be enrolled in their third or fourth year of college education versus those who dropped out of college in their first or second years of education on their levels of resiliency and persistence. The study also examines individual, sociocultural, and environmental factors that might be associated with college persistence and resiliency, using a survey approach (Appendix C). The study addresses the following research questions:

1. Is there an association between resiliency and college persistence among Latinas in college?

2. Are there associations between resiliency and individual factors (e.g., demographics, involvement in organizations, and parental education) among Latinas in college?

3. Are there associations between resiliency and sociocultural factors (i.e., sense of belonging, familial and peer support, psychosocial stress, acculturation, and cultural congruity) among Latinas in college?

4. Are there associations between resiliency and environmental factors (e.g. university environment and perceived discrimination) among Latinas in college?

5. Are the predictors of resiliency different by college persistence (i.e., for Latina students who continue to be enrolled in their third or fourth year of college versus those who drop out of college in their first or second year)?

Study Sample and Recruitment

This study included 308 Latina college students who were enrolled during the fall semester of 2014 at a four-year university. The sample included those who continued to be enrolled in their third or fourth year of college as well as those who had dropped out during their first or second years of college. This study included adult college women, ages 18 years and above, who self-identified as Latina or Hispanic.

Primary recruitment targeted Rutgers University, but students from other four-year colleges were also included in the study at the same time. Recruitment of study participants took place through flyers and posters advertised on the Rutgers campuses as well as electronic email announcement sent to Latina students. Recruitment email advertisements took place primarily through the Chancellor's office, with the help from the office of Executive Director of Student Retention. This allowed me to identify Latinas who have enrolled in the fall of 2014 and Latinas who had enrolled in the past five years but did not complete their degrees. Secondary recruitment strategy took place through word of mouth. Lastly, I sought the assistance of Hispanic student clubs, organizations, and Latin studies departments in the distribution of printed and electronic study advertisement.

Study Variables and Measurement

There are two study outcomes: college persistence and resiliency. College persistence in this study is defined as being enrolled in the third or fourth year of college by fall of 2016 among a pool of students who had enrolled for their first year of college in the fall of 2014. In other words, this binary study outcome compares students who

continue being enrolled in their third or fourth year of college to Latina students who had

dropped out of college during their first or second years.

Resiliency in this study is defined as a personal characteristic of an individual that

facilitates the ability to make the required psychosocial adjustments when faced with

adversity (Wagnild & Young, 1993). Resiliency was measured in this study using the 25-

item Resiliency Scale (RS) as illustrated in Table 10 and Appendix D. The RS was

developed in 1988 through a qualitative study of 24 women who adapted successfully

after a major life event (Wagnild & Young, 1993). This instrument measures resiliency

via a seven-point Likert scale and identifies resiliency, a positive personality

characteristic. Internal consistency and reliability coefficient were reported at .89 in a

study with undergraduate nursing students (Wagnild & Young 1993). For this study,

resiliency, as an outcome variable, was treated as a continuous score based on the sum of

responses for the 25 items. In addition, resiliency levels were dichotomized for high

versus low resiliency based on the mean. Participants below the mean score were

considered to have low resiliency levels and those who scored above the mean score were

considered to have high resiliency. In order to obtain a copy of the RS, the student rate of

$75 had to be paid to the developer, followed by a written request indicating the reasons

for using the scale.

The study predictors, independent variables for this study, included individual,

sociocultural, and environmental factors. In addition, resiliency levels, as described

above, were used as both a study outcome and as a predictor for college persistence. The

individual factors for this study included age, country of origin, whether the student was

bilingual, marital status, living with children under the age of 18, means for paying for

school, awards/scholarships, student loans, participation in student, community, and/or religious organizations, mother and father college education, household income, and employment. Personal characteristics were measured categorically and are listed in Table 10.

The sociocultural variables examined psychosocial and cultural factors. Psychosocial protective factors were defined as, conditions or attributes in individuals, families, communities, or the larger society that, when present, mitigate or eliminate risk in families and communities. This was based on Yosso's six-part Cultural Wealth Model which defined cultural factors as described in the Theoretical Model chapter (Yosso, 2005).

Sense of belonging in this study is defined as the experience of personal involvement in a system or environment so that persons felt themselves to be an integral part of that system or environment (Hagerty, Lynch-Sauer, Patusky, Bouwsema, & Collier, 1992). Individual sense of belonging in this study was measured by using the 24-item Social Provisions Scale (SPS) found in Appendix E (Russell & Cutrona, 1984). The Social Provisions Scale has been widely used in research (Russell, Cutrona, Rose, & Yurko, 1984; Zaki, 2009). Total internal consistency reliability was reported with alpha coefficients of .93 (Ewing, Ryan, & Zarco, 2007) in addition to being a reliable measure for use with a low income, minority population (Cutrona & Russell, 1987). Respondents for this instrument were asked to answer a four-point Likert scale, which ranged from 1 (strongly disagree) to 4 (strongly agree). Half of the scale was phrased with a supportive word and the other half with lack of support. For example, item number one was "There are people I know will help me if I really need it." Item number two was "I do not have

close relationships with other people." For this study, a high continuous score indicated a high sense of belonging.

Familial support is a core characteristic of the Hispanic culture. This core has been explained as being threefold: family obligation, perceived support from the family and family as a referent. Researchers indicate that the effects of acculturation decrease family obligation and the perception of the family as the referents. However, the perceived support of the family remained invariable despite acculturation. Hispanics with high levels of acculturation continue to have higher levels of familismo than white non-Hispanics, indicating that the familial support is strong within this group (Sabogal, Otero-Sabogal, Marín, Perez-Stable, & Marín, 1987). This study used the Parental Knowledge Subscale, a nine-item scale that evaluates parental solicitation according to the perceptions of the Latina collegian (see Appendix F). The response format ranged from never, rarely, sometime, most of the time to always. Responses were calculated and averaged. Higher scores on this continuous scale reflected higher levels of parental support and knowledge (Orpinas, Rico, & Martínez-Cox, 2013).

Peer support is defined as students providing other students at the university with help, guidance, and emotional resources that contribute to academic success. A modified version of The Interpersonal Competence Questionnaire was used in this study, which included eight items pertaining to peers from the original 40 items found in Appendix G. Items were scored on a five-point Likert rating scale to indicate levels of comfort (1 = I'm poor at this; 2 = I'm only fair at this; 3 = I'm OK at this; 4 = I'm good at this; 5 = I'm extremely good at this). Researchers studying interpersonal relationships have recognized the importance of peer support (Buhrmester et al., 1988) and how strongly it relates to

emotional support. Literature has indicated that increases in stress levels for minority students are related to decreased college adjustment (Hurtado & Carter, 1997) and increase in peer support was a positive predictor for college adjustment among first generation ethnic minorities (Phinney, Dennis & Chuateco, 2005). The Cronbach's alpha reliability coefficients for the abbreviated domain was .80 with a range of .77 to .87 across the five domains. For this study, higher scores on the continuous scale demonstrate high levels of peer support.

Psychosocial Stress was measured using the 10-item instrument, Perceived Stress Scale (PSS; Cohen, Kamarck & Mermelstein, 1983) which is found in Appendix H. This scale measures the perception of stress during the past month. The PSS was designed to assess how unpredictable, uncontrollable, and overloaded respondents find their lives (Cohen, 1994). Feelings and thoughts are questioned in the five-point Likert scale with a range from 0 (Never) to 4 (Very often). The first question asks, "In the last month (but was modified for this study to say in the last year) how often have you been upset because of something that happened unexpectedly?" All the questions begin with the same wording "In the last month how often have you…" The cultural adaptation of this instrument with a Mexican population was evaluated with satisfactory results (Ramirez & Hernandez, 2007). Internal consistency in Spanish was adequate (α = .83). Adequate reliability has also been established using three college samples. Coefficient alphas ranged from .84 to .86 and test- retest reliability was found to be .85 (Solberg, Valdez & Villarreal, 1994). The author has released this instrument free to researchers. For this study, the continuous measurement was used and higher scores of stress represented higher levels of stress.

Acculturation refers to the process of change that occurs when culturally distinct groups and individuals come in contact with another culture (Samaniego & Gonzales, 1999). Most studies that focus on acculturation have assessed the individual level (Wilson, 2009). To measure acculturation, this study used the Vancouver Index of Acculturation (VIA) found in Appendix I. This 20-item measure of acculturation distinguishes the new American (mainstream) values from the loss of old (heritage) cultural tendencies. These items assess three domains of acculturation: values, social relationships, and adherence to traditions. The questions are asked in an AB pattern (first about one's heritage followed by one on American culture) on a nine-point Likert scale ranging from strongly disagree to strongly agree. The Vancouver Index of Acculturation alpha coefficient ranged from 0.85 to 0.89 for the Mainstream Culture to 0.82 to 0.91 for Heritage Culture subscale (Goforth, Oka, Leong & Denis, 2014). Three scores were calculated for acculturation; these included the total acculturation score, mainstream culture subscale, and the heritage culture subscale. High total acculturation scores indicated higher levels of adjusting to the mainstream culture and lower levels of retaining one's own heritage culture. Higher scores for the mainstream culture subscale indicated levels of adjusting to the mainstream culture (i.e., mainstream American value system). Higher scores on the heritage culture subscale indicated higher levels of retaining one's own heritage culture.

Cultural Congruity implies the cultural fit by the perception of the student with the collegiate environment (Gloria & Robinson Kurpius, 2001). The Cultural Congruity Scale (CCS) was used in this study to measure the degree to which students feel that their personal values, behaviors, and beliefs align with that of the university (Gloria &

Robinson Kurpius, 1996). This instrument consists of 13 items, scored on a seven-point Likert scale (see Appendix J). These items were generated based on Gloria and Robinson Kurpius' experience as racial/ethnic students and as professors who have served in the role of mentors to racial/ethnic students. The sample included "I feel that I have to change myself to fit in at school, and, I often feel like a chameleon, having to change myself depending on the ethnicity of the person I am with at school." The alpha coefficient was .81, with a mean of 71.88 (SD = 12.55). Predictive validity of the CCS was established through its significant association with academic persistence (Gloria & Robinson Kurpius, 2001). By using a continuous score for this study, higher scores indicated a greater perception of cultural fit.

The environmental factors in this study included campus climate and experiences of discrimination related to one's ethnic origin. University Environment was defined as the current attitudes, behaviors and standards of faculty, staff, administrators, and students concerning the level of respect for individual needs, abilities, and potential (Rankin, 2008). In this study, the University Environmental Scale (UES) was used to measure university environment (Gloria & Robinson Kurpius, 1996). The UES examines racial and ethnic students' perceptions of the university environment. This instrument included 14 items, scored on a seven-point Likert scale. The answers ranged from (1) Not at all to (7) Very true with nine items having positive verbiage compared to four negative statements. Statement one reads, "Class sizes are so large that I feel like a number," compared with the last statement, "I feel comfortable in the university environment" (see Appendix K). Cabrera and Padilla (2004) reported that Chicana/o students experience overt and covert racism in their educational settings. The UES reported a Cronbach's

alpha of .84. A continuous scale was used in this study to measure university environment. Higher scores indicated more positive perceptions of the college environment.

Regarding experiences of discrimination, the Brief Perceived Ethnic Discrimination Questionnaire-Community Version was used in this study to measure experiences of discrimination related to one's ethnic origin (Gloria, Castellanos & Orozco, 2005). This instrument included 17 items and five factors: lifetime exposures, exclusion/rejection, stigmatization/devaluation, discrimination at work/school, and treat/aggression. Responses ranged from never happen, sometimes happen, to happen very often, as shown in Appendix L (Brondolo et al., 2005). This instrument had internal consistency coefficients ranging from .65 to .88 and has been used with people over the age of 18 who self-identified as Black, Latinx, or Asian (Orpinas et al., 2013). Higher scores indicated higher perceptions of ethnic discrimination in college.

