# PERSONAL AND ENVIRONMENTAL VARIABLES THAT HINDER OR FOSTER COLLEGE ASPIRATIONS AMONG LATINA/O HIGH SCHOOL STUDENTS

A Dissertation

by

# HAROLD MANZANO SÁNCHEZ

Submitted to the Office of Graduate and Professional Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

## DOCTOR OF PHILOSOPHY

Chair of Committee, Corliss Outley
Committee Members, David Matarrita

Alex MacIntosh Jorge González Brandy Kelly Pryor

Head of Department, Gary Ellis

May 2016

Major Subject: Recreation, Park, and Tourism Sciences

Copyright 2016 Harold Manzano Sánchez

#### **ABSTRACT**

This study used mixed methods to examine personal and contextual variables that hinder or foster college aspirations in Latina/o high school students. The Social Cognitive Career Theory (SCCT) served as a framework to explain and predict the interaction between socio-cognitive variables, contextual influences (i.e., SES and parents' education level), and personal characteristics (i.e., self-efficacy and outcome expectations) in career-related aspirations. 247 Latina/o high school students in Southern California completed a survey that measured: self-efficacy, outcome expectations, supports, and barriers about college aspirations. 21 students participated in four focus groups and described the factors that most affected their college aspirations.

The quantitative findings indicated that contextual factors were better predictors of college aspirations than personal factors. The biggest negative predictor was barriers, while academic performance was a positive predictor of college aspirations. Contextual and personal variables jointly accounted for 5.3% of the variation in college aspirations. In addition, supports were the biggest predictor of personal factors. Supports, barriers, SES, and parental education accounted for 37% of the variation in self-efficacy. Furthermore, supports, barriers, SES, parental education and self-efficacy accounted for 51% of the variation in outcome expectations. Additionally, personal and contextual variables were moderated by student gender and immigrant generation's types. For instance, environmental conditions affected the college aspirations of males and first

generation immigrants more than the college aspirations of females and older generations.

The qualitative approach found that parents, teachers, and friends were either a source of support or an obstacle to going to college. The most common barriers were: the lack of financial resources, family responsibilities, the lack of teachers' support, peer pressure, and systematic discrimination. The most valuable resources were: support from their parents, siblings, relatives and teachers. Latino families also provided encouragement, advice, economic support, and a sense of pride concerning the students' achievements.

Overall, these findings were consistent with previous research on barriers that Latina/o students face in the path of going to college as well as the types of supports they need to achieve their college aspirations. The implications of these findings for social cognitive career theory, practice, policy, and future research were discussed.

# **DEDICATION**

I dedicate this dissertation to my wife Adriana and our daughters Manuela and Mariana because this journey was possible for their love, patience, encouragement, support, and happiness.

#### **ACKNOWLEDGEMENTS**

I would like to thank my committee chair, Dr. Outley for her unconditional support, encouragement, and guidance during all stages of my doctoral program. She always attended me with a big smile, found ways to overcome my difficulties, and enrolled me in different intervention programs, research projects, teaching experiences, conferences, and field trips. Without her commitment, none of my valuable experience as a doctoral student would have been possible.

I would like to thank my committee members, Dr. Matarrita, Dr. González, Dr. Kelly and Dr. McIntosh for their accurate advice. Dr. Matarrita was the mentor who opened the door to my journey and gave me the tools to navigate my path as a doctoral student. Dr. González helped me to narrow my research project and gives me the opportunity to participate in his research project "Families for College". Dr. Kelly provided me frameworks in youth development policies and engaged me in research on fieldwork. Dr. McIntosh supported in the design and analysis of my quantitative method for my dissertation.

I also need to thank the professors of the Área Educación Popular y Desarrollo Comunitario; the council members of the Instituto de Educación y Pedagogía; and the academic council members of Universidad del Valle who approved and funded my study commission since June 2012. This educational and economic support was crucial to start and maintain the doctoral journey from my country Colombia to Texas A&M University in the U.S.A.

I want to thank Ms. Shamell Wilson and Ms. Ana Higuera-González, who were the first contacts at the High School in which my study was developed. Their leaderships and support were pivotal in the success of this research. In addition, I am grateful to the teachers, parents, and students of the high school because the achievement of this study is also in large part due to their cooperation and willingness to participate.

I would like to thank faculty members and colleagues those helped me in different stages of my dissertation process. I am grateful to Dr. Gerald Kyle, who helped me to understand the LISREL program. Dr. Elsa González, who involved me in a college readiness research, and she trained me in qualitative methods. Dr. Lisako J. McKyer who gave me the opportunity to participate in the Health Disparities Research Symposium. Dr. Matt Duerden who was my first contact in the RPTS Department and supported me at the beginning of my doctoral studies in Texas A&M. My colleague Glen Tolle, who also helped me with the LISREL program. My colleague Aishia Brown, who traveled with me to California to collect data and conduct the focus groups, I am also very gratefully with her for the broad discussion that we made about youth development, the disadvantages of the minorities groups, and the role of practitioners and researchers in the field of youth development. My colleague and friend Ali Alansari, who discussed with me the themes and categories of my qualitative analysis and helped me editing my dissertation. My friend Clement Sohoulande, who was my first support to establishing in College Station and my last support helping me to prepare the presentation of the defense of my dissertation. I acknowledge Ms. Irina Shatruk,

Program Coordinator of the Department of Recreation, Park, and Tourism Sciences, for all her support throughout my doctoral journey.

Finally, but certainly not least, I want to thank my family for their love, encouragement and support. My wife Adriana helped me to plan this family journey and she put aside her job and professional development to assisted me during this process. She also wisely and patiently taught me statistics, she took care of our daughters and home, and she was my strong leverage in the tough moments that I faced. My daughters Manuela and Mariana were understanding with my lack of family time, corrected my English pronunciation, laughed off my mistakes, and celebrated my achievements. My brother Otoniel Jr. was my most insightful support and guide to learn to navigate in the U.S. society. My parents Otoniel and Nelly for their love, support and encouragement to be a better person. My niece Natalia, who was my editor of several of my papers. My aunts, uncles, nieces, nephews, sisters-in-law, brothers-in-law, and cousins for their emotional and spiritual support. Lastly all my friends, especially, Marlene Ordoñez, Luz Alba Murillo, and Albeiro Ospina for their encouragement, advice, and support.

# TABLE OF CONTENTS

	Page
ABSTRACT	ii
DEDICATION	iv
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	viii
LIST OF FIGURES	xi
LIST OF TABLES	xii
CHAPTER I INTRODUCTION	1
Statement of the Problem	1
College Aspirations	4
Significance of the Study	5
Context	6
Purpose of the Study	9
Research Questions and Hypotheses	
Limitation of the Study	11
Definitions of Terms	
Dissertation Layout	15
CHAPTER II LITERATURE REVIEW	16
Theoretical Framework	
Career Development Theories	
Social Cognitive Career Theory –SCCT	
Personal Level	
Environmental Level	
Latino as an Ethnic Category: Literature Review	25
Latino Youth in the U.S.	
Characteristics of Latino Families	
Latinos Through Generations	
Educational Attainment of Latino Youth	34
Barriers in the Path of Going College	
Social Supports in the Path of Going College	
Latino High School Students and SCCT	40

CHAPTER III METHODOLOGY	
	40
Research Design	43
Quantitative Approach	
Participants	
Procedures	
Measures	
Data Analysis	
Qualitative Approach	
Participants	
Moderators	
Procedure	
Interview Protocol	
Data Analyses	
Coding	
Reliability and Trustworthiness	
CHAPTER IV RESULTS	
Participant Demographics	
College Aspirations	
Personal Variables	
Contextual Variables	
Quantitative Results	
Research Question 1	
Model Specification	
Model Estimation and Preliminary Evaluation	
Model Modification	
Direct Effects	
Indirect Effects	
Research Question 2	
Model Fit by Gender	
Latina College Aspiration ModelLatino College Aspiration Model	
Model Fit by Generations	
First Generation Latina/o College Aspiration Model	
Second Generation Latina/o College Aspiration Model	
Third Generation Latina/o College Aspiration Model	
Fourth Generation Latina/o College Aspiration Model	
College Aspirations Through Generations	
Qualitative Results	
Research Question 3	

	Page
Plans After High School Graduation	91
Personal and Contextual Factors Related to College Aspirations	
Barriers	
Supports	112
Self-Efficacy	
Outcome Expectations	
Students' Recommendations	
CHAPTER VI DISCUSSION AND CONCLUSIONS	133
Quantitative Discussion	134
Personal Factors and College Aspirations in Latina/o Students	135
Contextual Factors and College Aspirations in Latina/o Students	136
Predictors of College Aspirations	
Predictors of Academic Performance	
Predictors of Self-Efficacy	
Predictors of Outcome Expectations	
Summary of Quantitative Discussion	150
Qualitative Discussion	
Different Paths After High School Graduation	
Latina/o Students Experience More Barriers than Social Supports	
Significant Adults as Pivotal Support	
Issues that Affect Latina/o Students' Self-Efficacy	161
The Future Does Not Look Bright, But	
Traditional Gender Roles Remain in Latino Culture	
Students' Recommendations for College Readiness	167
Conclusions	
Implications for SCCT	177
Recommendations for Practice	179
Recommendations for Policy	
Recommendations for Further Research	188
REFERENCES	191
APPENDIXES	211

# LIST OF FIGURES

	Page
Figure 1. Latina/o college aspiration model	12
Figure 2. Hypothesized Latina/o college aspirations model	74
Figure 3. Hypothesized Latina/o college aspiration model with coefficients	75
Figure 4. Modified Latina/o college aspirations model	76
Figure 5. Latina college aspirations model.	80
Figure 6. Latino college aspirations model.	82
Figure 7. First generation Latina/o college aspirations model	84
Figure 8. Second generation Latina/o college aspirations model	85
Figure 9. Third generation Latina/o college aspirations model	86
Figure 10. Fourth generation Latina/o college aspirations model	88

# LIST OF TABLES

Page
Table 1 Theories and approaches in career development
Table 2 Latino family values
Table 3 Study participants' self-reported gender, age, country of birth, and generation.59
Table 4 Students' high school grade point average (GPA)
Table 5 Honor and AP courses taken by the students
Table 6 Number of people who live in the house as reported by the students62
Table 7 Students' self-reported parental education level
Table 8 Students' self-reported present occupation of their parents
Table 9 School meal plan65
Table 10 Plan immediately after high school graduation
Table 11 Latina/o students' college aspirations
Table 12 Self-efficacy beliefs68
Table 13 Outcome expectations
Table 14 Social supports
Table 15 Barriers of going college
Table 16 Path coefficients of the variables that affect college aspirations89
Table 17 Goodness of fit of the all models of Latina/o college aspirations90
Table 18 Themes, categories, and descriptions of personal and contextual factors95

#### **CHAPTER I**

#### INTRODUCTION

## Statement of the Problem

In 2012, Latina/o students had the second lowest high school graduation rate at 76% (National Center for Education Statistics, 2015) and only 9% of Latina/o young adults (ages 25 to 29) earned a bachelor's degree. (Krogstad & Fry, 2014). Although college enrollment has increased steadily over the last two decades, Latina/o students continue to fall behind White and Asian students (Sáenz & Ponjuan, 2012). Contextual and personal factors are associated with this gap.

Contextual factors are related to low-income household status, parents with low educational attainment, schools with limited resources, a lack of information about college entry process, and neighborhoods with limited opportunities to explore varying career experiences (Brown & Lent, 2006; Gushue, 2006; McWhirter, Valdez, & Caban, 2013; Tierney, Bailey, Constantine, Finkelstein, & Hurd, 2009; Lent, Brown, Talleyrand, McPartlad, Chopra, Alexander, Suthakaran, & Chai, 2002).

Personal factors related to low personal self-efficacy, negative outcome expectations, and unrealistic or unplanned performance goals for higher education are just a few of the obstacles that Latina/o students face in the process of applying to, enrolling in, and attending college (Brown & Lent, 2006; Gushue, 2006; McWhirter, Valdez, et al., 2013; Tierney et al., 2009; Lent et al., 2002).

A better understanding of contextual and personal factors and their influence on college aspirations in Latina/o highs school students can lead to (1) improving the

existing college access programs or providing guidelines to design new ones, (2) offering empirical evidence to design educational policies that foster a fair and smooth transition from high school to higher education, and (3) closing the gap in educational attainment between Latina/o high school students and non-Hispanic peers (white and Asian students).

This research proposes to focus on identifying the relationships between personal and contextual variables and college aspirations. Lent et al. (2002) have provided a conceptual overview of each of these variables. Personal variables are defined as abilities and motivational components (e.g., self-efficacy, outcome expectations, and performance goals) that allow young people to influence their own career development (Lent et al., 2002). Contextual variables are viewed as supports and barriers that enable or constrain the aspirations of young people during their career development, particularly their family background (Lent et al., 2002). The contextual background is related to parent educational attainment, household economic status, and family relationships that constrain or foster a particular path to career development. Supports are physical and emotional resources that young people obtain in their family, school, and community environments that encourage and foster the road to career development. Conversely, barriers serve to constrain or modify the career development of a young person. The most common barriers that Latina/o youth face are: lack of financial resources, negative peer influences, lack of community resources, and adverse life experiences (Nora, & Crisp, 2012; Sáenz & Ponjuan, 2012). The interplay between

personal and contextual variables shapes the course of career choices that is this study are career aspirations (Lent et al., 2002).

Given the importance of the interplay between personal and contextual factors in college aspirations, the primary purpose of this study was to test a model of college aspirations of Latina/o high school students. The second purpose was to contrast the results of this proposed model with the reasoning of students about the relationships between personal and environmental variables and college aspirations. The hypothesized model predicted that household economic status and parents' educational attainment affected students' academic self-efficacy. In turn, self-efficacy beliefs and outcome expectations affected academic performance and college aspirations of Latina/o youth. In the same manner, perceived barriers and supports both negatively and positively affected Latina/o students' college aspirations. The control variables of this model were gender and the generation of immigration. Consequently, Latina/o high school students were more likely to establish college aspirations as goals when they develop high self-efficacy, positive outcome expectations, and perceived higher levels of supports and fewer barriers to their college aspirations. The focus groups discussions facilitated the interpretation of survey results and added reasoning about the biggest barriers that hindered college aspirations, the types of supports that were found crucial in the path of going college, and academic experiences that increased or decreased Latina/o students' self-efficacy and outcome expectations related to college aspirations.

# **College Aspirations**

In this study, college aspiration is the ultimate outcome. Aspirations are idealistic preferences for the future (Mickelson, 1990); or desired outcomes which are not limited by constraints on resources (Hauser & Anderson, 1991); or individual goals given ideal conditions (Rojewski, 2005). In the educational context, educational aspirations refer to the highest level of education that students hope or desire to achieve (Bohon, Johnson, & Gorman, 2006; Hanson, 1994; Mickelson, 1990). In this vein, college aspirations represent the degree to which high school students want or desire to attend college or some level of higher education (Bohon et al., 2006). They are aspirations under ideal conditions in which student hope to accomplish without worry about constraints such as lack of economic resources, lack of preparation, or lack of social support.

College aspirations have been assessed through different measurement scales. Farrell, Sapp, Johnson, and Pollard (1994) measured the aspiration for college through five variables: actual school ability (GPA), perceived school ability (how well do students think they are doing in school), postsecondary plans (the type of the school that students plan to attend after graduating from high school), ethnicity, and gender. Ali and McWhirter (2006) measured postsecondary aspiration through a vocational/educational aspirations checklist (Rasheed, 2001 as cited in Ali & McWhirter, 2006). The participants answered the question: "If you were free to choose any of the following educational or vocational options (in other words, if you had enough money, parental support, etc.), check the one that would you would most want to pursue." (p. 98). In addition, McWhirter, Torres, Salgado, and Valdez (2007) measured students' post-

secondary plans by asking students about their immediate plans after completing high school. The options were: no further education, specialized training, 2-year and/or community college, and bachelor's degree.

In this vein, the aspiration for college, postsecondary aspirations, or postsecondary plans refer to desires or hopes that students have about their educational outcomes in higher education. Although college aspirations are not necessarily indicators of educational attainment, these hopes or desires have considerable psychological meaning and predictive value in identifying students' future career options or college aspirations (Holland & Gottdredson, 1975 as cited in Rojewski, 2005, p. 149).

# Significance of the Study

Much has been written about the contributions of higher education in the development of knowledge, skills, and values that people need to navigate socioeconomic and culturally complex societies (Museus, Harper, & Nichols, 2010; Tierney et al., 2009). In post-industrialized and competitive societies, the demand for highly qualified citizens is ever increasing. The benefits of postsecondary education are not only associated with personal welfare, career satisfaction, and higher wages but also with high levels of civic engagement, taxes, and declining social problems (Boroch & Hope, 2009; Museus et al., 2010; Tierney et al., 2009). Latina/o youth are the fastest growing population in the U.S. (Colby & Ortman, 2015); although they have high expectations to enter into higher education, the college enrollment rate still is lower than other race/ethnic groups. One way to close the gap between college aspirations and college entry is to discover personal and environmental factors that foster or hinder the

path of going college. This study is significant because it provides information to school administrators, counselors, and teachers to promote a college-going culture. Information regarding personal beliefs about capabilities and expectations and perceptions of the obstacles and types of supports that Latina/o students perceive are crucial in assisting students navigate the path to college. When Latina/o high school students are unable to discern a career trajectory, there are both social capital and economic capital losses which have grave consequences not only for Latino families but also society in general. In this sense, this study makes visible how Latina/o high school students deal with socio-institutional and structural barriers to their aspirations of going to college.

#### Context

This study was conducted in Southern California city with 71,300 residents. The majority of the population is Hispanic or Latino at 86.6%, African American at 10.3%, and other ethnicities at 3% approximately. Renters occupy over 50% of the housing units in the city and almost 25% of its residents live below the poverty line. The dominant language in this community is Spanish. Both majority populations celebrate and preserve their cultural heritage. In 2010, this city won the "All American City" award for the second time. The award recognizes outstanding civic accomplishments by demonstrating innovation, inclusiveness, and civic engagement. The National Civic League conferred this recognition. The daily interaction between Hispanics and African Americans has resulted in a diverse and multi-cultural exchange of ideas which has led to positive socioeconomic growth for this predominantly working class community.

An urban high school was the institution in which this research was conducted. This high school is one of the two high schools in the school district of the city. The enrollment for the 2013-14 school-year was 2,346 students. The high school provides a variety of participatory activities for parents and community in general. This high school is the recipient of grants that provide resources to increase the welfare, the academic performance, and English proficiency of the students.

This high school has agreements with business, colleges, and universities to offer job-training, career pathways, and college credits for those students interested in making a smooth transition from high school to work or college environments. Some of those institutions include St. Francis, Bank of America, Plaza Mexico, U.C.L.A., Long Beach State, CSU Los Angeles, East L.A. College, El Camino College, Black College Expo, and the Rochester Institute of Technology, among others.

The two largest student ethnic subgroups are Hispanic (92.6%) and African-American (6.7%), and 90.3% of the student body are socio-economic disadvantaged (SED) students. For this reason, all of the current high school students qualify for free or reduced lunch. The enrollment for 2013-2014 in special programs was: Gifted and Talented 329 students, Title I- Migrant 15 students, Special Education –SDC- 86 students, Special Education –RSP- 110 students, English Learners 456 students, and AVID 332 students. The Language Proficiency enrollment was: English only 441 students, Fluent English Proficient 301 students, and Redesignated Fluent English Proficient 1115 students.

In regards to the teaching staff, 57% are female, and 43% are male. The ethnicity composition of teachers is majority Hispanic (36.8%), followed by White (27.4%), African American (14.7%), Asian (7.4%), Filipino (5.3%), two or more races (1.1%) and unknown (7.4%). Although the number of the Hispanic teachers is high compared with other ethnicities, this percentage is small in comparison with the student's population.

The state of California evaluates the school's academic performance through different tests and indicators. The Annual Yearly Progress Report (AYP) indicates that the high school meets 9 of the 17 criteria. However, the high school still strives to improve student development. In the same vein, the California High School Exit Examination (CAHSEE) reported that 75% of the high school's seniors passed the English CAHSEE test, and 70% passed the Math test. This test was suspended effective on January 1, 2016, due to the change in academic standards in the State of California.

In order to improve these and other indicators, the high school developed an action plan that comprises seven goals: (1) Increase the graduation rate of 81% by 2%. (2) Increase CAHSEE Proficiency by 10%. (3) Increase The Early Assessment Program (EAP) by 5%. (4) Decrease by 10% the number of students not meeting the A-G Couse Completion requirements. (5) Decrease by 10% the number of students not passing AP Exams. (6) Increase the School Climate Index (SCI) by 10%. And (7) English Learner students will meet targets for AMAO 1 and AMAO 2 (Annual Measurable Achievement).

# Purpose of the Study

Most studies examining self-efficacy, outcome expectations, supports and barriers in career development have been done with college students and STEM fields (Sheu et al., 2010). However, little is known about perceived barriers and supports to the educational plans and attainment of Latina/o high school students (Lent et al., 2002; McWhirter et al., 2007; Nora & Crisp, 2012, Sáenz & Ponjuan, 2012).

The applicability of the SCCT choice model in Latina/o high school students contributed in recognizing the factors that hinder or foster the college aspirations and future college entrance of these young people. This research study focused on identifying the relationships between personal and contextual variables and college aspirations in Latina/o high school students. Given the importance of the interplay between personal –self-efficacy and outcome expectations- and contextual factors – barriers and supports- in college aspirations, the current study tested a path analysis equation model of college aspirations of Latina/o 11<sup>th</sup>-grade students.

This model hypothesized that household economic status and parent's educational attainment affect students' academic self-efficacy. In turn, self-efficacy beliefs and outcome expectations would affect academic performance and the college aspirations of Latina/o youth. In the same manner, perceived barriers and supports both negatively and positively affect Latina/o students' college aspirations. The control variables of this model are gender, generation, and place of birth.

In a similar way, it is important to identify the students' perceptions about the results of the survey to add insight about barriers that hinder and supports that foster Latina/o high school students' college aspirations.

# Research Questions and Hypotheses

The purpose of this study is expressed in the following research questions:

- 1. What are the relationships between personal and contextual variables and college aspirations in 11<sup>th</sup> grade Latina/o high school students in an urban high school located in a city in the southwestern of the U.S.?
- 2. Are gender, generation of immigration, and country of origin intervening variables in the relationship between personal and contextual variables and college aspirations of those students?
- 3. How are students' focus group responses regarding the current model related to the relationships between personal and contextual variables and college aspirations?

In addition to the research questions, thirteen hypotheses were tested in this study:

- 1. Lower parental educational attainment will be related to low self-efficacy.
- Lower parental educational attainment will be related to negative outcome expectations.
- 3. Lower household economic status will affect self-efficacy negatively.
- 4. Lower household economic status will affect outcome expectations negatively.
- 5. Higher levels of self-efficacy will affect college aspirations positively.
- 6. Positive outcome expectations will affect college aspirations positively.

- 7. Higher levels of self-efficacy will impact academic performance positively.
- 8. Positive outcome expectations will impact academic performance positively.
- 9. Supports will be related to self-efficacy positively.
- 10. Supports will be related to college aspirations positively.
- 11. Barriers will be related to outcome expectations negatively.
- 12. Barriers will be related to the college aspirations negatively.
- 13. High academic performance (GPA) will be related to the college aspirations positively.

A conceptual model illustrates the predicted hypotheses and relationships among the variables (Figure 1).

# Limitation of the Study

The study used a convenience sample of 11<sup>th</sup>-grade students from one urban high school, with a population majority Hispanic origin, located in a low-income area in Southern California. Due to the non-probability nature of the sampling, external validity was limited to study participants. The cross-sectional design used in this study considers that obtained relationships are consistent with SCCT's hypotheses, but it cannot conclude that the SCCT predictors are "causally" related to career choices. Self-report measures as well as narratives were used. These measures are susceptible to response bias and social desirability bias. The SES variable had two limitations. First, participants were not asked to report their family income; it was inferred by the type of meal plan in the school (free, reduce or pays. Second, the 95.5% of the participants had family low income; this situation did not allow finding SES variation in four of the seven models

(female, first, third, and fourth generation). These elements may include bias in the measure of the SES.

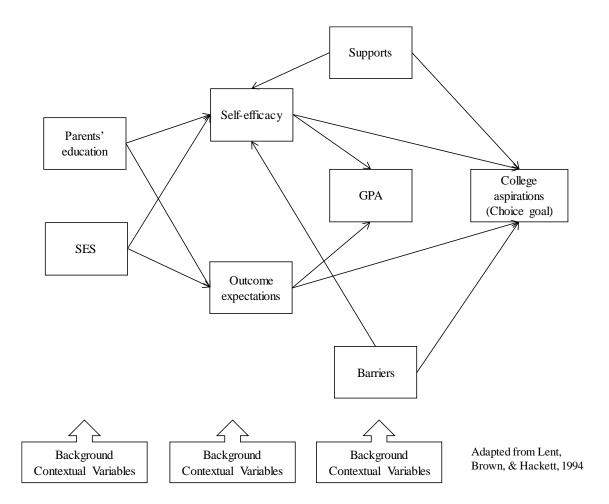


Figure 1. Latina/o college aspiration model.

# **Definitions of Terms**

The following is a list of term definitions applied in this study:

**Academic performance** is the outcome achieved by a student and measured by tests and examinations. For this study, the academic performance was measured by the grade point average (GPA) that each participant self-reported.

**Barriers** are events, personal or environmental condition those constrain or modify the career development of a young person (Lent, Brown, & Hackett, 2000; Swanson & Woitke, 1997).

Contextual variables are objective or perceived factors that allow or constrain the aspirations of young people during their career development, particularly their family background. The period in which these environmental influences occur are classified as distal and proximal (Lent et al., 2002).

**Distal background contextual factors** are related to socio-economic conditions of the environment in which people live that encourage or discourage them from engaging in particular academic activities (Lent et al., 2002). For instance, gender, race/ethnicity SES, parent educational levels, parents' occupations, family income, and employment or unemployment rates.

Outcome expectations refer to beliefs about the consequences of performing particular behaviors or engaging in particular actions (Brown & Lent, 2006). According to Bandura (1986, as cited in Bandura, 2001), people construct outcome expectations from the observed relationships between environmental events and the results that produce those actions. In this vein, people engage and persist in behaviors and activities in which they perceive positive future outcomes (Brown & Lent, 2006).

**Personal Variables** are defined as abilities and motivational components (e.g., self-efficacy, outcome expectations and performance goals) that allow young people to influence their own career development (Lent et al., 2002).

**Proximal contextual factors** are supports or barriers which are directly related to the phase in which the college aspirations and career decision goal are establishing. For example, support related to college requirements, lack of financial aid (Lent et al., 2002).

**Self-efficacy** refers to personal beliefs about an individual's capabilities to perform particular behaviors or actions (Bandura, 2006). Self-efficacy is the most central mechanism of personal agency to control personal functioning and environmental events (Bandura, 2006).

Social cognitive career theory (SCCT) is a framework for understanding educational and occupational behavior. This approach explains "how people (a) develop vocational interests, (b) make occupational choices, (c) achieve varying levels of career success and stability, and (d) experience satisfaction or well-being in the work environment." (Brown & Lent, 2012, p 115). In addition, SCCT illuminates the interplay between personal, environmental, and behavioral factors that are assumed to engender students' academic and career-related interests, choices, and performance outcomes (Lent et al., 2005).

**Supports** are physical and emotional resources that young people obtain for their family, school, and community environments that encourage and foster the path to career development (Lent et al., 2000).

#### Dissertation Layout

The purpose of this dissertation is to examine the relationships between personal and contextual factors and college aspirations of Latina/o high school students. This study is organized into four chapters. Chapter I has presented the statement of the problem, the significance, the context in which the data were collected, the purpose, the research questions that frame the study, the limitations and the definition of fundamental terms. Chapter II provides a review of the literature related to the study. In it, the framework of the Social Cognitive Career Development (SCTT) and the socio-cognitive and the contextual factor are described. Additionally, this chapter presents literature of Latino population in the U.S., specifically the youth population and the barriers they face and the supports they need on the road to go to college. Chapter III describes the research design of the mixed methods utilized in this study. A description of the specific quantitative and qualitative approaches is presented. Chapter IV presents the results of the study. The demographic characteristics of the participants are shown in the first part. Second, the quantitative outcomes related to the evaluation of the hypothesized model, the modification model, and the models by gender and generations. Last, the qualitative results of the focus group discussions are presented. Chapter V summarizes and discusses the quantitative and qualitative findings related to personal and contextual variables that predict college aspirations. Also, implications for SCCT and recommendations for practice, policy, and future research are presented.

#### **CHAPTER II**

#### LITERATURE REVIEW

The first section of the literature review describes the framework of the career development and the Social Cognitive Career Development (SCTT) in which the choice model is described as well as the socio-cognitive and the contextual predictors of choice goals that in this study are college aspirations. The second section describes the literature of Latino population in the U.S., specifically the youth population and the barriers they face on the road to college as well as the social support that encourage them to pursue a career in the higher education level.

#### Theoretical Framework

## **Career Development Theories**

The field of career development explains career-related behaviors from previous career decision-making processes to and following the enrollment of young people in higher education and/or into the work setting (Swanson & Fouad, 1999). A diversity of theoretical approaches integrates this field -more than fifteen. Some theories highlight intra-individual variables, contextual or environmental influences; others underline career development processes or contents in career decision-making (Porfeli, Niles, & Trusty, 2005).

Crumpton (2005) describes different types of theories and approaches to career development to range from cognitive and personal traits to theories that include the effect of the environment on career development. Table 1 presents a summary of these theories and approaches.

Table 1 Theories and approaches in career development

Theory/Approach	Description	Authors
Cognitive	The client is involved in problem-solving activities that	Peterson, Sampson, &
Information	train her/him in information-processing skill to make a	Reardon, 1991.
Processing Theory	career decision.	
Trait-Factors	Holland's theory identifies six types of the personality	Holland, 1997.
Types Theories	that are related to six types of environments in which	
	people can develop a career path.	
	Work adjustment theory identifies 18 types of	
	relationships between a person and the environment in	Davis & Lofquist,
	which an individual can find he/she job satisfaction and	1984.
	tenure.	
Lifespan Theories	Personal characteristics, values, needs, interests,	Ginzberg, Ginsburg,
	intelligence, aptitudes, and abilities determine how an	Axelrad, and Herma,
	individual see themselves and their environment. This	1951; Gottfredson,
	self-concept allows her/him to create changes during	1981, 1996; Super,
	the life span.	1957, 1990.
Career Decision-	This approach sees each person as responsible for one's	Tiedeman & Miller-
Making Approach	behavior. Intellectual ability, intuition, and previously	Tiedeman, 1979.
	provided experiences, and intuition into past	
	experiences led a person to build her/him own career.	
Learning Theory of	The learning experiences –instrumental and	Krumboltz, 1996.
Career Counseling	associative- develop individual behavioral, cognitive	
	skills, and preferences that allow an individual to	
g 11 g 11	function effectively in the environment.	YY 1 0 D 1001
Social Cognitive	This theory identifies how an individual develops a	Hackett & Betz, 1981;
Career Theory	vocational interest, makes a career choice, and succeeds	Lent, Brown, &
	in educational and occupational pursuits. In addition,	Hackett, 1994.
	this theory focuses on the interplay between social	
Constructivist	cognitive and environmental factors.	Vally 1055, Cabulta
	Constructivism depicts that "individuals interpret and organize their own reality depending on the way they	Kelly, 1955; Schultz & Schultz, 2001.
approaches	perceive and interpret events and relationships in their	& Schutz, 2001.
	lives" (pp. 86-87)	
	Action theory makes emphasis in the interaction	Young, Valach, &
	between people and an individual's career constructs	Collin, 1996
	(values, interests, work identity, and behaviors).	Collin, 1770
Roe's Personality	This theory focuses on the interaction of heredity and	Roe & Lunneborg,
Development	environment in the development of a person	1990
Theory	orientation. Individual interest in occupations is formed	1,,,,
	by father or family influences more than other factors.	
The role of	This approach describes that the chance influence or	Cabrail and Solamone,
unforeseen events	unforeseen events play a significant role in individual's	1990
in career	career decision.	
development		
Converging career	This approach establishes the relationships between	Savickas, 1995; Sharf,
development	career development theories and counseling practice.	1996
theories and	This relationship decreases operational conflicts when	
counseling	the theory is put into practice in psychotherapy and	
practices.	career counseling.	

Porfeli et al. (2005) point out the career development field is in a period of transition as a result of dramatic changes in the labor market and the socio-cultural environment in the last two decades. Additionally, Porfeli et al. (2005) identify areas of interest to an inquiry in career development: changes in the characteristics of the labor market, issues related to gender and minority groups, and socioeconomic trends. In the same vein, Crumpton (2005) points out that racial/ethnic and cultural diversity, gender, and sexual orientation are areas in which career counseling should make a major emphasis. Social cognitive career theory (SCCT) gives a crucial role to socio-cognitive factors (self-efficacy, outcome expectations, vocational interests, and goals) in professional development. In a similar way, SCCT also recognizes that environmental conditions can directly influence socio-cognitive factors in the choice process.

Therefore, this theory was chosen to ground this research study.

# **Social Cognitive Career Theory –SCCT**

In agreement with those contemporary issues, the Social Cognitive Career Theory (SCCT) explains and predicts career behaviors. SCCT depicts the interaction between socio-cognitive variables, contextual influences, and personal characteristics -in specifics domains of career development (Lent, Brown, & Hackett, 1994). In this way, SCCT predicts career interests, career choices, and educational attainments for specific populations or social groups. These predictions are pivotal in future interventions in career development. Those predictions can enhance self-efficacy beliefs in career pursuits, to build realistic outcome expectations, and coping with perceived and physical barriers in the establishing of performance goals (Lent & Brown, 2006).

SCCT provides a method for understanding the career development process through three interconnecting phases: career interests, career choices, and career success (Lent et al., 1994; Lent et al., 2000; Brown & Lent, 2006). This theory depicts how people develop an interest in a particular field, how they made choices influenced by personal and vicarious experiences and how people succeed in their goal to develop a career path. Linked to Bandura's (1986) social cognitive theory (SCT), SCCT focuses on the interplay between social cognitive variables, environmental variables, and physical attributes to configure the course of career development (Lent et al., 2000; Brown & Lent, 2006, Bandura, 2006). The social cognitive variables are self-efficacy, outcome expectations, and goals; the environmental variables are barriers and supports; and the physical attributes are gender, race/ethnicity, and age. Underlying SCT and SCCT theories the fact that people are contributors of their own life circumstances and not merely products of them (Bandura, 2006). Regarding theoretical analysis Lent et al. (1994) subdivided SCCT into two complementary levels: personal and environmental.

#### Personal Level

This level depicts the socio cognitive-person variables that enable people to exercise their own agency in career development (Lent et al., 2005). Those personal variables are self-efficacy, outcome expectations, and goals.

