Perceived Career Barriers: The Role of Ethnic Identity, Acculturation, and Self-Efficacy
Mediators among Latina/o College Students

Brenda Xiomara Mejia

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
under the Executive Committee
of the Graduate School of Arts and Sciences

COLUMBIA UNIVERSITY

2011

ABSTRACT

Perceived Career Barriers: The Role of Ethnic Identity, Acculturation, and Self-Efficacy

Mediators among Latina/o College Students

Brenda X. Mejia

Sociohistorical, sociopolitical and sociostructural barriers in American society create different paths in the college-to-work transition. Some individuals can follow their natural calling for a vocation, while others must contend with limited access to occupational opportunities. The emancipatory communitarian (EC) framework advocates for resisting and changing of structural barriers that hinder the career path of oppressed groups. Social Cognitive Career Theory (SCCT) explains how sociocultural and background contextual factors interact with self-efficacy, outcome expectations, and career goals to shape career behavior.

The present study investigated the relation of ethnic identity and acculturation to self-efficacy beliefs and outcome expectations by testing the validity of SCCT tenets with a sample of 357 Latina/o college students. An EC-SCCT framework was used to explore the relationships among ethnic identity, acculturation level, career decision self-efficacy, coping efficacy, and perceived barriers. The results of a modified path model demonstrated that, for this sample, career decision self-efficacy mediated the influence of ethnic identity and Anglo bicultural orientation on the perception of career barriers. The findings also point to the role of ethnic identity in augmenting Latina/o students' career decision self-efficacy and increasing awareness about career barriers (e.g., ethnic discrimination). The current study contributes to the literature promoting a liberational approach to vocational and counseling psychology theory, research, and practice. Limitations and implications for theory, research, training, and practice are discussed.

TABLE OF CONTENTS

List of Figures	v
List of Tables.....	vi
CHAPTER I: INTRODUCTION.....	1
Career Barriers	4
Perceived Career Barriers.....	6
Resistance to Barriers.....	7
Ethnic Identity	7
Acculturation.....	8
Self-Efficacy.....	8
Purpose of the Present Study.....	9
CHAPTER II: REVIEW OF THE LITERATURE.....	11
Introduction	11
Clarification of Terms	13
Emancipatory-Communitarian (EC) Approach	14
Social Cognitive Career Theory (SCCT)	15
Emancipatory-Communitarian Approach and Social Cognitive Career Theory Integration	18
Perceived Career Barriers.....	20
Prevalence and Effect of Perceived Barriers.....	21
Summary	24
Ethnic Identity	25
Aspects of Ethnic Identity	26

Assessing Ethnic Identity	27
Ethnic Identity and Career Development	28
Ethnic Identity and Vocational Identity	29
Ethnic Identity and Career Decision Self-Efficacy	31
Summary	33
Acculturation	33
Theoretical Frameworks of Acculturation	35
Acculturation versus Ethnic Identity	37
Acculturation Scales	38
Acculturation and Career Development	40
Acculturation and Self-Efficacy	41
Acculturation and Other Career Related Variables	43
Acculturation and the Career Paths of Latinas	44
Summary	46
Career Decision Self-Efficacy (CDSE) as a Mediator	47
Summary	50
Coping Efficacy as a Mediator	51
Summary	53
Statement of the Problem	53
Hypotheses	55
Alternative Path Model	56
CHAPTER III: METHOD	59
Participants	59

Instruments	63
Procedure.....	70
CHAPTER IV: RESULTS	72
Preliminary Analysis	72
Missing Values.....	72
Normality and Outliers Tests	72
Descriptive Statistics	72
MANOVA Results	76
Primary Analysis	80
Model Identification.....	80
Path Analysis Results	81
Split Samples.....	82
Fit Indices and Interpretation of Path Models.....	82
Fully Mediated Model.....	83
Partially Mediated Model.....	83
Analysis of Hypotheses Tested	84
Summary of Results	89
Path Model Modifications.....	90
Parameter Estimates	91
CHAPTER V: DISCUSSION	94
Introduction	94
Overview of Significant Findings	95
Discussion of Correlational Hypotheses	95

Exploration of SCCT Propositions.....	97
Implications.....	103
Theoretical Considerations.....	103
Research Considerations	105
Practice Considerations	107
Training Considerations	109
Limitations of the Study.....	111
Summary and Conclusions.....	113
REFERENCES.....	115
APPENDICES.....	133
Appendix A: Demographic Information Form	133
Appendix B: Revised Multigroup Ethnic Identity Measure.....	135
Appendix C: Acculturation Rating Scale for Mexican Americans-II (Modified)	137
Appendix D: Career Decision Self-Efficacy Short Form.....	139
Appendix E: Coping with Barriers Scale	141
Appendix F: Perceptions of Barriers Scale-Revised	142
Appendix G: Electronic Invitation	143
Appendix H: Informed Consent	144
Appendix I: HACU Hispanic Serving Institutions List	146

LIST OF FIGURES

Number.....	Page
1 Social Cognitive Career Theory-Choice Model	57
2 Fully Mediated Path Model Predicting Perceptions of Career Barriers and Partially Mediated Path Model Predicting Perceptions of Career Barriers	58
3 Estimated Fully Mediated Path Model.....	85
4 Estimated Partially Mediated Path Model.....	87
5 Modified Path Model	93