Table 10

Summary of Study Variables, Measurement Instruments, Number of items, and Level of Measurement

Variable	Measurement Instruments	Items	Level of Measurement
Dependent Variables / Outcomes			
College Persistence	Survey Question (binary outcome) Enrolled in 3rd yr. vs. dropped out in 1st or 2nd yrs.	1	Categorical
Resiliency Factors	Resilience Scale score Binary for low vs. high resiliency levels	25	Continuous Categorical
Independent Variables / Predictors			
Resiliency	Based on continuous RS	1	Categorical
Individual Factors	Age, country of birth, language, marital status, living with children under the age of 18, means for paying for school, belonging to student, community, and/or religious organizations, parental education, household income and employment.	11	Categorical
Sociocultural Factors: Psychosocial			
Sense of belonging	Social Provisions Scale	24	Continuous
Family	Parental Knowledge Scale (Child Version)	9	Continuous
Peer	Interpersonal Competence Questionnaire (emotional support) Q. 4.,9,14,19,24,29,34,39	8	Continuous
Psychosocial Stress	Perceived Stress Scale	10	Continuous
Sociocultural Factors: Cultural			
Acculturation	Vancouver Index of Acculturation	20	Continuous
Cultural Congruity	Cultural Congruity Scale	13	Continuous
Environmental Factors			
Campus Climate	University Environment Scale Brief Perceived Ethnic Discrimination Questionnaire-Community Version	14 17	Continuous Continuous

Data Analysis

Statistical Package for the Social Sciences (SPSS) software was used for statistical analysis of the study data. The data analysis proceeded in three stages. The first stage included conducting univariate analyses to describe the study variables using means and standard deviations for continuous variables and frequencies and proportions for categorical variables. The second stage included conducting bivariate analyses to examine the association between college persistence, resiliency, and the study variables. In the second stage, Chi-square, t-test, and Pearson's r-test were used to examine

bivariate association between the study variables, depending on the variables' levels of measurement. Given that data for resiliency scores were normally distributed, a binary outcome for resiliency was created based on the mean (77.37), which dichotomized responses into low resiliency levels (below the mean) vs. high resiliency levels (at or above the mean).

The third stage of the analysis included multivariate analysis for college persistence and resiliency, using logistic regression. In this stage, three predictive models were used to examine college persistence within the individual, sociocultural, and environmental factors that were found to be significant with the outcomes in the bivariate analysis and had low levels of collinearity with other predictors. Collinearity among the study predictors was determined based on having high levels of correlation using Pearson's test and r values more than 0.3. Further, three predictive models were used to examine the predictors of resiliency (dichotomized), for each category of variables (i.e., individual, sociocultural, and environmental) by introducing each category of variables into a separate predictive model. This allowed for examination of how the variables in each category contributed to variance or differences in college persistence as well as resiliency. The predictive models also included the estimation of adjusted Odds Ratios (aOR) and their respective 95% confidence intervals (95% CI).

Human Subjects Protection

Approval to conduct the study was obtained from the Rutgers University–Newark Institutional Review Board (IRB). The researcher completed the required Protection of Human Subjects Training. All study procedures were carried out in accordance with IRB and human subject's protections regulations and guidelines. Informed consent was

obtained in accordance with Rutgers University IRB regulations. Through continued

vigilance, I ensured that study participants were protected with regards to their safety,

confidentiality, privacy, voluntary participation, and being informed about the study.

Voluntary Participation

Study participants were informed that participation in the study was strictly

voluntary and that they were not obligated or required to participate in the study survey.

Interested participants were provided information about the study and were given

opportunities to ask questions and have their questions answered. Study participants were

asked to check a box on the online survey indicating that they received information about

the study and that they were willing to complete the survey. Participants were also

informed that they may withdraw from the study by stopping the survey at any time, no

questions asked.

Risks and Benefits

There are no known risks associated with taking part in the study. Even though

there are no direct benefits from the study for the participant, the study benefited the

target community by informing universities of the factors that support Latinas to succeed

in college and in developing interventions to improve college completion among Latina

women. Study participants were informed of the potential risks and benefits of

participating in the study. This information was provided as part of the written informed

consent.

Privacy and Confidentiality

No personal identifiers or data on protected personal information were collected

from study participants. The study records are kept in a secured locked file cabinet in

Ackerson Hall, room 212. All electronic study files are kept on a password-protected Rutgers computer, with encryption capabilities. The researcher made every attempt to protect the privacy of participants and confidentiality of the study data.

The following chapter will discuss the results of this research. The characteristics of study sample, predictors of college persistence and resiliency were examined to further understand how they are associated with the Latina collegian experience. Bivariate and multivariate analyzes was conducted on the responses of 308 Latinas.

Chapter Five: Results

Disparities persist among college attendance and conferred degrees among Latinas, both nationally and in New Jersey. Although college enrollment is on the rise, Latinas' completion rates remain disproportionately lower. Literature is lacking on resiliency and factors contributing to college success from those still enrolled in school, and particularly from those who left school before graduating.

The purpose of this study was to examine college persistence, resiliency, and factors that contribute to the Latina collegian experience at four-year universities. There were five research questions. The first asks: is there an association between resiliency and college persistence among Latinas in college? The second question was if there are associations between resiliency and individual factors (e.g., demographics, involvement in organizations, and parental education) among Latinas in college? Third, are there associations between resiliency and sociocultural factors (i.e., sense of belonging, familial and peer support, psychosocial stress, acculturation, and cultural congruity) among Latinas in college? Fourth, are there associations between resiliency and environmental factors (e.g. university environment and perceived discrimination) among Latinas in college? Finally, are the predictors of resiliency different according to the level of college persistence (i.e., for Latina students who continue to be enrolled in their third or fourth year of college versus those who drop out of college in their first or second year)?

There were two aims of this project. The first aim was to assess college persistence and levels of resiliency among Latina college students. The first steps involved analyzing the characteristics of the study sample, which included categorical

(individual factors) and continuous variables (sociocultural and environmental factors). Chi-square tests were completed to examine the bivariate associations between college persistence and the categorical predictors. The same test was done to examine resiliency. The results of the bivariate analysis also examined differences between the continuous predictors (sociocultural and environmental factors) and the study outcomes of college persistence and resiliency.

The second aim involved identifying factors that influence college persistence and resiliency among Latina collegians. Multivariate analysis was used to examine the individual, social, and environmental factors in this study. Logistic regression analysis was conducted to examine predictors for college persistence and resiliency. Results indicated that college persistence was higher among younger students (18-21 years old), bilingual students, single students, students who had awards/scholarships, students who belonged to student organizations, and students who belonged to community organizations. Further, college persistence was lower among students whose fathers had a college education. The study findings for resiliency indicated that belonging to student organizations and father's education were significant individual predictors among Latinas. The significant sociocultural variables included: sense of belonging, score on the acculturation–mainstream culture subscale, and the score on the acculturation-heritage culture subscale. Having high levels of resiliency was statistically associated with the university environment.

Characteristics of Study Sample

This section provides the study results related to the study sample. The characteristics of the sample show the frequencies and proportions for the categorical

study variables (as shown in Table 11). The means and standard deviations (SD) of the continuous study variables are listed in Table 12. The findings show that 36% of the respondents were between 18-21 years old; whereas, 64% of the respondents were 22 and above years old. Three fourths of the respondents (75%) were born in the United States. A large proportion (88%) of the respondents was bilingual. Additionally, 58% of the respondents were single and 38% were living with children under the age of 18 years. Regarding the source of payment for college, 72% were paying themselves, 28% had their families paying for their school, 44% received awards or scholarships, and 40% had loans. Furthermore, 37% of the respondents had a household income of $25,000-$49,999 and 13% had an annual household income of $50,000-$74,999. A large proportion of the respondents (84%) were either working as a full-time or a part-time employee. Regarding student involvement in organizations, 46% of the respondents belonged to student organization, 24% belonged to community organizations, and 15% had affiliations with at least one religious organization. In addition, 38% did not have any affiliation with any student, community, or religious organizations. Regarding parental education, 46% and 38% of the mothers and fathers, respectively, had college education.

Regarding college persistence (the *study outcome*), 38% of the respondents continued to be enrolled in their third or fourth year of college, while 62% of the respondents dropped out of college during the first or second years. The mean resiliency score (*study outcome*) was 77.37 (SD = 9.77). After dichotomizing resiliency scores based on the mean, 40% of the participants had low resiliency levels ($\leq$77) and 60% had high resiliency levels (>77).

Table 11

Characteristics of the Study Sample: Categorical Variables

Variables	Categories	n	%
College Persistence	Dropped out	191	62.0
	Persisting	117	38.0
Age	22 or over	164	63.6
	18-21	94	36.4
Country of Birth	United States	193	75.1
	Outside United States	64	24.9
Bilingual	No	30	11.6
	Yes	228	88.4
Single	No	131	42.5
	Yes	177	57.5
Living with Children under 18	No	160	62.0
	Yes	98	38.0
My family is paying for school	No	223	72.4
	Yes	85	27.6
I have Awards/Scholarships	No	172	55.8
	Yes	136	44.2
I have Student loans	No	184	59.7
	Yes	124	40.3
Belong to Student Organizations	No	166	53.9
	Yes	142	46.1
Belong to Community Organizations	No	234	76.0
	Yes	74	24.0
Belong to Religious Organizations	No	261	84.7
	Yes	47	15.3
Total Number of Type of Organizations	0	117	38.0
	1	121	39.3
	2	54	17.5
	3 or 4	16	5.2
Mother has College Education	No	137	53.7
	Yes	118	46.3
Father has College Education	No	150	62.2
	Yes	91	37.8
Household Income	$0 - $24,999	84	33.1
	$25,000 - $49,999	94	37.0
	$50,000 - $74,999	33	13.0
	$75,000 - $99,999	18	7.1
	$100,000 - $149,999	14	5.5
	$150,000 and up	11	4.3
Employment Full-time	Employed, full-time	112	43.6
	Employed, part-time	105	40.9
	Not employed	40	15.6

The mean score for sense of belonging scale was 68.22 (SD = 10.34). On average,

the mean family support score was 26.61 (SD = 4.58). Similarly, the respondents'

average score on the peer support was 26.86 (SD = 4.59). The average score of the

respondents on the stress scale was 26.56 (SD = 4.36). In addition, three different

measures related to acculturation were used. The mean acculturation scores were: 42.66

(SD = 5.18) for the total score, 27.32 (SD = 4.43) for the mainstream culture subscale,

and 29.59 (SD = 4.70) for the heritage culture subscale. Moreover, the mean score for

cultural congruity scale was 37.02 (SD = 7.15). The mean score for university

environment was 41.50 (SD = 7.48). Finally, the mean score for perceived discrimination

was 25.14 (SD = 7.27).

Table 12

Characteristics of the Study Sample: Continuous Variables

Continuous Study Variables	Mean	Std. Deviation
Resiliency Scale	77.37	9.77
Sense of Belonging	68.22	10.34
Family Support	26.61	4.58
Peer Support	26.86	4.59
Stress	26.56	4.36
Acculturation–Total Score	42.66	5.18
Acculturation–Mainstream Culture	27.32	4.43
Acculturation–Heritage Culture	29.59	4.70
Cultural Congruity	37.02	7.15
University Environment	41.50	7.48
Perceived Discrimination	25.14	7.27

Predictors of College Persistence

Predictors of college persistence were examined using bivariate analysis with chi

square as well as multivariate analysis with logistic regression. A chi-square test was

completed to examine the bivariate associations between college persistence and the

categorical study predictors, as shown in Table 13. In this bivariate analysis, college

persistence was statistically associated with age, language, marital status, having

awards/scholarships, belonging to student or community organizations, and father's

education. College persistence was higher among younger students (18-21 years-old; $X^2 =$

33.798; p < .001), bilingual students (X^2 = 6.639; p = <.010), single students (X^2 = 76.210; p = <.001), students who had awards/scholarships (X^2 = 51.443; p = <.001), students who belonged to student organizations (X^2 = 40.611; p = <.001), and students who belonged to community organizations (X^2 = 7.385; p = .007). Further, college persistence was lower among students whose fathers had a college education (X^2 = 8.296; p = .004). Finally, college persistence was not statistically associated in the bivariate analysis with country of birth, having children under 18 in the home, family paying for school, having student loans, belonging to religious organizations, mother's education, or household income.

Table 13

Bivariate Analysis of the Associations Between College Persistence and the Demographic
Characteristics, Using Chi-Square

Variable	Categories	College Persistence	
		%	X^2 (P)
Age	22 or over	31.7%	33.798
	18-21	69.1%	(<.001)
Country of Birth	United States	46.1%	.108
	Outside of US	43.8%	(.742)
Bilingual	No	23.3%	6.639
	Yes	48.2%	(.010)
Single	No	9.9%	76.210
	Yes	58.8%	(<.001)
Children under 18 in the home	No	50.0%	3.677
	Yes	37.8%	(.055)
Family Paying for School	No	35.9%	1.531
	Yes	43.5%	(.216)
Awards/Scholar-ships	No	20.3%	51.443
	Yes	60.3%	(<.001)
Student Loans	No	35.3%	1.374
	Yes	41.9%	(.241)
Belong to Student Organization	No	21.7%	40.611
	Yes	57.0%	(<.001)
Belong to Community Organization	No	33.8%	7.385
	Yes	51.4%	(.007)
Belong to Religious Organization	No	37.9%	.002
	Yes	38.3%	(.962)
Mother attend college	No	53.3%	6.533
	Yes	37.3%	(0.11)
Father attend college	No	52.0%	8.296
	Yes	33.0%	(.004)
Household Income	$0 - $24,999	47.6%	3.278
	$25,000 - $49,999	39.4%	(.657)
	$50,000 - $74,999	48.5%	
	$75,000 - $99,999	44.4%	
	$100,000 - $149,999	50.0%	
	$150,000 and up	63.6%	

The results of the bivariate analysis examined the differences in the continuous

predictors (sociocultural and environmental factors) by college persistence, using

independent sample t-tests as demonstrated in Table 14. Students who persisted in

college had significantly higher resiliency scores (t = 5.086; p <.001), a higher sense of

belonging (t =7.131; p= <.001), higher family support (t = 5.429; p= <.001) and peer

support (t = 5.600 ; p= <.001), higher stress (t = 2.299; p= .022), higher scores on the

heritage culture subscale of the acculturation scale (t=6.536; p<.001), higher cultural congruity (t = 4.123; p= <.001), and more positive perceptions of the university environment (t = 5.118; p= <.001), compared to students who had dropped out of college. Furthermore, students who persisted in college had significantly lower total acculturation scores (t = -3.939; p= <.001) and lower levels of perceived discrimination (t = -5.536; p= <.001). Finally, college persistence was not statistically associated in the bivariate analysis with scores on the mainstream culture subscale of the acculturation scale.