## **Self-efficacy**

Self-efficacy, "refers to context-specific, personal beliefs about an individual's capabilities to perform particular behaviors or courses of action" (Bandura, 1986, 1997, as cited in Brown & Lent, 2006, p. 204). Brown & Lent (2006) describe that unlike traits

such as self-esteem or self-confidence which can be indexed in generic domains, self-efficacy beliefs are dynamics and intimately tied to domain-specific aspects of human functioning, (i.e., academic self-efficacy, social self-efficacy; career decision-making self-efficacy). For example, a student might feel very confident in their math skills, but this student might feel low confident in social sciences skills. According to Bandura (2006), self-efficacy impacts cognitive, motivational, affective and decisional process-making. Therefore, self-efficacy constitutes a key personal resource and determines how people conceive environmental opportunities and impediments (Bandura, 2006).

In addition, Bandura (1977 as cited in Lent & Brown, 2006) identified "four primary informational sources: (a) personal performance accomplishments, (b) vicarious learning, (c) social persuasion, and (d) physiological and affective states" (p. 16). Personal accomplishments exert the greatest influence on self-efficacy beliefs (successful experiences raise it while failure or negative experiences decrease it). However, the observation of successful models or the exposure to encouraging messages from peers and adults and the participation in social experiences increase self-efficacy beliefs in a particular domain (Lent & Brown, 2006). For instance, students that have been exposed to shadowing practices in the career of their interest may increase their self-efficacy career choice more than those students that have not been exposed to this type of experience.

Although self-efficacy relies on personal beliefs about an individual's capabilities in a specific domain (i.e., a career choice), it does not mean that a sense of self-efficacy promotes an individualistic lifestyle that decreases collective welfare.

Rather a strong sense of self-efficacy is pivotal to exercise some control over one's functioning and environmental events regardless of whether this strong self-efficacy is achieved individually or by group members (Bandura, 2001).

# **Outcome expectations**

Outcome expectations are beliefs about the consequences or results of performing particular behaviors (Brown & Lent, 2006). Bandura (1986 as cited in Lent and Brown, 2006, p. 17) identified three types of outcomes expectations: anticipated social (e.g., benefits to one's family), material (e.g., financial gain), and self-evaluative (e.g., self-approval). Regardless of the direction and strength, outcome expectations are positive, negative, or neutral as a consequence of engaging in a particular activity (Lent & Brown, 2006). According to Lent & Brown (2006), people are likely to engage in behaviors that result in valued outcomes and to avoid performances that anticipate adverse results.

According to Bandura (1986, in Bandura, 2001), people construct outcome expectations from the observed relationships between environmental events and the results that produce those actions. In this vein, the ability to anticipate outcomes that influence current activities promotes foresightful behaviors (Bandura, 2001). Outcome expectations are pivotal in the socio-cognitive process because they "enable people to transcend the dictates of their immediate environment and to shape and regulate the present to fit a desired future" (Bandura, 2001, p. 7). In career development, outcome expectations allow students to imagine their future and then to establish actions that drive them on the path to achieving those expectations.

SCCT (Brown & Lent, 2006) posits that self-efficacy and outcome expectations partially determine the engagement, effort, and persistence that people put on their activities and their ultimate success. Self-efficacy beliefs assess personal's capabilities - 'can I do this?'-, and outcome expectations appraise anticipated consequences of particular behaviors - 'what will happen if I do this?'- (Lent et al., 2005). Both, self-efficacy and outcome expectations influence the types of goals that people set for themselves (Brown & Lent, 2006).

#### Goals

Goals are the intention to engage in a particular activity or to produce a particular outcome (Bandura, 1986). Goals are rooted in personal values and a sense of personal identity; therefore, people invest in activities with meaning and purpose for them (Bandura, 2001). Bandura (2001) identifies two types of goals, proximal and distal goals. Proximal sub-goals mobilize self-influences and guide that people do in the present; distal goals establish the course of pursuits; however, distal goals are too far to provide incentives and guides for actions in the present (Bandura, 2001). Consequently, the establishing of a hierarchical goals system that combines both distal aspirations and proximal goal self-guidance contribute to people progress toward their future (Bandura, 2001).

In a similar way, SCCT identifies two types of goals: choice-content goals that are the kind of activities that one wishes to pursue in a particular domain, and performance goals that are kind of level of performance that people aspire within a given area or field (Lent & Brown, 2006). In lay term, choice goals motivate students to pursue

a career, and performance goals determine the level of success that students are interested in achieving (Lent & Brown, 2006). When people establish personal goals they organize and conduct their own behavior, and those goals contribute to support them in difficult times. Because of goals are linked to both self-efficacy and outcome expectations, any success or failure in achieving goals confirm self-efficacy beliefs and outcome expectations regarding a particular domain (Brown & Lent, 2006).

This study defined the particular domain of the career choice as college aspirations. College aspiration refers to a student' emotional disposition toward the goal to go to college, given an ideal condition to drives her/him to the path of higher education (Rojewski, 2005). In this vein, college aspiration is a choice goal because it is a wish or a distal goal that guide the future. College aspiration is not necessarily an indicator of an attainment; however, an aspiration is a cognitive process that may predict the educational future of an individual (Gottfredson, Holland, & Gottfredson, 1975).

### Environmental Level

The second level of SCCT portrays three aspects. First, the environmental variables, these are barriers and supports that students have in the family, school, and community contexts. Second, physical attributes such as gender, age, and race/ethnicity are explored. Student's learning experiences are the third aspect. These learning experiences affect both personal variables and career development. This section focuses on the description of barriers and supports according to SCCT.

### **Barriers**

Barriers refer to negative contextual influences (Lent et al., 2000) or events, or personal conditions, which make career development difficult (Swanson & Woitke, 1997). Lent et al., (2000) make the distinction between generalized or pervasive barriers (e.g., permanent economic hardships, negative family influences, and toxic environments) and barriers that depend on the developmental task that one individual face (e.g., lack of financial resources to go to college). SCCT also identifies temporalize barriers: those encountered in the past, those hindering in the present, and those anticipated in the future of a particular domain (Lent et al., 2000).

# **Supports**

Supports or support systems are environmental variables that can facilitate individuals' career choice and development (Lent et al., 2000). Students need to build relationships with adults and peers that encourage their college aspirations and allow them to explore a variety of careers options (Tierney et al., 2009). According to SCCT (Brown & Lent, 2006), support is not a neutral environmental condition; rather, support systems provide resources that promote career development. For instance, Tierney et al. (2009) identify that financial aid plays a significant role in college aspirations and college entrance, "especially for first-generation students and students from low-income families." (p. 38).

SCCT depicts that "supports and barriers are inversely related or reflect opposite poles on a positive-negative continuum" (Lent et al., 2000, p. 42). Some students perceive familial financial aid as a crucial support for their goal of going to college;

while others perceive the lack of this economic resource as an educational barrier. Therefore, SCCT advocates for more research that inquire the relationship between, perceived supports and barriers (Lent et al., 2000).

# Latino as an Ethnic Category: Literature Review

#### Latino Youth in the U.S.

In the U.S., Latino/Latina is a generic category that is used to differentiate Latino heritage from other race or ethnic groups. This categorization is used by governmental institutions or non-profit organizations in the provision of their services or segmentations of their target population. Youth interacting with the different institutions/organizations are more likely to be asked to identify their race/ethnicity category than their parents.

Those young people who are in permanent contact with their country of origin will have stronger ties than those who are not in continuous contact with their country of origin. For example, Mexican and Mexican American heritage are in a more permanent nurturing connection due to the country's geographical proximity to the U.S. (Galan, 2001; Jimenez, 2010). This proximity to the origin of the country is more vigorously in first and second generations than the following.

Latina/o youth share Spanish language and some socio-cultural values such as the *familism*, communalism, collectiveness, respect, and spirituality (Zuniga, 2001; Negroni-Rodriguez & Morales, 2001). However, inside of this category, there are socio-cultural differences. For example, each country has its idiomatic expressions; types of foods and wardrobe; and spirituality rituals. In the same vein, not all Latina/o youth descendants speak Spanish. Second generations have limited Spanish language or

limited bilingualism, and third generations speak Spanish neither inside nor outside the home (Portes & Rumbaut, 2001).

Another characteristic is the perceptions of discrimination because of SES and skin color. Those who belong lower SES or their skin color is dark or have indigenous traits perceived more discrimination than those with high SES or light skin color (Murguia & Forman, 2003; Murguia & Sáenz, 2002; Murguia, 1975). Latina/o youths struggle with the whiteness ideology or be perceived as a "second man" (Mörner, 1967). Latina/o people in the US are neither white nor African Americans, not Native Americans; this condition to be among races generates feelings of belonging to a second category.

Latina/o youths face culture shock between their family cultural heritage and mainstream American culture. Additionally, some youth newcomers in the US face some shock when they are labeled as Hispanic/Latino rather than their origin nationality. Those types of culture shock not only are related to experiment differences in types of values, customs, and behaviors but also those cultures expect that young people navigate suitable for each culture. For example, in the family environment, they have to speak Spanish, eat traditional food, and attend some social or religious rituals own of their parent's culture. A family issue that constrains the way to go to college is the traditional cultural gender roles (McWhirter et al., 2007). For instance, males are perceived as the breadwinner of their families (Clark, Ponjuan, Orrock, Wilson, & Flores, 2013; Sáenz & Ponjuan, 2012) and the females take care of their sibling and develop domestic tasks (Casa, Wagenheim, Banchero, & Mendoza-Romero, 1995). In the school environment,

Latina/o youth have to adopt explicit and implicit behavioral rules. For example, they have to be fluent in the English language to avoid stereotypes of underachievement students (McKown & Weinstein, 2003). In the same vein, the newcomer's youth are discriminated or isolated by their ethnicity or country of origin in the school (McWhirter, Luginbuhl, & Brown, 2014; McWhirter, Ramos, & Medina, 2013).

Latina/o youth face the challenge to be skillful in bout cultures. A small fragment of the dialog between a father and his daughter - in the film Selena- represents it means to navigate between both cultures for Mexican Americans:

"And we gotta prove to the Mexicans how Mexican we are. And we gotta prove to the Americans how American we are. We gotta be more Mexican than the Mexicans and more American than the Americans both at the same time! It's exhausting! Damn! Nobody knows how tough it is to be a Mexican American!" (Abraham Quintanilla, as cited in Jimenez, 2010, p. 139)

Latina/o youth who reject the cultural heritage of their families without replacing them with American culture values display higher levels of personal and the family maladjustment (Negroni-Rodriguez & Morales, 2001). Conversely, those Latina/o youths with strong ethnic identity are positively associated with higher educational expectations (Cano et al., 2012). However, Portes and Rumbaut (2006) point out that to embrace the American values is not a guarantee of successful adaptation and economic advancement. Rather, Latino young generations in the U.S.A. "face the paradox that assimilating to their American surroundings may derail their successful adaptation, while

remaining firmly ensconced in their parents' immigrant communities and cultures may strengthen their chances." (Portes & Rumbaut, 2006, p. 25)

An alternative to cope with this paradox is the multiculturalism movements in Latin American countries and the Latina/o movements in the U.S.A. Those movements are paving the way in which Latina/o youth move away from whiteness ideologies or "mestizo nation" (Wade, Lopez, Restrepo, & Ventura, 2014) or "second man" (Mörner, 1967) to embrace multiethnic identities (Peloso, 2014). In this vein, Latina/Latino youth are more equipped than previous generations to define their version of what it means to be Latina/Latino in the US. They are a minority that will become a majority (Colby & Ortman, 2015); and their contributions will be pivotal in the building of American society not only more diverse regarding cultural and ethnic settings but also a society more inclusive, democratic and equality.

In this sense, Latina/o as an ethnic category calls for transcending the nationalisms ideologies to build a cultural-linguistic solidarity (Coronado, 2015). In this way, Latina/o can overcome the historical experiences of racialization and allow flourishing cultural values than have been missing in the hegemonic discourses of power and control. For instance, Latina/o youth reject to learn Spanish to avoid discrimination issues. Unfortunately, this affair forces them to lose the opportunity to develop bilingualism skills that are a competitive advantage in working environments.

Conversely, a linguistic and cultural reaffirmation contributes to reassert the Latino pride (Portes & Rumbaut, 2001).

#### **Characteristics of Latino Families**

People with Hispanic origin in the U.S.A. territories go back to the Colonial times when Spaniards settled in Saint Augustine Florida in 1565 and then, as a result of the Mexican-America War in the 1840's half of Mexico's territory was annexed to the U.S.A (Aguilera-Titus & Deck, 2016, March 11). During the twenty century, the first waves of immigration were initiated by U.S. growers and railroad companies that sent recruiters to Mexico to attract foreign workers in 1916 (Portes & Rumbaut, 2006). In a similar way, the Bracero Program was an agreement between Mexico and the U.S.A. that brought thousands of Mexican citizens to work in agriculture jobs (Centro para la Historia y Nuevos Medios, 2016). Subsequently, in 1965, the change in the America immigration law was the principal factor that contributes to increasing the number of immigrants from Asia and Latin America countries. Since 1965, the 51% of immigrants came from Latin America, and this population in the U.S.A rose from 4% in 1965 to 18% in 2015 (Krogstad, 2015).

Portes and Rumbaut (2006) explain that immigration movement is not only a personal decision; there are also small, medium, and large companies that profit from this source of labor. "The match between the goals and economic aspirations of migrant workers and the needs and interests of the firms that hire them is the key factor sustaining the flow year after year." (Portes & Rumbaut, 2006, p. 24). In this vein, the migration from Latina America to the U.S.A. is not merely a personal pursuit in search of a better future. It is also a labor demand that to stimulate the arrival of manual labors

and highly skilled workers mediated by networks that facilitate and sustain the movement in both directions (Portes & Rumbaut, 2006).

According to Portes and Rumbaut (2006) the type of migration –manual labors, professionals, entrepreneurial, refugee, and asylees- provides significant differences in migrations goals and expectations. For instance, while, manual labors (unskilled or semiskilled) accept menial jobs with low wages to meet their basic needs; professionals with advanced degrees usually work in their careers and their interests focus on to improving careers success and life standards (Portes & Rumbaut, 2006). Although the majority of the Latin American's immigrants are manual labors; there are also the other types of immigrants that it is necessary to take into account in the characterization of Latinos in the U.S.A.

Latino families in the US have different economic, educational, and sociocultural environments that allow them behave and make emphasis on some cultural
values than others. Although formulate family characteristics have the risk of reinforcing
stereotypes and undermine family uniqueness (Acevedo & Morales, 2001); researchers
have identified cultural values and behavioral norms that can be roughly generalizable to
Latino Families. The Table 2 presents a summary of values, descriptions and authors
who describe these values:

As stated earlier, those cultural values and behavioral serve as a general framework. However, particular family attributes should be considered both in research and intervention programs.

Table 2 Latino family values

Value	Description	Authors
Familism	This is the most fundamental value for Latina/os. The family is the core of Latino culture. In this sense, individual needs are subordinated to family needs.	Acevedo & Morales, 2001; Zuniga, 2001; Marin & Marin, 1991
Personalism	This value embodies the uniqueness of a person's personality. The relationships mediated by feeling of friendships and caring.	Acevedo & Morales, 2001; Zuniga, 2001; Marin & Marin, 1991
Allocentrism	Latina/os learn to feel empathy and sacrifice on behalf of their family interests and community expectations.	Green (as cited in Zuniga, 2001); Marin & Marin, 1991
Respect	Latina/os children learn to estimate and admire their adults that represent authority (parents, leaders, seniors). In this vein relationships between young and older generations are mediated by the respect.	Acevedo & Morales, 2001; Zuniga, 2001; Marin & Marin, 1991
Trust	Latina/os rely on each other. The ground of the relationships is <i>confianza</i> (reliance) each other. This value is also the foundation of <i>respeto</i> (respect).	Acevedo & Morales, 2001; Zuniga, 2001; Marin & Marin, 1991
Machismo	This is the male gender stereotype in which Latinos hold the authority and power in their families.  Moreover, this stereotype is associated with the role of protector, provider, and gallant.	Acevedo & Morales, 2001; Casa et al., 1995; Marin & Marin, 1991; Zuniga, 2001
Marianismo	This is the female gender stereotype in which Latinas are obedient and more spiritual or religious than Latinos. This stereotype is also related to the capacity of sacrifice that women display for their families.	Acevedo & Morales, 2001; Casa et al., 1995; Marin & Marin, 1991; Zuniga, 2001
Spirituality matters and religion:	The Catholic faith and other types of faiths such as espiritismo, curanderismo and Santeria.	Zuniga, 2001; Acevedo & Morales, 2001
Collective actions	Latina/os give emphasis to develop collective actions more than competition in which there are winners and losers.	Zuniga, 2001; Marin & Marin, 1991
Spanish language	The first generations of Latina/os are committed to holding the Spanish language as part of their heritage. Although older generations may lose the Spanish fluency, they do not disconnect of the legacy of this language.	Acevedo & Morales, 2001; Marin & Marin, 1991

Regarding educational goals, Latina/o parents not only believe that going to college is crucial (Clark et al., 2013; Lopez, 2009) but also when they participate in

schools programs they contribute to making changes in their children's education (Delgado-Gaitan, 1991). The alleged lack of Latino family involvement in children education is not related to a lack of interest from education. Latino parents do not have the knowledge of the American school system, they have limited English proficiency, they have to work demand on time (Gandara, 1995) and they are not always able to help their children in the same way as American parents (Clark et al., 2013). In this vein, Zuniga, (1998, as cited in Zuniga, 2001) points out Latino families have a strong commitment to socializing their children to be *bien educados* (well educated) or establish proper interpersonal relationships with others.

# **Latinos Through Generations**

Some studies describe the improvements of Latinos through generations of immigration. Smith (2003) examines two aspects of generational mobility of Hispanic and Mexican males: education and wages. Smith (2003) concluded that Latinos not only have made significant efforts in closing their educational and economic gap with Whites counterparts but also have surpassed their forefathers' generations in schooling and income levels. In a similar way, Taylor, Cohn, and González-Barrera (2013) find that the second generation of Latinos is better than the first generation in income, educational attainment, homeowner, and low levels of poverty. However, Taylor et al. (2013) state that these data are unable to conclude upward mobility of today's second-generation compared with those of earlier periods.

Although these studies present an increase in some socio-economic indicators from the Latino population; however, the Center for Immigration Studies CIS (2001)

states that these improvements lag far behind Whites and other ethnic groups. Although there are improvements in education and welfare between the first and second generation of Mexicans and Mexican Americans; there is no evidence of progress between the second and third generation in educational attainment. Also, there is a slight increasing in the rate of poverty between the second and third generations (CIS, 2001). Portes and Rumbaut (2006) depict that the human capital –educational level, bonds, and relationships- that the first generation brings from aboard, and the modes of incorporation are crucial in the future of the following generations. As a result, different paths of mobility across generation can be identified. The following extract presents the three routes described by Portes and Rumbaut (2006):

"Some immigrants today achieve middle-class status in the first generation, drawing on high levels of human capital and favorable mode of incorporations. Their offspring are thus posed to integrate rapidly into the American middle and upper closes by graduating from college and entering high-status occupations...Other immigrants never manage to rise above the working class, but their families are sufficiently strong and their communities sufficiently cohesive to support parental aspirations and steer children away from pitfalls endangering their progress through the educational system. Such youths can also achieve the necessary credentials, while maintaining strong social ties with their families and communities of origin. Finally, there are those youths from whom ethnicity would be neither a badge of pride nor a social convenience but a mark of subordination. These are usually offspring of working-class immigrants when

a negative mode of incorporation has prevented the development of strong and protective ethnic communities. Such children are at risk of joining the most disadvantaged minorities at the bottom of society. This path is labeled downward assimilation because, in this case, learning the cultural ways of the host society does not lead to upward mobility but, instead, to exactly the opposite." (pp. 265-264)

Latino immigrants with a low level of education, weak community bonds and negative modes of incorporation -high level of ethnic prejudice and governmental hostility – are at risk to follow the path of downward assimilation (Portes & Rumbaut, 2006). An alternative path between upward and downward assimilation is the segmented assimilation. Portes and Rumbaut (2006) describe strategic outcomes associated with a segmented assimilation that allows immigrants cope with obstacles in the process of incorporation in the U.S. society. These outcomes are educational attainment, occupation, and use language preference. In this vein, families, schools, and communities may foster actions that contribute to young generations attain high levels of education which increase the odds to find better jobs and establish proper social relationships (Boroch & Hope, 2009; Museus et al., 2010). In addition, Latino communities should advocate for young people recognize the advantages of being bilingual in an interconnected world.

#### **Educational Attainment of Latino Youth**

Takao (2007) depicts the 62.4% of young people (between 16 and 21 years old) were interested in attending some type of higher education either full time or part time,

regardless of their ethnicity. In the same vein, Tierney et al. (2009) present the 79% of students in early high school express college aspirations. In a similar way, roughly the 85% of Latina/o high school students plan to attend some higher education after school graduation (McWhirter et al., 2014; McWhirter, Ramos, et al., 2013). However, only 33.8% of Latina/o between 18 and 24 years old attended college in 2013 (USCB, 2013). As a result, more than half Latina/o students did not reach their goal to continue in higher education. These students faced personal and/or environmental barriers that constrain their college aspirations goals (Lopez, 2009). In addition, Portes and Rumbaut (2006) assert that offspring's immigrants who live in low-income areas face three major challenges to education attainment and career success: racial discrimination, the inequality of the American labor market, and the consolidation of a lifestyle grounded in drug business and street gangs, particularly in American inner cities. In this picture, social mobility through the access to higher education is the only option that several students and their families have put their hopes and expectations.

Although generally academic goals are related to the personal level, some kinds of goals involve the family welfare in the context of Latino families. For example, in the case of Latina/o college students -aware of family economic hardships- going to college and graduating from it, are collective goals rather than personal one (McWhirter, Ramos, et al., 2013). For Latino families, the educational achievement of their children is not only a personal goal but also a collective goal. Through higher education, Latina/o students find a path to reward their parents' effort and sacrifice, to achieve the educational level that their parents could not reach (McWhirter, Ramos, et al., 2013).

### **Barriers in the Path of Going College**

Tierney et al. (2009) point out that the most common barriers that hinder access to college are: first, students may not be aware of the steps they need to follow to go to college. Second, they may lack information on how to complete those steps. Third, they may not receive sufficient support and advice from adults around them.

McWhirter et al. (2007) assessed two dimensions of perceived barriers: the likelihood of encountering specific barriers and the estimated difficulty of overcoming them through the perceptions of educational barriers test (PEB). McWhirter et al. (2007) identified four external and two internal perceived barriers to postsecondary educational plans in a study of Mexican American and White high school students.

External barriers were:

- 1. Financial: "not enough money."
- 2. Relational: "none of my friends doing what I'm doing."
- 3. Demographic: "sex discrimination."
- 4. Separation: "I want not available here."

Internal barriers were:

- 1. Ability: "Not confident enough."
- 2. Preparation/motivation: "Not being prepared enough."

McWhirter, Torres, et al. (2013) in a qualitative research identified six types of barriers that Latina adolescents face in their career and educational aspirations. Those themes were: first, lack of resources (e.g., "limited access to loans and scholarships"). Second, peers and peers influence (e.g., "Experiences of discrimination"). Third,

school-base barriers (e. g., "ESL curriculum did not prepare students for college"). Fourth, family barriers (e. g., "parental reluctance for their daughters to move out of the house"). Fifth, individual factors (e. g., "the locus of responsibility on the individual"), and Sixth, macrosystemic and exosystemic barriers (e. g., "Latina gender roles", and "societal discrimination").

In addition, Schneider, Martinez, & Owens (2006) identified barriers in the family and school context that explain the low academic achievement of Hispanics from the elementary to the high school. Family background characteristics such us low income, immigrant status, parents' educational attainment (Acevedo & Morales, 2001), and language, create an initial barrier that is hard to overcome (Schneider et al., 2006). This situation is high in new immigrant families. Complementary to lower levels of English proficiency, the low socioeconomic status may play a significant role in the lower test scores of African Americans and Hispanics in schools (Schneider et al., 2006).

In regards to barriers in primary and middle school contexts. Schneider et al. (2006) identified three characteristics of urban schools that serve a Hispanic population which has an adverse impact on student's academic achievement: large class sizes, schools with high levels of poverty, and inexperienced or noncertified teachers. One important issue that deserves attention is the strong emphasis that Latina/o students place on their relationships with teachers and the school environment. Latina/o students tend to have more field-sensitive cognitive style than children of other ethnic groups (Zuniga, 2001). Likewise, unsuitable middle school environments contribute to academic and social difficulties in later years. (Schneider et al., 2006)

Other barriers in the academic context are related to courses and curricula that prepare students for college-level. Schneider et al. (2006) found that Latina/o students are less likely than white students to complete an advanced mathematics; they are also less likely than both white and African American students to take certain advanced science courses. Schneider et al. (2006) point out that the most troubling barriers that Latino students face are little financial resources and inadequate career guidance. In the same way, Latina/o students are the least likely to take college entrance examinations and apply to college (Fry, 2004 as cited in Schneider et al., 2006). The barriers mentioned above, explain partially why Hispanic students have the lowest rates of college attendance (Sáenz & Ponjuan, 2012). However, more systematic research is needed to identify the impact of barriers to Latina/o students and college attendance (Nora & Crisp, 2012; Sáenz & Ponjuan, 2012).

# **Social Supports in the Path of Going College**

Regarding supports, the Pathways to College Network's 2009 publication portrays five types of supports that programs and policies should exhibit in the goal to foster smoother transitions from high school to higher education. Sáenz & Ponjuan (2011) summarized these types of support as followed:

- 1. "Emotional Support—Encourage caring and respect through mentoring, peer support, and individual counseling.
- 2. Instrumental Support—Offer physical interventions, such as workshops focused on financial literacy, study skills, and time management.

- 3. Informational Support—Offer valuable information related to academic transitions, academic advising, and career choices.
- 4. Appraisal Support—Offer ongoing feedback based on student progress.
- 5. Structural Support—Provide formal and informal structures to improve the school's culture and climate" (p. 14).

McWhirter et al. (2013b) conducted a qualitative study to examine the types of supports that Latina high school students perceived of family, teachers and friends. The findings of this research showed that Latina high school students described the most suitable support from their family as the provision of encouragement and understanding, economic support and providing advice, and high expectations in their career expectations. The most helpful supports from their teachers were related to active engagement, caring expectations, understanding, and acceptance. Concerning friends, the most important supports were understanding and encouragement, assistance with homework and discouragement from engaging in risky behaviors.

Clark et al. (2013) identified five types of supports that Latino male students need in their goals of pursuing a higher education. These supports are:

- Parental support to decrease the pressure to contribute financially to their families
- 2. Adult mentors as role models
- 3. Cultural supports groups
- 4. Financial aid opportunities
- 5. Assistance with life transitions from high school to college

In the same vein, Sáenz & Ponjuan (2011) identified four areas in which schools and postsecondary institutions must develop policies and practices to supports college-readiness and success of Latino males. Those areas are:

- 1. Family and community engagement
- 2. College and career-ready curriculum
- 3. Linked academic and social supports
- 4. Affordability, transparency, and financial literacy

Although those areas were identified to assist Latino males' academic success, these areas might also be related to Latina students. The difference is the types of specific support that Latino or Latina need. For example, Latinos need help to overcome peer pressures that push them to join the workforce instead of going to college (Sáenz & Ponjuan, 2012). Latinas need an assistant to find access to loans and scholarships (McWhirter, Valdez, et al., 2013).

# **Latino High School Students and SCCT**

Lent et al. (2005) call for future research in SCCT should inquiry the conditions under which supports and barriers foster or hinder students' academic goals. In the same vein, future research should focus on different racial/ethnics groups, career development domains, educational settings, and varying levels of environmental resources (Lent et al., 2005).

The findings of a meta-analysis related to SCCT choice model (Sheu et al., 2010) suggest the next areas for future research: first, inquiry the applicability of this model in academic and occupational fields different from science and engineering-related

domains. Second, identify the conditions in which self-efficacy or outcome expectations contribute the most in the predictions of academic goals. Third, revise contextual supports and barriers as a direct predictor of goals.

McWhirter et al., (2007) suggest that future research in SCCT –in high school settings- should take into account not only supports and barriers -internal and external-but also inquiring for additional indicators about academic pursuits. Those variables are college academic preparation, college tests (SAT and ACT), college application, and college admission.

Research that examines the transition of Latina/o students from high school to post-secondary education points out gaps in the research on college aspirations and college access. Castillo, Conoley, Cepeda, Ivy, & Archuleta (2010) call for assessing appropriate support interventions to create pro-college culture. Nora & Crisp, (2012) suggest the future research should focus on the identification of barriers because of little attention has been paid to those impediments. Sáenz & Ponjuan (2012) indicate that academic and social developmental supports have been less attention. Clack et al. (2013) call for inquiry perspectives about the educational goals, barriers, and strengths that students perceive –Latino male students. McWhirter, Valdez, et al. (2013b) future research in support for Latinas –in high schools- should assess topics related to advise, caring expectations, cultural understanding, and interrupting racist behaviors.

Therefore, this research focuses on identifying the relationships between personal and contextual variables and college aspirations in Latina/o high school students. Given the importance of the interplay between personal (self-efficacy and outcome

expectations), contextual (barriers and supports) and background factors in college aspirations, the current study tested a model of college aspirations and following that conducted focus groups to discuss in depth those results.

#### **CHAPTER III**

#### **METHODOLOGY**

This section presents the methodological design and the methods used in this study. The first part describes the mixed methods model. The second part describes the methodological design of the quantitative approach: participants, procedure, measures and data analysis. The third part describes the methodological design of qualitative approach: participants, moderators, procedure, interview protocol, data analysis, and coding.

# Research Design

This study used mixed methods to gain a broader understanding of the personal and environmental factors that hinder or foster college aspirations in Latina/o high school students. Mixed methods collect, analyze, and interpret data from both quantitative and qualitative sources in the same study (Creswell, & Clark, 2011). The advantage of using qualitative and quantitative methods in concurrent is to illuminate the different aspects of a research problem that no single method alone can afford (Creswell & Clark, 2011; Hennink, 2014). The exploratory sequential design (Creswell & Clark, 2011) was used in this study in which two distinct interactive phases occurred sequentially. The first phase, quantitative data were collected from a survey, and the results were analyzed. The second phase, the results of the quantitative data were analyzed through focus group discussions in which participants provided perceptions of the survey results. This sequential process adds insight or reasons behind the outcomes of the research questionnaire (Creswell & Clark, 2011; Hennink, 2014; Stewart,

Shamdasani, & Rock, 2007).). In the present study survey results about the top five barriers that students face in their goal to go to college were presented to participants in the focus group. The subsequent discussion of these findings provided clues in the comprehension of how these barriers affect student's college aspirations.

The quantitative approach employed a survey questionnaire to identify how Latina/o students' college aspirations are influenced by family background, personal, and environmental variables. In the same vein, the results of the survey identified the differences by gender and generation. The two research questions guided the quantitative component are: what are the relationships between personal and contextual variables and college aspirations in 11th grade Latina/o high school students of an urban high school located in the southwestern of the U.S.? Are gender, generation of immigration, and country of origin intervening variables in the relationship between personal and contextual variables and college aspirations of those students?

The qualitative approach employed focus groups discussions to facilitate the interpretation of survey results (Stewart, et al., 2007) and added in depth meanings attribute to how variables affect more or fewer students' college aspirations. The goals of the focus groups discussions were: first, analyze the reasons why some barriers hinder their college aspirations more than others. Second, examine the types of supports that students consider pivotal in the path of going college. Third, discuss the academic experiences that increase or decrease their self-efficacy related to college aspirations and college attendance. The research question that guides this qualitative component is: what

is the reasoning of students surveyed to the results of this model related to the relationships between personal and environmental variables and college aspirations?

The Institutional Review Board at Texas A & M University approved of this study, IRB2015-0289 (0/22/215).

# **Quantitative Approach**

### **Participants**

A convenient sample, consisting of 11<sup>th</sup>-grade students –or junior classification-was obtained from an urban high school located in Southern California. All participants identified themselves as Latina-o/, Hispanic, Spanish, Mexican American, Mexican, or any country in Central or South America.) The sample size was calculated with the formula proposed by Newbold and Carlson, (2007). Previous studies have found that the 81.7% of 11<sup>th</sup>-grade students plan to go to college (McWhirter et al., 2014) Therefore, this ratio was used to establish the dispersion in the variable plans of going college. This variable was considered the most appropriate question for sampling in agreement with the conditions of the problem.

$$n = \frac{N(pq)}{(N-1)\left(\frac{e^2}{z^2}\right) + (pq)} \qquad n = \frac{575(0.85 * 0.15)}{(575-1)(\frac{0.05^2}{2.575^2}) + (085 * 0.15)} = 214$$

Where:

N = Total of Latino students in  $11^{th}$  grade

n =Sample size

Z = Critical value in the standard normal to a confidence level at 99%

p = Proportion of students considering going to college

q = Proportion of students does not considering going to college

e = Margin of error at 5%

Finally, the participants that filled out the survey included a final sample of 247 11<sup>th</sup> grade students. The return rate for the survey was 43%. The external validity of this study is limited to the participants due to non-probability nature of the sample size.

#### **Procedures**

Before filling out the survey questionnaire, the participants were provided a parental permission form and minor assent form. These forms were written in English and Spanish languages and were distributed two weeks before the survey period. Four teachers allowed for the administration of the survey in their 11<sup>th</sup> grade English class. If the majority of the students in the class participated in the survey, the survey was administered in the classrooms. If the number of participants was small, the student left the class and took the survey in the career center room. Although students were provided the option to take the survey in English or Spanish language, all students completed the survey in English. Participants completed the questionnaire in a paper-pencil format. Identifying information was not collected in the questionnaire. The survey took approximately 20 to 30 minutes, on average, to complete. The participants were allowed to skip any questions they chose or decline their participation at any time to avoid coercion.

#### Measures

The following measures were collected in the survey questionnaire: demographics, self-efficacy, outcome expectations, social supports, personal and environmental barriers, and college aspirations.

### **Demographics**

The participants provided demographic, academic, and family information. The demographic information included: gender, age, country of birth, and type of generation. The type of generation was measured as follows: 1st generation: you and your parents were born outside of the U.S.; 2nd generation: your parents were born outside of the U.S., and you were born in the U.S.; 3rd generation both your parents –or, at least, one-and you were born in the U.S.; 4th generation and more: your grandparents –at least ones; your parents –at least, one- and you were born in the U.S. The academic information included grade point average GPA score, the number of honors and advanced placement (AP) courses that he/she has taken, and SAT/ACT scores, if the student has taken. The family information included the number of members in the household, parents' educational attainment, parents' occupation, and the type of school meal plan in the school –free, reduce or pays-. The latest determined the family's SES level.