LIST OF TABLES

Number.....	Page
1 Demographic Characteristics for the Total Sample ($N = 357$).....	61
2 Means, Standard Deviations, Reliability Coefficients, Skewness, Kurtosis and Range of Scales	74
3 Means, Standard Deviations, and Range of Variables by Gender	75
4 Summary of Variable Intercorrelations ($N = 357$).....	76
5 Means and Standard Deviations for Career Decision Self-Efficacy, Coping with Barriers by Career Decision Status	78
6 Means and Standard Deviations for Perception of Barriers by Generational Status ..	79
7 Means and Standard Deviations for Perception of Barriers by Self-Reported Socioeconomic Status	80
8 Summary of Model Fit Indices for Proposed Models ($n = 100$).....	84
9 Parameter Estimates for the Fully Mediated Path Model ($n = 100$)	86
10 Parameter Estimates for the Partially Mediated Path Model ($n = 100$)	89
11 Fit Indices for Modified Model between Split Samples of Latina/os	91
12 Parameter Estimates for the Modified Path Model ($n = 257$)	92

ACKNOWLEDGMENTS

I am deeply grateful to my family who has inspired me during this journey. *Gracias a mi abuela* Adriana, *musa valiente*, *por su generosidad y por ser una fuente de fuerza en mi vida*. *Mi mami*, *alma maravillosa*, the hardest working woman I know, has made unthinkable sacrifices to provide me with exceptional educational opportunities. My beloved and wonderful *esposo*, Michael, has been my guiding light, best friend, and soul mate ever since he walked into my life. I can't thank you enough! My fabulous sisters, *primas*, and adorable *sobrinos* and *sobrinas*, who fill my life with joy and laughter. My curious and tenacious *hermanita*, Adriana, and other young Latinas who are pursuing their educational and career dreams, you are proof *que si se puede!* My Tia Lupe, *por darme la oportunidad de realizar mis sueños*. My new family, the Smiths, who have been incredibly understanding and supportive throughout my studies. I thank God for all of you and dedicate this work to you, *familia*.

I am deeply grateful to my advisor, Professor Gushue, a relentless cheerleader, inspiring professor, researcher, and clinician who always reminded me of my strengths. I'm thankful for my wise mentor, Professor Edmund Gordon, whose scholarship and commitment to social justice made me a better researcher and clinician. My superb clinical supervisors who encouraged me, Drs. Diana Morrobel, Diana Puñales-Morejon, Santos Vales, Fred Millán, and Rachel Navarro, your kind words helped me to believe in myself and in this process. My dissertation committee members, Professors George Gushue, Laura Smith, Larry DeCarlo, Dinelia Rosa, and Robert Fullilove for their thoughtful feedback. My dazzling cohort chicas Becky Redington, Debbie Chambers, Nancy Cha, and Roshnee Vazquez who laughed, danced, prayed, and studied hard with me. My study participants, who volunteered their time. To all of you, I offer my deepest and most sincere appreciation. *¡Muchísimas gracias de todo corazón por darme su apoyo!*

Chapter I

INTRODUCTION

Over the lifespan, individuals go through important developmental transitions as a result of interactions among biological, psychological, and sociocultural factors. All things being equal, we might expect that with each developmental transition (e.g., graduating from college and entering the workforce) individuals will have access to similar opportunities. Few societies, however, afford equal opportunities to *all* citizens. In Western societies like the United States, classism, racism, sexism, heterosexism, ableism, and ageism can have a significant impact on people's life path (Blustein, 2006; Johnson, 2006). These barriers to equality advance the well-being of some groups and disadvantage others. For example, during the college-to-work transition, groups socially constructed as dominant and subordinate have unequal access to educational and vocational opportunities resulting in differential skill readiness.

Barriers inherent in American society including sociohistorical (e.g., bias depiction and inclusion in American history), sociopolitical (e.g., power distribution), and sociostructural (e.g., unfair legal, educational, and economic systems) create different paths in the college-to-work transition (Blustein, McWhirter, & Perry, 2005). That is, while some individuals can follow their natural calling for a vocation, others have to contend with a limited range of job options and diminished access to opportunities due to inequities and injustices that insufficiently prepared them to compete in today's workforce. Perhaps, if American society would invest in developing its human capital (i.e., the education, training, and health of its population), it could maximize people's access and readiness for an increasingly competitive labor market and the nation's economic growth (Becker, 1998).

In recent years, there has been a movement in psychology and in vocational psychology in particular, to understand how barriers shape career decisions and career paths. Scholars have questioned career development theories (e.g., Holland's RIASEC model; theory of work adjustment, Super's developmental theory; and Krumboltz's social learning theory; see Osipow & Fitzgerald, 1996 for a description of these career theories) for their relevance to people who, historically, have had limited, if any, access to the occupational opportunity structure. Indeed, a careful examination of the career literature reveals that several scholars (e.g., Blustein, et al., 2005; Carter & Cook, 1992; Peterson & Gonzalez, 2000; Richardson, 1993) contend that vocational psychology and its theories are grounded in the worldview of middle-class, able-bodied, White men. As such, these theories ignore the social, cultural, and political context that controls access to work (Carter & Cook, 1992; Helms & Piper, 1994). For instance, the term "career development," or the process of crystallizing a vocational identity and testing interests in part-time, full-time, and recreational work situations (Tolbert, 1980) ignores the economic, social, and political disadvantages of people of color (e.g., Blacks and Latina/os). Alternatively, the term "career path" captures how the career choice of people of color is "relegated to paths" constrained within the social inequities and injustices pervasive in American society (Carter & Cook, 1992). Consequently, scholars have suggested that vocational theory, research, and practice must be expanded "to guide the field in helping *all* people, not just the affluent" (Blustein, et al., 2005, p. 144).