Table 14

Bivariate Analysis of the Associations Between College Persistence and Sociocultural and Environmental Factors (Continuous Predictors), Using t-test

| | College Persistence | | |
Variables	Persisted *Mean (SD)*	Dropped out *Mean (SD)*	t (P)
Resiliency Score	80.56 (8.76)	74.56 (9.79)	5.086 (<.001)
Sense of Belonging	72.71 (9.26)	64.11 (9.58)	7.131 (<.001)
Family Support	28.17 (3.95)	25.14 (4.66)	5.429 (<.001)
Peer Support	28.45 (4.09)	25.31 (4.54)	5.600 (<.001)
Stress	27.21 (4.65)	25.93 (3.98)	2.299 (.022)
Acculturation–Total Score	41.34 (4.75)	43.91 (5.29)	-3.939 (<.001)
Acculturation–Mainstream Culture	27.89 (4.00)	26.78 (4.76)	1.949 (.052)
Acculturation–Heritage Culture	31.46 (3.85)	27.79 (4.76)	6.536 (<.001)
Cultural Congruity	38.90 (7.20)	35.19 (6.63)	4.123 (<.001)
University Environment	43.90 (6.98)	39.17 (7.24)	5.118 (<.001)
Perceived Discrimination	22.65 (5.03)	27.59 (8.26)	-5.536 (<.001)

This study examined the predictors of college persistence within the individual, sociocultural, and environmental factors using multivariate analysis as shown in Table 15. Based on the bivariate analysis, three predictive models were tested. The results are described below and are shown in Table 15. Based on the multivariate analysis, this dissertation examined the predictors of college persistence within the individual, sociocultural, and environmental factors.

In the first predictive model, which is built to measure the relationship between college persistence and the individual factors, the categorical variables explained somewhere between 34% to 45% of the variability in college persistence (X^2=100.806; df=7; P<0.000). Among the variables that were significant predictors were age (p=.009), bilingual status (p=.031), marital status (p=.000), and employment status (p=.000). The odds of college persistence were higher for those who were younger (18-21 years old) (aOR:2.528; 95% CI: 1.257 -5.082), bilingual (aOR:3.271; 95% CI: 1.115-9.594), and single (aOR:4.286; 95% CI: 1.905-9.641). In contrast, the odds of college persistence were lower among students who were employed full time (aOR:.225; 95% CI: .114-.446). College persistence was not significantly associated with having awards/scholarship, having student loans, and father's education. Variables that were statistically significant in bivariate tests were no longer significant; these included having awards/scholarships, belonging to student or community organization and father's education.

In the second predictive model, college persistence was regressed on sociocultural factors. These continuous variables explained somewhere between 29% to 38% of the variability in college persistence (X^2=80.361; df=5; P<0.000). The variables that were significant included resiliency (p=.014), sense of belonging (p=.000), family support

(p=.023), acculturation-mainstream score (p=.021), and acculturation-heritage score (p=.001). The odds of college persistence were higher for Latina college students with high levels of resiliency (aOR:2.284; 95% CI: 1.183 -4.411), sense of belonging (aOR:1.070; 95% CI: 1.031-1.111), family support (aOR:1.093; 95% CI:1.012-1.181), and acculturation-heritage score (aOR:1.152; 95% CI: 1.063-1.248). In contrast, the odds of college persistence were lower for Latina college students with higher acculturation-mainstream score (aOR:.905; 95% CI: .832-.985).

The third predictive model tests the effects of the environmental predictors on college persistence. These predictors accounted for 15% to 20% of the variability in college persistence (X^2=38.411; df=2; P<0.000). College persistence was statistically associated with the university environment (p=.004) and levels of perceived discrimination (p=.001). The odds of college persistence were higher for Latina college students with more positive perceptions of the university environment (aOR:1.065; 95% CI: 1.020 -1.113), and lower levels of perceived discrimination (aOR:.922; 95% CI: .879-9.66).

Table 15

Logistic Regression Analysis of Predictors for College Persistence

Predictors	Criterion variables	College Persistence					
	B	SE	Wald	df	p	Exp(B)	95% CI
Individual Predictors (N=241)							
Age *(18-21 years vs. >21 years)*	.927	.356	6.775	1	.009	2.528	1.257-5.082
Bilingual *(Yes vs. No)*	1.185	.549	4.661	1	.031	3.271	1.115-9.594
Single *(Yes vs. No)*	1.455	.414	12.380	1	.000	4.286	1.905-9.641
Awards/Scholarships: *(Yes vs. No)*	.607	.341	3.162	1	.075	1.835	.940-3.583
Student loans *(Yes vs. No)*	-.338	.337	1.003	1	.317	.713	.368-1.381
Father have college education: *(Yes vs. No)*	-.525	.353	2.220	1	.136	.591	.296-1.180
Employed full-time: *(Yes vs. No)*	-1.490	.348	18.323	1	.000	.225	.114-.446
Constant	-2.062	.719	8.212	1	.004	.127	
Omnibus Tests of Model Coefficients	Chi-square=100.806; df=7; P<0.000						
Model Summary	-2 Log likelihood=230.693; Cox & Snell R^2=34.2%; Nagelkerke R^2=45.7%						
Sociocultural Predictors (N=238)							
Resiliency	.826	.336	6.049	1	.014	2.284	1.183-4.411
Sense of belonging	.068	.019	12.795	1	.000	1.070	1.031-1.111
Family support	.089	.039	5.147	1	.023	1.093	1.012-1.181
Acculturation-Mainstream	-.100	.043	5.340	1	.021	.905	.832-.985
Acculturation-Heritage	.141	.041	11.955	1	.001	1.152	1.063-1.248
Constant	-8.909	1.669	28.485	1	.000	.000	
Omnibus Tests of Model Coefficients	Chi-square=80.361; df=5; P<0.000						
Model Summary	-2 Log likelihood=249.510; Cox & Snell R^2=28.7%; Nagelkerke R^2=38.2%						
Environmental Predictors (N=236)							
University environment	.063	.022	8.164	1	.004	1.065	1.020-1.113
Perceived discrimination	-.081	.024	11.471	1	.001	.922	.879-9.66
Constant	-.621	1.276	.237	1	.627	.538	
Omnibus Tests of Model Coefficients	Chi-square=38.411; df=2; P<0.000						
Model Summary	-2 Log likelihood=288.738; Cox & Snell R^2=15.0%; Nagelkerke R^2=20.0%						

Predictors of Resiliency

The results of the bivariate analysis examine the differences in resiliency scores by the categorical study predictors, using independent samples t-test (except for household income which was tested using ANOVA) as illustrated in Table 16. The results of this bivariate analysis demonstrated that resiliency is statistically associated with family not paying for school, belong to community organizations, and father's education. Resiliency scores were higher among students whose families did not pay for college (t = 2.227; p=.027) and those who belonged to community organizations (t = -3.172; p= .002). Further, resiliency scores were lower among students whose fathers had college education (t = 2.506; p= .013). Finally, resiliency was not statistically associated with age, country of birth, language, marital status, children under 18 in the home, having awards/scholarships, having student loans, belonging to student or religious organizations, mother's education, and household income.

Table 17 illustrates the results of the bivariate analysis examining the associations between resiliency and the continuous study predictors, using Pearson's r-test. The results of this bivariate analysis demonstrate that resiliency scores are statistically correlated with sense of belonging, family and peer support, stress, acculturation-mainstream culture subscale as well as heritage culture subscale, cultural congruity, and the university environment. Higher resiliency scores were associated with higher sense of belonging (r = .446; p < .001), higher family support (r =.429; p < .001), higher peer support (r =.615; p < .001), higher acculturation-mainstream culture subscale score (r =.446; p <.001), higher acculturation-heritage culture subscale score (r = .493; p <.001), higher cultural congruity (r = .184; p = .004), and more positive perceptions of the university

environment (r = .294; p < .001). Further, lower resiliency scores were associated with

higher stress levels (r = -225; p <.001). Finally, resiliency scores were not statistically

correlated with the total acculturation score nor was it associated with level of perceived

discrimination.

Table 16

Bivariate Analysis of the Associations Between Resiliency Scores and the Demographic Characteristics, using t- test

| Variable | Categories | Resiliency | | |
		Mean	SD	*t(p)*
Age	22 or over	77.06	9.02	-.646
	18-21	77.88	10.94	(.519)
Country of Birth	United States	76.75	10.12	-1.77
	Outside of US	79.27	8.51	(.078)
Bilingual	No	75.04	10.28	-1.34
	Yes	77.66	9.69	(181)
Single	No	76.71	8.45	-.724
	Yes	77.67	10.34	(.470)
Children under 18 in the home	No	76.99	10.61	-8.21
	Yes	77.98	8.24	(.413)
Family Paying for School	No	78.31	9.61	2.227
	Yes	75.40	9.86	(.027)
Awards/Scholar-ships	No	76.74	9.08	-.947
	Yes	77.92	10.35	(.344)
Student Loans	No	77.99	10.02	1.051
	Yes	76.69	9.49	(.294)
Belong to Student Organization	No	76.04	9.32	-1.939
	Yes	78.44	10.03	(.054)
Belong to Community Organization	No	76.12	9.54	-3.172
	Yes	80.34	9.74	(.002)
Belong to Religious Organization	No	76.97	9.67	-1.373
	Yes	79.15	10.13	(.171)
Mother College	No	78.14	9.33	1.261
	Yes	76.58	10.14	(.208)
Father College	No	78.63	9.48	2.506
	Yes	75.37	9.99	(.013)
Household Income*	$0 - $24,999	77.98	9.73	F= .714
	$25,000 - $49,999	76.92	9.72	(.613)
	$50,000 - $74,999	74.97	10.64	
	$75,000 - $99,999	78.69	10.12	
	$100,000 - $149,999	79.57	6.30	
	$150,000 and up	78.64	12.39	

Note: Differences in Resiliency score by Household Income were tested using ANOVA

Table 17

Bivariate Analysis of the Associations Between Resiliency Scores and the Sociocultural and Environmental Factors, Using Pearson's r-test

Variables	Resiliency	
	r	P
Sense of Belonging	.446	<.001
Family Support	.429	<.001
Peer Support	.615	<.001
Stress	-.225	<.001
Acculturation-Total Score	-.066	.313
Acculturation-Mainstream Culture	.446	<.001
Acculturation-Heritage Culture	.493	<.001
Cultural Congruity	.184	.004
University Environment	.294	<.001
Perceived Discrimination	-.122	.060

Based on the bivariate analysis, three predictive models tested resiliency. The results are described below and are shown in Table 18. Based on the multivariate analysis, shown in Table 18, this dissertation examined the predictors of college persistence within the individual, sociocultural, and environmental factors.

In the first model, individual predictors explained somewhere between 7% to 10% of the variability in having high levels of resiliency (X^2=17.972; df=4; P<0.001). Among the variables that were significant predictors were belonging to student organization (p=.032) and father's education (p=.010). The odds of having high resiliency levels were lower for Latina college students whose fathers have college education (aOR:.470; 95% CI: .265-.832). The odds of having high resiliency levels were higher for those who reported belonging to student organizations (aOR:1.851; 95% CI: 1.055 -3.250). Having high levels of resiliency was not significantly associated with age or family paying for school.

In the second model, sociocultural predictors explained somewhere between 27%

to 36% of the variability in having high levels of resiliency ($X^2=75.281$; df=5; P<0.000).