# **Self-efficacy**

Self-efficacy was measured using a 12 item instrument. Five items measured self-efficacy for academic milestones and seven items indicated coping efficacy. This instrument was adapted from Lent et al. (2005). Permission to use the published instrument for the purpose of this study were obtained. The self-efficacy for academic milestones instrument (Lent et al., 2005) asked college students to indicate their confidence in their ability to successfully perform a variety of academic tasks required for success in engineering majors. In turn, Lent et al.'s (2005) instrument was adapted

from an original instrument related to science and engineering majors (Lent et al., 2001 and Lent et al., 2003 as cited in Lent et al., 2005). "The original version of this scale produced an adequate internal consistency reliability estimate (.89) as well as theoryconsistent relations with measures of academic performance, persistence, and perceived career options" (Lent et al., 1986, as cited in Lent et al., 2005, p. 86). The coping efficacy items (Lent et al., 2005) asked participants to indicate their confidence in their ability to cope with a variety of barriers, or problems that engineer students could potentially experience" (p. 86). The original coping efficacy measure yielded a coefficient alpha of .89 (Lent et al., 2003). Both self-efficacy ratings used a 10-point scale ranging from 0 (no confidence) to 9 (complete confidence). According to Lent et al. (2005) the self-efficacy scores will calculate "by dividing the summed item responses by 11, producing a possible score range of 0–9, with higher scores reflecting stronger efficacy percepts" (p. 87). The coefficient alpha value of the self-efficacy scale in Lent et al.'s (2005) study was .91. The coefficient alpha value of the self-efficacy scale in the present study was .889.

# **Outcome expectations**

The outcome expectations were measured using a 12 items instrument. This instrument was adapted from the vocational outcome expectations-revised measurement (VOE-R) (Metheny & McWhirter, 2013). Permission to use the published instrument for the purpose of this study were obtained. The VOE-R is a modified version of the vocational outcome expectation measurement –VOE- (McWhirter, Crothers, & Rasheed, 2000) that measured only career-related choices. The VOE-R has both career-related

choices (items 1 to 6) and non-career related choices (items 7 to 12). The last items correspond to Bandura's three types of outcome expectations: self-evaluation or satisfaction (items 7 and 10), physical (items 8 and 12), and social (items 9 and 11) outcomes associated with career choices (Metheny, & McWhirter, 2013). The measurement used a 9-point Likert-type scale with response options ranging from strongly disagree (scored as 0) to strongly agree (scored as 9). Higher scores indicate more positive outcome expectations. McWhirter et al. (2000) presented evidence of adequate internal consistency, test-retest reliability, and concurrent validity of scores among high school samples. In the same vein, Metheny & McWhirter (2013) reported α .93 for the sample of college students of the VOE-R. In the same vein, McWhirter et al. (2000) reported  $\alpha$  .54 for the VOE measurement in a sample of high school students. Outcome expectations-efficacy scores were calculated by dividing the summed item responses by 12, producing a possible score range of 0–9, with higher scores reflecting positive outcome expectations percepts. The coefficient alpha value of the outcome expectations scale in the present study was .924.

# **Social supports**

Perceptions of support for college aspirations will be assessed using a 9-item scale adapted from Lent et al. (2005) entitled: social environmental supports and barriers measures (SESB). Permission to use the published instrument for the purpose of this study were obtained. Participants will ask to indicate how likely they would be to experience supports from family, teachers, peers and adults, (e.g., "get encouragement from your friends for pursuing this major"). The scale has a score range of 1–5; with

higher scores reflect stronger positive social support in their college aspirations. Lent et al. (2005) reported  $\alpha$  .90 for support items in college students. Supports scores were calculated by dividing the summed item responses by 9, producing a possible score range of 0–5, with higher scores reflecting stronger support percepts. The coefficient alpha value of the supports scale in the present study was .878.

#### Personal and environmental barriers

Perceptions of barriers to college aspirations will be assessed using the perceptions of educational barriers (PEB) (McWhirter et al., 2007). The PEB presented 24 potential barriers and was measured on a 5-point Likert-type scale with response options ranging from not at all likely (scored as 1) to extremely likely (scored as 5). Permission to use the published instrument for the purpose of this study were obtained. McWhirter, et al. (2007) presented an internal consistency for the scales of .91for high school students. Barriers -efficacy scores were calculated by dividing the summed item responses by 24, producing a possible score range of 0–5, with higher scores reflecting stronger barriers percepts. The coefficient alpha value of the PEB scale in the present study was .877.

# **College aspirations**

The aspiration to continue in postsecondary education was measured asking participants to respond to this question: *After completing high school, what additional type of education (if any) do you expect that you will complete?* The participants had the options to select among the following options:

# 1. Work full time.

- 2. Work part time.
- 3. Not planning to work.
- 4. Enroll in 2 year/ community college program.
- 5. Enroll in 4 year/bachelor degree program.
- 6. Enroll in specialized training, or apprenticeship program (e.g., carpentry, beautician, electrician)
- 7. Not planning study
- 8. Enter military
- 9. Other (please describe)

These questions were adapted from the immediate postsecondary plans in McWhirter, et al. (2007).

# Data Analysis

A cross-sectional survey design was employed to collect data, and descriptive statistics was employed to describe demographic, academic, and family information of the participants. Independent-samples t-tests were conducted to compare the GPA, honor courses, and AP courses between females and males. Pearson correlations were performed to examine the relation between mother and father educational attainment and occupations. A principal component analysis was conducted to identify the reliability of the questions associated with each construct (self-efficacy, outcome expectations, supports, and barriers). The alpha coefficients of these constructs were presented previously.

The study employed a path analysis, a confirmatory technique, to test a hypothesized model of college aspirations in Latina/o high school students. The hypothesized model predicts that personal (self-efficacy and outcome expectations) and contextual variables (support, barriers, parents 'educational attainment, SES) affect academic performance and plans of going college (ultimate dependent variable). The goodness-of-fit indexes for the model allowed for the evaluation of the appropriateness of the model and proposed a model modification. The modified model was tested for the full sample, gender and generation and was also evaluated through the goodness-of-fit indexes. Additionally, group differences in plans of going college were evaluated as mean differences in each of the personal and contextual variables across gender and generation.

# **Qualitative Approach**

# **Participants**

The participants were recruited from the sample of survey respondents that indicated their interest in participating in the focus groups. For this reason, demographic information was not collected. The twenty-three participants (12 Latinas and 11 Latinos) were distributed in four groups by gender. Each student was provided the opportunity to choose a fake name to guarantee their anonymous participation.

#### **Moderators**

The four focus groups were moderated by two doctoral students in the

Department of Recreation, Parks, and Tourism Sciences (RPTS) of Texas A&M

University in the emphasis on Youth Development (a Latino male, in their late 40s and

an African American female in their late 20s). Both had prior experience working with young people, and the male is an international student and Spanish is his native language.

#### **Procedure**

Prior to conducting the focus groups, the students and their parents filled out the minor assent and parents' consent forms, took the survey and those students interested to participate registered their names on a list. The selection of the participants was made using a systematic selection from the list; each fifth position was selected to obtain twelve members for each gender. Twenty-four students were chosen to participate in the focus groups from 139 registered. Participants for the discussions were divided into two groups for females (7 and 5 participants) and two groups of males (6 and 5 participants). Homogeneity and the level of acquaintance were the criteria to divide the groups by gender and to facilitate the discussions (Hennink, 2014). The focus groups were conducted within a one-week period, and each lasted one hour in duration (Female1: 85 minutes, Female 2: 55 minutes, Male 1: 69 minutes, and Male 2: 66 minutes). The focus groups were conducted in a classroom at the high school. The students received refreshments and snacks during the session. The focus groups were conducted in English and audio-recorded and notes were taken from the groups. The moderators began with a brief introduction to the focus group purpose and structure, followed by participant's presentations in which they provided a fake name, shared something of them, and talked about their perceptions of the survey. Peer debriefing were made moderators at the end of each day in which two focus groups were conducted. These open discussions among

moderators provided useful feedback of the process in which the focus groups were undertaken; the sensible topics for the participants, and moderators' thoughts about the students' participation (Spall, 1998).

#### Interview Protocol

Focus group questions were derived from the results of the survey and the literature of contextual and personal variables that hinder or foster college aspirations in Latina/o students. The session was organized in six sections: introduction, barriers that impede students' college aspirations, supports those foster students' college aspirations, academic self-efficacy, outcome expectations in college aspirations, and closing. Each section began with a brief presentation of the results of the survey followed by questions that stimulated the discussion. Examples of those questions are: What do you think about those barriers that most affect the students' college aspirations? What do you think high school students need those types of supports in their goal to go to college and why? Think about highs school students. How would affect student' academic self-efficacy his/her college aspirations? Two questions were made in the summary and closing section: If you had just one minute with Mr. Arne Duncan the U.S. Secretary of Education what message would you like to convey from our discussion today? Are there any other things about high school's college aspirations that you would like to share before we finish?

Moderators allowed participants to spend more time on questions and topics that generated greater participation; however, some discussions were cut because of time

constraints. For example, the second group female was shorter than other groups because of the session began later and after that, the students had the lunch break.

## Data Analyses

Focus group recordings were transcribed by three undergraduate students and by the researcher. Before transcription, the researcher met with each undergraduate student to discuss the relevance of the transcription for the research, guidelines for the transcription as well as potential problems they might face during the transcription. One undergraduate student did one transcription completely and did half of another group. Two students did incomplete transcriptions of their groups and the researcher completed them. The researcher did one transcription also. The investigator verified all transcriptions. In some occurrences, the speakers could not be identified due to them speaking too low, simultaneous speaking and/or background noise which led to these phrases not being transcribed.

After transcripts had been verified, the data were analyzed following a three interwoven steps: "process of data reduction, data display, and conclusion drawing/verification" (Miles & Huberman, 1994, p. 10). According to Miles and Huberman (1994), data reduction sharpens, focuses, discards, and organizes data. Data display assembles the organized information in graphs, charts, maps, and matrices to interpret them. Conclusion drawing is the meaning that emerging from the data from the beginning to the end; and verification is a second reviewing of the data and conclusions. These three steps of the analysis process are interwoven before, during and after data are

collected and analyzed (Miles & Huberman, 1994). This process is flexible and allows going back and forth from raw data to conclusion during the analysis stage.

# **Coding**

The coding had begun before any data were collected because of the questions discussed in the focus groups were related to the results of the survey and the conceptual framework. Therefore, the preliminary outline was developed in which the four central themes (barriers, supports, self-efficacy, and outcome expectations) and their categories were identified previously. However, during the reading of the transcription, new categories emerged and enriched the preliminary outline. This method named the Prestructured Case, differs from traditional methods because the fieldwork is driven by the outline whereas the traditional methods the outline is the result of the conclusions (Miles & Huberman, 1994).

The researcher read all responses to the given questions across the four focus groups and then assigned each idea or statement to a particular category of a particular theme. All statements were associated with the participant and the group respectively (e.g., "Aaron M1", "Maggie F2" male group 1 and female group 2 respectively). Each statement was placed in a category of a particular theme and then all statements were counted for each theme. Next, a faculty member of RPTS Department and a doctoral student of HEAHD Department reviewed the outline, the transcripts, and coding, raised questions and recommendations for coding decisions were made. Discrepancies were resolved by consensus. This process of triangulation was used to increase the reliability and validity of the outline, analysis and coding processes (Miles & Huberman, 1994).

#### Reliability and Trustworthiness

This study used memos, peer debriefing, triangulation and data reduction to attain the validity of the data. Memos: this study took into account previous research that used mixed methods (McNamara, 2012) and qualitative methods (McWhirter et al., 2014; McWhirter, Valdez, et al., 2013) in postsecondary plans and barriers that students face in the path of going college as references to the methodological development (Hays & Singh, 2011) of this study. Peer Debriefing: the moderators hold open discussions of the process of the focus groups and the participants' responses to the establishment of the trustworthiness of the findings (Spall, 1998). Triangulation: the main source of information was the focus groups discussions. In addition, this study reviewed the 2014 WASC Progress Report of the high school as well as notes of the moderators to provide some insight and descriptions about the topics discussed (Erlandson, Harris, Skipper & Allen, 1993). Also, during the coding process, an external expert reviewed the transcriptions and the coding as it was mentioned previously. Data reduction: this study focused on the analysis of the principal variables of the study. For this reason, the themes and the categories were related to these variables (Hays and Singh, 2012; Miles, & Huberman, 1994).

#### **CHAPTER IV**

#### **RESULTS**

The primary purpose of the study was to test a model of college aspirations of Latina/o high school students. A convenient sample of 247 Latina/o high school students was recruited for the study. A questionnaire in a paper-pencil format was administrated to collect demographic data to profile Latino high school students' participants and the data to measure personal and environmental variables as well as plans for going college. Statistical Package for the Social Sciences (SPSS) was used to analyze the data and LISREL program was used to assess the model fit.

This chapter contains three parts; the first part presents demographic characteristics of the participants; the second part the quantitative results related to the evaluation of the hypothesized model, the modification model, and the models by gender and generations. The last section presents the qualitative results of the focus groups discussions.

# Participant Demographics

The participants were 247 11<sup>th</sup>-graders from an urban school located in Southern California. All of the students who participated in this study were self-identified as Latina/o, or Hispanic origin. The participants self-reported their demographic, academic, and family information.

The gender distribution roughly was the same, slightly more females than males. The 76.1% of the students were sixteen years old. The majority of the students reported they were born in the U.S. (87.8%), with the second country of birth being Mexico

(9.8%) and only six students reported they were born in other countries. These findings were slightly similar to data of U. S. Census Bureau (2015) in which 73% of Latinos, who live in California state, were born in the U.S.

Table 3 Study participants' self-reported gender, age, country of birth, and generation

Variable	Frequency	Percentage	
Gender			
Female	129	52.23	
Male	118	47.77	
Total	247	100.00	
Age			
Fifteen	39	15.79	
Sixteen	188	76.11	
Seventeen	20	8.10	
Total	247	100.00	
Country of birth			
USA	212	87.80	
Mexico	24	9.76	
Guatemala	2	0.81	
El Salvador	1	0.41	
Rep. Dominican	1	0.41	
Honduras	1	0.41	
Argentina	1	0.41	
Total	242	100.00	
Generation			
First	32	13.01	
Second	165	67.07	
Third	43	17.48	
Fourth and over	6	2.44	
Total	246	100.00	

Regarding generations, the largest generation was the second (67.1%), following by third (17.5%) and first generation (13%). Table 3 presents the students' demographic information of gender, age, country, and generation.

Table 4 Students' high school grade point average (GPA)

Parameter		All Students	Female	Male
Mean		3.21	3.23	3.18
95% Confidence Interval for Mean	Lower Bound	3.10	3.08	3.04
	Upper Bound	3.31	3.38	3.32
Std. Deviation		0.70	0.74	0.66
CV		0.22	0.23	0.21
Minimum		1.30	1.30	2.00
Maximum		4.64	4.64	4.60

**Table 5** Honor and AP courses taken by the students

Courses	Frequency	Percent
Honor courses		
Under 4	138	55.87
From 5 to 10	92	37.25
11 and over	13	5.26
Total	243	98.38
AP courses		
Under 4	189	76.52
From 5 to 10	51	20.65
11 and over	1	0.40
Total	241	97.57

The students also reported academic information related to their GPA, the number of honor courses and advanced placement (AP) courses and college exams (SAT/ACT). The mean of GPA was 3.198 (SD= .604). Independent-samples t-tests were conducted to compare the GPA, honor courses, and AP courses between females and males. There was not a significant difference in the scores for females (M= 3.22, SD= .63) and males (M= 3.18, SD= .58) GPA t (245) =-.542, p= .588. In the same vein, there was not a significant difference in the scores for females (M= 1.43, SD= .58) and males (M= 1.52, SD= .64) honor courses taken t (233.52) = 1.195, p= .233 and there was not a significant difference in the scores for females (M= 1.22, SD= .419) and males (M= 1.20, SD= .42) Regarding the enrollment in AP courses t (245) =-.399, p= .691.

The data regarding college exams (ACT/SAT) were not presented because only nine students reported they had taken the SAT exam and only one the ACT exam. Additionally, none of these students reported their exam score. In informal conversations with the students and the counselor, they said the students usually take those college exams in the spring semester. The tables 4 and 5 present the results of the GPA, honor and AP courses.

The students also reported family information related to the number of members in the household, parents' educational attainment, parents' occupation, and the type of school meal plan.

The highest frequencies of the Latino family size were between five to six people (47%) and three to four (34%). These findings are above the average Hispanic family

size (3.87 people) and the national average for all families (3.19 people) (Olivero, 2005). Table 6 presents the results of the number of member in the household.

**Table 6** Number of people who live in the house as reported by the students

People	Frequency	Percentage
Under 2	4	1.6
3 to 4	84	34.0
5 to 6	116	47.0
7 to 8	34	13.8
9 and over	9	3.6
Total	247	100.0

A Pearson correlation was performed to examine the relation between mothers and fathers' educational attainment from "some elementary school" to "postgraduate education". The relation between these variables was not significant, r = 5.984, p = .308, N = 494. Subsequently, an independent-sample t-test was conducted to compare the proportion of mothers and fathers in college level (college graduate and post graduate). There was a significant difference in the proportion for mother (M = .1215, M = .33) and father (M = .0648, M = .25) college level M = .250. Mothers doubled in numbers in comparison to fathers at the college level (mother 12.14% and fathers 6.48%).

Parents' educational attainment as a background variable was measured combining the means of both fathers and mothers' educational attainment. The mean of

parents' educational attainment was 2.437 (SD = .1.048). Table 7 presents the results of the parents' education level.

**Table 7** Students' self-reported parental education level

	Mother		Father	
Level	Frequency	Percent	Frequency	Percent
Some elementary school	66	27.3	69	28.9
Some high school	73	30.2	83	34.7
High school graduate	46	19.0	43	18.0
Some college	27	11.2	28	11.7
College graduate	24	9.9	14	5.9
Post graduate	6	2.5	2	.8
Total	242	100.0	239	100.0

A Pearson correlation was performed to examine the relation between mothers and fathers in occupations. The relation between these variables was significant, r = 130.359, p = .000, N = 494. Mothers hold the highest rates of unemployment at 24.7%. This rate is higher than the California state rate for Hispanic women at 9.4%. Conversely, fathers' unemployment rates (5.2%) were lower than the California state rate for Hispanic men at 7.8% (Bureau of Labor Statistics [BLS], 2014). Although the survey did not ask for the reason of unemployment nor the length of this condition; they survey did differentiate between unemployment and homemakers. Therefore, mothers in the category of unemployment were different from mothers who stay at home.

The three most common occupations for mothers were service 19%, sales and office 11.7%, and production and industry 10%. The most common occupations for

fathers were construction 24.2%, transportation 16.5%, and service 13.4%. Because there was a significant difference in college level among parents, an independent-sample t-test was conducted to compare the only professional and management related occupations between mothers and fathers. Surprisingly, there was not a significant difference between mothers (M= .15, SD= .36) and fathers (M= .14, SD= .35) in professional and managements occupations for mothers and fathers (*t* (492) =-.127, p= .899). Although there were more mothers with college educational level than fathers, there were not differences among parents in professional and management occupations. Fathers with low educational attainment may occupy management positions. Table 8 presents the results of the parents' occupations.

**Table 8** Students' self-reported present occupation of their parents

	Mother		Father		
Occupation	Frequency	Valid Percent	Frequency	Percent	
Unemployed	61	25.4	12	5.2	
Retired	3	1.3	3	1.3	
Homemaker	14	5.8	1	.4	
Farming, fishing, and forestry	1	.4	1	.4	
Construction, extraction, and maintenance	5	2.1	56	24.2	
Transportation and material moving	4	1.7	38	16.5	
Production and industry	24	10.0	24	10.4	
Service	46	19.2	31	13.4	
Sales and office	28	11.7	7	3.0	
Professional, technical and related	21	8.8	13	5.6	
Management and related	15	6.3	22	9.5	
Other	18	7.5	23	10.0	
Total	240	100.0	231	100.0	

The 98.7% of the students reported that they receive reduced or free school meal plan. This finding is consistent with the 2014 WASC Progress Report for the high school in which all students qualified for free and reduced lunch. Family annual income and the number of members in a house are the criteria to be eligible for free or reduce lunch. For instance, a family with five members and an annual income of \$35,841 or less may qualify for free lunch. A family with five members and an annual income between \$35,842 and \$\$43,568 may be eligible for reducing lunch (California Department of Education [CDE], 2013). Table 9 presents the results of school meal plan of the students.

Table 9 School meal plan

Туре	SES	Frequency	Percent
Yes, I received free lunch	1	236	95.5
Yes, I received reduce lunch	2	8	3.2
No, I did not receive free or reduce lunch	3	3	1.2
Total		247	100.0

The SES was calculated indirectly, and the students reported the school meal plans in the school. If the student did not receive free or reduce lunch was placed at a high level (3), students who received reduce lunch was placed at a middle level (2), and students who received free lunch was placed at a low level (1). The mean of SES was 1.057 (SD= 0.279).

### College Aspirations

College aspiration was measured as a nominal variable in which the participants answered this question: after completing high school, what additional type of education (if any) do you expect that you will complete?). Table 10 shows a summary of the results of the plans immediately after high school graduation.

Table 10 Plan immediately after high school graduation

Plan	Frequencies	Percent
Work full time	25	10.1
Work part time	113	45.7
Not planning to work	5	2.0
Enroll in 2 year/community college	54	21.8
Enroll in 4 year/bachelor degree	183	74.0
Enroll in specialized training	13	5.2
Enter military	18	7.2
¿Other?	4	1.6

*Note*. This question had multiple choices; therefore the percentage is over the total number of responses.

Subsequently, the participants' responses were re-coded because of the interest to identify the different levels of college aspirations; therefore, those with more than one option were codes as follows. If they selected work full time and any higher education they were assigned not going to study group. If they selected specialized training or enter the military and any higher education, they were assigned to the specialized training/military. If they selected 2-year community college and 4-year Bachelor, they were assigned to 2-year College. This re-coding allowed transforming this nominal

variable to ordinal variable to be used in the hypothesized model as an ultimate dependent variable. The mean of plans of going college was 3.178 (SD = 1.183). Table 11 shows a summary of the results of Latina/o students' college aspirations.

**Table 11** Latina/o students' college aspirations

Aspiration	Frequencies	Percent
Work full time/not going college	32	13.0
Enroll in specialized training/ Military	26	10.5
Enroll in 2 year/community college	40	16.2
Enroll in 4 year/bachelor degree	149	60.3
Total	247	100

# Personal Variables

Self-efficacy beliefs were measured by two instruments: self-efficacy for academic milestone scale and coping efficacy scale on a 10-point liker-type scaling (0 = no confidence to 9 = complete confidence). The mean of the self-efficacy beliefs was moderated 6.49 (SD = 1.301). Participants had high confidence in their ability to complete all the steps for college entry and continuing with their goal to go to college even in they did not feel well-linked by their classmates or teachers. In contrast, participants displayed moderated confidence in their abilities to cope with the lack of support from adults and excel in the requirements for college entry: essay and SAT or ACT. Table 12 shows a summary of the results of self-efficacy.

 Table 12 Self-efficacy beliefs

Variable	Mean	Std. Deviation
Academic Self-efficacy		
Complete a rigorous curriculum for college work	6.32	1.73
Obtain mostly A's and B's grades my in all courses in high school	6.24	2.03
Obtain a SAT or ACT test in upper percentiles	6.18	1.69
Excel in my essay for college	6.06	1.90
Complete all the steps for college entry	7.17	1.74
Coping Self-efficacy Cope with a lack of support from teachers, counselors, or parents	5.63	2.19
Go to college despite financial pressures	6.21	2.09
Continue on my goal to go to college even if I did not feel well-liked by my classmates or teachers	7.56	1.82
Find ways to overcome communication with teachers and counselors in my high school	6.77	1.83
Balance the pressures of studying for my courses with the desire to have free time for fun and other activities	6.61	2.08
Continue on my aspirations of going college even if you felt that, socially, the college environment was not very welcoming to you	6.74	2.07
Find ways to study effectively for college test (SAT or ACT) despite having competing demands for your time	6.40	2.04

Outcome expectations were measured with VOE-R on a 10-point liker-type scaling (0 = strongly disagree to 9 = strongly agree). The mean of the outcome expectation was high 7.52 (SD = 1.231). Although all values were above seven; the highest levels were for the statements "My career/occupation choice will allow me to have the lifestyle that I want "and "I can make my future a happy one." In contrast, the low levels of outcome expectations were for the statements "the future looks bright for

me" and "My talents and skills will be used in my career occupations." Table 13 displays a summary of the results of outcome expectations.

**Table 13** Outcome expectations

Variable	Mean	Std. Deviation
My college aspirations will lead to a satisfying career for me	7.42	1.71
I will be successful in my chosen career/occupation	7.52	1.60
The future looks bright for me	7.16	1.85
My talents and skills will be used in my career/occupation	7.17	1.80
I have control over my career decisions	7.49	1.76
I can make my future a happy one	7.89	1.48
I will get the job I want in my chosen career	7.25	1.68
My career/occupation choice will provide the income I need	7.30	1.70
I will have a career/occupation that is respected in our society	7.70	1.50
I will achieve my career/occupational goals	7.69	1.56
My family will approve of my career/occupation choice	7.85	1.76
My career/occupation choice will allow me to have the lifestyle that I want	7.79	1.61

#### Contextual Variables

Social supports were measured with the SESB on a 5-point liker-type scaling (1 = not at all likely to 5 = extremely likely). The mean of the supports was moderate 3.87 (SD = .809). Participants perceived high social support for family members and close friends. Conversely, the participants perceived low social support related to having access to a role model in the field of their interest and have access to a mentor who could offer them advise and encouragement. Table 14 shows a summary of the results of social supports.

**Table 14** Social supports

Variable	Mean	Std. Deviation
Have access to a "role model" in my field of interest	3.28	1.35
Feel support for this decision from important people in your life	3.98	1.10
Feel that there are people "like you" in this college	3.73	1.10
Get helpful assistance from a tutor, if you felt you needed such help	3.75	1.09
Get encouragement from your friends for going college	3.96	1.18
Get helpful assistance from your counselor	3.85	1.15
Feel that your family members support this decision	4.40	0.94
Feel that close friends or relatives would be proud of you for making this decision	4.39	0.93
Have access to a "mentor" who could offer you advice and encouragement	3.48	1.32

The barriers were measured with the PEBP on a 5-point liker-type scaling (1 = not at all likely to 5 = extremely likely). The mean of the barriers was low 1.95 (SD = .556). Participants perceived the highest level of barriers related to the statements: "not enough money" and "having a job/working outside of school." In contrast, the low levels of perceived barriers were in the statements "lack of English language skills" and "Pressure from my boy/girlfriend." Table 15 shows a summary of the results of barriers.

Table 15 Barriers of going college

Variable	Mean	Std. Deviation
Not enough money	3.03	1.24
Not smart enough	2.25	1.12
Not confident enough	2.51	1.34
Friends don't support me	1.77	1.12
Having a job/working outside of school	2.96	1.42
Lack of access to opportunities	2.31	1.05

**Table 15** Continued

Variable	Mean	Std. Deviation
Being married	1.78	1.14
Teachers don't support me	1.83	1.04
Social class discrimination (classism)	1.84	1.10
Not being prepared enough	2.37	1.17
Family responsibilities at home	2.44	1.26
Not enough communication between school and home	2.04	1.10
Teachers have low expectations of me	1.85	1.15
Pressure from my boy/girlfriend	1.26	0.69
Sex discrimination	1.30	0.76
Racial/ethnic discrimination	1.70	1.08
Pregnancy/having children	1.35	0.85
Lack of study skills	2.10	1.09
Cultural differences between home and school	1.67	1.05
Not enough help with figuring out the steps I need to take	2.34	1.15
Parents don't support me	1.39	0.89
My immigration status	1.37	1.00
Parents don't have access to the college information I need	1.97	1.26
Lack of English language skills	1.24	0.63

# Quantitative Results

The purpose of the quantitative analysis was to test a model of the college aspirations of Latina/o high school students. This model attempted to predict the relationships between personal, contextual, background factors and Latina/o students' college aspirations. Recall, three instruments measured personal variables: self-efficacy for academic milestone, coping efficacy, and vocational outcome expectations measurements. Two instruments measured contextual variables: social environmental supports and perceptions of educational barriers. Two single variables measured the background context: parents' educational attainment and school meal plan. The

academic performance was measured as a continue variable with the student GPA. The plans of going college or college aspirations were measured as a categorical variable.

#### **Research Question 1**

What are the relationships between personal and contextual variables and college aspirations in 11th grade Latina/o high school students in an urban high school located in a city in the southwestern of the U.S.? A hypothesized model of college aspirations of Latina/o high school students was tested to answer this question.

### **Model Specification**

The fit of the data of the hypothesized model was tested for the full sample. The structural equation modeling (maximum likelihood) procedures of LISREL and covariance matrices were used to assess the model fit. The following fit indices were used: comparative fit index (CFI), and root-mean-square error of approximation (RMSEA). CFI values close to .90 or above, NFI values close to .90 or higher, and RMSEA values close to .05 or less may be considered a reasonable approximation of the data (Tenko & Marcoulides, 2000). The following hypotheses are related to each path tested in the model:

- 1. Lower parents' educational attainment will be related to low self-efficacy.
- Lower parents' educational attainment will be related to negative outcome expectations.
- 3. Lower household economic status will affect self-efficacy negatively.
- 4. Lower household economic status will affect outcome expectations negatively.
- 5. Higher levels of self-efficacy will affect college aspirations positively.

- 6. Positive outcome expectations will affect college aspirations positively.
- 7. Higher levels of self-efficacy will impact the academic performance positively.
- 8. Positive outcome expectations will impact academic performance positively.
- 9. Supports will be related to self-efficacy positively.
- 10. Supports will be related to the college aspirations positively.
- 11. Barriers will be related to outcome expectations negatively.
- 12. Barriers will be related to the college aspirations negatively.
- 13. High academic performance (GPA) will be related to the college aspirations positively.

The hypothesized model (Figure 2) includes six measured variables: SES, parents' education, self-efficacy, outcome expectations, supports, and barriers. It is hypothesized that SES and parents' education predict self-efficacy and outcome expectations. In turn, self-efficacy and outcome expectations predict GPA.

Subsequently, GPA, supports, and barriers predict plans to go to college. The model also predicts indirect relationships. The model also predicts indirect relationships. Self-efficacy and outcome expectations mediate the relationship between parents' education and plan to go to college. Self-efficacy and outcome expectations mediated the relationships between SES and plans to go to college. The relationship between self-efficacy and plans to go to college is mediated by GPA and the relationship between outcome expectations and plans to go to college is mediated by GPA. The absence of a line connecting variables implies a lack of a hypothesized direct effect. The

hypothesized model contains 20 parameters to be estimated (13 regression coefficients and 8 covariances or errors).

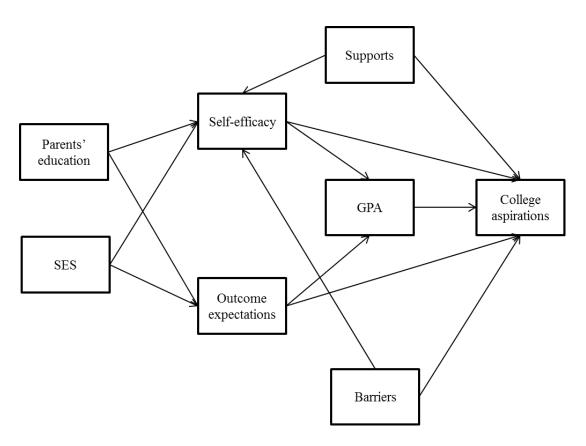


Figure 2. Hypothesized Latina/o college aspirations model.

### **Model Estimation and Preliminary Evaluation**

Maximum Likelihood estimation was employed to estimate all models. The independence model that tests the hypothesis that the variables are uncorrelated with one another was rejected,  $\chi^2$  (28, N = 247) = 447.34, p = 0.0. The hypothesized model (see Figure 3) was tested next and only marginal support was found for the hypothesized model,  $\chi^2$  (9, N = 247) = 187.65, p = 0.0, CFI = 0.95, NFI = 0.93, and RMSEA = 0.097.

A chi-square difference test indicated a significant improvement in fit between the independence model and the hypothesized model  $\chi^2$  is (447.34-187.65) = 259.69 with (28 - 9) = 19 degrees of freedom.

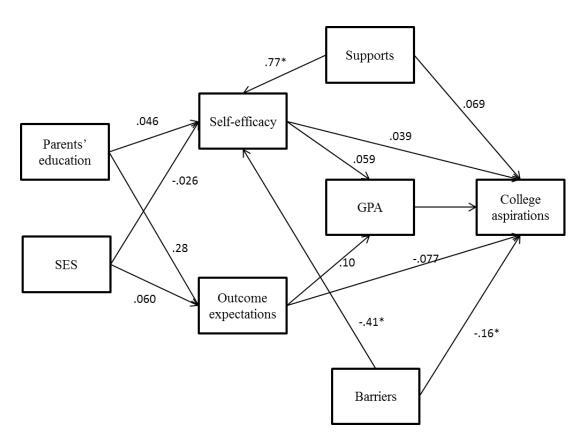


Figure 3. Hypothesized Latina/o college aspiration model with coefficients.

The hypothesized model (Figure 3) did not fit the data as well as the independence model  $\chi^2_{\rm diff}$  (19, N=247) = 259.69, p=0.0 suggesting that the hypothesized model did not fully explain the relations among the factors. The modification indices suggested that outcome expectations were related to self-efficacy, supports, and barriers. The SCCT provides considerable evidence for these relationships

between outcome expectations and self-efficacy, supports, and barriers (Brown & Lent, 2006; Sheu et al., 2010).

#### **Model Modification**

The modified model (Figure 4) includes three new paths: outcome expectations predicted by self-efficacy, supports, and barriers. The modified model produced a good model fit,  $\chi^2$  (6, 247) = 14.26, p <0.027, Satorra-Bentler Scaled Chi-Square = 2.15, p< 0.91, CFI = 1.0, NFI = 1.0, RMSEA = .00. The  $\chi^2$  difference test between the hypothesized model and the modified model was 27.19. These results suggest the modified model more accurately represents the data.

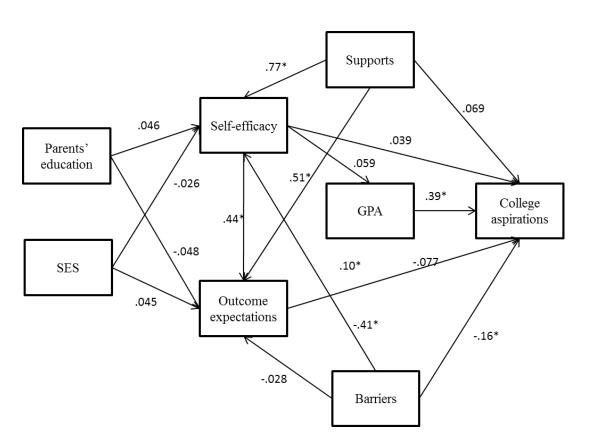


Figure 4. Modified Latina/o college aspirations model.

### Direct Effects

The hypothesized model considered 13 directs effects and the modified model considered 16 direct effects. Only seven of the 13 path coefficients in the modified model were significant. GPA was significant, and positive predictor and barriers were a significant and negative predictor of college aspirations (coefficient = .39 and -.16). These variables jointly with self-efficacy, outcome expectations and supports accounted for 5.3% of the variation in Latina/o high school students' college aspirations.