To mobilize vocational psychology theory, research, and practice Blustein et al. (2005) have proposed an "emancipatory communitarian" (EC) framework to resist and change the oppressive systems that impinge on people's working lives. EC is a conceptual framework that discusses how structural barriers (i.e., societal and organizational factors that minimize

occupational opportunities) hinder the career path of oppressed groups. For instance, research rooted in the EC framework emphasizes structures of injustices, the elimination of those injustices, and the liberation of groups from oppression. After reviewing existing vocational theories and research, Blustein and his colleagues have identified social cognitive career theory (SCCT; Lent, Brown, & Hackett, 1994; 2000; 2002) as consistent with the EC focus of social justice and relevant to the career path of people in a position of disadvantage.

Given its consideration of the role of contextual barriers in shaping career interests, goals, and persistence (Blustein et al., 2005; Lent et al., 2000; 2002), multiple empirical studies have shown that SCCT is relevant to exploring the career path of people of color, including Latina/os (Arbona, 1995; Flores & O'Brien, 2002; Gushue, 2006; Gushue, Clarke, Pantzer, & Scalan, 2006; Gushue & Whitson, 2005; McWhirter, 1997; McWhirter, Hackett, & Bandalos, 1998; Navarro, Flores, & Worthington, 2007). Based on Bandura's (1986) social-cognitive theory, SCCT posits that an individual's racial and ethnic background, gender, socioeconomic status (SES), cultural background, and barriers interact with self-efficacy (beliefs in one's ability to perform specific behaviors) and outcome expectations (what individuals expect will happen as a result of a given action) to shape career behavior. SCCT presents testable propositions and implications for research and practice. Self-efficacy beliefs, for example, mediate the influence of "person input" variables (e.g., ethnic identity and gender) and "background contextual variables" (e.g., acculturation level and SES) on career interests and subsequent career goals and choices. Additionally, SCCT posits that career goals and choices will be made primarily on the basis of job availability in concert with self-efficacy beliefs and outcome expectations (Lent et al., 2000). SCCT acknowledges the influence of contextual factors and assumes that people are active agents in their environments who can influence their career paths. Blustein et al. (2005)

state that SCCT can be better applied to oppressed groups by integrating it with the EC framework. They contend that an EC-SCCT perspective is more relevant to the experiences of historically oppressed groups, than existing career frameworks, because it prepares individuals to *resist* and *change* systemic barriers. Vocational researchers using an EC-SCCT approach would highlight the unjust structure of opportunity and its constraints and how unequal barriers can be altered at the individual and systems level. The following sections briefly describe how the unequal structure of opportunity shapes the career path of people of color, such as Latina/os, and the variables of interest to this study: perceived career barriers, career-related self-efficacy, ethnic identity, and acculturation.

Career Barriers

The term “career barriers” refers to factors within the person and the environment that impede career paths or make career progress difficult. Barriers such as gender, ethnic, and racial discrimination have disproportionately affected the career paths of people of color by limiting options and access to a wide variety of opportunities (Bendick, Jackson, Reinoso, & Hodges, 1991; Fitzgerald & Betz, 1994). For example, lack of access to certain occupational opportunities can lead to occupational segregation or “distribution of members of an ethnic group across occupations, such as they are overrepresented in some and under represented in others” (Leong & Chou, 1994, p. 10). Occupational segregation is evidenced among Latina/os, who, as a group, have been disproportionately represented in low paying jobs. Evidence from the Bureau of Labor Statistics (2007) shows that Latina/os occupy a large percentage of those in low paying occupations such as cleaning and maintenance (34.3%), sewing machine operators (35.5%), butchers (41.1%), roofers (45.1%), and concrete finishers (52.1%). Additionally, data from the U.S. Census Bureau (2003a) statistics show that Latina/os held the highest rates of employment

in non-professional occupations such as sales (23.1%), service (21.8%), and production and transportation (21.2%). Yet, numerous studies have found that Latina/os have vocational aspirations for high paying jobs (Arbona & Novy, 1991; Flores & O'Brien, 2002; Reyes, Kobus, & Gillock, 1999). This discrepancy between high vocational aspirations and actual vocational achievements has received minor attention in the vocational literature (Flores & O'Brien, 2002).

Furthermore, it is well documented that Latina/os are paid less when compared to other racial/ethnic groups. Evidence from the Bureau of Labor Statistics (U.S. Department of Labor, 2001) demonstrates that from 1986 to 2000, Latina/os received less in wages for full-time work than non-Latina/os. For example, the median weekly earnings of Latina/os in 2000 were \$396, compared to \$468 for Blacks and \$591 for Whites. These employment trends offer evidence of the inequities and injustices that Latina/os have historically faced. Undoubtedly, discrimination has played a significant role in these wage disparities (Arbona, 1995) as have laws that have perpetuated inequality. For instance, the 1986 Immigration Reform and Control Act (IRCA), which sanctioned employers for hiring undocumented workers, led to Latina/os experiencing more employment discrimination as employers did not hire qualified legal residents and citizens for fear that they were in the country illegally (Bendick, Jackson, Reinoso, & Hodges, 1991; U.S. General Accounting Office, 1990).