The sociocultural variables that were significant include sense of belonging (p=.000),

acculturation-mainstream culture subscale (p=.007), and acculturation-heritage culture

subscale (p=.002). The odds of having high level of resiliency were higher for Latina

college students with high levels of belonging (aOR:1.067; 95% CI: 1.030-1.106), high

acculturation-mainstream culture subscale score (aOR:1.122; 95% CI: 1.032-1.22), and

acculturation-heritage culture subscale score (aOR:1.132; 95% CI: 1.049-1.223). Having

high levels of resiliency was not significantly associated with family support or stress.

In the third model, the environmental predictors explained 5% to 7% of the

variability in college persistence ($X^2=13.313$; df=2; P=0.001). Having high levels of

resiliency was statistically associated with the university environment (p=.007). The odds

of having high levels of resiliency were higher for Latina college students with more

positive perceptions of the university environment (aOR:.1.058; 95% CI: .1.016-1.102).

Having high levels of resiliency was not significantly associated with perceived

discrimination.

Table 18

Logistic Regression Analysis of Predictors for Having High Level of Resiliency

Predictors	Criterion variables	Having High Resiliency Levels					
	B	SE	Wald	df	p	Exp(B)	95% CI
Individual Predictors (241)							
Age: *(18-21 years vs. >21 years)*	.116	.291	.158	1	.691	1.122	.635-1.985
Family paying for school: *(Yes vs. No)*	-.582	.299	3.782	1	.052	.559	.311-1.005
Belong to student organizations: *(Yes vs. No)*	.616	.287	4.603	1	.032	1.851	1.055-3.250
Father have college education: *(Yes vs. No)*	-.756	.292	6.712	1	.010	.470	.265-.832
Constant	.133	.229	.337	1	.561	1.142	
Omnibus Tests of Model Coefficients	Chi-square=17.972; df=4; P =0.001						
Model Summary	-2 Log likelihood=316.021; Cox & Snell R^2=7.2%; Nagelkerke R^2=9.6%						
Sociocultural Predictors (N=238)							
Sense of belonging	.065	.018	13.002	1	.000	1.067	1.030-1.106
Family support	.018	.038	.229	1	.632	1.018	.945-1.097
Stress	-.074	.039	3.607	1	.058	.928	.860-1.002
Acculturation-Mainstream	.116	.043	7.260	1	.007	1.122	1.032-1.221
Acculturation-Heritage	.124	.039	10.057	1	.002	1.132	1.049-1.223
Constant	-9.789	1.983	24.379	1	<.001	.000	
Omnibus Tests of Model Coefficients	Chi-square=75.281; df=5; P<0.000						
Model Summary	-2 Log likelihood=254.657; Cox & Snell R^2=27.1%; Nagelkerke R^2=36.2%						
Environmental Predictors (N=236)							
University environment	.057	.021	7.388	1	.007	1.058	1.016-1.102
Perceived discrimination	-.018	.021	.736	1	.391	.982	.943-1.023
Constant	-1.881	1.190	2.496	1	.114	.152	
Omnibus Tests of Model Coefficients	Chi-square=13.313; df=2; P=0.001						
Model Summary	-2 Log likelihood=313.835; Cox & Snell R^2=5.5%; Nagelkerke R^2=7.3%						

The following chapter will include the discussion about important findings related to similar studies, consider explanations of the findings, study limitations and implications.

Chapter Six: Conclusion

Discussion

To reduce the number of variables examined in this study, I will discuss the more parsimonious predictors that explain college persistence and resiliency among Latina collegians. Factors contributing to the Latina collegian experience were strongly and independently associated with individual, sociocultural, and environmental predictors. This section summarizes the differences in the existing literature with my expectations and findings in three categories: new, contrary, and consistent findings. Limitations and implications are noted to improve Latina graduation rates for future research.

College Persistence Among Latina Collegians

The findings of this study suggested that students who do not work have greater college persistence than employed students. This is consistent with other research that the individual factors of age, being bilingual, single, and not working all indicated associations with college persistence (Strage, 2008; Villalba, 2007). In this study, the rate of Latinas employed while enrolled in a four-year university was 84%, dramatically higher than the national rate of 43% (NCES, 2015). Latinas who are more engaged with peers and actively connect with peer networks display the characteristics for remaining in school (Moschetti et al., 2018). If students are spending more time working than studying, it hinders the time required for academic success. High rates of Latinas dropping out of school can therefore be attributed to their employment status. This is a core concept for higher education institutions to consider when designing strategic plans to increase retention among the Latinx community. Paid internships for Latinas within

their fields may increase graduation rates as it supports their education and financial needs.

In this study, having high levels of resiliency was a significant predictor among Latinas persisting in school. This finding was consistent with my hypothesis. However, few studies have examined Latina collegians from a strength-based approach to understand what factors influence resiliency and college completion (Zimmerman, 2013). More work is needed to understand success factors for this population in higher education. As Rivera (2014) indicated, increasing resiliency includes building a more supportive system, both internally (self-care) and externally (encouragement from work, school, friends, and family). This suggests that more scholars need to focus on research that investigates what works for Latinas in higher education, changing the scholarly tone from the negative rhetoric that has existed for too long.

In contrast, research has yet to agree on acculturation (Cuellar, 2000; Miranda & Umhoefer, 1998). In this study, the odds of college persistence were lower for Latina college students with higher acculturation–mainstream scores. In other words, the more you adapt to the mainstream culture, the less likely you are to persist in college. While researchers debate acculturation, my research and strength-based theories suggest that it is more important to retain one's own heritage culture in college in order to attain academic and personal success (Yosso, 2005). This contradicts the work of anti-deficits which suggest that cutting off ties with one's own ethnic cultural norms is mandatory to succeed in higher education (Tinto, 1982). If universities were to have cultural centers on campus to honor the Latinx community, this would demonstrate one way in which the universities are embracing different cultures.

This study also indicated that having high levels of sense of belonging was positively associated with persistence and demonstrates ways to improve sense of belonging. These findings support the existing literature (Museus, 2017). The increased numbers of Latinos in higher education pose new challenges for universities to increase student participation and retention. Yet, participation in mainstream organizations does not often promote or support Latinas to excel in school (Hurtado & Carter, 1997). A supportive academic environment that resembles family-like structures has shown to be best suited for Latinas to succeed (Yosso, 2005). One possible way to provide a supporting environment could be through increasing the number of Latinx faculty and mentors. This would make the college experience more familiar with a person to be able to call upon when faced with questions or in need of advice. The cultural notion of consejos (advice) emphasizes the importance of college persistence among Latinas (Delgado-Gaitan, 1994).

In agreement with results from the family support literature, high levels of family support as indicated in this study increase college persistence (Ceja, 2004). Successful Latinas often credit their parents as being the most influential and encouraging people and reasons for their college attainment. The parental literature often describes how Latina mothers, regardless of educational level, have a positive influence among Latinas' success in school (Garrett et al., 2010; Willekens et al., 2014). Furthermore, the focus in the literature has been more on the mothers' impact on education. While father's education was not associated with college persistence, it was with resiliency. These results create tension with my hypothesis, because father's education had no significant effect on college persistence, yet it has a negative effect on resiliency. The odds of having

high resiliency levels were lower for Latina college students whose fathers have a college education. More research is needed to explain the effects of the fathers' education level and daughter's success.

The environmental predictors; university environment and perceived discrimination were both associated with college persistence. The campus climate was measured by the University Environmental Scale which examines class size, availability and assistance from faculty, staff, and tutoring services. Having more university programs that include heritage culture could improve the Latina experience in college by creating a greater sense of belonging.

However, it should be noted, that this study and the existing literature both indicate that the odds of college persistence were lower for Latina students with higher levels of perceived discrimination. The perceived discrimination scale examines how students have been mistreated by faculty, staff, police, and other students. Discrimination included feeling like an outsider based on speech, clothing, and ethnicity. Therefore, undoing racism in the university may include increasing cultural competency training for both faculty and staff to reduce experiences of discrimination.

The findings of this study are consistent with the existing literature and expectations for the relationship between college persistence and the individual, sociocultural, and environmental factors. Nevertheless, a key finding was that college persistence was low when Latinas indicated higher levels of acculturating to the mainstream culture. This suggests that having classes taught in Spanish would support heritage culture as well as having more cultural events on campus.

Resiliency Among Latina Collegians

The study findings of having high levels of resiliency associated with the college experience among Latinas were also examined in terms of individual, sociocultural, and environmental predictors. The individual predictor—father's education—was associated with resiliency as a negative. Further, college persistence was lower among students whose fathers had college education. Little consideration has been given to the impact that fathers' education has on Latina collegians (Espino, 2016). It would be interesting to learn whether the same holds true for Latinos and if there is a gender dynamic to consider with regards to resiliency between sons and daughters of Latino fathers.

Among the study predictors, resiliency was also associated with belonging to student organizations. Latina collegians reported that joining cultural organizations or programs that support their education had positive effects on increasing resiliency (Mount, 2015). Surprisingly, perceived discrimination was not associated with resiliency. One explanation might be that the instrument used to measure perceived discrimination did not capture resiliency for Latinas.

Predictors associated with both college persistence and resiliency are discussed below: These include sense of belonging, acculturation-mainstream, acculturation-heritage and the university environment.

College Persistence and Resiliency among Latina Collegians Working in Tandem

While college persistence and resiliency examined individual, sociocultural, and environmental predictors. Individual predictors were not associated with either college persistence or resiliency when looking at them together. In spite of that, the sociocultural and environmental predictors worked in tandem with college persistence and resiliency.

Below are the four predictors significantly associated with college persistence and resiliency.

Sense of Belonging

In this study, Latinas indicated that having support systems within the university increases students' sense of belonging. As expected, sense of belonging enhances resiliency (Gonzalez & Padilla, 1997). Research indicated that Latinas tend to serve as mentors for other students and this creates a positive association for both college persistence and resiliency (Museus, 2017). However, Cavazos et al., (2010) challenges researchers of resiliency to find connections with sense of belonging by encouraging college campuses to transform the academic landscape. Changing the landscape would include reimagining the curriculum. This would occur by diversifying the faculty which would include different styles of pedagogy and perspectives that enhance the Latinx culture. Externally the landscape would suggest having places designated as cultural centers. In other words, having physical spaces on campus that honor the Latinx culture would be a place for students to call their own.

Acculturation - Mainstream versus Heritage

In this study, the odds of college persistence were lower for Latina college students with higher acculturation–mainstream scores. Yet, resiliency was significant for Latinas when they acculturated into the mainstream. This study suggests the need for more funding, support, and policies at the university level to cultivate and honor the heritage culture of Latinas. The point here is to find a balance between acculturation and heritage cultures to increase college persistence. Administrators must consider their

universities' mission and how to create more inclusive environments for Latinos (Villicana, 2018).

Acculturation Heritage

The expectation for students to acculturate into the mainstream culture with regards to college persistence is counterproductive. Instead, it is recommended that Latinas keep their heritage culture (Reyes & Nora, 2012). Nonetheless, this study noted above that acculturating into the mainstream culture was associated with having high levels of resiliency. This study also indicates that retaining one's heritage culture is also associated with having high levels of resiliency. Since research indicates variability with heritage and mainstream acculturation, the use of intensive longitudinal design would allow a time perspective on college life (Zell, 2014). Therefore, helping Latinas obtain a balance between Mainstream and Heritage cultures would assist students in ways to maintain and practice their own culture and assimilating with the surrounding culture at the same time. Following cohorts through their years at college and further into their professions may allow researchers to find patterns that have impact among peers, families, and professors over time. This type of research should be performed to gain knowledge of the development of college pathways that lead to increasing graduation rates.

University Environment

Like the existing literature, this study indicated that the odds of college persistence and resiliency were higher for Latinas that had positive perceptions of the university environment. Having more professors of color was noted in the existing literature as a meaningful way to integrate diverse cultures into the curriculum (Harper &

Davis, 2016). However, having high levels of resiliency was not significantly associated with perceived discrimination. The odds of college persistence were lower for Latina college students with higher perceived discrimination levels. While these results agree with my hypothesis about resiliency, perceived discrimination was not significant for resiliency.

New, Contrary, and, Consistent Findings associated with College Persistence and/or Resiliency among Latinas

In this section, I identify the new, contrary, and consistent findings based on the results of the logistic regressions that are associated with the existing literature. In other words, this section explains how this study adds to, questions, and supports the existing literature.

The new findings of this research suggest significant and surprisingly not significant factors for college persistence and resiliency. The results are explained in the order they were presented in the survey. Beginning with college persistence, father's level of education was not associated with college persistence. In fact, little is known about the impact that the fathers' education has on their daughters until now. In terms of resiliency, surprisingly, this study indicated that the fathers' college education had a significantly negative effect on their daughters. The existing literature focuses heavily on the mother's education, as opposed to exclusively examining the father's impact on Latina success. There are limited studies that examine how resiliency and persistence factors contribute to the performance of Latina college students in postsecondary institutions. More research is needed to understand the relationship between the father's education level and daughter's success in college.