Outcome expectations were the only predictor of GPA (coefficients = .10).

Outcome expectations and self-efficacy accounted for 9.7% of the variation in GPA.

While, supports directly increase high self- efficacy (coefficient = .77), barriers led to low self-efficacy (coefficient = -.41). These variables in addition to parental educational level and SES accounted for 32% of the variation in self-efficacy.

In the same vein, supports and self-efficacy were predictors of outcome expectations (coefficient = .51 and .44 respectively). These variables in addition to SES, parental educational level, and barriers accounted for 51% of the variation in outcome expectations.

The modified model did not support the direct relationships between self-efficacy, outcome expectations, supports, and college aspirations (coefficients = .039, - .077, and .069 respectively). In the same vein, this model did not find a relationship between self-efficacy and GPA (coefficient = .059). SES and parents' educational attainment were not related to self-efficacy (coefficients = -.026 and .046). SES and parents' educational attainment were not related to outcome expectations (coefficients =

.045 and -.048). In a similar vein, barriers were not related to outcome expectations (coefficient = -.028).

#### **Indirect Effects**

This study also considered indirect relationships between parents' educational attainment, socio-economic status and college aspirations through self-efficacy, outcome expectations and academic performance (GPA). In the same vein, this study considered indirect relationships between self-efficacy, outcome expectations and college aspirations through academic performance.

All indirect path coefficients were not significant. The relationship between SES and college aspirations through self-efficacy was -.0014. The relationship between SES and college aspirations through outcome expectations was -.0056. The relationship between SES and college aspirations through outcome expectations was -.0056. The relationship between SES and college aspirations through outcome expectations and GPA was .0017. The relationship between parents' educational attainment and college aspirations through self-efficacy was .0017. The relationship between parents' educational attainment and college aspirations through self-efficacy and GPA was .0001. The relationship between parents' educational attainment and college aspirations through outcome expectations was .00369. The relationship between parents' educational attainment and college aspirations through outcome expectations and GPA was .0036. The relationship between self-efficacy and college aspirations through GPA was .023, and the relationship between outcome expectations and college aspirations through GPA was 0.039.

These results are not surprising because the direct effects of SES, parents' educational attainment on self-efficacy and outcome expectations were not significant. Similarly, direct effects of self-efficacy and outcome expectations on plans of going college were not significant. Although the direct of outcome expectations on GPA was significant, this coefficient was not significant to compensate the lack of relationships among the others paths.

#### **Research Question 2**

Are gender, generation of immigration, and country of origin intervening variables in the relationship between personal and contextual variables and college aspirations of those students? To answer this question, mean comparison across subgroups and the assessment the modified model separately for gender and generations was made.

# **Model Fit by Gender**

Mean comparison and multiple-groups analysis were conducted to identify the differences among gender in the relationships between personal and contextual variables and college aspirations. A t-test was performed to determine the mean differences in the eight variables of the model between females and males. There were no a significant gender mean differences in any tested variable. Subsequently, the modified model was tested by gender.

### Latina College Aspiration Model

The Latina model (Figure 5) was run without the inclusion of SES variable because 127 participants belonged to the working class, one in the middle class and one

in the upper class. Therefore, SES becomes a constant for the female model (98.4%). This model produced a good model of fit,  $\chi 2$  (4, 129) = 1.76, p < 0.78, CFI = 1.0, NFI = 0.99, RMSEA = .0. These results suggest the female model accurately represents the data.

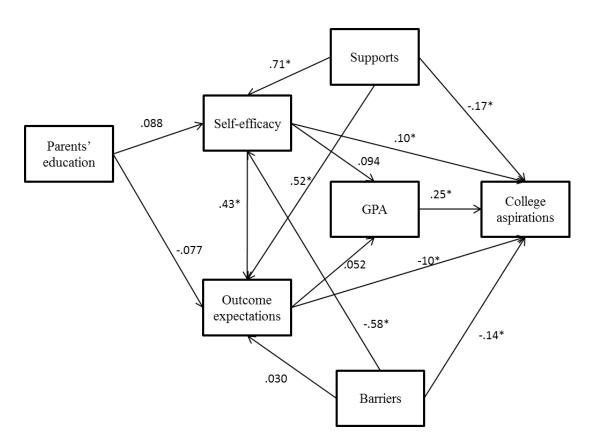


Figure 5. Latina college aspirations model.

The Latina model considered 14 paths, nine of them were significant. GPA, self-efficacy were positive predictors of college aspirations whereas supports, barriers, and outcome expectations were negative predictors (coefficients = .25, .10, -.17, -.14, and -.10 respectively). These variables jointly accounted for 3.8% of the variation in Latina

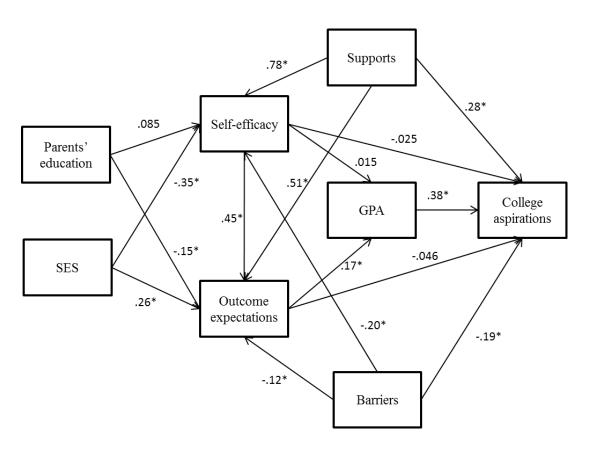
participants' college aspirations. Supports and barriers were predictors of self-efficacy; while supports increased self-efficacy, barriers decreased it (coefficients = .71 and -.58 respectively). Supports, barriers, and parents' educational attainment account for 47% of the variation in self-efficacy. Supports and self-efficacy were primarily predictors of outcome expectations (coefficients = .52 and .43 respectively). These variables in addition to parents' educational attainment and barriers account for 47% of the variation in outcome expectations. Parents' educational attainment and self-efficacy were not predictors for outcome expectations. In a similar way, self-efficacy and outcome expectation were not predictors of GPA.

## Latino College Aspiration Model

The Latino model (Figure 6) was run with all variables of the modified model. The male model produced a moderate model fit,  $\chi 2$  (6, 118) = 18.05, p < 0.0061, CFI = 0.93, NFI = 0.91, RMSEA = .13. These results suggest the male model partially represents the data.

The Latino model considered 16 paths, twelve of them were significant. GPA and supports were positive predictors of college aspirations (coefficients = .38 and .28 respectively), and barriers was negative predictor (coefficient = .19). Outcome expectations were the only significant predictor of academic performance (coefficient = .17). Supports were a significant predictor of self-efficacy (coefficient = .78), and SES and barriers were negative predictors (coefficients = -.35 and -.20 respectively). Supports, SES, barriers, and parents' educational attainment accounted for 25% of the variation in self-efficacy. All predictors of outcome expectations were significant:

supports, self-efficacy, and SES were positive predictors (coefficients = .51, .45 and .26 respectively), and parents' educational attainment and barriers were negative predictors (coefficients = -.15 and -.12 respectively). All predictors accounted for 57% of the variation in outcome expectations.



**Figure 6.** Latino college aspirations model.

# **Model Fit by Generations**

ANOVA test was conducted to identify mean differences in the eight variables of the model among generations. There was a significant difference in parents' educational attainment at p < .05 level among generations (F (3, 243) = 11.685 p = .000). There was a

small significant difference in GPA at p <.05 level among generations (F (3, 243) = 2.735 p = .044). There was not a significant statistical difference in college aspirations, self- efficacy, outcome expectations, SES, supports, and barriers among generations.

Scheffé post hoc comparisons showed that parents' educational attainment was higher in the third generations (M = 3.1395) than the first generation (M = 1.8750), p = .000 and the second generation (M = 2.3464), p = .000. Therefore, parents of the third generation were more educated than parents of first and second generations. The post hoc test did not establish mean differences in the students' GPA among generations.

Multiple-groups analysis was conducted to identify the differences among generations in the modified model of college aspirations. The first, third, and fourth generation models were run without the variable SES because the majority of the participants belong to the working class. The second generation model was the only model with 166 participants; the other generation models have a sample size less than 50. Consequently, the results of these analyses should be read cautiously.

The first generation model produced a moderated model fit,  $\chi 2$  (4, 32) = 9.14, p < 0.058, CFI = 0.93, NFI = 0.9, RMSEA = 0.19. The second generation model produced a good model fit,  $\chi 2$  (6, 166) = 5.59, p < 0.47, CFI = 1, NFI = 0.98, RMSEA = 0. The third generation model produced a good model fit,  $\chi 2$  (4, 43) = 5.6, p < 0.21, CFI = 0.97, NFI = 0.94, RMSEA = 0.099. The fourth generation model produced an inadequate model fit,  $\chi 2$  (4, 6) = 5.6, p < 0.00013, CFI = 0, NFI = 0.21, RMSEA = 0.37. An overview of each model is presented in the next section.

# First Generation Latina/o College Aspiration Model

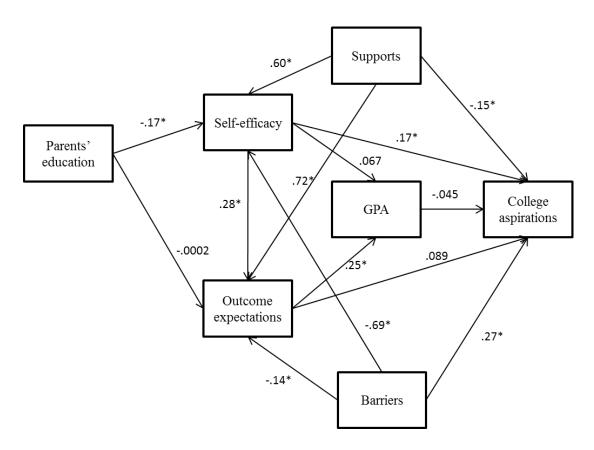


Figure 7. First generation Latina/o college aspirations model.

The first generation model (Figure 7) considered 14 paths; ten of them were significant. Barriers and self-efficacy were positive predictors (coefficients = .27 and .17 respectively), and supports was a negative predictor (coefficient = -.15) of college aspirations. Outcome expectations were the only significant predictor of academic performance (coefficient = .25). Outcome expectations and self-efficacy account for 45% of the variation in academic performance. Supports, barriers and parents' educational attainment, were reliable predictors of self-efficacy (coefficient = .60, -.69,

and -.17 respectively). They jointly account for 36% of the variation of self-efficacy. Supports and self-efficacy were positive predictors while barriers was a negative predictor of outcome expectations (coefficients = .72, .28, and -.14 respectively). Supports, self-efficacy, barriers, and parents' educational attainment account for 63% of the variation of outcome expectations.

### Second Generation Latina/o College Aspiration Model

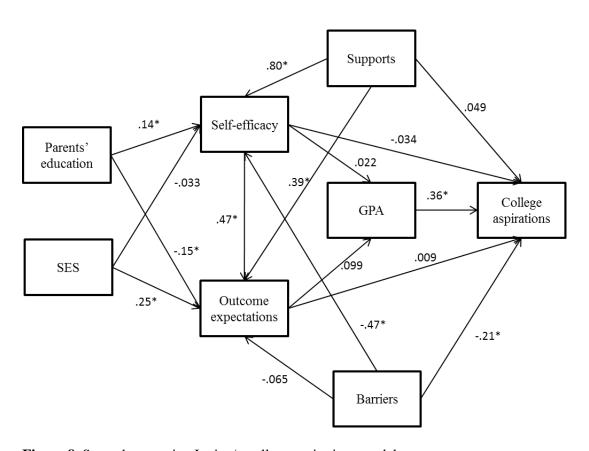
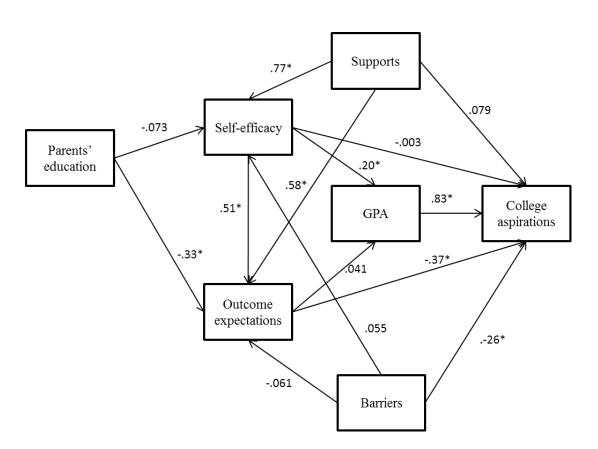


Figure 8. Second generation Latina/o college aspirations model.

The second generation model (Figure 8) considered 16 paths and half of them were significant. GPA and barriers were predictors of college aspirations (coefficient =

.36, and -.21 respectively). Neither self-efficacy nor outcome expectations were predictors of academic performance. Supports, parents' educational attainment, and barriers were predictors of self-efficacy (coefficient = .80, .14 and -.47 respectively). These predictors and SES account for 36% of the variation of self-efficacy. Self-efficacy, Supports, and SES were predictors of outcome expectations (coefficient = .47, .39, and .25 respectively). These variables in addition to barriers and parents' educational attainment account for 47% of the variation of outcome expectations.

### Third Generation Latina/o College Aspiration Model



**Figure 9.** Third generation Latina/o college aspirations model.

The third generation model (Figure 9) considered 14 paths; eight were significant. GPA was a positive predictor of college aspirations while outcome expectations, and barriers were negative predictors of college aspirations (coefficient = .83, -.37 and -.26 respectively). They jointly with self-efficacy account for 20% of the variation in college aspirations. Self-efficacy was the only predictor of academic performance (coefficient = .20). Self-efficacy and outcome expectations account for 23% of the variation in academic performance. Support was the only predictor of self-efficacy (coefficient .77). Supports, barriers and parents' educational attainment, account for 24% of the variation of self-efficacy. Supports and self-efficacy were positive predictors of outcome expectations while parents' educational attainment was a negative predictor of outcome expectations (coefficients = .58, .51, and -.33 respectively). These variables in addition to barriers account for 66% of the variation of outcome expectations.

### Fourth Generation Latina/o College Aspiration Model

The fourth generation model (Figure 10) also considered 14 paths; eleven were significant. GPA, barriers, and self-efficacy were positive predictors of college aspirations while outcome expectations was negative predictor of college aspirations (coefficient = .36, .24, .15, and -.49 respectively). Self-efficacy was a positive predictor of academic performance, and outcome expectations were a negative predictor of academic performance (coefficient = .33and -.70). They account for 52% of the variation in academic performance. Supports and parents' educational attainment were positive predictors of self-efficacy (coefficient = 1.58 and .24 respectively). These variables in

addition to barriers account for 44% of the variation of self-efficacy. Barriers and parents' educational attainment were positive predictors of outcome expectations, while supports were a negative predictor of outcome expectations (coefficient = .45, .11, and - 1.08 respectively). These variables in addition to self-efficacy account for 87% of the variation of outcome expectations.

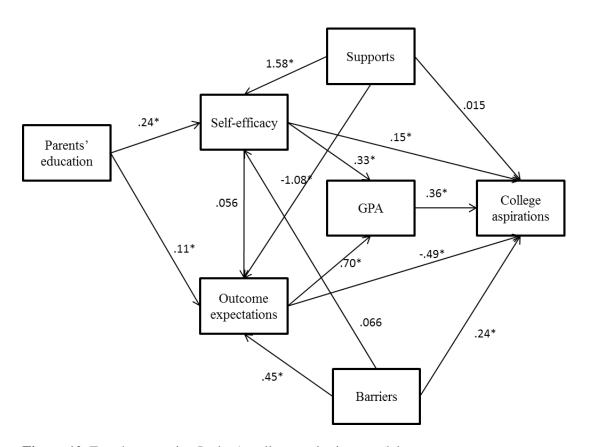


Figure 10. Fourth generation Latina/o college aspirations model.

# **College Aspirations Through Generations**

College aspiration was the ultimate variable and there were hypothesized direct effects between this variable and self-efficacy, outcome expectations, supports, barriers

and academic performance –GPA-. The results of these relationships through generations presented the following patterns. Self-efficacy was a positive predictor of college aspirations in the first and fourth generations. Outcome expectations were negative predictors of college aspirations in the third and fourth generations. Support was a negative predictor of college aspirations in the first generation. Barriers were positive predictors of college aspirations in the first generation; and barriers were negative predictors in the other generations –second, third, and fourth. GPA was a positive predictor of college aspirations in the second, third, and fourth generations. Table 16 shows a summary of these results.

Table 16 Path coefficients of the variables that affect college aspirations

Variables		Gener	ration	
	First	Second	Third	Fourth
Self-efficacy	.17*	034	003	.15*
Outcome expectations	.089	.009	37*	49*
Supports	15*	.049	.079	.015
Barriers	.27*	21*	26*	.24*
GPA	045	.36*	.83*	.36*

<sup>\*</sup> Significant unstandardized coefficient at p = 0.05

A summary of the goodness of fit for all models of Latina/o high school students' college aspirations is presented in the table 17. The chi-square test of the hypothesized model and the modified model was significant. These results conduct to another test, the Satorra-Bentler scaled chi-square. The Satorra-Bentler Scaled Chi-Square for the hypothesized model was significant also  $X^2$  (9, N = 247) = 29.34, p < .001. Conversely,

the Satorra-Bentler Scaled Chi-Square for the modified model was not significant  $X^2$  (6, N=247) = 2.15, p=.91. Therefore, it is concluded that the modified model fits the data, and the hypothesized model is retained (Tabachnick & Fidel, 2001). In addition to the chi-square, others comparative indices were evaluated. The comparative fit index (CFI) for the hypothesized, modified, Latina, the second and the third generation models indicated good-fitting models. The CFI for Latino and the first generation models were almost good. However, the CFI for the fourth generation was very low. The normed fit index (NFI) indicated good-fitting for all models, excepted for the fourth generation in which the NFI was small. The root mean square error of approximations (RMSEA) indicated good-fitting for the hypothesized, modified, Latina, the second, and the third generations' models. RSMEA indicated poor-fitting in the Latino, the first, and fourth generations' models.

**Table 17** Goodness of fit of the all models of Latina/o college aspirations

Model	Chi- square	df	p-value	Chi-square for independent model	df	CFI	NFI	RMSEA
Hypothesized	187.65	9	0.0001	447.34	28	0.95	0.93	0.097
Modified	14.26	6	0.027	447.34	28	1	1	0
Latina	1.76	4	0.78	249.17	21	1	0.99	0
Latino	18.05	6	0.0061	209.19	28	0.93	0.91	0.13
First Generation	9.14	4	0.058	90.67	21	0.93	0.9	0.19
Second Generation	5.59	6	0.47	283.12	28	1	0.98	0
Third Generation	5.6	4	0.21	93.62	21	0.97	0.94	0.099
Fourth Generation	23.01	4	0.00013	29.21	21	0	0.21	0.37

## Qualitative Results

The purpose of the qualitative analysis was to explore the relationships between the contextual factors, personal factors, and college aspirations based on a predicted model. Four focus groups were conducted to examine: (1) the reasons why some barriers hinder their college aspirations more than others. (2) The types of supports that students consider pivotal in the path of going college. (3) The academic experiences that increase or decrease their self-efficacy and outcome expectations related to college aspirations.

### **Research Question 3**

The research question that guides this qualitative component is: how are students' focus group responses regarding the current model related to the relationships between personal and contextual variables and college aspirations?

The results of the focus groups are presented in three sections; first plans after school graduation, second, personal and contextual factors related to college aspirations, and third students' recommendations.

#### **Plans After High School Graduation**

The students discussed the results of the survey related to their proposed plans after high school graduation. Many of the students had plans to go to college and provided their reasons why people are interested in:

"People want to get a degree and on top of that they want to work in something that they love doing, and they want to learn more about it. That's why they want to go to a four-year college and earn their degree and... get paid doing something they love doing." (Aron1)

While Aron described reasons related to personal satisfaction and vocational interests, Ricky provided economic reasons:

"The reason most people do that four-year college is to go out there and get a higher education so they can get a better job and might be working part-time at the same time to help pay off debt or like to help pay for their housing, or you know, something." (Ricky1)

When the participants were inquired about why people do not go to college, participants provided economic reasons: "It's like more people think about money... rather than their college and stuff." (Jesse F2). Another argument is that people are not interested in going college because they do not identify differences between in the workforce between an individual with a high school diploma and other with a college diploma:

"Well, I feel like they're not motivated to much cuz they're like... oh, well...I'll just end up finding a job anyway. They're...oh, I'll just get a high school diploma and then get a job and stay in that job. So they basically rely on their high school education." (Alex F2)

Another participant expressed his surprise because there are students that are not interested neither go to college nor go to work. One student was surprised why there are students that are not interesting to go to college: "It's amazing how people don't want to do anything like not study, and I think there are people like that, that they don't want to do anything after high school." (Julius2)

The next plan after graduation discussed was specialized training. The reasons students choose to study a specialized training is mainly due to they have a clear path to their career development. "Specialized training is for people who, they have their mind set, they have their goal straight ahead like: "I wanna be this", "I wanna do this"; and they just want to go into that training." (Estella F2). Another reason, a specialized training is the shortest way to get a skilled job: "They're just looking for... an easier way to get their job faster, instead of... going through four-year college." (Alex F2). Another student shared a family experience in which a specialized training was a suitable way to obtain the knowledge and skills in a specific profession and to start a business: "Sometimes specialized is the best option. Like my father... he does a tax preparation business. So, he did special training for six months... he has his own business now." (Ricky M1). For another student, specialized training is a valid alternative to being a professional in something that people like to do and to provide the resources to have a stable life: "It's not bad, I mean you're still doing something... keeping yourself in order." (Julius M2).

Another plan after graduation discussed was military. The main reason students had to choose a military career was the benefits, and several students agreed with that reason. Two examples illustrate this statement: "On top of that... once you retire from the military...financial expenses are going to be paid by the government." (Aaron M1). "Well, my brother is actually planning to go to the military because he wants them to pay for his college." (Alex F2). Another reason was related to past experiences of relatives in the army that motivate the students to go there: "They have relatives that tell

them stories as well." (Matthew M1). Three male students mentioned how the military life can motivate students because provide exciting experiences: "Just basic training or something... So, like... help them." (Ricky M1). "You want to experience it... being out in war." (Aaron M1). "Just imagine their lives... they don't want to be bored most of the time. So, like... adrenaline." (Jesus M2).

The last topic related to the plans after graduation was the relationships between to work and to study at the same time. The students were asked: Did work interfere with the students' college aspirations? One student stated that people cannot go to college due to economic hardships: "That's pretty... reasonable cuz some people can't make it to college. So, they have to work or maybe their parents can get them to work or something and then they can just live up from there." (Jesus M2). Other student mentioned the difficulties between working and studying at the same time; however, felt that people often do not have any other option: "Difficult...I think ...being like a full-time college student... it's already hard enough... and I think there's a lot of people who... despite not having money...like...having to work and stuff...they still like...wanna do both in order to succeed and stuff." (Jess1). There were also students discussing the abilities in time management that people need to work and studying at the same time. In this discussion, one participant expressed her lack of knowledge about how to navigate in both activities simultaneously: "I don't know like... some people work part time trying to pay for their tuition or trying to like... I don't know how to explain it." (Jeffre2).

Right after the discussion of plans after high school graduation was concluded; the discussion focused on the results of the survey related to barriers, supports, self-efficacy, and outcome expectations. The next section addresses in detail each theme.

# **Personal and Contextual Factors Related to College Aspirations**

The students provided insightful explanations of contextual and personal factors that affect students' college aspirations. Table 18 provides the themes, categories, and descriptions of each theme.

Table 18 Themes, categories, and descriptions of personal and contextual factors

	Themes	Categories	Description
1	Barriers (48%)	Not enough money; having a job or working outside of school; family responsibilities; lack of opportunities; not being prepared enough; not enough confidence; not enough help with figuring out the steps of going college; peers pressure; lack of teachers and counselors support; gender differences; and overcoming barriers.	Financial, demographic, relational, preparation, motivation, and ability barriers that students face in their college aspirations
2	Supports (37%)	Family members; friends or relatives; important people; teachers; counselors; school; gender differences; and succeed without support.	Support from parents, relatives, teachers, counselors and important people that students need in the path of going college
3	Self-efficacy (9%)	Academic Self-efficacy and coping self-efficacy	factors that affects positively and negatively student's self- efficacy and coping experiences that increase and other decrease self-efficacy

Table 18 Continued

	Themes	Categories	Description
4	Outcome Expectations (6%)	Expectations of the future; talents and skills; career satisfactions, adults' expectations.	Factors that affects positively and negatively students' expectations of their future and their career development

Note. Participants made a total of 325. Each was classified in a category and two or more categories represent a theme. The percentage refers to the frequency of the suggestions for each theme.

#### **Barriers**

The theme of barriers was most discussed during the focus discussions. The discussion started with the presentation of the top five barriers that affect the most Latina/o students' college aspirations. During the sessions, the students discussed these barriers and added other barriers (e.g. lack of teachers and counselors' support, and lack of opportunities). The two final categories were discussed, the differences between female and male related to barriers and how these barriers can be overcome. Eleven categories are described in this theme.

#### Not enough money

The lack of family financial resources was perceived as the biggest barrier to going to college for these students:

"...what my dad is making is not enough money, and my step-mom is working. She's working practically the whole day, and it's just not enough. So... if we realize that we don't even have enough money to pay even our rent then, where are we going to have money to pay for our college and even with the financial aid or scholarship? We can't make it." (Aundrea F2).

The lack of financial resources is further exacerbated when the students are viewed as one of the primary supporters for their families: "And from there, they help out their parents or that if they ever need help with financial, and they just forget about college." (Aaron M1).

In a similar way, this concern was discussed in other focus group, and a participant expressed her concern about financial pressure because she had heard people talking about this issue:

"And from what they hear from other people, it's like...the whole money issue and I think that scares them, like, it scares me...like...they're like..." Oh! Financial Aid will help you", but that's not like a for sure thing. So, I think ...that scares a lot of people." (Jess F1).

During the discussions, the financial aid was on option to help the students with college expenses. Participants provided arguments about the difficulties to access to scholarships and the advantages and disadvantages to get a student loan. Even though scholarships are available as financial alternatives, some students struggle to find them: "So, the best thing that they [students] can get is a scholarship and that's hard at most universities; even, just regular colleges, it's hard." (Julius M2).

Loans are also options that some students are not interesting in considering because participants believed that they have to spend many years paying that student debt:

"Yeah, their worse [loans] because, yeah! They might seem nice at first, like, "Oh, yeah! We'll give you money". But in the long run, you're going to end up owing for life, like you're going to owe until you die." (Alex F2).

Several students remarked the lack of financial support that students face paying college tuitions; other students discussed the economic hardships of their families that force some students to get a job. However, few students stated that the lack of economic support is not a barrier to going to college:

"I disagree with that, *cuz*, if you really wanted to go to college, there's a lot of help, and I know because I have counselors and college advisors, and there's a lot of help. So, I think, if you're out of money, it's not a barrier." (Peter M1).

Although this statement was not refuted for other students, the previous discussion provided arguments to identify the lack of financial resource as a crucial barrier to overcome on the road of college entry. Then the discussion drives to another barrier that students face in their college aspirations.

### Having a job or working outside of school

Participants stated that jobs interfere with the goal to go to college or remain on it due to work responsibilities increase or student have economic obligations that force them to drop out to college:

"People usually get into part-time jobs, and that actually get in the way of their education. So they aren't able to advance because they have to worry about their job and pay the bill and all that." (Jesus M2).

Students stated that time management is a skill that people need to develop to alternate both activities at the same time. For instance, one participant said:

"You have to manage time with it. Have to like... do part time work and then part time school. But knowing that they do part time with having a job, you know, they're not going to get as much money as they want as having full time."

(Aaron M1).

The last part of the Aaron statement remarked that a part time job is not enough to cover all financial expenses in college. In addition, other participants identified working and studying at the same time as a difficult to the extent to which people have to be skillful to manage suitable their time:

"I think it's a risk. Um, let's say, you go to a really good college, like, a really expensive one, and then...you probably have to... start off working to try to, you know, make money. But then, like, it's just the schedule interfering, you know, the time...management still have very poor time management so that probably." (Ricky M1).

One more time, Peter insisted that "having a job is an excuse not go to college." (Peter M1). This participant declared that barriers are excuses that people use to justify their lack or self-determination to persevere in the path of going college.

### Family responsibilities

These were the most resonated barrier to go to college for the participants. As a family member, students have to contribute to regular or unexpected family expenses:

"They need to get...a job to help their parents, like...pay for the rent since they're still going to living at home... or to help their parents with other stuff." (Bella M1).

"...coming from a very poor family, if something happens, like...a medical expense, or...just something like that, and you have to...probably work to help support fines to pay that off. 'Cause', I mean, it's family, you know, you help support them." (Ricky M1).

Several participants agreed with older siblings have mores family responsibilities than younger siblings.

"Yeah, I think, it's mainly on the oldest because I'm the oldest in the house, and I'm always the one who's getting picked on. [Mother says:] Oh! Why didn't you clean this or clean that and [The student says] I'm like, well, you do have other children and they [Parents] are like, well, you're the oldest." (Jesse M2).

Older siblings not only have more responsibilities than younger siblings but also, they to be positive role models for their siblings and economic providers for their families. Two examples illustrate this situation:

"I'm the oldest of four kids. I have to set those steps for myself and for my younger sibling to go to college. It's not a yes or no...I have to go. If I were to start working, let's say that my older siblings would be, like, he didn't go to college it's not important... that's what my mom is fearing. She feels like if I don't go to college and do well in studies, my siblings will follow in that." (Jack M2).

"They [young siblings] are always messing with me, like, Oh! Are you gonna take us out of the poor, right? It's like, all the pressure is on me. Like, Oh! You're gonna buy me this car right? When you grow up and get a job." (Aundrea F2).

According to participants, the family' responsibilities are assigned according to the gender; females are responsible for household chores and men for economic support.

One women participant related her experience about the pressure that she feels at home because she has both family responsibilities and school obligations:

"I mean, it isn't a big barrier, but my family, what my mom believes is that I have to help no matter what. So, even if get home from practice at seven... I have to do my homework; I eat, but then... I have to help in the house...wash the dishes, clean the kitchen, clean the bathrooms... she [mother] attacks me saying, like, Oh! You don't help out; all you do is be in school. [Student replied] I'm sorry; I'm in school a lot that just happens." (Aundrea F2.)

This high level of responsibility was even stronger for the male students. Men were seen as economic providers for their families and served as a barrier to college aspirations. "They [males] might want to go to college, but their parents are...oh, now, you have to start working and provide for the family" (Jesus M2). This situation exacerbates in a single parent family. Another male student made this statement, "Providing for the family being a male, especially if you're not living with your dad. You're probably...to tend to help with rent and all that stuff" (Jeffrey M1).

The participants also discussed that some students take adult responsibilities because of their parents are unable to take care of their families either parents have a severe illness or are irresponsible:

"Her mom...my aunt, she's not, like a good parent, she's like in and out of the house and then the only stable parent guardian that she has is my grandma, but my grandma...is old. So, she can't really do as much as she used to do...she feels [the student] limited because she has to take care of her sisters." (Alex F2).

Teen pregnant is another barrier to college aspirations, especially for female students. When teen adolescents get pregnant, the women have to interrupt their studies for taking care of her baby. However, the male's every life is not interrupted; it seems that he is not responsible for this matter. This dialogue between two males illustrates this gender prejudice:

"Women, if they get pregnant, they have to take care of their children." (John M1).

"Yeah what he said. Like, young teenagers now, like a lot of the women are getting, you know, having kids, and especially, you know, you can't go to college without having your own, you know, their own like care, you know, like not everyone they give birth. So that's why have to either, you know, go to work, or you know, stay with her. That's why." (Aaron M1).

However, another participant stated another alternative, the parents or some relative help to take care of the newborn instead as long as the teen parents continue to studying or they get a job to provide economic support for their new baby:

"I think; it could be possible because... let's say that the mom or father is alright with that. They understand they can take care of the child for them while they study and work hard to support their own child and their family." (John M1). In Latino families, several teen mothers receive the supported of their parent or relatives who help teen mothers to raise their children and some case to continue to studying.

### **Lack of opportunities**

This was barrier appeared only in the discussions with males. One student commented that lack of opportunities was "probably *cuz* there's too much competition in the field they want to enter and they just probably feel they're not fit to it. And just like quit afterward." (Ricky1). However, this participant finished his intervention saying that: "It's not that they have a lack of opportunities, it's like how he said. ... They're just too lazy to take advantage of those opportunities or they don't have the motivation to take advantage." (Ricky1). Other discussion with males, another participant remarked that females have more opportunities than males to go to college because of there are programs that encourage women to go to college, especially in STEM fields such engineers:

"I think females have a little bit more opportunities because there're more programs just for them...cause like the majority of college students are males...like...say in the Engineering School. Umm...there's gonna be a lot more help for the females since there's so little bit of them of them. So, they might have a little bit more opportunities and well." (Jack M2).

The lack of opportunities that male students perceived discourages them from pursuing a career or looking for information because of their gender condition is a barrier to access to programs and benefits.

### Not being prepared enough

There are some academic matters in which students feel they are not prepared for academic success during high school. For instance, one student stated that high school students did not feel enough prepare for academic skills that the higher education requires to the students. There were several examples that students provided with this topic. For example, one student stated that students do not have the basic skills to be success on the college level:

"A lot of people don't know how to get some basic skills in school, like taking notes because if you don't know, then, you will start to fail classes cuz you like, won't know how to keep up with it and there will be, like, failures. Another would be study skills for the exams, like; they might still be fine, but then, the day of the exam come, and the go blank and can't remember anything." (Jesus M2).

Another student described her lack of preparation in Math and how this situation makes her feel insecure to take college exams:

"...just to know the feeling right now and behind...I'm behind one math class.

So, this is making me panic so much that I didn't understand one thing about the math, and it made me, and I'm like...this is the cause for me not to go to college.

And I really don't want...just one little to ruin my future." (Nicky F1).

High school students that take regular class have less preparation to go to college than students who take rigorous and advanced class:

"She's just in regular class, and she's thinking about dropping out of high school because she doesn't think, she's prepared to go to another level of education."

"Like, an example would be my friend, like, she is not in advanced classes. Like, she's just in regular everything and she's thinking about dropping out of high school because she doesn't think, she's prepared to go to another level of education, cuz she's barely passing her classes right now." (Jack M2).

The lack of preparation is also perceived in classes that are not rigorous and do not challenge the student to improve their skills and acquire new knowledge:

"I feel like that's kind of the teacher's fault too because, um...you're struggling in a class, and then, they tell you something like [teachers] this is nothing compared to college... it's gonna be a lot stricter". They're giving you a lot of chances and being lenient with you and you're still somehow struggling. That kind of makes you feel, um, not confident and unprepared." (James M1).