Because of the widespread barriers that Latina/os have faced, it is likely that these obstacles may directly and indirectly influence their vocational decision making process. Consequently, there is a need to examine the influence of perceived barriers on the career paths of people of color, such as Latina/os, who, historically, have faced long-standing social, institutional, and structural barriers that constrain their career choices (Arbona, 1995; Brown, 1995; Leung, 1995).

Perceived Career Barriers

The degree to which people perceive undesirable obstacles to achieving their career goals and choices is commonly referred to as perceived career barriers. Perceptions of occupational barriers can inhibit the development of human capital by diminishing an individual's confidence in his/her ability to make a career decision (career decision self-efficacy), coping skills, and vocational choices (Morrison, 2002; Scandura, 2002; Worthington & Juntunen, 1997). Therefore, researchers have increasingly recognized the importance of assessing perceived career barriers among ethnic and racial group members (Leal-Muniz & Constantine, 2005; Luzzo & McWhirter, 2001; McWhirter, 1997).

Previous research with ethnic minorities and women has shown that these groups perceive more career barriers (Luzzo & McWhirter, 2001) and anticipate facing more career barriers in their career pursuits compared to Whites (Luzzo 1993a; Luzzo & Huchenson, 1996; Luzzo & McWhirter, 2001; McWhirter, 1997). Furthermore, investigators have demonstrated that ethnic minorities perceived more career-related barriers directly associated with their ethnicity (Luzzo & McWhirter, 2001; McWhirter, 1997). Other studies (e.g., Leal-Muniz & Constantine, 2005) have found that Latina/o students who anticipate facing more barriers prematurely narrow their career options. For example, among diverse Latina college students (Colombians, Cubans, Dominicans, Ecuadorians, Puerto Ricans, and Salvadorans), perceiving more career barriers was directly associated with the consideration of female-dominated versus male-dominated careers (Rivera, Chen, Flores, Blumberg, & Ponterotto, 2007). Collectively, these studies highlight the degree to which perceived career barriers influence individuals' career interests and choices.

Resistance to Barriers. Despite the existence of systematic barriers and widespread inequity, some individuals manage to overcome and/or resist these obstacles. By examining the factors that help individuals successfully circumvent or resist barriers, researchers can help to elucidate how individuals sustain themselves and create systemic change (Blustein, et al., 2005; Fouad, Byars-Winston, 2005). Psychological and behavioral factors may help people resist unjust structural obstacles by influencing the way barriers are perceived. Ethnic identity and acculturation are considered to be among the psychological and behavioral factors that facilitate resistance to career barriers among people of color, such as Latina/os (Arbona, 1995).

Ethnic Identity

Ethnic identity—a multidimensional variable which refers to the psychological relationship, attitudes, and emotional salience people attach to their ethnic group—is considered to be important in the psychological functioning of ethnic group members (Phinney, 1998; Juby & Concepción, 2005). Research evidence highlights the importance of adopting a positive orientation toward one's ethnic group, particularly among members of stigmatized groups (Quintana, 2007). It is posited that ethnic identity is essential to the psychological functioning of individuals whose groups and culture are oppressed because it provides the affirmation needed in the face of threats to their identity (Weinreich, 1983). Among Latina/o adolescents, a strong predictive relationship has been found between ethnic identity and higher psychological resiliency (e.g., Wong, Eccles, & Sameroff, 2003) and career decision self-efficacy (e.g., Gloria & Hird; 1999; Gushue, 2006). Its relationship to acculturation, however, has been understudied. In this study, ethnic identity was operationalized within SCCT as an input variable with direct and indirect effects on perceived barriers. Specifically, ethnic identity was thought to augment a person's beliefs in their ability to make a career decision and cope with barriers.

Acculturation

Acculturation—a multidimensional construct that describes the psychological, cognitive, and behavioral changes that occur when individuals continuously interact with a different culture (Berry, 1980)—may influence the perceptions of barriers, self-efficacy beliefs, and participation in various types of activities important in career decisions. Given that the college-to-work transition occurs within a sociocultural context, acculturation is thought to be an important cultural variable in the career paths of Latina/os (Arbona, 1995; Flores & O'Brien, 2002; Rivera, Chen, Flores, Blumber, & Ponterotto, 2007). For example, high levels of acculturation are associated with higher self-efficacy for making career decisions (Miranda & Umhoefer, 1998) and aspirations to lucrative jobs dominated by men (e.g. astronomy; Reyes, Kobus, & Gillock, 1999). As both natives and immigrants to this country, many Latina/o students often adapt to conflicting cultural values by becoming bicultural in order to successfully function in their communities and in the dominant culture and its institutions. As such, it seems that the career paths of Latina/os cannot be fully understood without considering the role of cultural factors such as acculturation. However, few studies have assessed the influence of acculturation on the career paths of Latina/os (Arbona, 1995). In this study, acculturation was operationalized within SCCT as a background contextual variable with direct and indirect effects on the perception of career barriers. The indirect effect of acculturation was thought to be mediated by specific types of self-efficacy.