Contrary to the literature, this study explains that college persistence was not associated with awards, scholarship, and loans. However, this study also noted that a majority of students were employed to supplement their income, which negatively affects college persistence. The work status implies that having awards and scholarships is simply not enough for college persistence. As for resiliency in this study, age was not significant. Surprisingly, family paying for school, stress, and perceived discrimination were also not significant factors. This may be due to having too many or too few factors in the analysis.

Consistent with the existing literature, younger Latinas, who are bilingual, single, do not work, have a high sense of belonging, family support, high acculturation-heritage and university score demonstrated college persistence. In addition, Latinas with low levels of perceived discrimination also indicated college persistence. In addition, the ongoing debate about acculturation was manifested in this study, too. Acculturation-mainstream was negatively significant for college persistence but significant for resiliency. Acculturation-heritage was significant for both college persistence and resiliency. This implies that if research looked at both factors from this study, universities that support the Latina culture would increase college persistence and resiliency.

Study Limitations

The study findings should be considered in the context of a few limitations. First, given the cross-sectional design of the study, the directionality of relationships cannot be established. However, given that the study predictors tend to conceptually occur before the study outcomes, it is unlikely that college persistence and resiliency would have led to the individual, sociocultural, and environmental factors examined in this study.

Nevertheless, the study design does not allow for examination of directionally or causation. Second, the study may be limited by recall bias; however, it is not clear how much of an effect recall bias had, if any, on the study findings. In addition, recall bias was minimized in this study by recruiting participants who have recently been through a college experience (within the past 5 years). Third, some of the study instruments were not specific to experiences of Latinos such as the University Experience Scale, while the University Scale reveals adequate internal consistency coefficients for diverse groups, more research is needed to measure unique educational experiences for Latinas' in higher education. Fourth, the study sample included Latinas in New Jersey, a state with a higher concentration of Latinos in the general population as well as in colleges. Therefore, generalizability of the study findings is limited to populations with similar characteristics to our study sample. In other words, the study findings may not be generalizable to colleges with low rates of enrollment for Latina students as well as in areas with low rates of Latinos in the surrounding populations.

This study examined Latinas who entered four-year universities in 2014 however, quantitative analysis was exclusively conducted. Including data from qualitative studies would be helpful to understand levels of resiliency and the interactions that affect college persistence. Although college enrollment has increased over the years (Fry, 2011), research is still needed to examine these factors, as the goal is to have graduation rates on par with the enrollment rate within the target population.

Furthermore, the focus of this study was not on collecting individual data on specific universities, however, lack of aggregated data on intervention and retention strategies implemented by universities to serve Latina students was a limitation of this

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study. Collecting individual data on specific universities would be important in terms of understanding what types of student organizations have high Latina participation over the course of four years. This information would assist in examining levels of resiliency and college persistence.

Another limitation of this study was the lack of literature with regards to understanding how college educated fathers affect resiliency among Latina collegians. In this study, careful examination of the individual factors indicated that Latinas' whose fathers graduated from college had lower levels of resiliency. Hence, this study is still pertinent in the Latinx community because conferred degrees remain disproportionately low, and identifying best ways to support students remains crucial (Fry, 2011; Yosso, 2005).

Implications for Interventions and Future Research

The results of this study have implications for potential positive academic changes at the university level as well as for future research. This study presented recommendations, applicable in higher education, which enable comparisons between students that dropped out of four-year universities and those that persisted. Taken together, this dissertation addressed a gap in the literature using quantitative methods. With little national research that focuses on females within the Latinx community in colleges, the following key points are suggested. Recommendations are listed in two sections: recommendations for interventions and programs and recommendations for future research.

Recommendations for interventions and programs include having more paid internships or work study programs on campus that relate to the Latina's major to increase retention rates. This research suggests that having awards and scholarships is simply not enough for college persistence. Therefore it is recommended to provide paid work related to support academic interests in order to increase college persistence. In addition, sense of belonging and the university environment would increase college persistence and resiliency if college campuses transformed the academic landscape by reimaging the curriculum (designed by Latinx faculty) and including Latina cultural centers. This will entail increasing funding to support racial diversity. Policies at the university level also need to be redesigned to cultivate and honor the heritage culture of Latinas. Administrators must address creating inclusive environments for the Latinx community on campus.

Latina students would also benefit by having mentors to support their transition from the familiar collective college to the existing individualistic college campus. This research indicated higher levels of college persistence and resiliency when retaining one's heritage culture. This implies the need for universities to accept, embrace, and support the Latinx culture. Undoing racism in the university may include increasing cultural competency training for both faculty and staff to decrease discrimination felt on campus.

While Harper and Davis (2016) explains the responsibilities for higher education to address racial inequalities, one recommendation as it pertains to all the predictors in this study is for Latinas to have the option to take classes taught in Spanish across disciplines, which would entail hiring a more diverse faculty. This would aid

administrators to consider creating academic spaces that have meaning and express cultural and ethnic identifications.

Recommendations for future research include development and or adaptation of instruments to measure the experiences of Latinas. Another recommendation includes using the College Self-Efficacy instrument, which measures course, social, and roommate efficacy as a determinant for college adjustment. In addition, using qualitative research to gain in-depth understanding of the experiences of Latinas in college. Also, it is recommended to consider the use of other designs, such as longitudinal designs, to establish causal pathways for college persistence and resiliency. Future research should examine college persistence and resiliency in colleges with low Latina enrollment rates for Latinas to understand what is happening at non-Hispanic Serving Institutes. Further research is required to understand the relationships between the parental education – particularly father's education – and lower levels of college persistence among Latinas.

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Appendix A: **Total Number, Percentage Distribution, and Percent Female of**

Undergraduates, 1976 - 2008

Race/ethnicity	1976	1980	1990	2000	2003	2005	2008
Number enrolled							
Total	9,418,970	10,469,088	11,959,106	13,155,393	14,480,364	14,963,964	16,345,738
White	7,740,485	8,480,661	9,272,630	8,983,455	9,664,641	9,828,594	10,339,216
Black	943,355	1,018,840	1,147,220	1,548,893	1,838,043	1,955,356	2,269,284
Hispanic	352,893	433,075	724,561	1,351,025	1,579,783	1,733,555	2,103,524
Asian/Pacific Islander	169,291	248,711	500,486	845,545	922,749	971,353	1,117,865
American Indian/ Alaska Native	69,729	77,900	95,474	138,506	157,821	160,404	175,552
Nonresident alien	143,217	209,901	218,735	287,969	317,327	314,702	360,297
Percentage distribution							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White	82.2	81.0	77.5	68.3	66.7	65.7	63.2
Black	10.0	9.7	9.6	11.8	12.7	13.1	13.9
Hispanic	3.7	4.1	6.1	10.3	10.9	11.6	12.9
Asian/Pacific Islander	1.8	2.4	4.2	6.4	6.4	6.5	6.8
American Indian/ Alaska Native	0.7	0.7	0.8	1.1	1.1	1.1	1.1
Nonresident alien	1.5	2.0	1.8	2.2	2.2	2.1	2.2
Percent female							
Total	48.0	52.3	55.0	56.1	57.0	57.2	56.8
White	47.6	52.2	54.9	55.4	55.9	55.9	55.5
Black	54.3	58.0	61.0	62.7	64.1	64.3	63.8
Hispanic	45.7	51.2	54.9	56.9	58.4	58.6	58.0
Asian/Pacific Islander	46.2	48.3	49.2	52.5	53.6	53.9	54.0
American Indian/ Alaska Native	50.1	55.4	58.2	59.3	61.0	61.1	59.9
Nonresident alien	32.7	33.4	42.4	47.9	50.3	51.8	50.7
Race/ethnicity	1976	1980	1990	2000	2003	2005	2008

Appendix B: **Dimensions of Resilience**

DIMENSIONS OF RESILIENCE

Adversity Strikes

↓

Interpretation of Adversity

Past and Current Reality
- Assumptions about reality
- Causes of adversity
- Risks posed by adversity

Future Possibility
- Personal influence
- Personal expectations
- Personal focus

↓

Resilience Capacity

Personal Values
- Core values
- Educational values
- Program values

Personal Efficacy
- Competence and confidence
- Strong connection to others

Personal Energy
- Physical fuel
- Emotional mastery
- Mental focus
- Spiritual wellspring

↓

Actions to Achieve Resilience

- Enact personal values   • Employ personal efficacy   • Invest personal energy

↓

Successful Outcome

↓

Increased Resilience Capacity for Future Adversity

- Strengthened personal values
- Strengthened personal efficacy
- Strengthened personal energy

Appendix C: **Online Survey: Resiliency and Factors Contributing to the Latina**

Collegian Experience

RUTGERS

Resiliency and Factors Contributing to the Latina Collegian Experience

1. **Welcome to the survey.**

Thank you in advance for participating in this research to *help improve Latina educational outcomes*.
Your feedback is important!

7%
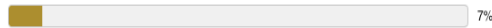
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Resiliency and Factors Contributing to the Latina Collegian Experience

2. **Eligibility Questions**

Do you consider yourself Latina or of Hispanic background?

○ Yes

○ No

Are you 18 years old or older?

○ Yes

○ No

Are you female?

○ Yes

○ No

Have you been enrolled in college in a 4-year college any time during the past 4 years?

○ Yes

○ No

14%
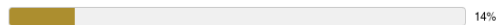
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Resiliency and Factors Contributing to the Latina Collegian Experience

3. Informed Consent

You are invited to participate in a research study that is being conducted by Jennifer Bucalo, Principal Investigator, who is a PhD candidate in the Joint PhD Program in Urban Studies at Rutgers University. The purpose of this research is to determine factors that contribute to the success of Latina collegians.

This research is anonymous. Anonymous means that I will record no information about you that could identify you. There will be no linkage between your identity and your response in the research. This means that I will not record your name or share your email address. If you agree to take part in the study, there will be no way to link your responses back to you. Therefore, data collection is anonymous.

My dissertation committee and the Institutional Review Board at Rutgers University are the only parties that will be allowed to see the data, except as may be required by law. If a report of this study is published, or the results are presented at a professional conference, only group results will be stated. All study data will be kept for three years.

There are no foreseeable risks to participation in this study. In addition, you may receive no direct benefit from taking part in this study. At the end of the survey, there will be information about support and assistance if you need counseling resources.

Participation in this study is voluntary. You may choose not to participate, and you may withdraw at any time during the study procedures without any penalty to you. In addition, you may choose not to answer any questions with which you are not comfortable.

If you have any questions about the study or study procedures, you may contact me at jennifer.bucalo@rutgers.edu or 917-743-9811. You can also contact my faculty advisor Dr. Mara Sidney at 973-353-5787, msidney@scarletmail.rutgers.edu or via mail at 360 MLK Jr. Blvd. Hill Hall. 7th Floor Newark. NJ 07102.

If you have any questions about your rights as a research subject, please contact an IRB Administrator at the Rutgers University, Arts and Sciences IRB:
Institutional Review Board Rutgers University, the State University of New Jersey
Liberty Plaza / Suite 3200
335 George Street, 3rd Floor
New Brunswick, NJ 08901
Phone: 732-235-2866
Email: humansubjects@orsp.rutgers.edu

Please retain a copy of this form for your records. By participating in the above stated procedures, then you agree to participation in this study.

If you are 18 years of age or older, understand the statements above, and will consent to participate in the study, click on the "I Agree" button to begin the survey. If not, please click on the "I Do Not Agree" button which you will exit this program.

I have read the consent and willing to take part in this research study.

◯ Yes, I agree

◯ No, I do not agree

[====================   ] 21%
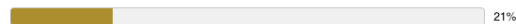
[Prev] [Next]

Do you belong to...? (select all that apply)

☐ Student Organizations

☐ Community Organizations

☐ Religious Organizations

☐ Other (please specify)

[   ]

What is the highest level of school your mother (caretaker) completed?

◯ Did not complete high school

◯ High School/GED

◯ Some college

◯ Bachelor's Degree

◯ Master's, Advanced Graduate work or Ph.D.

◯ Not Sure

What is the highest level of school your father (caretaker) completed?

◯ Did not complete high school

◯ High School/GED

◯ Some college

◯ Bachelor's Degree

◯ Master's, Advanced Graduate work or Ph.D.

◯ Not sure

Please select from the following list the option that best describes your college enrollment

◯ I left school in my first year

◯ I left school in my second year

◯ I left school in my third year

◯ I left school in my fourth year

◯ I am currently enrolled in my third year

◯ I am currently enrolled in my fourth year

What is your approximate average household income?

◯ $0-$24,999

◯ $25,000-$49,999

◯ $50,000-$74,999

◯ $75,000-$99,999

◯ $100,000-$149,999

◯ $150,000 and up

Which of the following categories best describes your employment status?