Again, Peter and John insisted in their argument that the lack of preparation is an individual problem due to a lack of self-efficacy. These are their opinions: "Honestly, I think that's a weak excuse because if you really wanted to go to college, you would prepare yourself." (Peter M1). "You would go to people to try to... help you to find... stuff that you need..., like he said, that's kind of a weak excuse." (John M1). However, the number of comments about the lack of preparation is sufficient to consider that the

problem is not only an individual matter; there are also institutional issues that affect the students' academic success.

### Not enough confidence

For two students the lack of previous experiences related to high academic success due to low academic confidence would serve as a barrier to college: "Previous experiences, maybe, high school, probably...struggled through it. He's gonna feel that the same thing's gonna happen in college." (Matthew M1). "You're thinking that it's [college] harder than it's here [high school] and then, people put themselves down, thinking that they can't do it." (Jeffrey M2).

Another reason that participants provided is when students receive negative feedback. One student commented: "...having anyone telling me: "Oh, you're not good at what you do." It's just me, in my own mind; I tell myself that I'm not good enough." (Alex F2).

Another argument that students provided is related to a low academic performance, students with low grades feel defeated in their college aspirations.

"It's because they have the mentality of knowing that, cause starting up in high school, and you know, not getting good grades or nothing. They already have the mindset saying: Oh! Why am I gonna bother trying when I'm not gonna go to college anymore?" (Aaron M1).

Competition with others also decreases their self-confidence regardless of their academic status:

"I'm actually taking AP classes, and I thought, I was alright...But I'm actually struggling... there're actually people here, who are way smarter than me. So, I'm like; it's bringing down my confidence little by little." (Alex F2).

Personal experiences and social persuasion are sources of self-efficacy (Lent & Brown, 2006). The lack of useful sources of self-efficacy reinforces low levels of self-confidence in their abilities to succeed in academic affairs. The examples mentioned above are decreasing students' self-efficacy.

# Not enough help in figuring out the steps of going college

Jack mentioned that students do not feel comfortable to ask for help. "Guys are too afraid to ask for that help... So, they try to avoid asking for help which in that case, it's just, gonna bring you down." (Jack M2). Another student perceived that they did not receive the help they need. "There's not enough...resources for us... We have to go ask people to help, but they don't come and offer us help." (Rose F1).

Other students considered that students have different types of resources to obtain information about the steps they need to following to college. For example, high school counselors or even their relatives can help the students in this matter: "I think that's really not a good excuse because, like, how he said, you can go to your counselors. Even if there's nobody to help you, I mean, the internet is there. You can search right there how to apply, for even other help." (John F1). James agreed with John's comment: "Yeah, the relatives that have gone to college that could help you out apply." (James 1).

#### Peer pressures

Participants addressed that pressure also comes from students who do not value going to college. Two statements illustrate this situation: "They're friends...are you going? And they give in to peer pressure like that isn't that important." (Jesus M2). "'A lot of people come to this school... they don't do anything, like, just sit and class and do nothing and... sometimes, you hang out with other friends. So, sometimes the idea spreads around." (Jesus2). Participants expressed that there were peers that force them to do activities that they did not feel comfortable when they are doing them. "He's gonna have to be forced into doing something he really doesn't want to do, and he could probably be miserable for the rest of his life." (James M1). In a similar way, former students discouraged them from going to college. However, in this example, the student has the self-determination to repeal that negative influence.

"Some former friends... they'll discourage me, not only from college... I love to make music, and they'll say, "Oh...you're never gonna do it" and that's why I just cut them off and I don't need that negativity." (JamesM1).

### Teachers and counselors' lack of support

Students perceived a lack of teachers' support in assisting with the students' learning processes. "There're some teachers that...don't really teach you because they really don't care about your education... and they make us feel bad." (Bella F1). One student recognized that teachers give support to students with low academic performance, but only when failure is imminent. "Math or English, whatever you're struggling on, you don't get help until after you fail it." (Jess F1).

Although students recognized that teachers and counselors offer help during the school schedule, the students feel uncomfortable to ask them for help, or they feel that teachers and counselors do not have enough time to attend them, or a lack of communication exists.

"If you need help for certain things, teachers will tell you: "well, come this day and stay after school..." But, it's like...you don't wanna bug your teachers.

Because you know a lot of your teachers... they just want to go home. You don't want to like...feel rushed or like...just being uncomfortable." (Jess F1).

"What scares me about the counselors is that I feel, like, they're always busy... I don't wanna be like...rushed and stuff. And that's why... I try to figure it out...like, by myself most of the time." (Rose F1).

"Then a counselor, because sometimes we speak...in a way...the way we speak could sound disrespectful towards them. So... it's like...has a barrier between us and asking the questions we want." (Bella F1).

Students perceived a lack of support from some teachers and counselors because of they do not have the time or these teachers or counselors do not establish caring relationships that make feel welcome to the students to ask for help.

#### **Gender differences**

This discussion was motivated by the presentation of the results of the survey in which there was a slight difference in the types of barriers that perceived males and females. For example, women identified having a job as the biggest barrier; while men not enough money was the biggest one. After that, the students were asked to provide

perceptions regarding the survey results. One student pointed out that the reason a male perceived the barrier not enough money in the first place is due to males being the economic providers for their families.

"In the Latino culture, like, males are usually the providers...they provide for the family; they work... Yeah, it's just the way we're taught to like, as males, we have to... always provide." (Jesus2).

The participants perceived that females at home play the role of caregivers. As a caregiver, they are responsible for taking care of the children and doing household chores. Three statements show the spectrum of this female role in Latino families. "Females usually don't go to college because they feel "Oh, why should I go to college if I'm just going to stay here and take care of my family?" (Julius M2). "It mostly connects to stereotyping people... all Latinas and Mexican stay at home and cook and clean stuff you know." (Jack M2). "Females just take care of the house and... other procedures outside, like, bills or anything... males give them the money." (Jesus M2).

The stereotype that Latinas are not smart was unveiled by the students as well. "Females think that they're not smart enough they think they're not capable." (JCole M2). One student attributed this stereotype to religious beliefs. "Based on religion…Just [women] wanna be at home, like…get a husband, have kids and cook… and clean. That's why they don't feel smart enough." (Aaron M1).

The students also discussed how females are challenging these traditional female roles. In an extended discussion about gender roles, Jack rejected the statement that women are not smart. In his argument, he took into account the results of the survey:

"If you compare the numbers from females and the males you can see that the female numbers [GPA] are greater than the males by a couple of decimals. But, still it matters because it is an encouragement for the person because... um... for like some people... for males they're more pressure instead of going to college; it's like go get a job that's why I believe that the numbers are kinda lower while for the females they think that... Um... because of this generation there actually coming more open parts in education and stuff. Females will now think that it's more important to continue with their education. They can say: I'm here, I matter, I have the same intelligence as a guy because if we go back like fifty years or more... um... females weren't really allowed to go to college. Well now, times are changing and now they have to go with the time and if they can, and they also have a brighter future." (Jack 2).

In a similar way, participants suggested that women are interested in having economic independence. "I would like to have a part time job because I would like to be independent and not have to worry about everything else." (Aundrea M2).

These comments about gender differences were also the opportunity to participants think about gender stereotypes and challenge those gender roles that are obstacles on the road to college.

#### Overcome barriers

The students were asked if they considered that they could overcome the obstacles that arose in the discussions. Participants stated that for students with low confidence, those barriers are difficult to overcome. "My confidence is really low. So,

it's just...trying to get the fact... it's hard to do something knowing that you're going to fail." (Jack M2). Many students felt that an appropriate way to overcome difficulties was to get reliable information. "...having enough information to make up your own mind, not go off of what everyone else is telling you." (Jess F1). Another way was finding alternative options in higher education that is different from attending a 4-year College. "There're other ways to get to education once you're not accepted to the university of your choice; you can start off slowly." (Jack M2).

Likewise, one student remarked there are different kinds of help that student can get to overcome barriers.

"You're not alone, you can get the help at home or...there a lot of places that offer help like, at school there's SAT camp that helps, friends too they can help you if you hang out with the right people they inspire you to get better. Even, if you don't have enough money, you can still aspire to show it off somewhere else as a tutor as whatever until your intelligence gets noticed and then, like, there's where you could begin another education life if a college notices like what you're doing and stuff." (Julius M2).

Despite students discussed a broad spectrum of barriers that the students face on the path to college; they also presented coping strategies to deal with those obstacles.

### **Supports**

Following the discussion about barriers and being the second theme most discussed during the focus groups was supports that facilitated college intent. The students discussed the top five supports from the survey. The two final categories were

considered, the differences between female and male related to supports and how to succeed without support.

### Family members' support

Parents and siblings were the most valuable support that students have in their goal to go to college. Several students claimed that family is a source of advice and inspiration:

"It's who you really look to for advice." (Matthew M1).

"My mom, since, I was a child, she's being encouraging me to get a good education." (Jack M2).

"My whole family is my biggest inspiration; cuz they tell you what's wrong or right. So for them to tell you push up to college even if you don't know what college is you know it would be like the right step because your parents guided you through the right path." (Julius M2).

Something that is consistent is the idea that their parents want a better life for their children:

"They [patents] just want you to be better than them...have better lives than they have because they came here to give us a better life, but they don't really have a good job because... my mom...she didn't go to college...she was single mom...

But, she wants us just to have a better life and have more opportunities than what she had...to take advantage of the opportunities. We have here more opportunities than she had." (Melanie F1).

Parents expect a better life for their kids. For this reason, parents not only motivate and push their children to reach academic goals but also parents express to their kids that they will be proud if their children will be successful:

"They [parents] basically want you to have a better than they have themselves right now, which is really a great motivation towards me... when your parents tell you, "I want you to make us proud." It's kind of like giving you a lot of pressure, but it's good pressure because you want to make your parents proud of you and what you do." (Nicky F1).

Students not only discussed supports they received from their parents but also the parents' work experiences that motivate the students to go to college:

"My dad works outdoors for something...for like, twelve hours and my mom is a house worker as well. She works for like eight hours. But, still both come back like aching. So, then, that's why they tell me... constantly, every day to prepare for college...because I've seen that. I've gone to work with them, and I've seen how hard they work and that's why...So, I won't have to be going through, something like that as well." (Matthew1).

Parents encourage their children to go to college because parents want better opportunities for their offspring in their future. In this vein, the negative parents' work experiences are a source of family reflection about the future. On one hand, these discussions contribute to parents provide the emotional and economic support to their children achieve academic goals. On the other hand, these discussions encourage

children to establish high educational aspirations and goals that allow them to reach a better socioeconomic condition than their parents already have.

### Friends and relatives' support

It is pivotal in students' college aspirations because they are looking forward similar goals. "Friends' encouragement is really important because...they have similar goals, similar ideas, similar things they want to achieve." (Matthew M1).

Participants stated that they not only received support from their friends and peers but also the students were willing to help and support their friends to achieve academic goals. "You're going to college, and you want to encourage your best friend because you want to see him go to college... have the same...high level of education." (Aaron M1). "When you're really close to someone you want...to kinda succeed together." (Nicky F1). Friends are also a source of support when students do not have support at home. "If your parents don't support you on something... you have your friends' support because those know that's what you really want." (Light F1).

One participant described how a friend's encouragement in a competitive environment increased their academic performance:

"My friends and I, always compete for...to see who has the highest grade... it's pretty cool *cuz* that inspires you to do better than, like, it makes you want to go past your limits as a student... I think, school is really fun, just *cuz* there's a challenge in every single class." (Julius M2).

### Other important people's support

Significant people for the students are relatives and national leaders. Participants stated that relatives were a source of inspiration and support. Likewise, relatives encouraged the students to achieve academic goals: "I have relatives that...they even tell you... "Do better than me", "I might have gone to this school, but I want you to try harder and do better than me." (Aaron M1). "You could even go with family members, brothers, sisters that are older than you. You can look up to those people." (Matthew M1).

Another student considered national leaders as a source of inspiration: "They're somebody that made a difference in your life or made a difference to other people... Cesar Chavez, Martin Luther King, Jr.... I look up to all those people." (James M1).

Other students described those people who are alike or have overcome difficulties like the participants. "...someone that grew up here or is... from the same race or like...that they went through the same thing." (Light F1). "Someone who actually went through the same barriers that you're gonna through." (Jess F1).

People that have overcome barriers and have achieved goals are a source of inspiration for the students overcome their obstacles and reach their aims.

### Counselors, teachers, and school support

Students recognized the value of counseling at school as pivotal in their college aspirations. "Counselors would be...the most important because...they know more about college than probably your family members and friends." (JCole M2). "They help you... when you apply for college... that's a really big help." (Maggie M2).

Students perceived that teachers with similar characteristics like them; for instance, they live in the same neighborhood, they have overcome barriers to go college; these teachers might provide a suitable support to the students because they can understand the challenges that students face in their everyday. This is an example of these kinds of teachers:

"We have two teachers here; they're alumni, and they're twins. One went to UCLA, and one went to UC, and they're here...teachers now. So, that... connect with us the most because they're actually alumni, and then they succeeded; and now they're here just teaching us and telling their stories and yeah, we could relate to them because they were in teams here. They have coaches; they have science teachers that we still have, surprisingly because they're really old." (Light F1).

Two students also identified teachers as important people for them. "My AVID teacher, she helps me with everything...she's there, she never going to let me down. But apart from that, I have none. (Jesse M2). "Probably a teacher... he's a really intelligent man...he doesn't sugar-coat... he's straight up, a very honest guy. I look up to him a lot." (Matthew M1).

Another participant considered those teachers who highlight good students' behavior provide a suitable support than those who focus on negative behavior: "Then you have teachers that say, you did well on this, and you will do great on the next one. So those are the teachers that actually give you the difference." (Jess F1).

In the school facilities, there is a career center in which the students receive information on college and universities and orientation about college applications.

"There're also different sources where you can get that information, for example, college and career centers. They also...any question, that they have we can go and ask them and they'll usually have an answer, and they'll provide it which will help us to get to college." (Jack2).

However, when the students were asked about the use of these services, the level of consultation was small:

Moderator: Oh, okay, when was the last time that did you go there?

Jack: Like a week ago.

Moderator: What about you?

Jesus: I can't remember.

Moderator: You?

Julius: Two or three weeks ago.

Moderator: You?

Jeffrey: I never go.

Moderator: You?

J. Cole: To the college and career center? I'd never gone there.

(Focus group Male # 2)

Participants identified different kinds of supports that school had and how these supports may help the student to follow the steps of going to college. The most valuable were the career center; unfortunately, during the discussions, this resource was not analyzed in depth.

#### **Gender differences**

The students discussed the difference between females and males in the perception of supports. There were gender stereotypes that emerged in the discussion. Boys considered that girls build strong relationships with their friends, and this is a suitable support for academic pursuits. "Females...build stronger bonds with their friends, and that's why... her friends are telling her like..." You can do it; you can do it." It probably gets her even more." (Matthew M1). One student considered that females were more emotional than males. "Girls are more... emotional and open up...rather than guys...I'll probably feel weird telling...but, I don't need to... but it'll take me time" (John M). "Women can express themselves easier than men...for males, it's harder to open up to other guys." (Jeffrey M2).

Another traditional male role is related to guys do not discuss their plans with other guys. "It's not very often for me, to hear a guy just randomly walking to each other like, oh, what kind of college are you going to? Like what are your plans?" (Aundrea F2). Many students discussed that a man doesn't ask questions or for help to people like them and that adults with authority maybe can help the students:

"If you're a guy you don't want to ask some questions, like, that to your friends because I don't know, it makes you feel less masculine. But, if you go to a counselor, you feel like, you can rather open up to them more than with your friends" (Jesus M2).

There were comments of how students have challenged these gender stereotypes.

For example, a male student critiqued the pattern that males do not discuss college aspirations with their peers.

"I hang out with all of my friends... but not only do we joke around that much, but when it comes to getting down to work...we are serious and actually work and get our stuff done in time rather than last minute." (Jesus M2).

### **Succeed without support**

Students have a firm conviction that they can succeed without support, the only thing they need is an inner desire. "It all depends on your...believing in yourself...that you can do it...what you want." (Jade F1). "If you do want to succeed without any support, you put yourself through the...high circumstances and the highest point to achieve your dreams." (Aaron M1). And, "Just with the right motivation, you could be able to go to college, even if you don't have...support from everyone else." (Estella F2).

Students also described experiences of acquaintances that have succeeded without support. For instance, two participants related the story of relatives and teachers that went to college without support:

"I had a cousin who...she had no type of support and...she still managed to go to UC Davis." (Light F1).

"We had a tutor in AVID that she really didn't have support from like, her family and all that and...she didn't really have friends either. So like she thought to herself... her parents didn't want her to go to college either cuz, they thought [parents] why are you going to waste your time you might not even get in? So,

she just put her mind to it, and she applied to the Gates' Millennium scholarship, and she got accepted, and she went to UCLA and she's still in there." (Jesse F2).

Those stories made emphasis in personal motivation that pushes these people to achieve their goals. However, the participants were not aware of people behind those stories that help to the cousin and the AVID tutor to succeed.

### Self-Efficacy

Different from barriers and supports, the students were directed to discuss self-efficacy due to the low levels reported in the survey results. For this reason, the discussion focused on the factors that affected students' academic self-efficacy and the types of strategies that student used to cope with low levels of self-efficacy.

### **Academic self-efficacy**

Many students felt that the low levels of self-efficacy in taking college exams were due to the students having a lot of pressure to obtain high scores. They realized that college exam primarily determines the odds get accepted in college: "If you ask a counselor or someone who has already been to college, the pressure you feel, that, it's like, oh, this test is the one that matters to get into college." (Jeffrey M2). "They're less confident in doing...the SAT because that's... a big test, and it's timed and...people feel pressured because it's timed." (Ricky M1). "Those two [college exams and essay] are like main things that college looks out. So, that's when you stress more into and...that brings you down." (Maggie F2).

In addition to the pressure, the students felt that they are not prepared enough to take the test: "I'm not prepared for it and... having the mindset that you failed the SAT

and you're not going to go to any other college." (Aaron1). Another student described that to have high grades in high school is not a guarantee to obtain good grades in college exams. "Even though you get...really good grades...a lot of people don't test well, or maybe it's just like certain days... it's just iffy." (Jess F1).

Another theme discussed by the participants was the type of college information that the high school provides to the students. However, the students perceive that they not only need information but also they need guidance to follow the steps for college preparation and college entry.

"The school gives you...the requirements to go to college... So, we...already have... understandings of what colleges want and...what you need to go to college. But...when it comes to...the essays, the SATs...it's kinda...yourself. Like...you have to do it...you have to...research and study and...do it on your own. I think that's why they're a little bit...less confident in doing...well on that." (Jess1).

Another student described how the lack of economic resource affected the student's academic self-efficacy:

"I believe that the students here at the school are less encouraged to get a higher SAT result because they know that people who go to Beverly Hills or something have like, a better education because that district has a lot more money. When it comes to those exams, it matters how much money you have to study for them." (Jack M2).

Students do not have previous positive academic experiences that help them to increase their academic self-efficacy:

"It's just basically you studying on your own, and it's like whether you want to succeed or not, it's like based on you." (Jess F1). "And it's hard just to pick...where to start, where to... get the help... They [teachers] announce it, we know. But they don't reinforce us to go to it." (Nicky F1).

There is a close relationship between the low levels of self-efficacy related to college preparation (college exams and essays) and preparation and abilities barriers they face to feel thoroughly prepare for college entry.

### **Coping self-efficacy**

It was related to lack of economic support for a few of the students: "With no support, it would be hard to do something. I mean, you could still do it; but is harder and financial pressure." (Maggie F2). "Being in debt for... the rest of their life...or the same thing with...lack of support...they just...it discourages them." (Matthew M1).

The lack of support also decreases the students' coping self-efficacy. "They're demoralized because they see other people getting support and then, they have nothing. So, they don't think they're going to make it." (James M1).

One student identified how vicarious experiences could contribute to increasing coping self-efficacy:

"Talk to someone that has taken the SAT or also is writing the essay. Talk to them and get advice from them, on how they did, and from there. That would encourage yourself...that's a click in the head, like, "Oh, I can actually still do it". It's not a situation, nobody can do it. There's...everybody can do it."
(Matthew1).

Participants stated a different kind of strategies that could help them to cope with low self-efficacy. For example, a participant indicated that practices test could be a suitable option: "Practice test...something...that you get...exposed to... the format of exams" (Peter M1). Another student described how planned activities might develop skills for college exams. "We have SAT prep and then...teachers always do essays or helping ya'll with essays. So, I feel like, it's just the mind that brings it up." (Maggie F2). Another student considered that mandatory classes might help them to increase coping efficacy. "The mandatory classes could help us so much... if they hand you something, we're not going to do it. But, if it's mandatory for you to do it, we'll do it." (Nicky F1).

The strategies that students described as efficient practices to cope with a low self-efficacy were associated with the knowledge and the skills that they need to excel in college exams and the essay.

## Outcome Expectations

Similar to supports, the students discussed the items of the survey in which the responses presented low levels of outcome expectations. These were: "the future looks bright for me" and "my talents and skills will be used in my career/occupation".

### **Expectations of the future in college**

Many students felt that their future does not look bright. One argument is that being graduated from college does not guarantee to get that job that people want:

"After college, they probably might not find something that they love doing...
they'll just get a regular, average job. They can't find something that they love
doing... They are successful by completing college and getting a degree in that
major, but it's gonna be the most difficult part trying to find somewhere to do
what you did in college." (Aaron M1).

Another participant related the experience of relatives that graduated from college that were not working with the degree area they studied. "I have family members too that... they went to college, and they don't work for... what they got...a degree..." (Jade M1).

Although a college diploma is not a guarantee to obtain job people want, the students understood that it gives them a competitive advantage. "College is not guaranteed that you will get your dream job and... that you will have a safe economic life. But there's a great chance...So, it's worth it." (Nicky F1).

Two students felt differences "The future looks bright for me" and "I can make my future a happy one." Happy is related to a specific mood or accomplished goals; bright is related to personal fulfillment or ultimate goals:

"A lot of people misinterpreted that. They probably thought of happy as in "Oh, they're fine with it." So, that's why they say they're happy because they're like...they're okay with it. But bright, they...it's not so much because it's not to their full potential." (Ricky M1).

"For a happy future, they might have to work to achieve that; while for a bright future... it's one of those things where you have to work for it, but you're never going to achieve." (Jesus M2).

"A happy future doesn't mean to go to college and get a higher education. It could just mean, like, forming a family and stuff like that or bright future can be more to a high education." (Jack M2).

Another participant made a relationship between bright future and personal effort: "Everybody thinks... oh, I want a happy future. But they don't actually put much work into it. So, they give up; that's probably why having a bright future is lower." (Jeffrey M2). Another student considered that the future does not look bright is because the lack of social mobility they want: "They don't think that they will have a bright future that they don't have a probable change. They will always be up in the lower classes." (Jeffrey M2).

Additionally, another participant made a difference between negative and positive outcome expectations about college aspirations:

"If people expect positive things... that'll encourage them to go to college. But, if they don't expect it, and they have low self-confidence...they don't have motivation. So they're not going to want to go." (Ricky M1).

Participants felt that the future is uncertain; however, some participants considered the path of going to college as an opportunity to increase the odds to get a better job than people that only have a school diploma. Conversely, other students expressed hopelessness to the future.

#### Talents and skills

Some students that choose a career base on the criteria to obtain a high remuneration instead of considering their personal skills. "They choose a career that pays a lot, but in reality, they don't like doing that. So...what they like doing might pay less." (Peter M1). For example, there was a discussion about students developing skills in sports that were not used in their career or occupations: "People [who] are really good at sports, but don't make it to a high level. So, they can just settle for another major...they won't have to use their skills." (Jesus M2).

Another participant stated how competition discourages other to enter into a particular field: "People might have...amazing skills; but... there's a lot of competition. So, people think they might not be good enough. (Jack M2). Other student remarked that to enter into art colleges; people have to be talented, and this situation discourages them; therefore, they decide to look for another career:

"There's a lot of students that are probably gonna study things that they don't wanna study... a lot of people...want to be art majors and stuff. They don't pursue that. Because... you have to be really talented to make it.... that's why people focus more on the English, Science, Math...is because there's gonna be jobs for that." (Jess1).

### Adults' expectations

Differences between students' expectations and teachers and parents' expectations related to career paths were discussed: "Teachers will always tell you: "don't do what you want. Do what...you know...is gonna like...make money." (Jess

M1). Financial pressures were primary issues that parents take into account when they give advice about careers for their kids. Two examples illustrated this statement:

"I wanna be an art major, but my mom says, "It's not gonna give you money...

It's not just about money...It's just that she wants me to have a stable life... I

completely agree... what she told me: "make art your minor...don't abandon

your art skills...I want you to major is something that's actually gonna help

you...in college." And that's what I think that ...parents should do." (Nicky F1).

"I have a cousin where they [parents] forced her to work instead of going to

college, and I feel bad for her because she wanted just to go, and she had a

scholarship already. But her parents didn't want her, they said it wasn't

important. And it just, it made me feels bad for her because she didn't even have

a choice." (Alex F2).

Financial pressure that adults have lived may be the principal argument that adult takes into account when they are giving advice to young generations.

#### Students' Recommendations

The closing section of the focus groups was dedicated to collecting opinions and suggestions to assist students in the critical steps of going college. Two closing questions were utilized to stimulate the discussion: (1) if you had just one minute with Mr. Arne Duncan the U.S. Secretary of Education what message would you like to convey from our discussion today? And (2) are there any other things about high school's college aspirations that you would like to share before we finish? The students' thoughts and recommendations were summarizing in three thematic topics: the disadvantages of

Latina/o high school students, social conditions and college access and the relationships between schools and colleges.

### The disadvantages of Latina/o high school students

Participants are aware of the stereotypes and lack of opportunities for education that Latinas/o students face. "Since most people stereotype against us, like some of the kids at school are like: "Oh, I can't do it because I'm Mexican." (Alex F2). "Hispanics or Latinos being limited..., I would think about it and be like, oh! What's up with Donald Trump, like that's kind of... driving me out." (Jesse F2). Another student suggested to stop labeling people as underachievers: "If someone gets a lower score on the test or something, not making the feel dumb... just making them feel nice." (Maggie F2). Another participant remarked that Latinas/o students are interested in going to college, and all they need is appropriate support: "Everybody considers Latino or like Hispanic culture are not going college... if we get, the right support and we get the right motivation...yeah, you can make it. "(Alex F2).

### The social conditions of college access

One student addressed the issue that people expect less of the people who live in poor neighborhoods: "Because they're... classified as a low budget school, and people expect less from it...It gives you to think... you can't go a really good university because you come from that school." (Light F1).

Participants also remarked that to access higher education is a benefit to both people and the country: "To make college more accessible to everyone...it just doesn't benefit the people that are going to college; it just benefits the country as a whole."

(Jesus2). "It helps us become better test-takers as well. So I think it benefits everyone in general. Not only us." (Bella F1).

Another participant considered that social class determines college access: "If they [colleges] have like one slot left for their college, I'm pretty sure they'd go with the Hollywood kid, because umm...the education would be better than over here and they'd have the money to go, and they don't really need financial aid." (Aaron M1). However, the same student remarked that personal effort from students in low-income areas should be considered in the process of selection in college:

"That person [an urban highs school student] grew up in an atmosphere where nobody really goes to college, and yet, this person comes along and actually does make it. And this person from Hollywood has more other chances. But that person's really putting so much effort into getting into this college, and there is that one slot left...that person would get accepted because the other person, you know, has other...has a lot more money to get into another college. And on top of that, a lot of people in Hollywood don't put that much effort since you know, they have the education. But right here, we really don't. So, you have to push yourself, and put yourself in that mentality like, I have to do my work every single day and be on top of it to get into the college I want to." (Aaron M1).

# Relationships between schools and colleges

Although the mission statement of the high school is "to prepare all students for college and careers" the students perceived a separation between the academic activities of the high school and the college requirements. One student highlighted the role of the

high school in the development of youth: "High school is just the beginning, that's where you start everything, that's where you start, like, realizing what you're going to be as an adult or what you're going to be when you grow up." (Alex F2). Another student described how the educational systems did not prepare to go to college. "Yeah, let's go to college...let's do this and do that..." but they don't really focus on what you need to... excel in college. (Jess F1).

Another student considered that school should identify the barriers that students face in the path of going college and to find strategies to help them. "Just to take into consideration, all the barriers that we saw that really stops the student from trying to go to college and just like, to try to find different ways and skills to overcome those."

(Jeffrey M2). Another student addressed one strategy that the high school might implement in the same way they used to prepare the students to the CAHSEE.

"They should've done it like the CAHSEE... they [teachers] have... certain exams that they would practice with you, like this is what you're going to do for the essay or like these problems...on the Math part... when you saw, it was like, "Oh, this is going to be easy. I already know this." But, for the PSAT they do anything." (Jade F1).

Additionally, participants are aware that college preparation is a complex process, and they considered that an extra class or an after school program might be very helpful.

"If we had just like an option of an extra class called like... college prep class to help you get your applications ready... write your personal statements, get your recommendation... we just need help establishing where to find that information, where to get help." (Nicky F1).

For some students, the college preparation should be mandatory. "I think making certain things mandatory instead of giving us, like...the option to do it." (Jess F1). "If there's a way to help us with that, it would benefit everyone. Not only the ones who...who really want it, but even the ones who...play around and distract the class." (Rose F1). Other students proposed that this activity should be only for students interested in college preparation. "Those kids that are always disturbing the class...So, why would you make it mandatory for the kids that don't really wanna be there?" (Jade F1). "I don't really think that's a good idea because not a lot of people need it... I mean, a lot of people do, but not everybody." (Aaron M1).

The discussions with Latina/o high school students about students' aspirations provided insightful information about the problems they face and the alternatives they consider solving these issues. In each context (personal, familiar, school, and society) the students were able to identified factors that hinder vocational plans in career development as well as supports that encourage and facilitate achieve academic goals and college aspirations. Although the participants were not optimistic about their future primarily by socio-economic barriers; they were confidence in their abilities to overcome difficulties and follow the path that drives them to develop a career. This professional development will be the result of the interplay between personal motivations and interests, and socio-economic and cultural conditions that furnish or hamper this development.

#### **CHAPTER VI**

#### **DISCUSSION AND CONCLUSIONS**

The purpose of this study was to identify personal and contextual variables that hinder or foster college aspirations in Latina/o high school students. The research questions that guided this study were:

- 1. What are the relationships between personal and contextual variables and college aspirations in 11<sup>th</sup> grade Latina/o high school students in an urban high school located in a city in the southwestern of the U.S.?
- 2. Are gender and generation of immigration origin intervening variables in the relationship between personal and contextual variables and college aspirations of those students?
- 3. How are students' focus group responses regarding the current model related to the relationships between personal and contextual variables and college aspirations?

This research used a mixed methods approach. The quantitative approach employed a survey questionnaire to identify how Latina/o high school students' college aspirations are affected by family background, personal, and environmental variables. In the same vein, the results of the survey identified the differences by gender and generation. The qualitative approach employed focus groups discussions to facilitate the interpretation of survey results and added reasoning about some personal or contextual variables affected more or fewer Latina/o students' college aspirations.

This chapter is organized into three main sections; the first is the discussion of the quantitative findings, the second is the discussion of the qualitative findings, and the third sections is the conclusions and recommendations. The quantitative discussion focuses on the analysis of the relationships between personal and contextual factors and college aspirations in the general model. In addition, genders and generations models will be examined in light of the literature. The last part of this section discusses the predictors of the dependent variables, college aspirations, academic performance, selfefficacy and outcome expectations. The qualitative discussion in the second section will focus on the barriers and supports that participants perceived as fundamental to their college aspirations. This section provides the sources of self-efficacy beliefs among students and how those sources undermine or encourage this socio-cognitive variable. Students' expectations associated with their academic future and how gender differences affect college aspirations are also presented. The qualitative discussion closes with reflections about the recommendations that students made to improve their college preparation. The third section presents the general conclusions of this study, the implications of these results for the SCCT, and the recommendations for practice, policies, and future research.

#### Quantitative Discussion

A hypothesized model was proposed to identify the relationships between personal, contextual factors, academic performance, and college aspirations. Because only marginal support was found for the hypothesized model, new paths were added to improve the fit of the model. The modified model produced a good model fit,  $\chi 2$  (6, 247) = 14.26, p <0.027, CFI = 1.0, NFI = 1.0, RMSEA = .00. Subsequently, genders and generations models were evaluated. This section provides a reflection of the SCCT and

their application in the specific domain of college aspirations in Latina/o high school students.

### Personal Factors and College Aspirations in Latina/o Students

This study found that contextual factors (supports, barriers), personal factors (self-efficacy and outcome expectations) and background factors (parents' educational attainment and SES) are predictors of academic performance and college aspirations in Latina/o high school students. The study findings confirmed the applicability of SCCT in a particular domains of career development in minorities groups (Sheu et al., 2010; Gushue, 2006; Lent & Brown, 2006; McWhirter et al., 2014).

This study found that self- efficacy was a significant predictor of college aspirations in the models of first and fourth generation and Latina model. The role of self-efficacy in academic performance was also found to be related to the third and fourth generation models. This finding is related to the abundant literature in which self-efficacy is a significant predictor of academic performance (Boroch & Hope, 2009; Lent & Brown, 2015). Particularly to Latina/o students, Ojeda, Flores, & Navarro (2011) find that "college self-efficacy predicted positive anticipated outcomes for pursuing a college education, progress toward academic goals, and academic satisfaction in Mexican American college students." (p. 68).

Additionally, the self-efficacy seems to play a better role in older generations than recent generations. This finding suggested that self-efficacy may play a significant role in Latina/os more acculturated than less acculturated. One study in Vocational development found that ethnic identity directly influences Latina/o students' self-

efficacy in career exploration (Gushue, 2006). Another study about post-secondary educational goals found that Latina/o high school students more oriented toward the Anglo culture had a high level of self-efficacy in higher educational goals than students less oriented toward the Anglo culture (Flores, Navarro, & DeWitz, 2008). Future research should address the impact of self-efficacy on career development through generations of Latina/o' high school students.

Meanwhile, this study found that outcome expectation was a predictor of college aspirations, in the third and the fourth generations' models and the female model.

Additionally, outcome expectations were the biggest predictor of academic performance (in the general, male, first and fourth generations' models). In this vein, the outcome expectations seem to play a more significant role in academic pursuits than self-efficacy. This finding is related to previous research in which outcome expectations play a better role explaining academic pursuits than self-efficacy (Sheu et al., 2010). However, this finding is different from Flores et al. (2008) who found that college outcome expectations were not related to educational aspirations and educational expectations.