Self-Efficacy

The importance of self-efficacy or the beliefs in the capacity to succeed in specific tasks, as a relevant construct in the career path of individuals who face multiple career barriers has been corroborated in the empirical literature (Gainor, 2006; Gloria & Hird, 1999; Hackett &

Byars, 1996). For instance, due to systemic barriers, students of color (e.g., Latina/os) may have lower self-efficacy for certain occupations (e.g., medicine) resulting in a restricted range of career exploration options and lower self-efficacy for coping with career-related barriers (Lauver & Jones, 1991; Luzzo & McWhirter, 2001). In contrast, Latina/o students who believe that they can complete specific tasks related to making a career decision, are, perhaps, more likely to engage in a wider range of career exploration behaviors. For instance, career decision self-efficacy has been found to be related to career exploration and low levels of career indecision (Blustein, 1989; Gloria & Hird, 1999). Similarly, Latina/o students who believe they can cope with career-related barriers may have higher self-efficacy for various occupations. Additional research is needed, however, to understand how some Latina/o students' ethnic identity and acculturation level lead to increased self-efficacy beliefs and reduced career barrier perceptions. Based on the findings of prior studies, the investigator examined two types of career-related self-efficacy: confidence in one's ability to effectively engage in career decision tasks (career decision self-efficacy; Taylor & Betz, 1983) and self-efficacy for coping with career barriers (coping efficacy; Bandura, 1997), to understand their influence on the career path of Latina/os.

Purpose of the Present Study

The purpose of the present investigation was to explore the role of ethnic identity and acculturation level in the career path of Latina/os, an ethnically and racially diverse group that faces multiple barriers, comprises a large segment (61%) of the employed civilian labor force, and lacks attention in the vocational research (Arbona, 1990; Fitzgerald & Betz, 1994; Fouad, 1995; U.S. Census Bureau, 2003b). Further, this study sought to investigate the validity of SCCT with a diverse Latina/o college sample by testing hypothesized paths in the model. Specifically, the researcher tested the direct effect of ethnic identity (person input variable), and acculturation

(background contextual variable), on career decision self-efficacy (mediator), coping efficacy (mediator), and perceived career barriers (outcome expectations). SCCT was integrated with the EC framework to highlight how the career paths of Latina/os must be considered within the context of sociohistorical, sociopolitical, and sociostructural barriers.

Chapter II

REVIEW OF THE LITERATURE

Introduction

The degree of success experienced during the college-to-work transition seems to be influenced by many factors. The presence or absence of barriers (e.g., ethnic discrimination) and resources such as educational opportunities, access to role models, and social networks are some of the important factors that shape the transition from school to work and career path (Blustein, et al., 2005; Rosenbaum 2001; Wilson, 1996). However, before and during this key life transition, many young people start on an uneven playing field. The socioeconomic hierarchy has created two groups of classes—"the haves" and "the have-nots," those with access to the opportunity structure and those without (Blustein, Chaves, Diemer, Ghallagher, Marshall, Sirin, et al., 2002; Fouad & Brown, 2000; Kozol, 1991; Wilson, 1996). Consequently, an elite education, political power, financial security, and a secure job position, are among the many privileges that wealthy young people will have in pursuing their career interests (Bourdieu, 1996; Wilson, 1996). In sharp contrast, those from a working class background, women, and people of color (e.g., Blacks, Latina/os) are less likely to have existing support systems and more likely to contend with structural barriers which may inhibit their career choices and shape their career paths (Fitzgerald & Betz, 1994; Fouad & Byers-Winston, 2005).

Accordingly, researchers contend that it is necessary to examine the influence of perceived barriers on the career paths of people of color who are likely to encounter oppressive conditions (e.g., discrimination and lack of access to jobs). More importantly, the factors that help some individuals to resist many obstacles in their career paths remain unclear. It is postulated that the degree to which barrier perceptions impede choices and decisions about

careers depends, partly, on ethnic identity and acculturation (Arbona, 1995). In this study, ethnic identity and acculturation were considered to be protective psychological and behavioral factors among Latina/os in that they contribute to a person's beliefs in their ability to make career decisions and cope with career barriers. Ethnic identity and acculturation are thought to be related, but separate, constructs that deserve more research attention to elucidate how ethnic identity changes in relation to acculturation level (Cuéllar, Nyberg, & Maldonado, 1997).

What follows in the next sections of this chapter is an integrative review of a selective body of literature in vocational psychology with a focus on constructs relevant to the career paths of Latina/o students. The chapter begins with a clarification of terms (e.g., Latina/o vs. Hispanic) which will be used throughout this review. Building on the recommendation to accurately describe how the career paths of Latina/os are influenced by multiple barriers, this review first presents the framework used to conceptualize the present investigation, EC. Second, the discussion turns to a description of SCCT and the major tenets guiding this study. Specifically, how the variables for this study are situated within the SCCT framework is explained. The rationale for using EC and SCCT to investigate the factors that influence the perception of career barriers among Latina/os students also is discussed.

To test parts of SCCT, variables hypothesized to be important in the career path of Latina/os were selected. Specifically, the review begins with a discussion of perceived career barriers, which is operationalized as an outcome expectation within SCCT. Second, because this study is concerned with exploring the role of protective factors, ethnic identity and acculturation are operationalized as personal and contextual background inputs within the SCCT framework. In addition, according to SCCT, ethnic identity and acculturation are hypothesized to influence two mediators: career decision self-efficacy and coping efficacy. Thus, the literature review

discusses the mediators after discussing the independent variables of interest. Finally, the statement of the problem and research hypotheses is discussed.