◯ Employed, working full-time

◯ Employed, working part-time

◯ Not employed

29%

| Prev | Next |

RUTGERS

| Resiliency and Factors Contributing to the Latina Collegian Experience |

5. **The following section asks questions related to how you adapt and accept change:**

Please answer all the questions.

	Strongly Disagree	Disagree	Agree	Strongly Agree
When I make plans I follow through with them.	◯	◯	◯	◯
I usually manage one way or another.	◯	◯	◯	◯
I am able to depend on myself more than anyone else.	◯	◯	◯	◯
Keeping interested in things is important to me.	◯	◯	◯	◯
I can be on my own if I have to.	◯	◯	◯	◯
I feel proud that I have accomplished things in life.	◯	◯	◯	◯
I usually take things in stride.	◯	◯	◯	◯
I am friends with myself.	◯	◯	◯	◯
I feel that I can handle many things at a time.	◯	◯	◯	◯
I am determined.	◯	◯	◯	◯
I seldom wonder what the point of it all is.	◯	◯	◯	◯
I take things one day at a time.	◯	◯	◯	◯

I can get through difficult times because I've experienced difficulty before.	◯	◯	◯	◯
I have self discipline.	◯	◯	◯	◯
I keep interested in things.	◯	◯	◯	◯
I can usually find something to laugh about.	◯	◯	◯	◯
My belief in myself gets me through hard times.	◯	◯	◯	◯
In an emergency, I am someone people can generally rely on.	◯	◯	◯	◯
I can usually look at a situation in a number of ways.	◯	◯	◯	◯
Sometimes I make myself do things whether I want to or not.	◯	◯	◯	◯
My life has meaning.	◯	◯	◯	◯
I do not dwell on things that I can't do anything about.	◯	◯	◯	◯
When I am in a difficult situation, I can usually find my way out of it.	◯	◯	◯	◯
I have enough energy to do what I have to do.	◯	◯	◯	◯
It's ok if there are people who don't like me.	◯	◯	◯	◯

36%

Prev   Next

RUTGERS

Resiliency and Factors Contributing to the Latina Collegian Experience

6. **This sections asks about the people in your life:**

Please answer all questions.

	Strongly Disagree	Disagree	Agree	Strongly Agree
There is no one who needs me to take care of them.	◯	◯	◯	◯
I do not have a feeling of closeness with anyone.	◯	◯	◯	◯
If something went wrong, no one would help me.	◯	◯	◯	◯
There are people who call on me to help them.	◯	◯	◯	◯
I have someone to talk to about decisions in my life.	◯	◯	◯	◯
There is no one I can turn to in times of stress.	◯	◯	◯	◯
There is no one I can count on for help if I really need it.	◯	◯	◯	◯
There are people who admire my talents and abilities.	◯	◯	◯	◯

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There is no one who has the same interests and concerns as me.	○	○	○	○
I feel a strong emotional tie with at least one other person.	○	○	○	○
There are people I can count on in an emergency.	○	○	○	○
There are people who value my skills and abilities.	○	○	○	○
I feel responsible for taking care of someone else.	○	○	○	○
I have a trustworthy person to turn to if I have problems.	○	○	○	○
There are people who like the same social activities I do.	○	○	○	○
There is no one who likes to do the things I do.	○	○	○	○
There is no one I feel comfortable talking about problems with.	○	○	○	○
I have close relationships that make me feel good.	○	○	○	○
I am with a group of people who think the same way I do about things.	○	○	○	○
I do not think that other people respect what I do.	○	○	○	○
I do not have close relationships with other people.	○	○	○	○
Other people do not think I am good at what I do.	○	○	○	○

43%
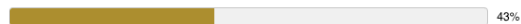
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Resiliency and Factors Contributing to the Latina Collegian Experience

7. **This section asks questions related to how you feel about your family's support:**

Please answer all questions.

	Strongly Disagree	Disagree	Agree	Strongly Agree
My parent(s)/guardian(s)/main caretaker(s) are the reason I am in college.	○	○	○	○
I would say that I am a "successful" student.	○	○	○	○
I have some form of contact with my family often.	○	○	○	○
I am solely responsible for my academic success as a student.	○	○	○	○
My parents(s)/guardian/main caretakers were "strict" when it came to school.	○	○	○	○
My family calls/emails/texts me a lot to ask how I am doing in school.	○	○	○	○
I am disciplined in how I approach my studies.	○	○	○	○
My parents(s)/guardian/main caretakers valued education.	○	○	○	○
I follow a routine in how I study, take notes and prepare for classes.	○	○	○	○

50%

Prev   Next

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Resiliency and Factors Contributing to the Latina Collegian Experience

8. **This section asks questions related to your role as a friend:**

Please answer all questions.

	Never	Rarely	Sometimes	Often
Helping a close companion work through his or her thoughts and feelings about a major life decision, (e. g., a career choice).	○	○	○	○
Being able to patiently and sensitively allow a companion "let off steam" about outside problems s/he is having.	○	○	○	○
Helping a close companion get to the heart of a problem s/he is experiencing.	○	○	○	○
Helping a close companion cope with family or roommate problems.	○	○	○	○
Being able to say and do things to support a close companion when s/he is feeling down.	○	○	○	○
Being able to show genuine empathetic concern even when a companion's problem is uninteresting to you.	○	○	○	○
When a close companion needs help and support, being able to give advice in ways that are well received.	○	○	○	○

57%

Prev   Next

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Resiliency and Factors Contributing to the Latina Collegian Experience

9. **This section asks questions related to stress:**

Please answer all questions.

	Never	Rarely	Sometimes	Often
How often have you been upset because of something that happened unexpectedly?	○	○	○	○
How often have you felt that you were unable to control the important things in your life?	○	○	○	○
How often have you felt nervous and "stressed"?	○	○	○	○
How often have you felt confident about your ability to handle your personal problems?	○	○	○	○
How often have you felt that things were going your way?	○	○	○	○
How often have you found that you could not cope with all the things that you had to do?	○	○	○	○
How often have you been able to control irritations in your life?	○	○	○	○
How often have you felt that you were on top of things?	○	○	○	○
How often have you been angered because of things that were outside of your control?	○	○	○	○
How often have you felt difficulties were piling up so high that you could not overcome them?	○	○	○	○

64%

Prev   Next

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10. **This sections asks questions related to your participation in the Latina and mainstream culture.**

Please answer all questions.

	Strongly Disagree	Disagree	Agree	Strongly Agree
I often participate in my Latina cultural traditions.	○	○	○	○
I often participate in mainstream American cultural traditions.	○	○	○	○
I would be willing to marry a person from my Hispanic culture.	○	○	○	○
I would be willing to marry a non-Hispanic American.	○	○	○	○
I enjoy social activities with people from the same Hispanic culture as myself.	○	○	○	○
I enjoy social activities with non-Hispanic individuals.	○	○	○	○
I am comfortable interacting with people of the same Hispanic culture as myself.	○	○	○	○
I am comfortable interacting with non-Hispanic individuals.	○	○	○	○
I enjoy entertainment from my Latina culture.	○	○	○	○
I enjoy mainstream American entertainment.	○	○	○	○
I often behave in ways that are typical of my Latina culture.	○	○	○	○
I often behave in ways that are typically mainstream American.	○	○	○	○
It is important for me to maintain or develop the practices of my Hispanic culture.	○	○	○	○
It is important for me to maintain or develop American cultural practices.	○	○	○	○
I enjoy the jokes and humor of my Hispanic culture.	○	○	○	○
I enjoy non-Hispanic jokes and humor.	○	○	○	○
I am interested in having friends from my Hispanic culture.	○	○	○	○
I am interested in having non-Hispanic friends.	○	○	○	○

71%

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RUTGERS

11. **This section asks questions related to how you feel at the university:**

Please answer all questions.

	Strongly Disagree	Disagree	Agree	Strongly Agree
I feel that I have to change myself to fit in at school.	○	○	○	○
I try not to show the parts of me that are "ethnically" based.	○	○	○	○
I often feel like a chameleon, having to change myself depending on the ethnicity of the person I am with at school.	○	○	○	○
I feel that my ethnicity is incompatible with other students.	○	○	○	○
I can talk to my friends at school about my family and culture.	○	○	○	○
I feel I am leaving my family values behind by going to college.	○	○	○	○
My ethnic values are in conflict with what is expected at school.	○	○	○	○
I can talk to my family about my friends from school.	○	○	○	○
I feel that my language and/or appearance make it hard for me to fit in with other students.	○	○	○	○
My family and school values often conflict.	○	○	○	○
I feel accepted at school as an ethnic minority.	○	○	○	○
As an ethnic minority, I feel as if I belong on this campus.	○	○	○	○
I can talk to my family about my struggles and concerns at school.	○	○	○	○

79%

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Resiliency and Factors Contributing to the Latina Collegian Experience

12. **This section asks questions related to people at the university who provide you with support:**

Please answer all questions.

	Never	Rarely	Sometimes	Often
Class sizes are so large that I feel like a number.	○	○	○	○
The library staff is willing to help me find materials/books.	○	○	○	○
University staff has been warm and friendly.	○	○	○	○
I do not feel valued as a student on campus.	○	○	○	○
Faculty has not been available to discuss my academic concerns.	○	○	○	○
Financial aid staff has been willing to help me with financial concerns.	○	○	○	○
The university encourages/sponsors ethnic groups on campus.	○	○	○	○
There are tutoring services available for me on campus.	○	○	○	○
The university seems to value minority students.	○	○	○	○
Faculty has been available for help outside of class.	○	○	○	○
The university seems like a cold, uncaring place to me.	○	○	○	○
Faculty has been available to help me make course choices.	○	○	○	○
I feel as if no one cares about me personally on this campus.	○	○	○	○
I feel comfortable in the university environment.	○	○	○	○

86%

Prev   Next

Resiliency and Factors Contributing to the Latina Collegian Experience

13. **This section asks questions related to discrimination:**

How often ....

	Never	Sometimes	Often
Have you been treated unfairly by teachers, principals, or other staff at school?	○	○	○
Have others thought you couldn't do things or handle a job?	○	○	○
Have others threatened to hurt you (ex: said they would hit you)?	○	○	○
Have others actually hurt you or tried to hurt you (ex: kicked or hit you)?	○	○	○
Have policemen or security officers been unfair to you?	○	○	○
Have others threatened to damage your property?	○	○	○
Have others actually damaged your property?	○	○	○
Have others made you feel like an outsider who doesn't fit in because of your dress, speech, or other characteristics related to your ethnicity?	○	○	○
Have you been treated unfairly by co-workers or classmates?	○	○	○
Have others hinted that you are dishonest or can't be trusted?	○	○	○
Have people been nice to your face, but said bad things about you behind your back?	○	○	○
Have people who speak a different language made you feel like an outsider?	○	○	○
Have others ignored you or not paid attention to you?	○	○	○
Has your boss or supervisor been unfair to you?	○	○	○
Have others hinted that you must not be clean?	○	○	○
Have people not trusted you?	○	○	○
Has it been hinted that you must be lazy?	○	○	○

93%

Prev   Next

Resiliency and Factors Contributing to the Latina Collegian Experience

14. **THANK YOU FOR COMPLETING THE SURVEY!!!!**

Kindly forward the link below to another Latina or female Hispanic who is currently enrolled in college as a third or fourth year student or to a Latina who may have left in their first or second year of college. All of our voices are important if we want to improve the graduation rates among our people.
https://www.surveymonkey.com/r/Latina-college-experience
In solidarity,
~Jennifer

Would you like to receive via email a short summary of the results of this study?

◯ If yes, please email me your contact information to jennifer.bucalo@rutgers.edu

◯ No, thank you.

If you are interested in speaking with confidential counseling resources, please log onto: http://compliance.rutgers.edu/title-ix/reporting/support-assistance/

100%

Prev   Done

<p style="text-align:center">Appendix D**: Resiliency Scale**</p>

The Resilience Scale may be purchased for a fee at

http://www.resiliencecenter.com/resilience-products/resilience-tools/the-original-

resilience-scale/. The authors, Gail Wagnild and Heather Youngs do not give permission

for this Resiliency Scale to be used in the public domain.