## **Contextual Factors and College Aspirations in Latina/o Students**

Contextual factors (supports and barriers) were stronger predictors than background factors (SES and parents' educational attainment) in Latina/o high school students. This finding confirmed theoretical assumptions of the SCCT (Brow & Lent, 2006) that proximal contextual variables directly affect students' career choices; more specifically in this study college aspirations. However, this finding was unable to confirm the impact of distal background contextual factors to career choices through

self-efficacy and outcome expectations (Brown & Lent, 2006; Lent et al., 2000). Barriers were the biggest predictor of college aspirations and the direct one in this study. However, this predictor did not operate similarly across generations. First and fourth Latina/os generations were triggered to go to college by the barriers. Conversely, in mid generations (second and third) barriers hindered their college aspirations. The difference between generations may suggest that some Latina/o students perceived barriers as difficult to overcome whereas those Latina/o students more resilient perceive barriers as temporary situations that they can overcome in the path of going to college (Lent et al., 2002; McWhirter et al., 2007).

These findings also support the different types of modes of assimilation that experience children of immigrants through generations. According to the framework of paths of mobility across generation formulated by Portes and Rumbaut (2006), one explanation is that the first and fourth generation experience segmented assimilation and the second and third generation downward assimilation. The first generation may have low social capital and negative modes of incorporations; however, they perceived positive self-efficacy toward college aspirations. This condition allows them to be resilient and copes with difficulties in the path of going to college. The fourth generation also perceived positive self-efficacy and additionally, their parents displayed better levels of social capital –the parents of this generation were more educated than parents of the other generations-. In this case, personal beliefs of their capabilities and the resilient influence of parental human capital are strategies that encourage them to achieve high educational and occupational outcomes. The second generation is more at

risk of downward assimilation than the others because barriers not only affected their college aspirations negatively but also mediated the relationships between college aspirations and the other variables. The third generation is also at risk of downward assimilation because barriers and outcome expectations were negative predictors of college aspirations. However, self-efficacy might alleviate these negative influences when self-efficacy affects positively college aspirations through high academic performance.

Supports were the biggest predictor of personal factors (self-efficacy and outcome expectations) for Latina/o high school students in all models. This finding is similar to a qualitative study in which social supports (particularly, high schools) play a critical role in the provision of supports for Latina/o students' postsecondary plans (McWhirter et al., 2014)

As regards, contextual variables (supports and barriers) and background variables (SES and parents' educational attainment) as predictors of personal variables (self-efficacy and outcome expectations) among genders models; some differences deserve being analyzed. In the Latina model, supports and barriers were predictors of self-efficacy, but they were not predictors of outcome expectations. The only predictor of outcome expectations was self-efficacy. Parents' educational attainment was not predictor neither self-efficacy nor outcome expectations. In lay terms, Supports and barriers were predictors of Latinas' self-efficacy; in turn self-efficacy beliefs predicted outcome expectations; in turn, both self-efficacy and outcome expectations predicted Latinas' college aspirations. Different from Latinas, in the Latino model both contextual

and background variables were predictors of personal variables; in turn personal variables were predictors of Latinos' college aspirations mediated by GPA. In lay terms, Latinos' college aspirations are more influenced by environmental factors than personal factors. This finding confirmed the theoretical assumption partially that distal background and contextual factors affected career choices through self-efficacy and outcome expectations (Lent et al., 2000; Brown & Lent, 2006). The explanation for this finding, and considering participants' statements in the focus group, is that Latinos may be more influenced by their context (i.e., lack of family financial support, gender stereotypes, role socialization, do not ask for help) than females. Similar to this finding, Sáenz & Ponjuan (2012) found that misguided perceptions of masculinity, the complex influence of peers and Latino family and academic underachiever's stereotypes affect Latino male success in the educational system.

The following studies depict differences between male and females related to perceptions of support and barriers and the level of self-efficacy. The first study found that women were more likely to perceive support while males were more likely to perceive barriers (Inda, Rodríguez, & Peña, 2013). Although this study was conducted in Spain with college students; it may offer lights to understand gender differences in academic pursuits. The second study about the influence of cognitive-motivational variables in academic achievement found that Males' self-efficacy was lower than females' self-efficacy (Castro-Villarreal, Guerra, Sass, & Hseih, 2014). This study was conducted in a Hispanic-serving institution in the southwest of the U.S.

SES and parents' educational attainment played a small role in the development of self-efficacy and outcome expectations in Latina/o high school students as well as in college aspirations. SES was a predictor of self-efficacy in the Latinos model. Similarly, Perry, Link, Boelter, and Leukefeld (2012) found that low-SES was a predictor of low science self-efficacy in sixth-graders boys. SES was also a predictor of outcome expectations in Latino and second generation models. Again, these results confirmed the impact of contextual factors in males' college aspirations. The positive relationships between SES and outcome expectations in the second generation model indicated that expectations about college path were directly related to family financial support. The relationships between SES, self-efficacy and outcome expectations were unable to be identified in Latinas, first, third, and fourth generation's models because of the homogeneity of the sample size associated with SES. A study of socio-cognitive influences that shape children's career aspirations found family socioeconomic status linked to children's career trajectories only indirectly through parents' self- efficacy (Bandura et al., 2001). Therefore, future research that considers sample size more diverse in SES might confirm or reject relationships between SES, self-efficacy and outcome expectations.

The relationships between parent's educational attainment, self-efficacy and outcome expectations were visible when the analysis examined generations. Parents' educational attainment was related to self-efficacy in all generations' models. This finding was partially related to another study that found significant correlation only between father's education level and academic self-efficacy (Chandler, 2006). The

difference was the direction of the effect (first and third were negative, whereas second and fourth were positive). Parents' educational attainment was related negatively to outcome expectations in Latino, second, third and fourth generation. The only positive relationship was found in the fourth generation. This finding showed that parents' educational level did not operate in the same way in both socio-cognitive variables through generations and that particular attention might be brought to the experience of acculturation of each generation. The relationships between parents' educational attainment, self-efficacy and outcome expectations were only positive in the fourth generation. This means that parents with high levels of education were associated with high levels of youth's self-efficacy and positive outcome expectations in college aspirations. The relationships were negative in the third generation. It reflects that low levels of parents' education motivated students to increase their self-efficacy. Besides that, it might project positive outcome expectations related to college aspirations. In other words, the lack of the parents' education drove them to believe in their capabilities and the positive consequences of access higher education.

The hypothesized relationships between SES and parent's educational attainment mediated by self-efficacy and outcome expectations were unable to be verified due to insignificant coefficient correlation in the direct and indirect path analyzed. Future research may consider direct ways to measure SES because of the indirect measure through the type of lunch plan, which might be inaccurate. Therefore, future research might consider examining the effect of parents' educational attainment separately by

gender (mother and father) to find significant relations as have been depicted in other studies (Chandler, 2006).

### **Predictors of College Aspirations**

The biggest predictor of college aspirations were barriers and academic performance. These findings were consistent with the theoretical assumptions of SCCT about the relationships among academic performance, career choices, and how proximal contextual variables affect career choices (Brown & Lent, 2006). Barriers were found to be the biggest negative predictor of college aspirations, which is not surprising in lowincome SES racial/ethnic minority populations. According to Tierney et al. (2009), lowincome students had the lowest college enrollment rates. Roughly, the 36% of young Latina/os are poor compared to the 15% of young White and young Latina/os are almost two-and-a-half times as likely as White children to live in extreme poverty (Children's Defense Fund, 2012). However, this study found barriers did not operate in the same way across generations. For the first and fourth generations, high levels of barriers triggered high college aspirations. The first generation had positive relationships between self-efficacy, positive outcome expectations, and college aspiration; this situation might suggest that these students had unrealistic expectations that underestimate the negative impact of barriers in the path of going college. Unrealistic academic goals and the underestimation of the effect of barriers to career college aspirations, create the conditions where failure and discouragement are likely (Brown & Lent, 2006).

The fourth generation students had positive relationships between self-efficacy, college aspirations and negative relationships between outcome expectations and college aspirations. These relationships suggested that these students had more realistic expectations of their aspirations and the strategies to cope with barriers that they might find on the path of going college.

The other models (general modified model, genders models and second and third generations' models) also presented negative relationships between barriers and college aspiration. These relationships were more realistic according to the low-income areas in which they live and the lack of resources they have in their community to face those barriers (Brown & Lent, 2006). These findings confirmed that proximal contextual variables affected career choices directly (Brown & Lent, 2006). In a similar way, difficulties to overcome barriers in the path of going college that hold second and third generation might be associated with experiences of stigmatization and negative stereotypes that Latina/os face in their daily days (Padilla, 2006).

These differences among generations related to the relationships between contextual variables and personal variables may be explained by the improvement that each generation made in their educational attainment and economic status (Smith, 2003; Taylor et al., 2013). However, those improvements are uneven in Latino generations. For example, the difference in wages between first and second generation is narrow while the gap between second and third is insignificant (Smith, 2003). Another factor that affects differences among generations is the assimilation process they face. Portes and Rumbaut (2001) identify three types of assimilation dissonant, consonant, and selective.

For instance, dissonant assimilation is characterized by high levels of racial/ethnic discrimination and low levels of social support. Historically, Latino immigrants have faced high levels of discrimination; however, these arguments cannot be generalized for all Latinos because the arrival and context of reception, the types of networks, and the access to resources and support define the type road of assimilation (Portes & Rumbaut 2001). In lay terms, this study found differences among generations, but this study was unable to provide an explanation beyond the scope of the data.

The results also described other social-cognitive (self-efficacy and outcome expectations) and contextual variables (supports) as predictors of college aspirations; each of the variables served as a predictor in at least three of the seven models.

Regarding the variation of college aspirations by predictors, a small variation was presented in all models –less than 20%. Therefore, there are other factors such as learning experiences, emotional factors, and aptitudes that could be considered in future research on the paths of going to college in Latina/o students. Moreover, future studies may examine particular barriers or types of barriers (i.e., financial, relational, demographic, ability, preparation/motivation) and their relationship with college aspirations.

Another difference among the models was related to gender. The hypothesized predictors of college aspirations (self-efficacy, outcome expectations, GPA, barriers, and supports) were all significant in the female model. Conversely, in the male model only supports and barriers were significant predictors of college aspirations. These findings suggest that women take into account both personal and contextual factors when they

consider the decision of going college. Meanwhile, men make emphasis on contextual factors; they think about supports that encourage their aspirations; or barriers or family background that hinder their aspirations as well. This difference between Latina and Latino is related to previous research in which environmental factors -family and peer contexts- were predictors of college aspirations for males while variables associated with personal factors, academic preparation and external were most salient for females (Chenoweth, & Galliher, 2004). As stated earlier, traditional male gender roles may be an explanation why Latinos give more importance to environmental conditions, especially family income, than personal interest when they make the decision in their college aspirations (Sáenz & Ponjuan, 2012). Subsequently, Brown et al. (2006) reported studies in which family interest play a significant role in related career choices rather than personal interests in racial/ethnic minorities groups.

#### **Predictors of Academic Performance**

Outcome expectations were the only predictor of GPA in three of the seven models (general, male, and first generation models). In the fourth generation model, both outcome expectations and self-efficacy were significant predictors. In the third generation model, self-efficacy was the significant predictor of GPA. These findings confirmed that the value of outcome expectations in predicting career choices in which outcome expectations produce substantial direct paths coefficients than self-efficacy (Sheu et al., 2010).

The relevance of outcome expectations in five of the seven models indicated Latina/o students; especially men have higher expectations of their academic

performance more than their beliefs in their capabilities for obtaining good grades. These findings could be analyzed in two ways. First, high expectations in their academic performance can drive them to set their goals; for example, it encourages them to take advanced courses or prepare for college exams. Moreover, it could be beneficial for the female model, which put their effort and persistence in the academic success. Second, the overestimation of the academic expectations without considering the steps for academic success can drive them to unrealistic expectations to obtain a high academic performance in future (Brown & Lent 2006; McNamara, 2012).

The results of the relationships between outcome expectations and academic performance in the genders models as well as the results of gender differences in GPA and the number of advanced and AP courses allow to inferring that Latino students have unrealistic expectations of their academic performance after they took it. In turn, these unrealistic expectations of academic performance may follow two ways. First, Latinos over-confidence does not allow the students to establish and to follow the critical steps of going to college on time. In this vein, SCCT depicts that students who overestimate their self-efficacy set unrealistic goals that are beyond of their scope and these end in failure and dejection (Brown & Lent, 2006). Second, students with low expectations of their academic performance will not consider going to college as a suitable path in their career development. SCCT postulates that students with low self-efficacy underestimate their abilities and establish goals under their capabilities and tend to give up quickly when they envision an obstacle and consequent they experience less academic success. (Brown & Lent, 2006)

The findings of self-efficacy and outcome expectations were not predictors of academic performance in women and the second generation models. These findings suggest that females and second generation students may consider other factors (i.e., performance process, environmental barriers, self-esteem) that contribute to their academic performance additionally to motivational factors (self-efficacy and outcome expectations). Literature in career development described how different approaches consider different variables in the prediction of academic pursuits and career paths (Brown & Lent, 2012; Crumpton, 2005).

### **Predictors of Self-Efficacy**

Supports were the significant predictor of self-efficacy for all models with coefficients above of .60. Barriers were the second significant predictor in five of the seven models (modified model, gender models and first and second generations' models). For Latina/o students, supports and barriers related to academic success and college aspirations were more significant in the development of their academic self-efficacy than background contextual variables (SES and parents' educational attainment). In other words, the type of support that Latina/o student receive was more pivotal in the development of their academic self-efficacy than the characteristics of the context in which they live.

Parents' educational attainment was moderated by generations. For first generation students, low levels of parents' educational attainment were facts that were encouraging students to increase their academic self-efficacy. Conversely, for the second and fourth generation, low levels of parents' educational were associated with low

academic self-efficacy. The lack of communication that first generation of Latino parents has with the school due to language constraints affects negatively the academic self-efficacy of their children (Schneider et al., 2006).

SES as a predictor of self-efficacy was only found jointly with supports and barriers in the male model. Men who lived in low-income families were considered a source of economic supports for their families more than females. Therefore, the academic self-efficacy in these males was undermined by family economic hardships. This finding is consistent with previous studies of how contextual factors affect more the educational goals in males than females (Sáenz & Ponjuan, 2012). As stated earlier, the relationships between SES and self-efficacy were unable to identify in Latinas, first, third, and fourth generation's models because of the homogeneity of the sample size associated with SES.

## **Predictors of Outcome Expectations**

Supports were the biggest predictor of outcome expectations for all models with coefficients above of .47. These findings confirm the theoretical assumptions of the SCCT about the relationships between self-efficacy and outcome expectations (Lent et al., 1994; Brown & Lent, 2006). Similar to self-efficacy, outcome expectations were more related to social supports than educational barriers.

The differences between women and men models were females considered into account supports and self-efficacy as predictors of their outcome expectations of college aspirations. Males considered all variables (self-efficacy, supports, barriers, SES, and parents' educational attainment). These findings were consistent with previous results in

this study in which both distal and proximal contextual variables were predictors of socio-cognitive variables and choice goals in males. Parents' educational attainment was a negative predictor mostly in all models (modified, genders, first, second, and third generations' models). Although this path was only significant for the third and fourth generations; this tendency allows inferring that low levels of parents' education are a source of inspiration to establish expectations of their career development in Latina/os high school students.

However, in older generations the rationale was different; the level of parents' educational was positively related to student's outcome expectations. Parents with a high level of education and more knowledge of the school system can assist their children in establishing realistic outcome expectations for the steps needed to go to college in comparison to parents with low levels of education. Contextual variables as a predictor of outcome expectations were topics with limited research, as well as outcome expectations as predictor of Latina/o students' college aspirations. For instance, outcome expectations were not significant predictors of students' educational goal in students oriented toward Mexican culture (Flores et al., 2008). Much the same, Mexican-American students reported low outcome expectations for academic self-efficacy (Hackett, Betz, Casas, & Rocha-Singh, 1992). More research is needed to understand the significant role outcome expectations for student's college aspirations and the nuances of gender, generation and SES effects in Latina/o students.

#### **Summary of Quantitative Discussion**

In summary, the analysis of differences and similarities observed among the models made it possible to evaluate the adequacy of the SCCT to explain Latina/os' college aspirations. These results are consistent with prior results indicating that SCCT variables (personal and contextual) are predictors of academic choice goals (Brown & Lent, 2006; Sheu et al., 2010). Additionally, these findings suggest that gender and generation of immigration moderate the predictive utility of the social cognitive variables in Latina/o high school students. SCCT variables may help to explain the college aspirations of Latina/o students when it takes into account interviewing variables such as gender, generation, parents' educational level and SES.

## Qualitative Discussion

The interplay between personal and contextual factors contribute to personal aspirations; however, factor assist in students moving forward a particular career development goal or remain a dream that will never come true needs to be examined further. This study found that 76.5% of Latina/o high school students expressed their aspiration of going to college. This finding is similar to previous research in which Latina/o students have high college aspiration (Flores et al., 2008; McWhirter et al., 2014). In addition, Latina/o high school students perceived obstacles that should be removed and replaced with supports that could encourage them in the process of college preparation and college entry. The results of the students' discussions are presented in five parts: plans after school graduation, which are contextual factors, personal factors, gender differences, and characteristics of Latino families.

### **Different Paths After High School Graduation**

Latina/o high school students considered different plans after graduation; to enroll in higher education or enter the workforce. The principal reasons that Latina/o students indicated the desire to attend college were to obtain knowledge and develop skills in their field of interest to have better chances of getting the job they want and a salary in agreement with this level of education. Other reasons included: achieving growth, purpose, meaning, and social contribution (Brown & Lent, 2012), were not mentioned. This finding is consistent with Tannock, (2006) who depicts that the principal reason that college freshmen gave for pursuing a career is to get a good job and secure a better standard of living. In a similar vein Pryor et al. (2012) found that the main reason to go to college is "to be able to make more money" (p. 4).

Regarding specialized training, participants considered that people who enroll in these kinds of schools have already defined their career path and the students identified this option as the shortest way to get a skilled job and obtain a suitable remuneration. Furthermore, relatives' experience in this kind of specialized training reinforces confidence in the students that this option is a practical and realistic career choice. The 2009 national survey of Latinos for Latino found that 6% of Latina/os (between 18 and 25 years old) plan to go to a technical or trade school while the average of the general population is 4%. This plan to enroll in a technical or trade school is higher in foreignborn at 11% while native born is 3% (Tannock, 2006).

In a similar vein, the major enticement to join the military was the benefits they obtain (i.e., financial assistance for college). There are also other motivations they

indicated such as past experiences of relatives in the military and personal interests in choosing an exciting lifestyle; "...so, like adrenaline." (Jesus M2). These findings are consistent with studies that indicate that the primary reason for enlisting in the U.S. military is to obtain financial support for college (Lott, 2012; Tannock, 2006), job training and experience (Lott, 2012).

An interpretation of this finding is that economic factors are crucial factors that influence the plan after high school graduation in Latina/o students. Tannock (2006) found that 74% of Latina/o youth cut their education short during or right after high school because they had to support their family.

## Latina/o Students Experience More Barriers than Social Supports

This study found Latina/o high school students experience more barriers that hinder their college aspirations than supports that facilitated them. The lack of financial resources was view as the primary barrier to this study. This finding is consistent with previous studies in which the lack of financial resources is a barrier to college aspirations for Latina/o students (McWhirter et al., 2007; McWhirter, Valdez, et al., 2013) and students from low-income areas (Tierney et al., 2009). Latina/o students do not perceive scholarships and student loans as appropriate financial assistance for college. These students do not know where to look and how to apply for scholarships or they often feel they do not meet the necessary requirements to earn them. Regarding loans, many of the students were not interested in having student debt for a long time. Although financial aid plays a significant role in making college affordable (Tierney et al., 2009); "Latino families are significantly less likely than other groups to have student

debt. About 22% of Latino families have a loan while the 45% of white families have one" (Krogstad, 2015). In a similar way, Cunningham and Santiago (2008) found that "Latino students expressed reluctance to take out loans because they will have to pay them back even if they do not complete college, and they do not think they can afford to take the chance" (p. 18). In addition, Hernández (2012) found that credit history was the principal reason Latinos did not access to credit loans. Other reasons were race/ethnic discrimination and beliefs that their credits application will be denied (Hernández, 2012).

Latina/o students did not perceive work as a significant barrier to their college aspirations; for many students to get a job is the option to get the financial resource for college expenses. This finding is slightly similar to the results of one study that found positive relationships between work and study at the same time in college students who work 20 hours or less a week (Pike, Kuh, & Massa-McKinley, 2008). However, Latina/o students remarked that they did not know how to manage both activities at the same time. This finding suggests that Latina/o students need guidelines to manage more efficiently their time and balance study and work activities.

The second big barrier to college aspirations was family responsibilities. In the context of the Latino families, the value of familism leads to individual' needs being subordinate to family needs (Negroni-Rodriguez, & Morales, 2001) and during economic hardships everybody makes contributions to the family welfare, most often older siblings (Burton, 2007). Participants in this study provided narrations in which daughters and sons take family responsibilities. These range from doing household

chores, being a positive role model to being the caregiver of their younger siblings, or being the breadwinner. This situation is exacerbated in low-income families, as well as single mother families and families in which parents have a long-term illness or irresponsible parents. These findings agree with the characteristics of adultified children who perform parents' responsibilities (e.g., breadwinner, caregiver, protector) with the purpose of meeting family needs (Burton, 2007). Nevertheless, adultified youth in these roles develop leadership skills, a sense of social awareness and mature behaviors; but also concurrently suffer from anxiety, depression, and stress (Burton, 2007).

Findings in this study of high levels of family responsibilities become a difficult barrier to overcome for Latina/o high school students who assume the roles of providers, protectors, and caregivers of younger siblings. These adult roles interfere with the participation in pro-college activities (i. e., SAT preparation class, college visits, workshops, and meetings with mentors). This finding is similar to Lopez (2009) who found that found that principal reason that Latina/o had to not being enrolled in education before high school graduation was the need to support their family.

The barrier of lacking access to opportunities was remarked by Latino males in two aspects: there are highly competitive majors in which they do not fit, and there are more programs for college access for females than males. In the school system, males of color perceive two types of stressors, academic challenges and negative stereotypes that undermine their academic performance (Graham, Taylor & Hudley, 1998). When the negative stereotype is activated, Latinos tend to underperform particularly on cognitive and aptitude tests (Schneider et al., 2006). Therefore, this systematic discrimination may

undermine Latinos' academic self-efficacy and positive outcome expectations related to entering to competitive majors and colleges. It is known that 46% of Latina/os enrolled in higher education attend a two-year public school; this is the highest rates compare to other race/ethnicity (Krogstad, 2015).

The perception that women have a more diverse support system for college access than men is not only grounded in programs for college access but also in economic and disciplinary evidence. Labor market barriers for women have decreased, and educated women have significantly more opportunities than women with less education (Lopez & González, 2014). The increase in school disciplinary problems among minorities' males has risen (Lopez & González, 2014) which might generate an attitude of disengagement in males towards higher educational pursuits (Lopez & González, 2014). In the last two decades, college enrollment for Latinas outpaced Latinos by 13 % and the gap is increasing steadily (Lopez & González, 2014, Sáenz & Ponjuan, 2011).

Latina/o high school students feel they are not prepared enough to go to college and; therefore, their level of confidence in this pursuit is small. There are different reasons that Latina/o students remarked: they are taking courses with low levels of thoroughness; they received negative feedback from their teachers, and few go out of their way to help to prepare students for SAT's and the college essays. Literature about college access shows that students in low-income schools are less likely to complete a rigorous curriculum and receive the one-on-one help that would prepare them for college admission than students in middle and high-income schools (Tierney et al., 2009).

Another study remarked how teachers hold more positive expectations for white students than for African American and Latina/o students (Tenenbaum, & Ruck, 2007). Another factor that undermines the lack of confidence in Latina/os high school students is an atmosphere that sends a message of inferiority and discrimination based on their phenotype or ethnic identity (Noguera, 2001; Padilla, 2006). This structural stigmatization maintains and reinforces the barriers and makes it difficult for Latina /os to access resources that would improve their college preparation. This might be the reason these Latina/o students are more likely to matriculate to two-year than four-year college (Schneider et al., 2006).

It should be noted that peer pressure and the lack of teachers' support were the most resonated relational barriers that participants provided. Finding of peer pressures come to students that do not value college aspirations and in some cases force the students to behave improperly. Similarly, Castillo et al. (2010) found that peers could tempt students into troublesome situations, and they were not a suitable support system to talk about grades, career aspirations and college life.

The findings of the lack of teachers' support for Latina/o students supports prior findings, in which teachers do not care about students (Valenzuela, 2010) and their lack of positive interaction contribute to decreased students' academic performance (Schneider et al., 2006). Another study presented that the relationships between cognition and emotion play a pivotal role in the teaching-learning process for Latina/o students (Galan, 2001). Therefore, the lack of support that Latina/o students conferred is

not only related to academic information, but also to the form in which that information is delivered by teachers and other significant adults.

Some comments crossed the discussion about barriers. Expressions such as "having a job is an excuse not to go to college", "they don't have the motivation to take advantage" and "they're just too lazy to take advantage" undermine the complex interaction between socio-cognitive factors, contextual affordance and personal abilities that define a career direction. These kinds of statements rejected structural barriers that force people to abandon personal interests to embrace strategies of survivors. This finding suggests that Latino students are not aware that "people do not choose careers unilaterally; environments also choose people" (Lent, 2005, p. 109). The interaction between Latina/o' personal interest and environmental condition doom her/him to a particular path that ends up being recognized as valid options (i.e., to get a full-time job, to enroll in the military, or to enroll in a short-term training after graduation). For example, Latina/o chosen to enter to a technical school because he or she considers that this is the best option. However, this Latina/o may not be aware that family conditions, the quality of education they receive, and the jobs available in their community drive her or him consciously or unconsciously to choose that path. Technical or trade school and military are career choices targeted to students in low-income schools (Lott, 2012).

Understandably, overcoming these barriers is a challenging task, particularly for students with low self-efficacy beliefs that are surrounded by unhealthy environments (Brown & Lent, 2006); many of the students surveyed might fall into this category. However, students provided several strategies to cope with those barriers. Problem-

solving (i.e., take SAT preparation programs, apply for scholarships), information seeking (i.e., get reliable information about college steps), self-reliance (to make up their own mind, assert self-motivation and personal effort), support-seeking (i.e., talk to friends and tutors with college experience, counselors), and negotiation (find alternative paths in career development different from college or find a part-time job to pay college expenses) (Lent et al, 2001; Skinner & Zimmer-Gembeck, 2007).

Family responsibilities, negative attitudes and behaviors from teachers and peers were identified as significant barriers in the path to higher education for Latina/o high school students. In opposite way, supportive parents; teachers committed to students' learning, and peers that stimulate academic goals are also valuable resources in completing critical steps for college entry. The next section describes the characteristics of these kinds of supports.

# Significant Adults as Pivotal Support

Findings of this study suggest that encouragement, advice, and help from parents, siblings and relatives were the most valuable supports for Latina/o high school students. In this vein, parents provided emotional and financial support; relatives with college experience provided emotional and informational support. These findings were consistent with previous studies in which parents provide parental support in academic pursuits, career decision and college entry (Castillo et al., 2010; Ceja, 2004; Graff, McCain, & Gomez-Vilchis, 2013; McWhirter, 2007; Metheny & McWhirter, 2013). In this study, parents also encouraged their daughters and sons to achieve personal, educational and professional goals that they could not have the opportunity to reach.

More than 75% of the participants' parents have no college experience; however, parents' life experiences and economic difficulties are also opportunities to learn about the importance of higher education. This finding is consistent with studies of parents' support in which their lack of higher education is a source of motivation that their children surpass them in educational attainment (Ceja, 2004; McWhirter, Valdez, et al. 2013; Sánchez, Reyes, & Singh, 2005). Latina/o students perceived this encouragement by their parents as a compromise and positive pressure for doing well at school and pursuing college or specialized training. Therefore, for Latina/o students, the goal of postsecondary education is to increase the odds of finding jobs with a better incomesalary not only to improve personal welfare but also to improve their family's wellbeing. Additionally, Latino parents that do not know the U.S. postsecondary educational system cannot help their children with the college admissions process. Therefore, the type of support they provide is pushing their children to find the path to higher education themselves, because parents are unable to offer personal experience or networks to facilitate this process. Although Latino parents' motivation is a support to students; this support is enough to guide the students through every step on the path to college entry.

One remarkable finding of this study is that friends and close peers provide emotional, informational, and appraisal support mutually. In this vein, Latina/o students surrounded by other peers interested in higher education tend to share goals, academic and extracurricular activities associated with successful college entry (Lent, 2005; Pérez & McDonough, 2008; Turner & Lapan, 2005). This mutual encouragement is done in competitive or cooperative environments. Participants in the focus groups placed great

emphasis on the value of the support that friends, peers, and college students with the same characteristics can offer them. People who share socio-cultural characteristics (vocational interests, age, ethnicity, geographic location, and barriers) or have experienced similar challenges in their career development (financial, relational or ability barriers) are more sensible to high school students than those who have not experienced similar conditions (Sáenz & Ponjuan, 2012). However, people with different backgrounds can help students with college aspirations as long as these professionals, tutors, or mentors are committed to respect, learn, and value cultural differences (American Psychological Association [APA], 2003; Turner & Lapan, 2005).

Although counselors possess more knowledge and skills in advising students in the college process, in the sample high school studied, the ratio of counselor to students (7/2319) was one counselor for 331 students (WASC 2015). This ratio surpasses three times the optimal student–counselor ratio (100 to 1) purposed by the American School Counselor Association (Johnson, & Rochkind, 2010). This situation was insufficient to meet the demand for college advice for all students. On one hand, participants in the focus groups recognized the fundamental role their counselors played in providing reliable information for college access. On the other hand, participants recognized that counselors' availability was enough to cover the students' initial interests in college preparation. This finding confirm that school counselors play a crucial role to assist students to select rigorous courses and supplemental instruction; provide information and advice about college requirements, and facilitate partnerships with college access programs (Tierney et al., 2009). In 2015, a study demonstrated that high school students

who had an individual meeting with a counselor had a firmer grasp of what career path the might pursue and what major they would choose in college, especially males from low-income areas (Borghans, Golsteyn, & Stenberg, 2015). The applicability of the results of this study might increase the access of Latinos in higher education because males rely on counselors for college advice and are more likely to struggle with a lack of opportunities for college access than females.

Likewise, students in this study believed that they can cope with a lack support in their college aspirations, as long as they have a personal motivation and a firm belief in their capabilities. SCCT points out that an overestimation of their self-efficacy might be self-defeating because of the establishing of unrealistic academic goals is the favorable scenario for overwhelming tasks or undesired failure (Brown & Lent, 2006).

# Issues that Affect Latina/o Students' Self-Efficacy

Latina/o high school student felt less self-efficacious about their abilities to obtain high SAT scores and excel in their essay for college entry. The students experienced high levels of anxiety because of the pressure for achieving high grades on college exams which undermine their academic self-efficacy. In a similar vein, they did not have previous training in taking college exams and their previous educational experiences of academic success in high school are not seen as a guarantee of college success. Additionally, students received negative messages about their academic capabilities by their teachers and former students which undermine their academic self-efficacy beliefs. In this restrictive context, self-efficacy beliefs cannot flourish (Brown & Lent 2006).

Social persuasion and vicarious experiences were the principal sources of self-efficacy for Latina/o high school students. Successful adults (i.e., parents, teachers, relatives) and friends encouraged them to believe in their capabilities and strengths to pursue a college career. This confirms theoretical assumptions SCT that persuasory process might raise youth's perceived self-efficacy for academic pursuits (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001). In a similar way, this finding confirms previous studies in which parents' encouragement fosters self-confidence (Rayle, Arredondo, & Kurpius, 2005) and parents' involvement are predictors of self-efficacy and academic performance and culturally responsible teachers are positively related to Latina/os' academic self-efficacy (Chun & Dickson, 2011).

Participants had few role models in family members, relatives or acquaintances that graduate from colleges and universities. However, the experiences of some parents as unskilled laborers with low wages were viewed as negative vicarious experiences that motivated their children to go to college, to find a job with better compensations and stability. High school students in middle and upper-income areas learn about college lifestyle and career paths through positive vicarious experience from their parents, relatives, and acquaintances; they also have access to networking in their communities that facilitate personal experiences to identify their career path (Perna & Titus, 2005). For instance, workshops, college exam preparation, college courses, and job shadowing.

The participants pointed out strategies to cope with the lack of adults' support, financial pressures, and lack of preparation for SAT that undermines their academic self-efficacy beliefs. These strategies were: problem-focused methods (i.e., practices for

SAT, developing skills to take tests, participating in workshops for college preparation, apply for scholarships), self-reliance (build their self-efficacy), social support-seeking (i.e., talking to someone who already has taken the test, asking teachers for advice about essays, finding people who encourage them), negotiation (proposing mandatory class for college preparation) (Skinner & Zimmer-Gembeck, 2007).

### The Future Does Not Look Bright, But...

The findings of this study suggest that Latina/o students who expect positive outcome expectations (to be accepted in the career they chose and to get the job they want) were engaged in the path of going to college. They considered that going to college is "worth" because they will have more opportunities to get a job with better salary than those who will not go to college. This expectation is consistent with official data about the average income for young adults. In 2013, young adults with a bachelor's degree earned 62% percent more than young adults with a high school diploma (U.S. Department of Education, National Center for Education Statistics [NCES], 2015).

However, there were also Latina/o students that perceived a future less hopeful. These Latina/o students had low expectations about a bright future because a college diploma is not a guarantee to get the job they want. Equally, participants described how relatives that recently graduated from college do not work in the degree in which they studied. Most of all, some students had the belief that this situation will not change in the future and especially for people who live in low-income areas. Therefore, individuals who anticipated negative outcome expectations in higher education; they will not engage in the steps of going college (Brown & Lent, 2006). Although the students did not

discuss salary-income, this hopelessness might be grounded in the earnings disparity across race and ethnicity groups. In 2014, Latinos with bachelor's degree earned less than Asian and White men; Latinas with the same level of education earned less than all races/ethnicity (BLS, 2015). Latina/os earn roughly 13% less than the average of the population. In this sense, the participants of this study had true reasons to consider that the future does not look bright for them because race/ethnicity and gender disparities in income-salary remain even with a college preparation and higher.

The essential criteria that Latina/o students considered choosing a career path is the profitability of the profession instead of their skills or personal interests. This finding confirms theoretical assumptions of SCCT in which personal interests are bypassed for more pragmatic considerations when people live in restrictive environments (Brown & Lent, 2006). In a similar way, Latina/o students avoid to engaging in highly competitive careers because they think they might not be good enough, or they do not fit in. These pessimistic views about their academic capabilities are the results of the systematic stigmatization and marginalization that students received from the society based on their race and ethnicity (Blustein et al., 2010). This pessimistic expectation of their future might be one reason that explains the poor indicators of college attainment in Latina/o students. "Hispanic college students are less likely than their white counterparts to enroll in a four-year college (56% versus 72%), they are less likely to attend a selective college, less likely to be enrolled in college full time, and less likely to complete a bachelor's degree." (Fry & Taylor, 2013).