Clarification of Terms

Throughout this literature review the terms Latina/o and Hispanic are used interchangeably to describe a heterogeneous group of people whose ancestry is from Latin America including Mexico, Central and South America, and the Caribbean islands (Puerto Rico, Dominican Republic, and Cuba). People from Latin America or “Latina/os” are descendants of Spanish, Indigenous Indian (e.g., Maya, Aztec, Inca), and African cultures. Consequently, Latina/os vary in racial categories, skin color, and phenotypic characteristics. For example, a Latina/o person from the country of Honduras may identify ethnically as Honduran and racially as White or Black. In the literature, the terms Latino and Hispanic have been commonly and erroneously used as a racial group; however, the labels connote ethnic group rather than racial group.

Furthermore, since the term “Hispanic” was created by the U.S. Census Bureau to suggest “Spaniard” origin, the use of “Latina/o” is preferred because it describes diverse people from Latin American and it was created within the Latina/o population to emphasize “Latino America” (Murguia, 1991). Interestingly, individuals from Latin America do not arrive to the United States using the labels “Hispanic or Latina/o;” they adopt these labels when they come in contact with mainstream Americans (Phinney, 2003).

In the present study, the term Latina/os is used to convey the ethnic diversity of this group. Nevertheless, when reviewing extant studies the terminology used by the researchers when describing their study participants was maintained (e.g., Mexican American, Puerto Rican, etc.). In addition, the terms dominant group or dominant culture are used to refer to Anglo/White

individuals and culture. It is understood that compared to the dominant group, less dominant groups, from various ethnicities, hold less power and status and are likely to experience discrimination (Phinney, 1996). Next, the conceptual frameworks guiding this study are discussed.

Emancipatory-Communitarian (EC) Approach

Blustein et al. (2005) contend that vocational psychology does not have a conceptual framework for the role of work in the lives of groups who are disenfranchised by social and economic disadvantages. Building on the discourse for social justice in counseling psychology, these authors present the EC framework as an alternative to the traditional career theories, research, and practice that have dominated the field of vocational psychology. The term “emancipatory” refers to “the need for liberation among all groups that are dominated in society” and “communitarian” describes “social obligation and mutual determination” (Blustein, et al., 2005, p. 150).

Based on Prillelensky’s (1997) emancipatory-communitarian approach of psychological discourse and action, the EC framework advocates for the need for vocational researchers and practitioners to recognize and change oppressive systems that affect people’s work. They distinguish between work and career because they argue that oppressed groups do not have the privilege of a self-determined career. EC is guided by the writings in community psychology, liberation psychology, and critical psychology. The notion of resistance, for example, is associated with writers in education and liberation psychology (e.g., Freire, 1970 & Martín-Baró, 1994) who instilled critical consciousness among exploited people so that they could resist and take action against oppressive regimes. Similarly, the process of liberation is associated with Freire’s (1970) *concientización* which describes how oppressed people must develop critical

consciousness to change their oppressed status. For example, an immigrant Latina who is experiencing ethnic discrimination in her job is likely to take action against her oppressive situation and to transform her life as she gains critical awareness of her skills and resources and increases her ability to make choices that determine her future (Martín-Baró, 1994).

EC promotes a set of values, assumptions, and practices for researchers and practitioners against which to guide and evaluate their work. For example, the values include caring and compassion, self-determination, human diversity, collaboration and democratic participation, and distributive justice. This perspective assumes that psychological practice is focused on promoting a good society, a good life, and knowledge that promotes social justice. Moreover, the EC approach provides a framework from which to study the career paths of people who have been disadvantaged because of its emphasis on sociohistorical, sociopolitical, and sociostructural barriers. For example, it emphasizes how ethnic discrimination and the perception of career-related barriers can constrain aspirations and choices while at the same time it promotes the elimination of injustices. Typically, however, career development theories have been developed and applied independent of the constraining factors that hinder people's career paths. More recent theories have begun to consider the role of contextual factors such as barriers. Particularly, proponents of SCCT maintain that a person's choices and goals in their career path are influenced by personal and contextual factors. The SCCT model and the major parts being tested in this study are presented below. Then, the EC and SCCT framework are discussed as an integrated perspective to understand the career path of Latina/os.

Social Cognitive Career Theory (SCCT)

SCCT is an extension of Hackett and Betz's (1981) self-efficacy theory and Bandura's (1986) social-cognitive theory which stresses a triadic reciprocity between persons, their

environments, and their behavior. In this way, social-cognitive theory explains human behavior as a bidirectional interaction between personal determinants (e.g., cognitive, affective, biological, and behavioral) and environmental factors. Extending this transactional view between persons and their environments, Lent et al. (1994; 2000) proposed SCCT. Acknowledging the importance of human cognition in guiding human motivation and behavior, SCCT emphasizes three constructs self-efficacy, outcome expectations, and goals, and it considers how they interact with contextual factors to predict career choices made in people's paths (See Figure 1). Each of these constructs is discussed below.

Bandura (1977; 1986) was instrumental in explaining self-efficacy by creating a self-efficacy theory which posited that beliefs about capabilities to perform a particular behavior influenced choices, performance, and persistence. Self-efficacy is defined as “people’s judgments of their capacities to organize and execute course of action required for attaining designated types of performances” (Bandura, 1986; p. 391). Self-efficacy is different from self-esteem which is a global affective evaluation of self-worth. Thus, self-efficacy describes perceived abilities and self-esteem describes self-worth (Bandura, 1986). In SCCT, self-efficacy is thought to guide career interests and pursuits such that individuals with strong and realistic self-efficacy beliefs are likely to persist in the face of obstacles.