Appendix E: Social Provisional Scale

1. There are people I know will help me if I really need it.

2. I do not have close relationships with other people.

3. There is no one I can turn to in times of stress.

4. There are people who call on me to help them.

5. There are people who like the same social activities I do.

6. Other people do not think I am good at what I do.

7. I feel responsible for taking care of someone else.

8. I am with a group of people who think the same way I do about things.

9. I do not think that other people respect what I do.

10. If something went wrong, no one would help me.

11. I have close relationships that make me feel good.

12. I have someone to talk to about decisions in my life.

13. There are people who value my skills and abilities.

14. There is no one who has the same interests and concerns as me.

15. There is no one who needs me to take care of them.

16. I have a trustworthy person to turn to if I have problems.

17. I feel a strong emotional tie with at least one other person.

18. There is no one I can count on for help if I really need it.

19. There is no one I feel comfortable talking about problems with.

20. There are people who admire my talents and abilities.

21. I do not have a feeling of closeness with anyone.

22. There is no one who likes to do the things I do.

23. There are people I can count on in an emergency.

24. No one needs me to take care of them.

Appendix F: Parental Knowledge Scale

1. Do your parents know what you do during your free time?

2. Do your parents know who you have as friends during your free time?

3. Do your parents usually know what type of homework you have?

4. Do your parents know what you spend your money on?

5. Do your parents usually know when you have an exam or paper due at school?

6. Do your parents know how you do in different subjects at school?

7. Do your parents know where you go when you are out with friends at night?

8. Do your parents normally know where you go and what you do after school?

9. In the past month, have your parents had no idea where you were at night?

Appendix G: The Interpersonal Competence Questionnaire

1. Helping a close companion work through his or her thoughts and feelings about a major life decision, e.g., a career choice.

2. Being able to patiently and sensitively listen to a companion "let off steam" about outside problems s/he is having.

3. Helping a close companion get to the heart of a problem s/he is experiencing.

4. Helping a close companion cope with family or roommate problems.

5. Being a good and sensitive listener for a companion who is upset.

6. Being able to say and do things to support a close companion when s/he is feeling down.

7. Being able to show genuine empathetic concern even when a companion's problem is uninteresting to you.

8. When a close companion needs help and support, being able to give advice in ways that are well received.

Appendix H: Perceived Stress Scale

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often   4 = Very Often

1. In the last month, how often have you been upset because of something that happened unexpectedly?

2. In the last month, how often have you felt that you were unable to control the important things in your life?

3. In the last month, how often have you felt nervous and "stressed"?

4. In the last month, how often have you felt confident about your ability to handle your personal problems?

5. In the last month, how often have you felt that things were going your way?

6. In the last month, how often have you found that you could not cope with all the things that you had to do?

7. In the last month, how often have you been able to control irritations in your life?

8. In the last month, how often have you felt that you were on top of things?

9. In the last month, how often have you been angered because of things that were outside of your control?

10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Appendix I: Vancouver Index of Acculturation

1. I often participate in my heritage cultural traditions.

2. I often participate in mainstream American cultural traditions.

3. I would be willing to marry a person from my heritage culture.

4. I would be willing to marry a white American person.

5. I enjoy social activities with people from the same heritage culture as myself.

6. I enjoy social activities with typical American people.

7. I am comfortable interacting with people of the same heritage culture as myself.

8. I am comfortable interacting with typical American people.

9. I enjoy entertainment (e.g. movies, music) from my heritage culture.

10. I enjoy American entertainment (e.g. movies, music).

11. I often behave in ways that are typical of my heritage culture.

12. I often behave in ways that are typically American.

13. It is important for me to maintain or develop the practices of my heritage culture.

14. It is important for me to maintain or develop American cultural practices.

15. I believe in the values of my heritage culture.

16. I believe in mainstream American values.

17. I enjoy the jokes and humor of my heritage culture.

18. I enjoy white American jokes and humor.

19. I am interested in having friends from my heritage culture.

20. I am interested in having white American friends.

Appendix J: The Cultural Congruity Scale

1. I feel that I have to change myself to fit in at school.

2. I try not to show the parts of me that are "ethnically" based.

3. I often feel like a chameleon, having to change myself depending on the ethnicity of the person I am with at school.

4. I feel that my ethnicity is incompatible with other students.

5. I can talk to my friends at school about my family and culture.

6. I feel I am leaving my family values behind by going to college.

7. My ethnic values are in conflict with what is expected at school.

8. I can talk to my family about my friends from school.

9. I feel that my language and/or appearance make it hard for me to fit in with other students.

10. My family and school values often conflict.

11. Given my ethnic background, I feel accepted at school.

12. Given my ethnic background, I feel as if I belong on this campus.

13. I can talk to my family about my struggles and concerns at school.

Appendix K: University Environmental Scale

1. Class sizes are so large that I feel like a number.

2. The library staff is willing to help me find materials/books.

3. University staff have been warm and friendly.

4. I do not feel valued as a student on campus.

5. Faculty have not been available to discuss my academic concerns.

6. Financial aid staff have been willing to help me with financial concerns.

7. The university encourages/sponsors ethnic groups on campus.

8. There are tutoring services available for me on campus.

9. The university seems to value minority students.

10. Faculty has been available for help outside of class.

11. The university seems like a cold, uncaring place to me.

12. Faculty has been available to help me make course choices.

13. I feel as if no one cares about me personally on this campus.

14. I feel comfortable in the university environment.

Appendix L: Brief Perceived Ethnic Discrimination Questionnaire-Community

Version (Brief PEDQ-CV)

1. Have you been treated unfairly by teachers, principals, or other staff at school?

2. Have others thought you couldn't do things or handle a job?

3. Have others threatened to hurt you (ex: said they would hit you)?

4. Have others actually hurt you or tried to hurt you (ex: kicked or hit you)?

5. Have policeman or security officers been unfair to you?

6. Have others threatened to damage your property?

7. Have others actually damaged your property?

8. Have others made you feel like an outsider who doesn't fit in because of your dress, speech, or other characteristics related to your ethnicity?

9. Have you been treated unfairly by co-workers or classmates?

10. Have others hinted that you are dishonest or can't be trusted?

11. Have people been nice to your face, but said bad things about you behind your back?

12. Have people who speak a different language made you feel like an outsider?

13. Have others ignored you or not paid attention to you?

14. Has your boss or supervisor been unfair to you?

15. Have others hinted that you must not be clean

16. Have people not trusted you?

17. Has it been hinted that you must be lazy?

Appendix M: Data Code Book

Variable Number & Name	Label	Measurement	Valid Ranges
College Completion			
College Completion		Categorical	0-Dropped out 1-Completed
Section 1: Demographics			
Q1 Age	What is your age?	Categorical	0. 18-21 1 - 22-29 2 - Over 30
Q2 Country of Birth	What is your country of birth?	Categorical	0 - United States 1- Outside of United States
Q3 Bilingual	Do you consider yourself bilingual?	Categorical	0 - No 1 - Yes
Q4 Relationship Status	Which describes your relationship status?	Categorical	0 - Never married 1 - Married 2 - Separated 3 - Divorced 4 - Widowed
Q5 Children in Household	Do any children under 18 live in your household?	Categorical	0 - No 1 - Yes
Q6 Paying for School	How are you paying for school?	Categorical	0 - My family is paying for school 1 - Awards/Scholarships 2 - Student loans 3 - Other
Q7 Member of Organization	Do you belong to…? (Check all that apply)	Categorical	1- Student Organization 2- Community Organizations 3- Religious Organizations 4- Other
Q8 Mother's Education	What is the highest level of education your mother/care taker completed?	Categorical	1- Did not complete high school 2- High School/GED 3- Some College 4- Bachelor's Degree 5- Master's, Advanced Graduate work or Ph.D. 6- Not Sure
Q9 Father's Education	What is the highest level of education	Categorical	1- Did not complete high school 2- High School/GED

			3-	Some College
your father/care taker completed?			4-	Bachelor's Degree
			5-	Master's, Advanced Graduate work or Ph.D.
			6-	Not Sure

Variable Number & Name	Label	Measurement	1-	Valid Ranges
Q10 College Enrollment	Please select the option the best describes your college enrollment	Categorical	2-	Left school in 1st year
			3-	Left school in 2nd year
			4-	Left school in 3rd year
			5-	Left school in 4th year
			6-	Currently enrolled in 3rd year
			7-	Currently enrolled in 4th year
Q11 Income	What is your average household income?	Categorical	1-	$0 - $24,999
			2-	$25,000 - $49,999
			3-	$50,000 - $74,999
			4-	$75,000 - $99,999
			5-	$100,000 - $149,999
			6-	$150,000 and up
Q12 Employment	Which best describes your employment status?	Categorical	1-	Employed, full-time
			2-	Employed, part-time
			3-	Not employed

Section 2: Resiliency - Q13

Making plans	When I make plans, I follow through	Ordinal	1-	Strongly disagree
			2-	Disagree
			3-	Agree
			4-	Strongly Agree
Manage	I usually manage one way or another	Ordinal	1-	Strongly disagree
			2-	Disagree
			3-	Agree
			4-	Strongly Agree
Depend on self	I am able to depend on myself more than anyone else	Ordinal	1-	Strongly disagree
			2-	Disagree
			3-	Agree
			4-	Strongly Agree
Keeping interest	Keeping interested in things is important to me	Ordinal	1-	Strongly disagree
			2-	Disagree
			3-	Agree
			4-	Strongly Agree
Being on one's own	I can be on my own if I have to	Ordinal	1-	Strongly disagree
			2-	Disagree
			3-	Agree
			4-	Strongly Agree

Variable Number & Name	Label	Measurement	Valid Ranges
Proud of accomplishments	I feel proud that I have accomplished things in life	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Take in stride	I usually take things in stride	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree

Variable Number & Name	Label	Measurement	1- Valid Ranges
Friend to self	I am friends with myself	Ordinal	2- Strongly disagree 3- Disagree 4- Agree 5- Strongly Agree
Handle many things	I feel that I can handle many things at a time	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Determined	I am determined	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Point of it all	I seldom wonder what the point of it all is	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
One day at time	I take things one day at a time	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Difficult times	I can get through difficult times because I've experienced difficulty before	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Self-Discipline	I have self-discipline	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Keep interested	I keep interested in things	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Laugh about	I can usually find something to laugh about	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Self-belief	My belief in myself gets me through hard times	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree

Rely on me	In an emergency, I am a person people can rely on	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Multiple views	I can usually look at a situation in a number of ways	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Doing things	Sometimes I make myself do things whether I want to or not	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree

Variable Number & Name	Label	Measurement	1- Valid Ranges
Life meaning	My life has meaning	Ordinal	2- Strongly disagree 3- Disagree 4- Agree 5- Strongly Agree
Dwell on things	I do not dwell on things that I can't do anything about	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Difficult situations	When I am in a difficult situation, I can usually find my way out of it	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Energy	I have enough energy to do what I have to do	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
People who don't like me	It's ok if there are people who don't like me	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Total Resiliency Score	Sum of all items for Q13	Continuous	No categories
Resiliency groups	The cutoff score for low resiliency was < 77, versus high resilience > 77	Categorical	0-Low resiliency 1-High resiliency
Section 3: Sociocultural Factors - Sense of Belonging - Q. 14			
Close relationships with others	I do not have close relationships with other people	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Stress	There is no one I can turn to in times of stress	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree

People call me for help	There are people who call on me to help them	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Social activities	There are people who like the same social activities I do	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Other people think	Other people do not think I am good at what I do	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Responsible for others	I feel responsible for taking care of someone else	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Similar people	I am with people who think the same way I do about things	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree

Variable Number & Name	Label	Measurement	Valid Ranges
People respect what I do	I do not think that other people respect what I do	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Support	If something went wrong, no one would help me	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Close relationships	I have close relationships that make me feel good	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Someone to talk to	I have someone to talk to about decisions in my life	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
People value me	There are people who value my skills and abilities	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
People share same interests as me	There is no one who has the same interests and concerns as me	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Caretaker for others	There is no one who needs me to take care of them	Ordinal	1- Strongly disagree 5- Disagree 6- Agree 7- Strongly Agree
Trustworthy person	I have a trustworthy person to turn to if I have problems	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree

Emotional tie with other	I feel a strong emotional tie with at least one other person	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Dependable person	There is no one I can count on for help if I really need it	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Comfortable talking about problems	There is no one I feel comfortable talking about problems with	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
People who admire me	There are people who admire my talents and abilities	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Feeling of closeness	I do not have a feeling of closeness with anyone	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree

Variable Number & Name	Label	Measurement	Valid Ranges
People who like the things I do	There is no one who likes to do the things I do	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Emergency people	There are people I can count on in an emergency	Ordinal	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Total Sense of Belonging Score	Sum of all items for Q14	Continuous	No categories
Sense of Belonging groups	The cutoff score for low sense of belonging was < 68, versus high sense of belonging > 68	Categorical	0-Low Sense of Belonging 1-High Sense of Belonging
Section 3: Sociocultural Factors - Family Support - Q. 15			
Successful student	I would say that I am a successful student	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Family contact	I have some form of contact with my family often	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Responsible for success	I am solely responsible for my academic success as a student	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree

Strict caretakers	My caretakers were strict when it came to school	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Family phone calls, texts and emails	My family calls, emails, texts me a lot to ask how I am doing	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Discipline student	I am disciplined in how I approach my studies	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Caretakers value education	My caretakers value education	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Routine for note taking and studying	I follow a routine in how I study, take notes and prepare for class	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Total Family Support Score	Sum of all items for Q15	Continuous	No categories
Family Support	The cutoff score for low family support was < 26, versus high family support> 26	Categorical	0-Low Family Support 1-High Family Support

Variable Number & Name	Label	Measurement	Valid Ranges
Section 3: Sociocultural Factors - Peer Support - Q. 16			
Helping a friend	Helping a close companion work through his/her thoughts about a major life decision	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Being a patient friend	Being able to patiently and sensitively allow a companion "let off steam"	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Getting to the heart of a problem	Helping a close companion get to the heart of a problem s/he is experiencing	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Helping with a friend with family or roommate	Helping a close companion cope with family or roommate problems	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often

Being a good listener	Being a good and sensitive listener for a companion who is upset	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Supporting a companion when s/he is down	Being able to say and do things to support a close companion when s/he is feeling down	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Shows empathy	Being able to show empathy even when a companion's problem is uninteresting to you	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Gives advice that is well received	When a companion needs support, being able to give advice in ways that are well received	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Total Peer Support Score	Sum of all items for Q16	Continuous	No categories
Peer Support	The cutoff score for low peer support was < 26, versus high peer support > 26	Categorical	0-Low Family Support 1-High Family Support
Section 3: Sociocultural Factors - Stress - Q. 17			
Upset about unexpected events	How often have you been upset because of something that happened unexpectedly?	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Unable to control important things	How often have you felt that you were unable to control the important things in your life?	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Feeling nervous and stressed	How often have you felt nervous and stressed?	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often

Variable Number & Name	Label	Measurement	Valid Ranges
Feeling confident to handle problems	How often have you felt confident about your ability to handle	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often

	your personal problems?		
Feeling things are in your favor	How often have you felt that things were going your way?	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Not able to cope with everything	How often have you found that you could not cope with all the things that you had to do?	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Able to control irritations in life	How often have you been able to control irritations in your life?	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
On top of things	How often have you felt that you were on top of things?	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Angry things were not in your control	How often have you been angered because of the things that were outside your control?	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Unable to overcome difficulties	How often have you felt difficulties were piling up so high that you could not overcome them?	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Total Stress Score	Sum of all items for Q17	Continuous	No categories
Stress	The cutoff score for low stress was < 26, versus high peer stress > 26	Categorical	0-Low Family Support 1-High Family Support
Section 3: Sociocultural Factors - Stress - Q. 17			
Cultural participation	I often participate in my Latina cultural traditions	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
American cultural participation	I often participate in mainstream American traditions	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Marrying a Hispanic	I would be willing to marry a person from my Hispanic culture	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree

Marrying a non-Hispanic	I would be willing to marry a non-Hispanic American	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Enjoy Hispanic social activities	I enjoy social activities with people from the same Hispanic culture as myself	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree

Variable Number & Name	Label	Measurement	Valid Ranges
Enjoy non-Hispanic social activities	I enjoy social activities with non-Hispanics	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Comfortable with other Hispanics	I am comfortable interacting with people from the same Hispanic culture as myself	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Comfortable with non-Hispanics	I comfortable interacting with non-Hispanics	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Enjoy Latina entertainment	I enjoy entertainment from my Latina culture	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Enjoy American mainstream entertainment	I enjoy American mainstream entertainment	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Latina behavior	I often behave in ways that are typical of my Latina culture	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Mainstream American behavior	I often behave in ways that are typical of mainstream American culture	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Develop practices of my Hispanic culture	It is important for me to maintain or develop the practices of my Hispanic culture	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Develop practices of American culture	It is important for me to maintain or develop American cultural practices	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree

Hispanic jokes and humor	I enjoy jokes and humor of my Hispanic culture	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Non-Hispanic jokes and humor	I enjoy non-Hispanic jokes and humor	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Hispanic friends	I am interested in having friends from my Hispanic culture	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Non-Hispanic friends	I am interested in having non-Hispanic friends	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Total Acculturation Score	Sum of all items for Q18	Continuous	No categories

Variable Number & Name	Label	Measurement	Valid Ranges
Acculturation Total	The cutoff score for low total acculturation was < 42, versus total acculturation > 42	Categorical	0-High total acculturation 1-Low total acculturation
Acculturation-Heritage score	The cutoff score for low Heritage culture was < 27, versus high Heritage culture > 27	Categorical	0-Low Heritage 1-Heritage
Acculturation-Mainstream score	The cutoff score for low Mainstream was < 29, versus Mainstream > 29	Categorical	0-High Mainstream 1-Low Mainstream
Section 5: Sociocultural Factors - Cultural Congruity - Q. 19			
Change myself to fit in	Felt that I had to change myself to fit in at a school	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Hiding my ethnicity	I tried not to show the parts of me that are "ethnically" based	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Felt like a chameleon	Felt like a chameleon, having to change myself depending on the ethnicity of the person I was with at school	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree

Incompatible with others	Felt my ethnicity was incompatible with other students	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Able to talk to friends about my culture	I could talk to my friends at school about my family and culture	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Leaving family values	I felt I was leaving my family values behind by going to college	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Conflict of ethnic and school values	My ethnic values were in conflict with what is expected at school	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Talk to family about school	I could talk to my family about friends from school	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Felt hard to fit in	Felt my language and/or appearance made it hard for me to fit in with other students	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Conflict with family and school	My family and school values often conflicted	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree

Variable Number & Name	Label	Measurement	Valid Ranges
Felt accepted	Felt accepted at school as an ethnic minority	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
I belong on this campus	As an ethnic minority, I felt as if I belonged on this campus	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Talk with family about school concerns	I could talk to my family about my struggles and concerns at school	Continuous	1- Strongly disagree 2- Disagree 3- Agree 4- Strongly Agree
Total Cultural Congruity Score	Sum of all items for Q19	Continuous	
Cultural Congruity	The cutoff score for low Cultural Congruity was < 37,	Categorical	0-Low Cultural Congruity 1-Cultural Congruity

versus high Cultural
Congruity > 37

Section 6: Environmental Factors - Campus Climate, University Environment - Q. 20

Large class size	Class sizes were so large that I felt like a number	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Library staff	The library staff was willing to help me	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
University staff	University staff was warm and friendly	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Valued as a student	I did not feel valued as a student on campus	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Faculty availability	Faculty was not available to discuss my academic concerns	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Financial aid staff	Financial aid staff was willing to help me with my financial concerns	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
University sponsored ethnic groups	The university encouraged and sponsored ethnic groups on campus	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Tutoring Services	There were tutoring services available for me on campus	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
University values minority students	The university seemed to value minority students	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Variable Number & Name	Label	Measurement	Valid Ranges
Faculty help	Faculty was available for help outside of class	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
University seemed cold and uncaring	The university seemed like a cold, uncaring place to me	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often

Faculty available	Faculty was available to help me make course choices	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
No one cared on campus	I felt as if no one cared about me personally on this campus	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Comfortable at school	I felt comfortable in the university environment	Continuous	1- Never 2- Rarely 3- Sometimes 4- Often
Total University Score	Sum of all items for Q20	Continuous	
University Environment	The cutoff score for low University Environment was < 41, versus high University Environment > 41	Categorical	0-Low University Environment 1-University Environment

Section 7: Environmental Factors - Campus Climate, Perceived Discrimination - Q. 21

Treated unfairly	Have you been treated unfairly by teachers, principals, or other staff at school?	Continuous	1- Never 2- Sometimes 3- Often
Others think you couldn't	Have others thought you couldn't do things or handle a job?	Continuous	1- Never 2- Sometimes 3- Often
Others threatened you	Have others threatened to hurt you?	Continuous	1- Never 2- Sometimes 3- Often
Others hurt you	Have others actually hurt you or tried to hurt you?	Continuous	1- Never 2- Sometimes 3- Often
Unfair police or security	Have policemen or security officers been unfair to you?	Continuous	1- Never 2- Sometimes 3- Often
Damaged property	Have others damaged your property?	Continuous	1- Never 2- Sometimes 3- Often
Felt like an outsider	Feel like an outsider who doesn't fit in because of dress, speech or ethnicity?	Continuous	1- Never 2- Sometimes 3- Often

Unfair co-workers or classmates	Have you been treated unfairly by co-workers or classmates?	Continuous	1- Never 2- Sometimes 3- Often
Variable Number & Name	**Label**	**Measurement**	**Valid Ranges**
Others say you can't be trusted	Have others hinted that you are dishonest or can't be trusted?	Continuous	1- Never 2- Sometimes 3- Often
Two faced	Have people been nice to your face, but say things behind your back?	Continuous	1- Never 2- Sometimes 3- Often
Others speak a different language	Have people who speak a different language made you feel like an outsider?	Continuous	1- Never 2- Sometimes 3- Often
Others ignore you	Have others ignored you or not paid attention to you?	Continuous	1- Never 2- Sometimes 3- Often
Unfair boss	Has your boss or supervisor been unfair to you?	Continuous	1- Never 2- Sometimes 3- Often
Not trusted	Have people not trusted you?	Continuous	1- Never 2- Sometimes 3- Often
Lazy	Has it been hinted that you must be lazy?	Continuous	1- Never 2- Sometimes 3- Often
Total Perceived Discrimination Score	Sum of all items for Q20	Continuous	
Perceived Discrimination	The cutoff score for low Perceived Discrimination was < 41, versus high Perceived Discrimination > 41	Categorical	0-High Perceived Discrimination 1-Low Perceived Discrimination

Appendix N: Dichotomization Recoding Syntax

Resiliency	Low 0-77 Coded = 0, low resiliency	High >78 Coded = 1, high resiliency
Sense of Belonging	Low = 0-67 Coded = 0, low SOB	High >68 Coded = 1, high SOB
Family Support	Low = 0-26 Coded = 0, low Family Support	High >27 Coded = 1, high Family Support
Peer Support	Low = 0-27 Coded = 0, low Peer Support	High >28 Coded = 1, high Peer Support
Stress	Low = 0-26 Coded = 0, low Stress	High >27 Coded = 1, high Stress
Acculturation (Total)	Low = 0-42 Coded = 0, low Acculturation	High >43 Coded = 1, high Acculturation
Mainstream	Low = 0-26 Coded = 0, low mainstream	High >27 Coded = 1, high mainstream
Heritage	Low = 0-20 Coded = 0, low Heritage	High >30 Coded = 1, high Heritage
Cult. Congruity	Low = 0-36 Coded = 0, low Cult. Congruity	High >37 Coded = 1, high Cult. Congruity
University Climate	Low = 0-41 Coded = 0, low University Support	High >42 Coded = 1, high University Support
Perceived Discrimination	Low = 0-24 Coded = 0, low Per. Discrimination	High >25 Coded = 1, high Per. Discrimination

RECODE Resiliency_Score_Sum (Lowest thru 77=0) (78 thru Highest=1) INTO Recode_Resiliency.
VARIABLE LABELS Recode_Resiliency 'Resiliency - Dicotomous'.
EXECUTE.

RECODE Sense_belonging_Sum (42 thru 67=0) (68 thru Highest=1) INTO Recode_SoB
.
VARIABLE LABELS Recode_SoB 'Sense of belonging dichotomous'.
EXECUTE.

RECODE
Acculturation_Sum (Lowest thru 42=0) (43 thru Highest=1) INTO Recode_sum_acculturation.
VARIABLE LABELS Recode_sum_acculturation 'Acculturation dichotomous total'.
EXECUTE.

RECODE Acculturation_Mainstream_Culture_Sum (Lowest thru 26=0) (27 thru Highest =1) INTO Recode_MSA.
VARIABLE LABELS Recode_MSA 'Mainstream acculturaiton'.
EXECUTE.

RECODE Acculturation_Own_Culture_Sum (Lowest thru 29=0) (30 thru Highest=1) INTO Recode_OA.
VARIABLE LABELS Recode_OA 'Own acculturation dichotomous'.
EXECUTE.

RECODE Cultural_Congruity_sum (Lowest thru 36=0) (37 thru Highest=1) INTO Recode_CC.
VARIABLE LABELS Recode_CC 'Cultural congruity dichotomous'.
EXECUTE.

RECODE Univ_Climate_sum (Lowest thru 41=0) (42 thru Highest=1) INTO Recode_UC.
VARIABLE LABELS Recode_UC 'University climate dichotomous'.
EXECUTE.

RECODE Perceived_Discrimination_Sum (Lowest thru 24=0) (25 thru Highest=1) INTO Recode_PD.
VARIABLE LABELS Recode_PD 'Perceived discrimination dichotomous'.
EXECUTE.