In some cases, parents and teachers' expectations were different from students' expectations. According to the participants, some parents and teachers emphasized that students should choose careers with a good salary and secure employability. This kind of advice was opposite to some students' interests and skills; especially for those with vocational interests in art and humanities careers. These findings described how the negative experiences that Latino parents had in the workforce and the family economic hardships were the principal criteria that parents had to motivate their kids to choose careers that provide them a high salary. However, in career decision, there are vocational interests, personal skills, previous experiences, gender stereotypes, and socio-economic factors that contribute to building a particular path for a career development (Patrick, Eliason, & Thompson, 2005; Brown & Lent 2012). In a similar way, a high-income salary might not be the only outcome expectation to pursue a college degree. Personal satisfaction, growth, fulfillment, the establishing of professional networks, and giving back to community service are also essential outcomes expectations in the establishing of a particular career development (Brown & Lent, 2012; Collins, 2011). Ultimately, outcome expectations in which to pursue a career will contribute to a radical re-vision of our world in social, cultural, politic, and economic affairs (Tannock, 2006).

## **Traditional Gender Roles Remain in Latino Culture**

Participants provided interesting examples of gender differences in Latino families, in regards to college aspirations. Latino males were viewed as economic providers in regular household expenses or unexpected expenses (i.e., medical treatments); and Latina females were viewed as caregivers responsible for taking care of

their younger siblings and doing household chores. In Latino literature, these gender roles are named as "machismo" and "marianismo".

Machismo refers to specific beliefs, attitudes, and behaviors that have been traditionally ascribed to Latinos such as authority, power, protector, economic provider, and chivalrous family (Arcaya, 1995; Acevedo & Morales, 2001; Casa, 1995; Marin & Marin, 1991; Zuniga, 2001). Marianismo refers to beliefs, attitudes, and behaviors that have been traditionally ascribed to Latina such as caregiver, obedient, spiritual, alluring, and self-sacrifice for their family (Arcaya, 1995; Acevedo & Morales, 2001; Casa et al., 1995; Marin & Marin, 1991; Zuniga, 2001). Those traditional gender roles are not only characteristics of Latino culture; those roles have been found in many patriarchal cultures worldwide (Eckert & McConnell-Ginet, 2013; Gilmore's, 1990 in Casa et al., 1995).

Therefore, the traditional gender roles found in this study may suggest that

Latino families with strong beliefs, attitudes, and behaviors tied to traditional gender
roles hinder college aspirations of their sons and daughters. On one hand, these parents
do not consider the worth of a higher education for their children. On the other hand,
these parents consider their children as means to meet family needs because of economic
hardships.

Latina/o students described other gender difference as it relates to relationships and communication. Females build strong relationships with their friends that allow them to discuss college aspirations and career development openly. This gender role is a protective factor that allows Latinas talk about their aspirations, expectations, failures,

success, worries and goals to the college path. Indeed, Latinas expressed more concerns about the lack of college preparation and how they feel about it than their Latinos counterparts. Different from females, Latinos did not discuss their plans about college with their friends because this behavior might seem "less masculine". Males in patriarchal cultures are socialized to validate their masculinity through power, competition, and control (O'Neil, 1982 as cited in Casa et al., 1995, p. 232); they do no ask for help because they have to solve their problems in an autonomous fashion (Heilbrun, 1961 and Scher, 1981 as cited in Casa et al., 1995, p. 241); and they tend to avoid showing pain or sorrow; therefore, the emotional "shutting down" becomes a "way of being" for adolescent males (Jolliff, & Horne, 1999). Consequently, these stereotypical images of strong and silent men block options to ask for help and obtain suitable advice to follow the steps of going to college. The only window opens for these men socialized in the "boy code" (Pollack, 1998) are counselors, or male college students who may offer to high school students advice, guidance, and non-traditional role models to counteract peers' pressure that discourages them from pursuing a college degree.

#### **Students' Recommendations for College Readiness**

Latina/o high school students asked for the elimination of stigmatization and negative stereotypes based on their race/ethnicity or country origin. The prejudice applied by some members of the school community is the result of the systematic and structural racism that society exerts in Latina/o students which blocks social mobility and exacerbates the difference among social class and races/ethnicities (Martinez, 1982).

Latina/o high school student in this study were interested in going to college and they were aware of their responsibilities and understood that there are steps they need to follow in this matter. However, they recognized they need appropriate support in two ways, in completing the tasks for college entry and building caring relationships with teachers, counselors, and mentors that value their personal effort and respect their cultural identity.

Participants were aware of the toxic environments in which they are living and the lack of opportunities they are facing. These students wanted that adults value the effort that Latina/o students are doing to cope with adversities and maintain academic success in their goal to navigate the higher education to increase their personal, family and community well-being. They were also aware that in a globalized world, a country needs qualified citizens to improving the economy and the competitiveness of their country. Unfortunately, they were not mindful of the fact that post-industrial economies segment the labor market and offers low-wage jobs, little stability, and few opportunities for social mobility to the newcomers and their descendants (Massey, Durand, & Malone, 2002). Simply put, the "American dream" is just that a dream; that is not an attainable goal for Latina/os who live in low-income areas and do not have support for success due to structural discrimination and stigmatization (Lott, 2012).

Latina/o high school students identified strategies that the education system could implement to support the students with the goal of going college. First, the school should determine the barriers that students face in the path of going college. Second, in a similar way to the school used to prepare the students for the CAHSEE, they could use

this strategy to prepare the student for the SAT and college essay. Third, the school could include either an after school program or an elective course to all students to assist students in completing the steps for college entry. The students did not agree on whether or not this course or program should be mandatory or optional (only for interested students). Participants explained that students who disturb the class were not interested in college information. However, participants were unable to identify that the lack of students' interests in academic pursuits is because of some students do not find the relevance of what is being taught in their future (Schneider et al., 2006). In a similar way, the perceptions about masculinity for male students might undermine their opportunities for engagement in academic and college pursuits (Sáenz, & Ponjuan, 2012). Therefore, the lack of interest in academic pursuits is the result of multiple factors that affect students' expectations in educational goals negatively (Sáenz, & Ponjuan, 2012; Schneider et al., 2006).

#### **Conclusions**

The purpose of this study was to understand personal and contextual factors that hinder or foster college aspirations in Latina/o high school students. Findings from both quantitative and qualitative data collected from 11<sup>th</sup> -grade high school students in Southern California provide valuable insight towards SCCT variables and Latina/o students' college aspirations.

The findings of the quantitative data are consistent with prior results indicating that SCCT variables (personal and contextual) are predictive of career-related goals in Latina/o students (McWhirter et al., 2007; McWhirter et al., 2014; Metheny, &

McWhirter 2013). Nevertheless, in this study, contextual factors are more predictive than personal factors in Latina/o students' college aspirations; particularly, barriers and academic performance were shown to be biggest predictors in the general model.

Additionally, these findings suggest that student gender and generation of immigration moderated the predictive utility of the SCCT variables. That is, Latina/o students pursue different paths of going to college according to the varying experiences they face as a determinate of their gender identity and the type of generation they belong.

In specifically examining the roles of contextual (supports and barriers) and personal (self-efficacy and outcome expectations) variables in college aspirations through gender and generations, this study found nuances that allow for a unique understanding of the effects that are manifested by social constructs in Latina/os. For instance, while contextual factors -supports and barriers- were the significant predictors of almost all models, the female and fourth generation models took into account personal factors -self-efficacy and outcome expectations-. These findings suggest that Latinas and older generations are not only influenced by environmental pressures, but also by motivational factors that guide them on their paths to college. These findings assert proof of the firm influence of environmental factors on Latina/o students' college aspirations.

A similar pattern was found for academic performance; self-efficacy was a predictor of academic performance in third and fourth generations, and outcome expectations were a predictor of academic performance in the general, male, first, and fourth generation models. Older generations base their commitment to academic

performance on their ability to believe in their capabilities and positive expectations of their actions while males and first generations rely on the expectations of positive outcomes as a result of their behaviors or actions. In other words, Latinos and first generations engage in academic activities that they perceive in advance in regards to the positive utility of these activities. Concurrently, Latinas' academic performances are influenced more by previous learning experiences, as well as relational and attitudinal factors than motivational factors.

In regards to the impact of contextual factors on personal factors, this study found that supports were predictors of personal factors (self-efficacy and outcome expectations) in all models. This finding suggests that the presence of suitable support plays a pivotal role in increasing motivational factors by direct and/or indirect ways contribute to Latina/o students' college aspirations. Barriers were predictors of selfefficacy in the general model, between the genders, and the first and second generations. Also, barriers were predictors of expectation outcomes in males, first and fourth generation. These findings suggest that barriers affect mainly the motivational factors of Latino males and the first generation. Females and other generations experience the effect of barriers due to their motivational factors in different ways. While Latinas identify more barriers those affect their self-efficacy beliefs, each generation has a particular way in which barriers affect either self-efficacy or outcome expectations. Therefore, gender and generations are social constructs that affect the way in which Latina/o students experience both social support and educational barriers in the path of going to college. In a similar way, these environmental factors –social support and

educational barriers- affect students' confidence in their academic capabilities and expectations of college aspirations.

The influence of parents' educational attainment in personal factors was mediated by the characteristics of gender and generations. While the parents' educational levels did not affect Latinas' motivational factors, it did affect Latinos' outcome expectations. These findings suggest that Latinos may have high outcome expectations of college aspirations when their parents' academic levels are low.

However, this was not the case for females, whose parents' educational level has a relatively insignificant impact on their college aspirations. Subsequently, the influence of parents' levels of education was perceived differently by each generation of immigration. Parents' educational level affected both self-efficacy and outcome expectations in the second and fourth generations. Parents' educational level affected only self-efficacy in the first generation and the outcome expectations in the third generation. Again, the experiences of acculturation might affect motivational factors in each generation differently. For example, in older generations, parents' educational levels are more related to academic expectations than in the first generation.

The influence of SES on all models was unable to be compared because SES was a constant in Latinas, third and fourth generation models (the majority of the students surveyed belonged to a low-income class). In Latino males, SES affected both contextual factors; in the second generation model, it only affected outcome expectations, and in the general models SES did not have an effect on personal factors. These findings suggest that Latinos are more influenced by environmental conditions

than Latinas. Future research needs to examine the profound effects of generational status in Latina/o students' college aspirations.

The findings of the qualitative data provided insights regarding the degree to which contextual and personal factors affect Latina/o high school students' college aspirations, ways in which students cope with obstacles and recommendations for college improvement preparation provided by participants.

Consistent with quantitative data, the qualitative data found that Latina/o high school students experienced more barriers that hindered their college aspirations than supports that facilitated them. The most barriers alleged were: the lack of financial resources, family responsibilities, lack of teachers' support, peer pressure, and systematic discrimination.

These findings suggest that Latina/o students in low-income areas experience an increased sense of obligation to family responsibilities in which males assume the roles of providers and protectors, and females take the roles of caregivers of younger siblings and homemakers of household chores. Although, those duties are related to Latino family values such us familism and collectivism (Acevedo & Morales, 2001; Marin & Marin, 1991; Zuniga, 2001); those traditional gender roles are characteristics of patriarchal cultures spread around the world (Arcaya, 1995; Eckert and McConnell-Ginet, 2013). Interestingly, these findings suggest that Latina/o high school students who live in families in which parents are unable to meet all basic needs are likely expected to assume the responsibilities of an adult to help the family at the expense of their educational pursuits. In this situation, it was not only Latino family that forced them to

accept the responsibilities of an adult but also the segmented labor market that offers low pay and little stability to Latinas/os (Massey et al., 2002).

The lack of teachers' support came from two sources. First, some teachers did not provide the adequate level of academic support to help to prepare the students for college exams. Second, some teachers did not put enough effort to establish the type of teacher-student relationships in which students feel comfortable in asking for help. This finding may be because the curriculum is not aligned with a college preparation; therefore, the curriculum does not provide the right tools for students to develop the knowledge and skills they need to learn to navigate the path to college entry. In addition, there are some teachers who were not sensitive to Latino culture, and they did not understand that Latino culture values caring relationships in teaching-learning processes (Castillo et al., 2010; Ogbu & Simons, 1998, Valenzuela, 2010).

Findings suggest that peer pressure played a significant role in discouraging students to pursue a higher education and in some cases influences students to behave improperly. An interpretation of this result is that the systematic marginalization and stigmatization that Latina/o students face both in the school system and in the workforce drives them to anticipate negative expectations about the return on investment in higher education, and emphasizes the lack of access to better opportunities. For this reason, they discourage other Latinas/os from pursuing a college education.

This study also found that some participants claimed other students do not go to college because they are lazy, or do not take advantage of opportunity. This finding suggests that some Latina/o high school students are not aware of structural

discrimination and unsuitable socio-economic conditions that push some Latinos to enroll in low paying jobs to help their families to meet the basic needs. This economic hardships force Latino students to delay or forget about their college aspirations.

This study also found that some students utilized strategies to cope with these barriers: problem-solving, information seeking, self-reliance, support-seeking, and negotiation. Findings suggest that self-efficacious Latina/o students use these strategies to overcome difficulties and maintain their goal of going to college.

These results suggest that the most valuable resource that Latina/os have in their college aspirations is support from their parents, siblings, and relatives. An interpretation of these findings is that family provides encouragement, advice, economic support, and a sense of pride concerning the students' achievements. Although parents cannot offer suitable information pertaining to the college process, they offer their experiences with hardship that pushes their children to overcome difficulties and improve family conditions.

Regarding teachers, the participants identified that teachers had reliable information and sources to develop the knowledge and skills required to navigate the collegiate journey. An interpretation of this finding is that invested teachers are a crucial component in the students' academic success. However, this kind of support is discretional; only some teachers were willing to provide suitable support for students' career goals. Unfortunately, this task is not a school policy.

Another significant support that participants referred to was that which is rooted in friendship. The benefits of this are twofold; students help each other to achieve

academic goals. This finding suggests that the collectivism and kindship are important values for Latina/o high school students. When Latina/o students are surrounded by friends with similar academic goals, they can overcome barriers that stand in the path to college.

Frequently, the participants experienced high levels of anxiety because of the pressure to achieve high grades on college exams undermines their academic self-efficacy. In a similar vein, they did not have previous training in taking college exams and their previous experiences of academic success in high school were not seen as a guarantee of college success. Additionally, Latina/o high school students received negative messages about their academic capabilities from teachers and former students, which undermined their academic self-efficacy beliefs. In this restrictive context, self-efficacy beliefs cannot flourish (Brown & Lent 2006).

Social persuasion and vicarious experiences were the principal sources of self-efficacy for Latina/o high school students. Successful adults (i.e., parents, teachers, relatives) and friends encouraged them to rely on their capabilities and strengths to pursue a college career. In addition, Latina/o high school students had few role models in family members, relatives or acquaintances that graduated from colleges and universities.

The vicarious experiences of Latina/o high school students also came from negative experiences (unhealthy environments, unskilled jobs, family economic hardships, lack of networks, and insufficient college preparation) which motivated them

to overcome difficulties and find a career path that might provide better conditions than their families might have.

The qualitative data also provided insights regarding areas that students need to consider in obtaining a better preparation for college pursuits. Latina/o high school students asked for school administration and staff to stop the stigmatization and negative stereotypes based on their race/ethnicity. They were aware that higher education not only benefits people who get into a college but also the society in general. The high school may need to consider the barriers that Latina/o students face and develop a curriculum that prepares them for college and subsequent careers. An interpretation of this finding is that Latina/o high school students are aware of their constraints and are capable of determining ways to overcome them. They need a teaching-learning process that challenges them to develop the knowledge, skills, and values required to succeed academically. Likewise, Latina/o high school students need guidance to establish realistic goals according to their capabilities and outcomes if they expect to attain a particular path in their career development (Lent & Brow, 2006).

### Implications for SCCT

Based on this study, contextual factors are potent predictors of Latina/o high school students' college aspirations. These findings confirm theoretical assumptions of SCCT that under unsuitable environmental conditions, personal factors should be compromised for more pragmatic considerations or aspirations (Brown & Lent, 2006). The implications for SCCT choice model is that future research should consider particular types of barriers (i.e., financial, demographic, relational, ability, preparation

motivation) and how those variables affect career choices in Latina/o students. In a similar way, the identification of particular types of supports (i.e., emotional, informational, instrumental, appraisal) that Latina/o students gain from parents, siblings, relatives, teachers, and counselors, can help them to overcome obstacles in the path of college.

Another implication for SCCT is that gender identity was found crucial in Latina/o students' college aspirations. This study used gender as a dichotomy variable female-male; however, future studies may consider other categories for this variable to accommodate different gender identities and how those identities shape career decisions and college aspirations.

Research in SCCT uses "Hispanic" or "Latinos" as a generic category without consider differences in ethnic identities and acculturation processes inside of this ethnic group (Gushue, 2006). For example, the modes of incorporation of a Cuban professional is different from a Salvadorian unskilled worker and both are labeled as "Hispanic". Future studies may consider variations inside of this category to recognize the influence of these factors on college aspirations and career decisions. Findings of this study described that personal and contextual factors behave differently in each generation, and some patterns might be found with large sample size for each generation. For example, contextual factors seem to be strong predictors in young generations as personal factors are in older generations of Latina/o students.

Findings in qualitative results suggest that parents, teachers, and peers operate either supports or barriers in college aspirations. These results confirm SCCT efforts to

conceptualize, catalog, and assess barriers and supports (Lent et al., 2002). The implications of this result for SCCT is that future classifications of barriers and supports may consider parents, siblings, relatives, peers, friends, teachers, and counselors as both a source of social support and an educational barrier.

# Recommendations for Practice

Latina/o high school students have high expectations of going to college (McWhirter et al., 2014; McWhirter, Ramos, et al., 2013), yet data show low rates of college enrollment and completion for Latina/o students (Fry & Taylor, 2013). The results of this study demonstrated that Latina/o students face more barriers than support on the path of going to college. However, it is shown that supports encourage Latina/o' self-efficacy beliefs and outcome expectations. Sequentially, personal factors (self-efficacy and outcome expectations) directly affect college aspirations as well as indirectly through by academic performance. Based on the findings from this study, the following recommendations are provided for parents, teachers, and counselors interested in helping students to navigate the path of college entry.

1. Parents need to learn how to balance family responsibilities with college preparation. The most challenging barrier that Latina/o students face is family obligations. Although young people need to take responsibilities at home, these duties might need to be exanimated based according to the youth's capacity to handle academics. In addition, parents should consider equality in gender when they assign household responsibilities; both females and males can play caregivers or providers' roles to contribute to family welfare according to their skills and their age. However,

parents should also consider the extent to which these responsibilities interfere with academic pursuits and college preparation. In other words, students need economic resources and time to participate in college preparation activities and a decrease in family duties that constrain them from taking part in activities that will contribute to their college readiness. In this way, the emotional support that parents give to their children (i.e., "I want you to go to college...") is complemented by a structural support, to the extent that family conditions allow it.

- 2. Teachers should establish caring relationships with the students. Teachers are valued when they establish caring relationships, push the students to raise their academic performance, and respect Latino heritage. The relationships between cognition and emotion play a significant role in Latina/o students (Rojewski, 2005). Teachers who build caring relationships not only impact the development of social skills but also contribute to raising the Latina/o students' academic interest. In a similar way, Latina/o students valued teachers that challenge them to increase their academic performance and teachers who avoid expressions that reinforce negative stereotypes. Lastly, teachers who respect and value students' cultural identity. These kinds of teachers' attitudes and behaviors provide a safe place for Latina/o students express their ethnic identity and these teachers also help the students to make connections between their Latino heritage and academic success (Ogbu, & 1998).
- 3. Counselors are useful resources in providing college information and career advice. In the school environment, counselors are those who have the best knowledge and skills to assist the students in the path of going to college. However,

the number of counselors in the school in small concerning to the number of students who need support and advice in completing the steps for college entry. Therefore, counselors and school administrators should establish partnerships with higher education institutions and community organizations that foster college preparation programs. Schools that have a career center or college preparation programs need to evaluate the barriers that students face in access to this programs and services as well as assess the effectiveness of this programs into achieving their goals.

### Recommendations for Policy

1. School Districts should stimulate a college-going culture. Pro-college culture is the system of institutions, advisors/mentors, programs, and activities that support college readiness and enrollment (Castillo et al., 2010). School districts can find guidelines to establish the foundation of a college-going culture from elementary to high school. Some organizations have developed guides to help the school districts to develop policies, programs, and actions aimed at students make a smoother transition from high school to college. Two examples that illustrated these guides are: "Helping students navigate the path to college: what high schools can do: a practice guide" (Tierney et al., 2009) published by What Works Clearinghouse (WWC). The purpose of this guide is to recommend five steps which policymakers, school administrators, high school counselors and teachers can follow to increase students' access to higher education. The five steps suggested for WWC are described in Chapter II of this dissertation. The other guide is "Effective practices for promoting the transition of high school

students to college" (Boroch & Hope, 2009). This guide provides a review of the literature and efficient practices for supporting the transition from high school to college. These practices are rigorous curriculum, relevance high school course content, an alignment high school with college-level entry, students' realistic expectations, support students in the transition from secondary to higher education, and articulated pathways among institutions. The California Community College published this guide.

- 2. School Districts and high schools should offer a rigorous curriculum that prepares students for college-level work. The evidence of the research in college readiness (Tierney et al., 2009) show that offer rigorous courses, and a curriculum that prepares the students for the demands of the higher education is crucial in a college-going culture. Successful curriculums provide at least four years of English language, three years of Math; three or two years in science and social studies and two to three years in additional courses -foreign language, arts, physical education, computer literacy, and college preparation- (Tierney et al., 2009). The role of the school administrators is not only to provide the access to these courses but also to ensure that students understand the importance to follow a college-ready curriculum (Tierney et al., 2009).
- 3. School should assess the student process in the path of going college. In addition to regular evaluations of the courses; high schools should implement college-readiness assessment that allows them to identify students' strengths and weakness in knowledge and skills needed to succeed in college. School can

design guidelines for individual learning (Bloom, 2011) in which each student updates information according to her/him educational outcomes (i.e., AP or dual course-taking, GPA, college readiness workshops and career fair attended, areas that need improvement). This strategy contributes to students develop an improvement plan in subjects, areas, or abilities in which they identified their deficiencies. In this students' endeavor, counselors, teachers, and/or mentors are crucial to assist Latina/o students and track students' progress.

- 4. School should stimulate parents' engagement in college readiness. School administrators should make emphasis in establishing appropriate communication with Latino parents to engage them in a college-going culture. Latino parents are willing to support their children in the path of going college; however, parents' knowledge about college preparation is insufficient. For this reason, Latino parents need useful information about college preparation, college entry, financial aid, scholarships, and deadlines to apply for those requirements. In this way, parents may complement the emotional support they already give to their children with informational and appraisal support. As a result, Latino parents become actively involved in their children's paths of going college.
- 5. School district should develop partnerships with organizations that that foster college-going culture. Schools play a pivotal role in to assist students to make smoother transitions forms high school to higher education. However, schools are unable to do this task alone. Schools need partnerships to identify particular Latina/o students' needs related to college- readiness and design

programs that fit these requirements and Latina/o students' characteristics. The establishment of community partnerships is a suitable way to coordinate and mobilize public and private resources, reduce competition among organizations, and decrease the duplication of services (Outley, Bocarro, & Boleman, 2011). The findings of this study revealed that Latina/o high school students not only need information about college preparation and college entry; they also need mentors/advisors that are willing to assist the student in navigating the path of going to college surrounded by caring relationships. In a similar way, the findings of this study show that students lack professional role models in their family and community contexts. Therefore, students need opportunities to visit professionals in their work environment to explore potential career path through job shadowing experiences (McCarthy, & McCarthy, 2006). In those schools that already have these kinds of agreements, periodical process and impact evaluations should be made to identify the level of accountability of these programs.

Several programs around the country that contribute to smoother transitions from high school to college for all students or programs that focus on a particular population to increase their participation in higher education (i.e., women in engineering careers, disadvantaged students). In this section four types of programs are described briefly; the first program is an initiative to reach student from disadvantaged communities, the second and third are programs which the

target population is males or females, and the last program is an example of collaborative efforts between academia and community organizations.

The PUENTE high school is a program that helps high school students to become college eligible, and enroll in college through the assistant of mentors and leaders who provide academic counseling and mentoring (<a href="http://puente.berkeley.edu/">http://puente.berkeley.edu/</a>). The University of California and the California Community College are the sponsors of this project.

The Project MALES is a mentoring program that connects male college students with male high school students to improve their academic success and college-going competencies. This program focuses on young men of color, and the University of Texas at Austin sponsor it (<a href="http://ddce.utexas.edu/projectmales/">http://ddce.utexas.edu/projectmales/</a>). The Future Girls @ The Beach is a mentoring program aimed at inspiring and motivating female students from middle and high school to pursue careers in STEM fields. This program provides female engineering mentors, exposure to engineering careers, and priority to enroll in engineering honors program and scholarship and internship. The California State University Long Beach College of Engineering is the sponsor of this program.

(https://web.csulb.edu/colleges/coe/views/essc/k\_12\_outreach\_recruitment/future girls at the beach.shtml).

Familias en Acción Community Collaborative Council (CCC) is an example of partnership between academia and community organizations. This program focused on increasing student motivation for and access to higher education and

increasing the capacity of families to support their children to achieve academic success. The workshops and activities provided information to young people and parents about college access, financial aid, scholarships, and strategies to cope with socio-emotional barriers. This program also trained community members who assist parent and youth understand the importance of a higher education, strategies to navigate the educational system and actions to cope with youth development issues (Texas Healthy Adolescent Initiative, 2013). The University of Texas Health Science Center, San Antonio (UTHSCSA) and Hispanic residents of Harlandale community sponsored this program. Nowadays, this community-based effort is implementing culturally proficient health interventions for women and their families who are experiencing disparities in health outcomes. (https://nursing.uthscsa.edu/ONRS/CBHP.aspx).

6. Schools should provide scaffolding support for female and male students.

Latina and Latino high school students need differentiated types of support on the road of going college. The findings of this study presented that both genders perceived a lack of preparation; however, Latinas are abler to ask for help than Latinos counterparts. Whereas Latinas expressed their concern about the lack of preparation and the need to received social support from teachers, counselor, and adults with college experience; Latinos considered that they can cope with the lack of preparation by themselves. Therefore, both Latinas and Latinos need a scaffolding support in college preparation according to their gender characteristics. In this vein, the way in which this training is offered might be

different. For example, Latinas feel more comfortable in workshops in which their peers participate; Latinos feel more comfortable in an individual session with a counselor or a mentor –college student-. Another difference, Latinas an assistant to increase their confidence in their academic capabilities; Latinos need support to cope with the lack of family economic support. Although these findings cannot be generalized to all Latina/o high school students; gender as a social construct that matters in the way in which Latinas and Latinos perceived barriers in the path of going to college. Therefore, stakeholder and school administrators interested in increasing college readiness in may consider these differences in the design of policies, programs, and activities to Latina/o youths.

Speak out against discrimination and negative stereotypes. Schools' personnel (administrators, counselors, teachers, and staff) should be aware of the structural discrimination and stigmatization that ethnic minorities face in their daily life. Racism, genderism, and classism are not placed at the individual level. Those prejudices are located in the institutions, in the macro system level of post-industrialized societies (Massey et al., 2002; Martinez, 1982). Therefore, school administrators should encourage discussions about these concerns to gain awareness of the problem and then design collective actions against those expressions of discrimination and stigmatization that each student (labeled as minority student) deal with those stereotypes and prejudice in an individualist fashion every day.

7.

## Recommendations for Further Research

This study presents relevant findings regarding the interplay between contextual factors, personal factors, and college aspirations in Latina/o high school students.

Likewise, gender and generation mediate these relationships. These results suggest several avenues for future research.

- 1. Sources of self-efficacy and outcome expectations. Findings indicate that

  Latina/o students have limited sources of self-efficacy (i.e., personal

  accomplishments, vicarious experiences, social persuasion) that encourage them

  to follow a career path. Future research in college aspirations or career choices

  should hypothesize SCCT choice models that consider not only personal and

  contextual factors, but also sources of self-efficacy as independent variables that

  affect self-efficacy beliefs and outcome expectations.
- 2. Learning experiences and motivational factors. The qualitative results described teaching-learning experiences that affected self-efficacy beliefs and academic success in two different avenues; experiences that discouraged learning process and reinforced negative stereotypes; and experiences that encouraged learning process and trust relationships between teacher and students. The SCCT posits that learning experiences directly influence self-efficacy beliefs and outcome expectations. Future research should consider the analysis of past learning experiences (academic success or failure) and how these experiences are modeling particular paths to drive to college or lead away from college.

- 3. The influence of social constructs (i.e., gender, generations, and social class) on career choices. The findings of this study confirm the effect of gender and generation in Latina/o students' college aspirations. The understanding of social constructs' role in career choices is essential in future Latina/o studies. As stated earlier, research in career development should consider the influence the gender identity and the gendered roles associated with a particular path of going college. In the same token, futures studies should scrutinize the effect of generation of Latina/o students' academic performance and career development. Latino or Hispanic is a broad category; therefore, take into account intra-group variability illuminate the different types of experiences that members of this ethnic category experience in their academic pursuits.
- 4. Coping strategies to overcome barriers. Qualitative findings identified coping strategies that Latina/o used to deal with barriers that hinder their college aspirations. Future research should also explore copings strategies in college students that overcame barriers in competitive college and careers. Literature in coping strategies is available (Gloria, Castellanos, & Orozco, 2005; Chiang, Hunter, & Yeh, 2004; Crockett, 2007); however, little is known about Latina/os enrolled in flag universities.
- 5. Latino families' values and practices and career decisions. The qualitative findings from Latino families suggest that family may play either a role as support or a role as a barrier in which cultural values, acculturation process, and socio-economic conditions should be considered. Future research should explore

the characteristics of supportive or unsupportive families that foster of hinder college aspirations and the socio-economic structure that surround these types of families.

#### REFERENCES

- Acevedo, G., & Morales, J. (2001). Assessment with Latino/Hispanic communities and organizations. In R. Fong & S. B. Furuto (Eds.), *Cultural competent practice skills, interventions, and evaluations* (pp. 147-162). Needham Heights, MA: Pearson Education Company.
- Aguilera-Titus & Deck, A. F. (2016, March 11). Hispanic/Latino presence in the USA and the church. Retrieved from <a href="http://www.usccb.org/issues-and-action/cultural-diversity/resources/upload/presence-hispanic-latino.pdf">http://www.usccb.org/issues-and-action/cultural-diversity/resources/upload/presence-hispanic-latino.pdf</a>
- Ali, S. R., & McWhirter, E. H. (2006). Rural Appalachian youth's vocational/educational postsecondary aspirations applying social cognitive career theory. *Journal of Career Development*, *33*(2), 87-111.
- American Psychological Association. (2003). Guidelines on multicultural education, training, research, practice, and organizational change for psychologists. *The American Psychologist*, 58(5), 377.
- Arcaya, J. (1999). Hispanic American boys and adolescent males. In Horne, A. M., & Kiselica, M. S. (Eds.), *Handbook of counseling boys and adolescent males: A practitioner's guide* (pp. 101-116). Thousand Oaks, CA: Sage Publications.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory.

  Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(1), 1-26.

- Bandura, A. (2006). Adolescent development from an agentic perspective. In F. Pajares & T. Urdan (Eds.), *Self-efficacy beliefs of adolescents* (pp. 1-43). Greenwich, CT: Information Age Publishing.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (2001). Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child Development*, 72(1), 187-206.
- Bloom, T. (2011). *College and career readiness: A systemic P-20 response* (Report for Hobsons Inc.). Retrieved from <a href="http://www.naviance.com/docs/naviance\_white\_paper\_college\_and\_career\_readiness\_a\_systematic\_p20\_response.pdf">http://www.naviance.com/docs/naviance\_white\_paper\_college\_and\_career\_readiness\_a\_systematic\_p20\_response.pdf</a>
- Blustein, D. L., Murphy, K.A., Kenny, M. E., Jernigan, M., Pérez-Gualdrón, L., Castañeda, T., Koepke, M., Land, M., Urbano, A., Davis, O. (2010). Exploring urban students' constructions about school, work, race, and ethnicity. *Journal of Counseling Psychology*, 57(2), 248.
- Bohon, S. A., Johnson, M. K., & Gorman, B. K. (2006). College aspirations and expectations among Latino adolescents in the United States. *Social Problems*, 53(2), 207-225.
- Borghans, L., Golsteyn, B. H., & Stenberg, A. (2015). Does expert advice improve educational choice? *PloS one*, *10*(12), e0145378.
- Boroch, D., & Hope, L. (2009). *Effective practices for promoting the transition of high* school students to college (A review of literature with implications for California

- Community College Practitioners. Academic Senate for California Community Colleges). Retrieved from <a href="http://files.eric.ed.gov/fulltext/ED519286.pdf">http://files.eric.ed.gov/fulltext/ED519286.pdf</a>
- Brown S. D., & Lent, R. W., (2006). Preparing Adolescents to make career decisions. A social cognitive perspective. In F. Pajares & T. Urdan (Eds.), *Self-efficacy beliefs of adolescents* (pp. 201-223). Greenwich, CT: Information Age Publishing.
- Bureau of Labor Statistics (2014). Employment status of the civilian non-institutional population by sex, race, Hispanic or Latino ethnicity, marital status, and detailed age, 2014 annual averages. Retrieved from <a href="http://www.bls.gov/lau/table14full14.pdf">http://www.bls.gov/lau/table14full14.pdf</a>.
- Bureau of Labor Statistics. (2014). *Unemployment rates for states*. Retrieved from <a href="http://www.bls.gov/web/laus/laumstrk.htm">http://www.bls.gov/web/laus/laumstrk.htm</a>
- Burton, L. (2007). Childhood adultification in economically disadvantaged families: a conceptual model. *Family Relations*, 56(4), 329-345.
- California Department of Education. (2013). *Income eligibility scales for 2013-14*.

  income eligibility guidelines for free and reduced-price meals or free milk in child nutrition programs. Retrieved from:

  <a href="http://www.cde.ca.gov/ls/nu/rs/scales1314.asp">http://www.cde.ca.gov/ls/nu/rs/scales1314.asp</a>
- Cano, M. Á., Castillo, L. G., Davis, M. J., López-Arenas, A., Vaquero, J., Thompson, K. V., & Saldivar, I. M. (2012). Dynamics of acculturation, enculturation, and ethnic identity: Influence of psychocultural constructs on conscientiousness and expectations of higher education among Latinos. *International Journal for the Advancement of Counselling*, 34(3), 231-241.

- Casa, M. J., Wagenheim, B.R., Banchero, R., & Mendoza-Romero, J. (1995). In A. Padilla (Eds.), *Hispanic masculinity: myth or psychological schema meriting clinical consideration* (pp. 231-244). Thousand Oaks, CA. SAGE Publications.
- Castillo, L. G., Conoley, C. W., Cepeda, L. M., Ivy, K. K., & Archuleta, D. J. (2010).