Self-efficacy theory has been extended to various domains of career behavior including career decision self-efficacy and coping efficacy. Self-efficacy is a central variable in the SCCT framework which seems to contradict the model’s emphasis on sociocultural factors important to career-related behavior. However, Bandura (2000) maintained that “personal agency and social structure operate interdependently” (p. 77) in that a strong sense of self-efficacy contributes to the collective efficacy (e.g., beliefs about the power of the group).

From an SCCT perspective, efficacy is domain and task specific. Thus, efficacy expectations about specific activities are hypothesized to yield subsequent outcomes, such as vocational interests and choice goals (Lent et al., 1994). For instance, career decision self-efficacy and coping efficacy are two types of domain specific self-efficacy considered important in examining a person's career path. For example, a Latina student who feels efficacious about completing the tasks necessary for making a career decision (e.g., gathering occupational information and managing a job interview) and feels a strong efficacy for coping with barriers specific to the domain of math, is more likely to pursue her math career goals. The relevance of the individualistic human agency (i.e., self-determined) implied in self-efficacy has been questioned for cultural groups that operate from a collectivistic perspective; but studies show that it has important relevance across cultures, including collectivistic cultures (Bandura, 2000; Lindley, 2006).

Outcome expectations refer to the perceived consequences of carrying out specific behaviors. Thus, a person is more likely to develop interests in a particular vocational path if he or she envisions positive outcomes. Lent and colleagues (1994) contend that outcome expectations involve the "imagined" consequences of engaging in particular behaviors. For instance, a Latino male is more likely to develop vocational interests in a career in education, such as becoming a university professor, if he expects positive outcomes such as monetary rewards, social approval, and self-satisfaction. In SCCT, perceived career barriers can be operationalized as a type of outcome expectations (Lent et al., 2000, Swanson, Daniels & Tokar, 1996). That is, career barriers can be described as "process expectations" that are "proximal" because they include consequences anticipated in the very near future that may interfere with the career development process (Lent et al., 2000, p.44). In other words, in the "process" of making

a career decision, individuals will consider the potential barriers they are likely to encounter. For example, the Latino male student who develops a vocational interest in becoming a university professor may consider the barriers he may encounter as he makes a career decision (e.g., I will probably face discrimination because of my ethnicity). This may help to explain how individuals who have made the same career choice (e.g., physician) may hold different process expectations about the proximal barriers that they will face in pursuing that career goal (Lent et al., 2000). This study situates perceived career barriers within outcome/process expectations in the SCCT model (Figure 1). Finally, “choice goals” in the SCCT model refer to intentions to engage in specific actions.

SCCT predicts that self-efficacy and outcome expectations positively relate to vocational interests. Both self-efficacy and outcome expectations are influenced by personal experiences and environmental factors (e.g., discrimination). Researchers have noted that SCCT can be expanded in its scope to include the long standing sociopolitical, sociohistorical, and sociostructural barriers that influence career path. To improve its utility and relevance to all people, scholars have recently proposed incorporating the SCCT model with the EC approach.

Emancipatory-Communitarian Approach and Social Cognitive Career Theory Integration

Blustein and his co-authors contend that the integration of EC and SCCT can be a promising approach toward more relevant models of career for all people. The integration of EC and SCCT may provide a useful framework for implementing interventions that enhance the self-efficacy beliefs and outcome expectations as well as help psychologists to confront systemic barriers (Blustein, et al., 2005). For example, the EC-SCCT framework can be used to highlight how Latina/os face multiple systemic barriers (e.g., lower socioeconomic status, racial/ethnic discrimination, low access to role models, and limited access to work opportunities), which can

limit their career decisions and choices. For example, a Latina college student who comes from a low socioeconomic background may be more likely to pursue her science career interests if she is exposed to role models and experiences that increase her career decision self-efficacy and coping efficacy for resisting ethnic discrimination.

Blustein and his collaborators note that EC dovetails nicely with SCCT because of its consideration of social and economic barriers that may inhibit career choice. Therefore, these scholars recommend combining EC with SCCT to help practitioners and researchers develop “critical ideas about how to alter systems and structures that create unequal barriers” (p. 155). A vocational counselor using an EC-SCCT approach, for instance, would help a Latina college student identify systemic barriers in pursuing a career in engineering, increase her self-efficacy for resisting those obstacles, train parents to support the student’s exploration, work with district administrators to implement policies to decrease barriers, partner with business to create mentoring and work opportunities, and work with key players to increase equitable resource allocations. Similarly, Blustein and colleagues assert that using an EC-SCCT research approach could increase the knowledge base of psychology of working while also promoting and understanding the needs of all workers. The combined EC-SCCT framework attends to “the societal factors that continuously hamper the optimal vocational development of so many people” (Blustein, et al., 2005, p. 170).

Consequently, as suggested by Blustein et al. (2005), the present investigation used an EC-SCCT framework to emphasize: 1) how perceived and real sociopolitical, sociohistorical, and sociostructural barriers impinge on the work and career decisions of Latina/o students; 2) the role of self-efficacy in resisting and coping with barriers and 3) the importance of promoting social justice strategies to dismantle barriers to create greater equity in career opportunities.

Using an EC-SCCT framework presented both an opportunity and challenge as this study was among the first to use this conceptual framework to examine the career paths of Latina/os.