  Mexican American adolescents' perceptions of a pro-college culture. *Journal of Hispanic Higher Education*, 9(1), 61-72.
- Castro-Villarreal, F., Guerra, N., Sass, D., & Hseih, P. H. (2014). Models of pre-service teachers' academic achievement: The influence of cognitive motivational variables. *Journal of the Scholarship of Teaching and Learning*, 14(2), 71-95.
- Ceja, M. (2004). Chicana college aspirations and the role of parents: Developing educational resiliency. *Journal of Hispanic Higher Education*, 3, 338-362.
- Center for Immigration Studies (2001). 2nd- and 3rd-generation Mexican-Americans.

  Retrieved from <a href="http://www.cis.org/articles/2001/mexico/generations.html">http://www.cis.org/articles/2001/mexico/generations.html</a>
- Centro para la Historia y Nuevos Medios. (2016) *Bracero history archive*. Retrieved from <a href="http://braceroarchive.org/es/about">http://braceroarchive.org/es/about</a>)
- Chandler, M. (2006). The influence of parenting style and ethnicity on academic selfefficacy and academic performance (Senior honors thesis). Available electronically from http://hdl.handle.net/1969.1/3717
- Chenoweth, E., & Galliher, R. V. (2004). Factors influencing college aspirations of rural West Virginia high school students. *Journal of research in Rural Education*, 19(2), 1-14.

- Chiang, L., Hunter, C. D., & Yeh. C. J. (2004). Coping attitudes, sources, and practices among Black and Latino college students. *Adolescence*, 39(156), 793.
- Children's Defense Fund. (2012). *Portrait of inequality 2012 Hispanic children in America*. Retrieved from <a href="http://www.childrensdefense.org/library/data/a-portrait-of-inequality-2012.pdf">http://www.childrensdefense.org/library/data/a-portrait-of-inequality-2012.pdf</a>
- Chun, H., & Dickson, G. (2011). A psychoecological model of academic performance among Hispanic adolescents. *Journal of Youth and Adolescence*, 40(12), 1581-1594.
- Clark, M. A., Ponjuan, L., Orrock, J., Wilson, T., & Flores, G. (2013). Support and barriers for Latino male students' educational pursuits: Perceptions of counselors and administrators. *Journal of Counseling & Development*, 91(4), 458-466.
- Colby, S. L., & Ortman, J. M. (2015). *Projections of the size and composition of the US*population: 2014 to 2060 (US Census Bureau, Ed, 25-1143). Retrieved from

  <a href="https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25">https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25</a>

  -1143.pdf
- Collins, W. (2011). Authentic engagement for promoting a college-going culture.

  \*Journal of Higher Education Outreach and Engagement, 15(4), 101-118.
- Coronado, R. (2013). World not to come: a history of Latino writing and print culture.

  Cambridge, MA, USA: Harvard University Press.
- Creswell, J. W., & Clark, V. L. P. (201). *Designing and conducting mixed methods* research. Thousand Oaks, CA: Sage.

- Crockett, L. J., Iturbide, M. I., Torres Stone, R. A., McGinley, M., Raffaelli, M., & Carlo, G. (2007). Acculturative stress, social support, and coping: relations to psychological adjustment among Mexican American college students. *Cultural Diversity and Ethnic Minority Psychology*, 13(4), 347.
- Crumpton, N. L. (2005). Career Counseling 1990 to present. In J. Patrick, G. Eliason, and D. L. Thompson (Eds.), *Issues in career development* (pp. 81-99).

  Greenwich, CT: Information Age Publishing.
- Cunningham, A. F., & Santiago, D. A. (2008). *Student aversion to borrowing: who borrows and who doesn't.* (Report by the Institute for Higher Education Policy and *Excelencia* in Education). Retrieved from <a href="http://files.eric.ed.gov/fulltext/ED503684.pdf">http://files.eric.ed.gov/fulltext/ED503684.pdf</a>
- Delgado-Gaitan, C. (1991). Involving parents in the schools: A process of empowerment. *American Journal of Education*, 20-46.
- Erlandson, D. A., Harris, E. L., Skipper, B. L., & Allen, S. D. (1993). *Doing naturalistic inquiry. A guide to methods*. Newbury Park, CA: Sage Publications Ltd.
- Eckert, P., and McConnell-Ginet, S. (2013). *Language and gender*. New York, NY: Cambridge University Press.
- Farrell, W. C., Sapp, M., Johnson, J. H., & Pollard, D. S. (1994). Assessing college aspirations among at-risk high school students: A principal component analysis. *The High School Journal*, 77(4), 294-303.

- Flores, L. Y., Navarro, R. L., & DeWitz, J. (2008). Mexican American high schools' post-secondary educational goals: Applying social cognitive career theory.

  \*Journal of Career Assessment\*, 16(4), 489-501.
- Fry, R., & Taylor, P. (2013). *Hispanic high school graduates pass Whites in rate of college enrollment*. (Pew Research Center). Retrieved from <a href="http://www.pewhispanic.org/2013/05/09/hispanic-high-school-graduates-pass-whites-in-rate-of-college-enrollment/">http://www.pewhispanic.org/2013/05/09/hispanic-high-school-graduates-pass-whites-in-rate-of-college-enrollment/</a>
- Galan, F. (2001). Intervention with Mexican American families. In R. Fong & S. B. Furuto (Eds.), *Cultural competent practice skills, interventions, and evaluations* (pp. 255-268). Needham Heights, MA: Pearson Education Company.
- Gandara, P. (2001). Paving the way to postsecondary education: K-12 intervention programs for underrepresented youth. (Report of the National Postsecondary Education Cooperative Working Group on Access to Postsecondary Education).

  Retrieved from <a href="http://nces.ed.gov/pubs2001/2001205.PDF">http://nces.ed.gov/pubs2001/2001205.PDF</a>
- Gloria, A. M., Castellanos, J., & Orozco, V. (2005). Perceived educational barriers, cultural fit, coping responses, and psychological well-being of Latina undergraduates. *Hispanic Journal of Behavioral Sciences*, 27(2), 161-183.
- Gottfredson, G. D., Holland, J. L., & Gottfredson, L. S. (1975). The relation of vocational aspirations and assessments to employment reality. *Journal of Vocational Behavior*, 7(1), 135-148.
- Graham, S., Taylor, A. Z., & Hudley, C. (1998). Exploring achievement values among ethnic minority early adolescents. *Journal of Educational Psychology*, 90(4), 606.

- Graff, C. S., McCain, T., & Gomez-Vilchis, V. (2013). Latina resilience in higher education: Contributing factors including seasonal farmworker experiences. *Journal of Hispanic Higher Education*, 12(4), 334-344.
- Gushue, G. V. (2006). The relationship of ethnic identity, career decision-making self-efficacy and outcome expectations among Latino/a high school students. *Journal of Vocational Behavior*, 68(1), 85-95.
- Hackett, G., Betz, N. E., Casas, J. M., & Rocha-Singh, I. A. (1992). Gender, ethnicity, and social cognitive factors predicting the academic achievement of students in engineering. *Journal of counseling Psychology*, 39(4), 527.
- Hanson, S. L. (1994). Lost Talent: Unrealized educational aspirations and expectations among U.S. youths. *Sociology of Education*, *67*(3), 159–183. http://doi.org/10.2307/2112789
- Hauser, R. M., & Anderson, D. K. (1991). Post-high school plans and aspirations of Black and White high school seniors: 1976-86. *Sociology of Education*, 263-277.
- Hays, D. G., & Singh, A. A. (2011). *Qualitative inquiry in clinical and educational settings*. New York, NY: Guilford Press.
- Hennink, M. M. (2014). Focus group discussions: Understanding qualitative research.

  New York, NY: Oxford University Press.
- Hernández, B. (2012). Fear of asking: factors that inhibit Latinos in seeking and obtaining credit for small business (Honors Thesis Program in the College of Management. University of Massachusetts Boston). Retrieved from

- http://scholarworks.umb.edu/cgi/viewcontent.cgi?article=1010&context=manage ment\_hontheses
- Inda, M., Rodríguez, C., & Peña, J. V. (2013). Gender differences in applying social cognitive career theory in engineering students. *Journal of Vocational Behavior*, 83(3), 346-355.
- Jimenez, T. R. (2010). Replenished ethnicity: Mexican Americans, immigrations, and identity. Berkeley, CA: University of California Press.
- Jolliff, D., & Horne, A. M. (1999). Growing up male: The development of mature masculinity. In A, M. Horne & M. /s. Kiselica. (Eds.), *Handbook of counseling boys and adolescent males: A practitioners' guide.* (pp. 3-23) Thousand Oaks, CA: Sage.
- Johnson, J., & Rochkind, J. (2010). Can I get a little advice here? how an overstretched high school guidance system is undermining students' college aspirations? (Public Agenda Report for the Bill & Melinda Gates Foundation).

  Retrieved from <a href="http://files.eric.ed.gov/fulltext/ED508672.pdf">http://files.eric.ed.gov/fulltext/ED508672.pdf</a>
- Krogstad, J. M. (2015). *5 facts about Latinos and education* (Pew Research Center).

  Retrieved from <a href="http://www.pewresearch.org/fact-tank/2015/05/26/5-facts-about-latinos-and-education/">http://www.pewresearch.org/fact-tank/2015/05/26/5-facts-about-latinos-and-education/</a>
- Krogstad, J. M., & Fry, R. (2014). *More Hispanics, Blacks enrolling in college, but lag in bachelor's degrees* (Pew Research Center). Retrieved from <a href="http://www.pewresearch.org/fact-tank/2014/04/24/more-hispanics-blacks-enrolling-in-college-but-lag-in-bachelors-degrees/">http://www.pewresearch.org/fact-tank/2014/04/24/more-hispanics-blacks-enrolling-in-college-but-lag-in-bachelors-degrees/</a>

- Lent, R. W. (2005). A social cognitive view of career development and counseling. In S.
  D. Brown & R. W. Lent (Eds.), *Career development and counseling, putting theory and research to work* (pp. 101-127). Hoboken, NJ: John Wiley & Sons, Inc.
- Lent, R. W. (2012). Social cognitive career theory. In S. D. Brown & R. W. Lent (Eds.),

  Career development and counseling: putting theory and research to work (2)

  (pp. 115-146). Somerset, US: Wiley, 2012. ProQuest ebrary. Web.
- Lent, R. W., & Brown, S. D. (2006). On conceptualizing and assessing social cognitive constructs in career research: A measurement guide. *Journal of Career Assessment*, 14(1), 12-35.
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45(1), 79-122.
- Lent, R. W., Brown, S. D., & Hackett, G. (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of Counseling*Psychology, 47(1), 36.
- Lent, R. W., Brown, S. D., Schmidt, J., Brenner, B., Lyons, H., & Treistman, D. (2003).
   Relation of contextual supports and barriers to choice behavior in engineering
   majors: Test of alternative social cognitive models. *Journal of Counseling Psychology*, 50(4), 458.
- Lent, R. W., Brown, S. D., Sheu, H. B., Schmidt, J., Brenner, B. R., Gloster, C. S., ... & Treistman, D. (2005). Social cognitive predictors of academic interests and goals

- in engineering: utility for women and students at historically Black Universities. *Journal of Counseling Psychology*, 52(1),
- Lent, R. W., Brown, S. D., Talleyrand, R., McPartland, E. B., Davis, T., Chopra, S. B.,
  ... & Chai, C. M. (2002). Career choice barriers, supports, and coping strategies:
  College students' experiences. *Journal of Vocational Behavior*, 60(1), 61-72.
- López, M. H. (2009). Latina/os and education: Explaining the attainment gap (Pew Research Center). Retrieved from <a href="http://www.pewhispanic.org/files/reports/115.pdf">http://www.pewhispanic.org/files/reports/115.pdf</a>
- López, M. H., & González-Barrera, A. (2014). Women's college enrollment gains leave men behind (Pew Research Center). Retrieved from <a href="http://www.pewresearch.org/fact-tank/2014/03/06/womens-college-enrollment-gains-leave-men-behind/">http://www.pewresearch.org/fact-tank/2014/03/06/womens-college-enrollment-gains-leave-men-behind/</a>
- Lott, B. (2012). The social psychology of class and classism. *American Psychologist*, 67(8), 650.
- Martínez, R. (1982). Internal colonialism: A reconceptualization of race relations in the United States. *Humboldt Journal of Social Relations*, 163-176.
- Marin, G. & Marin, B. (1991). Research with Hispanic populations. Newbury Park, CA: Sage.
- Massey, D. S., Durand, J., & Malone, N. J. (2002). Beyond smoke and mirrors: Mexican immigration in an era of economic integration. New York, NY: Russell Sage Foundation.

- McCarthy, P. R., & McCarthy, H. M. (2006). When case studies are not enough:

  Integrating experiential learning into business curricula. *Journal of Education for Business*, 81(4), 201-204.
- McKown, C., & Weinstein, R. S. (2003). The development and consequences of stereotype consciousness in middle childhood. *Child Development*, 74(2), 498-515.
- McNamara, M. W. (2012). Self-efficacy, stress, and acculturation as predictors of first year science success among Latinos at a South Texas University (Doctoral dissertation, Texas A&M University-Corpus Christi). Retrieved from <a href="http://search.proquest.com/pqdtglobal/docview/1284793872/fulltextPDF/4F03C79DEF2445FDPQ/1?accountid=7082">http://search.proquest.com/pqdtglobal/docview/1284793872/fulltextPDF/4F03C79DEF2445FDPQ/1?accountid=7082</a>
- McWhirter, E. H., Crothers, M., & Rasheed, S. (2000). The effects of high school career education on social–cognitive variables. *Journal of Counseling*Psychology, 47(3), 330
- McWhirter, E. H., Luginbuhl, P. J., & Brown, K. (2014). ¡ Apóyenos! Latina/o student recommendations for high school supports. *Journal of Career Development*, 41(1), 3-23.
- McWhirter, E. H., & Metheny, J. (2009). Vocational outcome expectations-revised. A revised measure of expectations associated with high school career planning.

  Unpublished measure.

- McWhirter, E. H., Ramos, K., & Medina, C. (2013). ¿Y ahora qué? Anticipated immigration status barriers and Latina/o high school students' future expectations. *Cultural Diversity and Ethnic Minority Psychology*, 19(3), 288.
- McWhirter, E. H., Torres, D. M., Salgado, S., & Valdez, M. (2007). Perceived barriers and postsecondary plans in Mexican American and White adolescents. *Journal of Career Assessment*, 15(1), 119-138.
- McWhirter, E. H., Valdez, M., & Caban, A. R. (2013). Latina adolescents' plans, barriers, and supports: A focus group study. *Journal of Latina/o Psychology*, *1*(1), 35.
- Metheny, J., & McWhirter, E. H. (2013). Contributions of social status and family support to college students' career decision self-efficacy and outcome expectations. *Journal of Career Assessment*, 21(3), 378-394.
- Mickelson, R. A. (1990). The attitude-achievement paradox among Black adolescents. *Sociology of education*, 44-61.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oak, CA: Sage.
- Mörner, M. (1967). *Race mixture in the history of Latin America*. Boston, MA: Little, Brown and Company.
- Murguia, E. (1975). Assimilation, colonialism and the Mexican American people.

  Austin, TX: University of Texas at Austin.
- Murguia, E., & Forman, T. (2003). Shades of whiteness: The Mexican American experience in relation to Anglos and Blacks. In A. W. Donae & E. Bonilla-Silva

- (Eds.), White out: The continuing significance of racism (pp. 63-79). New York, NY: Routledge.
- Murguia, E., & Saenz, R. (2002). An analysis of the Latin Americanization of race in the United States: a reconnaissance of color stratification among Mexicans. *Race and Society*, *5*(1), 85-101.
- Museus, S. D., & Harper, S. D. & Nichols, AH (2010). Racial differences in the formation of post-secondary educational expectations: A structural model. *Teacher's College Record*, 112(3), 811-842.
- National Center for Education Statistics. (2015). *Public High School Graduation Rates*.

  Retrieved from http://nces.ed.gov/programs/coe/indicator\_coi.asp
- Negroni-Rodríguez, L., & Morales, J. (2001). Individual and Family Assessment Skills with Latino/Hispanic Americans. In R. Fong & S. B. Furuto (Eds.), *Cultural competent practice skills, interventions, and evaluations* (pp. 132-146). Needham Heights, MA: Pearson Education Company.
- Newbold, P., Carlson, W. L., & Thorne, B. M. (2007). *Statistics for business and economics*. Boston, MA: Pearson.
- Noguera, P. A. (2001). Transforming urban schools through investments in the social capital of parents. *Psychology*, 16, 725-50
- Nora, A., & Crisp, G. (2012). Future research on Hispanic students: what have we yet to learn?" and" what new and diverse perspectives are needed to examine Latino success in higher education? (White paper prepared for the Hispanic Association of Colleges and Universities). Retrieved from

- http://www.hacu.net/images/hacu/OPAI/H3ERC/2012\_papers/Nora%20crisp%2 0-%20future%20research%20on%20hispanics%20-%202012.pdf
- Ogbu, J. U., & Simons, H. D. (1998). Voluntary and involuntary minorities: A cultural-ecological theory of school performance with some implications for education. *Anthropology & Education Quarterly*, 29(2), 155-188.
- Ojeda, L., Flores, L. Y., & Navarro, R. L. (2011). Social cognitive predictors of Mexican American college students' academic and life satisfaction. *Journal of Counseling Psychology*, 58(1), 61.
- Olivero, H (2015) *Hispanic family size in USA shrinking* (Population Research Institute). Retrieved from <a href="https://www.pop.org/content/hispanic-family-size-usa-shrinking">https://www.pop.org/content/hispanic-family-size-usa-shrinking</a>.
- Outley, C., Bocarro, J. N., & Boleman, C. T. (2011). Recreation as a component of the community youth development system. *New directions for youth development*, 2011(130), 59-72.
- Padilla, A. M. (2006). Bicultural social development. *Hispanic Journal of Behavioral Sciences*, 28(4), 467-497.
- Patrick, John, Eliason, Grafton, & Thompson, Donald L. (2005) *Issues in Career Development*. Greenwich, CT: Informational Age Publishing.
- Peloso, V. C. (2014). *Race and ethnicity in Latin American history*. New York, NY: Routledge Taylor & Francis.
- Perez, P. A., & McDonough, P. M. (2008). Understanding Latina and Latino college choice: A social capital and chain migration analysis. *Journal of Hispanic Higher Education*.

- Perna, L. W., & Titus, M. A. (2005). The relationship between parental involvement as social capital and college enrollment: An examination of racial/ethnic group differences. *Journal of Higher Education*, 485-518.
- Perry, B. L., Link, T., Boelter, C., & Leukefeld, C. (2012). Blinded to science: Gender differences in the effects of race, ethnicity, and socioeconomic status on academic and science attitudes among sixth graders. *Gender and Education*, 24(7), 725-743.
- Pike, G. R., Kuh, G. D., & Massa-McKinley, R. C. (2008). First-year students' employment, engagement, and academic achievement: Untangling the relationship between work and grades. *Naspa Journal*, 45(4), 560-582.
- Pollack, William S. (1998). *Real Boys: Rescuing our sons from the myths of boyhood.*New York, NY: Henry Holt & Company.
- Porfeli, E. J., Niles, S. G., and Trusty, J. (2005). Theories of career development: core concepts and propositions. In J. Patrick, G. Eliason & D. L. Thompson (Eds), 

  \*Issues in career development\* (pp. 1-42). Greenwich, CT: Information Age 

  Publishing.
- Portes, A., & Rumbaut, R. G. (2001). Legacies: The story of the immigrant second generation. Berkeley, CA: University of California Press.
- Portes, A., & Rumbaut, R. G. (2006). *Immigrant America: a portrait*. Berkeley and Los Angeles, CA: University of California Press.
- Pryor, J. H., Eagan, K., Palucki Blake, L., Hurtado, S., Berdan, J., & Case, M. H. (2012). *The American freshman: National norms fall 2012* (Higher Education Research

- Institute, UCLA). Retrieved from <a href="http://www.heri.ucla.edu/monographs/theamericanfreshman2012.pdf">http://www.heri.ucla.edu/monographs/theamericanfreshman2012.pdf</a>
- Rayle, A. D., Arredondo, P., & Kurpius, S. E. R. (2005). Educational self-efficacy of college women: Implications for theory, research, and practice. *Journal of Counseling & Development*, 83(3), 361.
- Rojewski, J. W. (2005). Occupational aspirations: construct, meanings, and application.

  In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling,*putting theory and research to work (pp. 131-154). Hoboken, NJ: John Wiley & Sons, Inc.
- Sáenz, V. B., & Ponjuan, L. (2011). *Men of color: Ensuring the academic success of Latino males in higher education* (Institute for Higher Education Policy).

  Retrieved from

  <a href="http://www.ihep.org/sites/default/files/uploads/docs/pubs/brief\_men\_of\_color\_lat\_inos.pdf">http://www.ihep.org/sites/default/files/uploads/docs/pubs/brief\_men\_of\_color\_lat\_inos.pdf</a>
- Sáenz, V. B., & Ponjuan, L. (2012). *Latino males: Improving college access and degree*completion: A new national imperative (Perspectivas, Issues in Higher Education
  Policy and Practice, No.1.) Retrieved from

  <a href="http://www.aahhe.org/\_resources/pdf/Perspectivas-Vol1.pdf">http://www.aahhe.org/\_resources/pdf/Perspectivas-Vol1.pdf</a>
- Sánchez, B., Reyes, O., & Singh, J. (2006). Makin'It in College the Value of Significant Individuals in the Lives of Mexican American Adolescents. *Journal of Hispanic Higher Education*, 5(1), 48-67.

- Schneider, B., Martinez, S., & Owens, A. (2006). Barriers to educational opportunities for Hispanics in the United States. In M. Tienda & F. Mitchell (Eds.), *Hispanics and the future of America. Panel of Hispanics in the United States* (pp. 179-227). Washington, D.C: The National Academies Press.
- Skinner, E. A., & Zimmer-Gembeck, M. J. (2007). The development of coping. *Annu. Rev. Psychol.*, 58, 119-144.
- Sheu, H. B., Lent, R. W., Brown, S. D., Miller, M. J., Hennessy, K. D., & Duffy, R. D. (2010). Testing the choice model of social cognitive career theory across Holland themes: A meta-analytic path analysis. *Journal of Vocational Behavior*, 76(2), 252-264.
- Smith, J. P. (2003). Assimilation across the Latino generations. *The American Economic Review*, 93(2), 315-319.
- Spall, S. (1998). Peer debriefing in qualitative research: Emerging operational models. *Qualitative Inquiry*, 4(2), 280-292.
- Stewart, D. W., Shamdasani, P. N., Rock, D. W. (2007). *Focus groups: Theory and practice*. Thousand Oaks, CA: Sage Publications Inc.
- Swanson, J.L., & Fouad, N. A. (1999). *Career theory and practice. learning through* case studies. Thousand Oaks, CA: Sage Publications Inc.
- Swanson, J. L., & Woitke, M. B. (1997). Theory into practice in career assessment for women: Assessment and interventions regarding perceived career barriers. *Journal of Career Assessment*, 5(4), 443-462.

- Tabachnick, B. G. and Fidell, L. S. (2001) *Using Multivariate Statistics*. Needham Heights, MA: Person Education Company.
- Takao, M. J. M. (2007). An analysis of selected decision making variables and the effects they have on the post-secondary education plans of 16-21 year old youth from the United States (Doctoral dissertation, Texas A&M University). Available electronically from <a href="http://hdl.handle.net/1969.1/5972">http://hdl.handle.net/1969.1/5972</a>.
- Tannock, S. (2006). Higher education, inequality, and the public good. *Dissent*,53(2), 45-51.
- Taylor, P., Cohn, D. V., & Gonzalez-Barrera, A. (2013). Second-generation Americans:

  A portrait of the adult children of immigrants. social and demographic trends

  (Report from Pew Research Center). Retrieved from

  <a href="http://www.pewsocialtrends.org/files/2013/02/FINAL\_immigrant\_generations\_re">http://www.pewsocialtrends.org/files/2013/02/FINAL\_immigrant\_generations\_re</a>

  port\_2-7-13.pdf
- Tenenbaum, H. R., & Ruck, M. D. (2007). Are teachers' expectations different for racial minority than for European American students? A meta-analysis. *Journal of Educational Psychology*, 99(2), 253.
- Tenko, R., & Marcoulides, G. (2000). First course in structural equation modeling.

  Mahwah, N.J: Lawrence Erlbaum Associates.
- Tierney, W. G., Bailey, T., Constantine, J., Finkelstein, N., & Hurd, N. F. (2009).

  Helping students navigate the path to college: What high schools can do

  (Practice guide from the National Center for Education Evaluation and Regional

- Assistance, Institute of Education Sciences, US Department of Education).

  Retrieved from <a href="http://ies.ed.gov/ncee/wwc/publications/practiceguides/">http://ies.ed.gov/ncee/wwc/publications/practiceguides/</a>
- Turner, S. L., & Lapan, R. T. (2005). Promoting career development and aspirations in school-age youth. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 539-564). Hoboken, NJ: John Wiley & Sons Inc.
- U.S. Department of Education, National Center for Education Statistics. (2015). *The condition of education 2015* (NCES 2015-144, Annual Earnings of Young Adults). Retrieved from: <a href="https://nces.ed.gov/fastfacts/display.asp?id=77">https://nces.ed.gov/fastfacts/display.asp?id=77</a>
- Valenzuela, A. (2010). Subtractive schooling: US-Mexican youth and the politics of caring. Albany, NY: Suny Press.
- Wade, P., Lopez, C. B., Restrepo, E., and Ventura, R. S. (2014) *Mestizo genomics: Race mixture, nation, and science in Latin America*. Durham, NC: Duke University Press.
- Zuniga, M. E. (2001). Latinos: cultural competence and ethics. In R. Fong R. & FurutoS. B. (Eds.), *Cultural competent practice skills, interventions, and evaluations*(pp. 47-60). Needham Heights, MA: Pearson Education Company.

# **APPENDIXES**

### **APPENDIX I**

### PARENTAL PERMISSION FORM

# Project Title: PERSONAL AND ENVIRONMENTAL VARIABLES THAT HINDER OR FOSTER COLLEGE ASPIRATIONS IN LATINA/O HIGH SCHOOL STUDENTS

You are invited to take part in a research study being conducted by Dr. Corliss Outley, a researcher from Texas A&M University. The information in this form is provided to help you and your child decide whether or not to take part. If you decide to allow your child to take part in the study, you will be asked to sign this permission form. If you decide you do not want your child to participate, there will be no penalty to you or your child, and your child will not lose any benefits they normally would have.

## Why Is This Study Being Done?

The purpose of this project is to determine personal, family, school, and community factors that hinder or foster college aspirations in Latina/o high school students.

## Why is My Child Being Asked to Be in This Study?

Your child is being asked to be in this study because your child is an 11th grade Latina or Latino student currently enrolled in a public high school.

## What Will My Child Be Asked to Do in This Study?

Your child will be asked to participate in both a paper-pencil survey and a focus group discussion. The survey will be used to assess your child's attitudes and perceptions of college aspiration. The survey should take about 30 minutes to complete it. The focus group will ask your child questions about how he/she interprets the results of the college aspirations survey made previously. Each focus group will consist of six to seven people engaging in a discussion, led by a researcher. If your child chooses to participate in the focus groups, it should take about 60 minutes to complete it and we will make an audio recording of the focus group discussion.

### Will Photos, Video or Audio Recordings Be Made of My Child during the Study?

The researchers will make an audio recording only during the focus group discussion; so that researchers have an accurate record of what participants discussed during their focus group, only if you and your child give permission to do so. Indicate your decision below by initialing in the space provided.

		I give	permiss	ion for	audio :	recording	gs to	be r	nade	of my	child	during
their <sub>l</sub>	participa	tion in	this rese	arch st	udy.							

\_\_\_\_\_ I do not give permission for audio recordings to be made of my child during their participation in this research study.

### **Are There Any Risks to My Child?**

The things that your child will be doing will have no greater risks than your child would come across in everyday life. There is the chance that expressing her/his opinions will

put your child in social discomfort. But, she/he does not have to answer any questions she/he does not want to. Also, the answers she/he provides will be kept confidential. Her/his part in this study is confidential to the researcher. Any reports or publications based on this research will use only group data and will not identify she/he or any individual as being affiliated with this project.

## Will There Be Any Costs to My Child?

Aside from their time, there are no costs for taking part in the study.

## Will Information from This Study Be Kept Private?

The records of this study will be kept private. The researchers will provide a formal report and will make a presentation of the aggregate results of the research to the Lynwood High School administrators. However, no identifiers linking your child to this study will be included in any sort of report that might be published. Research records will be stored securely and only approved research study personnel will have access to the records.

### Who may I Contact for More Information?

You may contact Dr. Corliss Outley to tell her about a concern or complaint about this research 979-845-5330 or coutley@tamu.edu. For questions about your rights as a research participant, to provide input regarding research, or if you have questions, complaints, or concerns about the research, you may call the Texas A&M University Human Subjects Protection Program office by phone at 1-979-458-4067, toll free at 1-855-795-8636, or by email at irb@tamu.edu.

## What if I Change My Mind About Participating?

This research is voluntary and you have the choice whether or not to allow your child to be in this research study. Your child may decide to not begin or to stop participating at any time. If they choose not to be in this study or stop being in the study, there will be no effect to them. By allowing your child to participate in this research study, you are giving permission for the investigators to use any information provided for research purposes.

#### STATEMENT OF CONSENT

The procedures, risks, and benefits of this study have been told to me and I agree to allow my child to be in this study. My questions have been answered. I may ask more questions whenever I want. I do not give up any of my child's or my legal rights by signing this form. A copy of this consent form will be given to me.

Child's Name	_
Parent/Legal Guardian Signature	Date
Parent/Legal Guardian Signature	Date

# **INVESTIGATOR'S AFFIDAVIT:**

project. I hereby certify that to the be	ly explained to the parent the nature of the above st of my knowledge the person who signed this ture, demands, benefits, and risks involved in
Signature of Presenter	Date
Printed Name	Date

### APPENDIX II

### MINOR'S ASSENT FORM

# Project Title: PERSONAL AND ENVIRONMENTAL VARIABLES THAT HINDER OR FOSTER COLLEGE ASPIRATIONS IN LATINA/O HIGH SCHOOL STUDENTS

You are being asked to join a research study. A research study is a science project that is trying to answer a question. This research project is trying to see if personal, family, school, and community factors hinder or foster college aspirations in Latina/o high school students. To do this, we will need to ask you fill out a paper-pencil format questionnaire and eventually, along with a group of other youth your age a couple of questions about how you interpret the results of the college aspirations survey made previously. This is a focus group discussion. If you chose to participate in the focus group discussions, the researchers will make an audio recording; so that researchers have an accurate record of what participants said during their focus groups only if you give your permission to do so. Indicate your decision below by initialing in the space provided. I give my permission for audio recordings to be made of me during my participation in this research study. I do not give my permission for audio recordings to be made of me during my participation in this research study. You do not have to be in this research study and you can stop at any time. If you have any questions, you can talk to your parents, or the person talking to you about this form. Do you have any questions? Do you want to be in this research study? Minor's Name

Date

Date

Minor's Signature (if applicable)

Presenter's Signature

## **APPENDIX III**

## SAMPLE OF THE SURVEY QUESTIONNAIRE

Five sample items from the Vocational Outcome Expectations measure (McWhirter & Metheny, 2009).) are shown below:

Please indicate the extent to which you agree or disagree with each of the following statements:

	Strongly Disagree		Disagree		Unsure		Agree		Strongly Agree	
	0	1	2	3	4	5	6	7	8	9
1. My college aspirations will lead to a satisfying career for me.	О	О	О	О	О	О	О	О	О	О
2. I will be successful in my chosen career/occupation.	О	О	О	О	О	О	О	О	О	О
3. The future looks bright for me.	О	0	0	О	0	0	0	0	О	О
4. My talents and skills will be used in my career/occupation.	0	О	О	О	О	О	О	О	О	О
5. I have control over my career decisions.	0	О	О	О	О	О	О	О	О	О

Reprinted with permission from "Vocational Outcome Expectations-Revised. A revised measure of expectations associated with high school career planning" by McWhirter, E. H., & Metheny, J. (2009). Unpublished measure.

## **APPENDIX IV**

# FOCUS GROUP PROTOCOL

# **Focus Group Protocol College Aspirations**

# **Introduction, Explanation, Group Process**

Moderator introduces her/himself and explains project's purpose.
Hello, my name is and I am a/an at Texas A&M University. My assistants are They will be taking notes during the interview. We are working on a project to determine personal, family, school, and community factors that hinder or foster college aspirations in Latina/o high school students. This project will help designing and implementing programs that foster college access to Latina/Latino students. Before we begin, let me tell you about this interview and answer any initial questions you may have.
We are interested in your own opinions, in other words, what you think and feel about each topic. Everything you say in this interview will be kept private and no names will be used in the report. It is important to us that you give us your honest opinions. We will be recording your comments today, for a researcher to review and summarize your thoughts in a report. The recordings will be kept confidential.
Our interview will last about one hour. Please speak clearly and share your opinions.  There are no rights or wrong answers. (Ensure everyone has signed the consent form)
Does anyone have any questions? (Pause- answer any questions) May we turn on the recorder? (Turn on recorder and begin with first question below)

### **Focus Group Questions**

### Let's star by introducing ourselves

- 1. Let's each share our first names and tell us a little bit about you, anything you want to share with us.
- 2. What comes to your mind when you finished filling out the survey about college aspirations and college expectations last month?

## Barriers that hinder students' college aspirations

First, I would like to share with you some results of the survey about college aspirations... (We will present the results about the barriers that hinder college aspirations)

- 3. What thoughts went through your head while you see these results?
- 4. What do you think about those barriers that most affect the students' college aspirations?
- 5. Think about high school students interested to go to college. Do you consider those barriers would be difficult to overcome and why?

### Supports that foster students' college aspirations

Now, let's focus on the results about supports... (We will present the results about the supports that foster college aspirations)

- 6. Tell me about these results.
- 7. What do you think high school students need those types of supports in their goal to go to college and why?
- 8. Think about high school students interested to go to college. Do you consider students would enroll in college without those types of supports and why?

### **Academic Self-efficacy**

Now, let's talk about Academic Self-efficacy. Academic Self-efficacy is personal beliefs about academic capabilities. For example, when a person says, "I'm confidence in my academic capabilities to go to college".

According to the results, Latino Academic self-efficacy is characterized by ... (we will present the results)

- 9. What thoughts went through your head while you see these results?
- 10. Think about highs school students. How would affect student' academic self-efficacy his/her college aspirations?

### **Outcome expectations in college aspirations**

Now, let's talk about Outcome expectations. Outcome expectations are personal beliefs about the consequences of performing particular behaviors. For example, when a person says, "What will happen if I do this?"

According to the results, Latino outcome expectations are characterized by ... (We will present the results)

- 11. What thoughts went through your head while you see these results?
- 12. Think about highs school students. How would affect student' outcome expectations his/her college aspirations?

### **Summary and Closing**

We just have a few last questions...

- 13. If you had just one minute with Mr. Arne Duncan the U.S. Secretary of Education what message would you like to convey from our discussion today?
- 14. Are there any other things about high school's college aspirations that you would like to share before we finish?

Thank you for sharing your thoughts with us today.