Literature addressing the primary constructs of interest in this study is presented in the following sections. These constructs include: perceived career barriers, ethnic identity, acculturation, career decision self-efficacy and coping efficacy. Several of the empirical studies reviewed are discussed within the context of SCCT. First, the research on perception of career barriers (dependent variable) is discussed. Then, ethnic identity (independent variable) and acculturation (independent variable) research is reviewed. Finally, two types of self-efficacy (mediators) are considered, career decision self-efficacy and coping efficacy.

Perceived Career Barriers

Swanson et al. (1996) define barriers as “external conditions or internal states that make career progress difficult” (p. 237). Similarly, in the SCCT framework, barriers are defined as adverse contextual influences related to personal factors that impede career development (Lent et al., 2000). In SCCT, perceived career barriers are situated within outcome/process expectations because they include the sorts of barriers people envision encountering while in “the process of making a career decision” (Lent et al., 2000, p. 44). Also, a primary assumption of SCCT is that individuals will be unable to implement their career goals and choices if they perceive undefeatable barriers in their career path. That is for some, perceptions of barriers can lead to individuals abandoning their career aspirations, narrowing their career interests, or making the career choice more difficult. Alternatively, perceiving career barriers can motivate others to overcome and resist barriers.

Research on career barriers grew primarily from the literature on women’s career development, as barriers were thought to narrow women’s career aspirations and their pursuit of

career goals (Swanson, et al., 1996). Subsequently, with the increasing recognition that people of color encounter various career barriers, vocational researchers expanded the study of career barriers to include ethnic and racial minorities. Presumably, one's career path is influenced by the structural access to opportunity and the way one constructs one's environment (Lent et al., 1994). Thus, the way barriers are perceived is subject to individual interpretation. Lent and colleagues (1994) have suggested that the perception of career barriers (whether accurately or inaccurately), can significantly influence the career development of people of color. That is, for some, the perception of occupational barriers will discourage them from pursuing their career aspirations. Conversely, for others, the perception of career barriers may motivate them to resist those barriers and carefully plan their occupational aspirations (Luzzo, 1996). Thus, the impact of career-related barriers on the career paths of people of color warrants more research to better understand the protective factors that buffer against obstacles.

Prevalence and effect of perceived barriers. The literature indicates that a small number of studies have examined perceived career barriers among ethnic minority samples. The evidence shows that women and ethnic minorities, including Latina/os, expect to face more career barriers than non-Latina/os (Lent, Brown, & Hackett, 1994; Luzzo 1993a; Luzzo & Hutcheson, 1996; Luzzo & McWhirter, 2001; McWhirter, 1997). High achieving Latina and Black women have also mentioned barriers to their career progress (Gomez, Fassinger, Prosser, Cooke, Mejia, & Luna, 2000; Richie, Fassinger, Linn, Johnson, Prosser, & Robinson, 1997). Lent and colleagues (2000) explain that when individuals view their efforts to be hindered by difficult obstacles (e.g., unavoidable barriers), they are less likely to transform their career interests into goals, and their goals into actions. Examples of inevitable barriers that ethnic

minorities may perceive to be in the way of achieving their career goals include discrimination due to gender, ethnicity, and limited English fluency.

McWhirter (1997) was interested in investigating how students perceive career barriers before attending college. She hypothesized that the perception of barriers during high school may influence the educational goals (e.g., finish high school) that ultimately would lead to pursuing a career. Using a large sample of 1,139 Mexican-American and Euro-American high school juniors and seniors in the southwestern region of the US, McWhirter explored ethnic and gender differences in perceived educational and career barriers. The results revealed that the Mexican American participants in the study anticipated more sex and ethnic discrimination in their future jobs than their White counterparts. Additionally, female participants expected to face more barriers than male participants. The findings from this study substantiate the premise that ethnic minority students and women perceive more career-related barriers.

Luzzo and Hutcheson (1996) expanded the career perceived barriers research focused on gender differences by including the mediating influence of causal attributions between occupational barriers and career maturity. The researchers included the variable of causal attributions to examine whether participants who believe that career decisions are internally caused perceived fewer occupational barriers compared to those who believe that making career decisions is an uncontrollable process that is externally caused. Hence, these individuals may perceive more barriers beyond their control. The participants for this study were comprised of 115 women ($n = 80$) and men ($n = 30$), enrolled in a small liberal arts university in the Midwest. Luzzo and Hutcheson found that compared to the men, women perceived more barriers related to future career pursuits. Significantly more than men, women perceived past barriers related with family and work responsibilities. Additionally, a negative relationship was found between the

number of perceived barriers and maturity for participants who thought that career decision making was beyond their control. The findings indicate that for individuals who feel little control over career decisions, perceiving barriers is likely to influence their career paths.

In a different study, Luzzo and McWhirter (2001) investigated the degree of gender and ethnic differences in perceived educational and career-related barriers among college students. Their sample consisted of 168 women and 118 men attending a small southern university. Participants were from diverse ethnic and racial backgrounds including 89% European American, followed by 7% African American, 2% Native American, 1% Asian, and 1% Hispanic. Consistent with previous studies, the findings revealed that women anticipated significantly more career-related barriers than men. Second, compared to European Americans, ethnic minorities anticipated significantly more career-related barriers.

Lent, Brown, Talleyrand, McPartlan, Davis, Chopra, et al. (2002) used interviews to understand the barriers that students report in implementing their career choice. They interviewed 19 students enrolled in a state university and 12 enrolled in a technical college. Findings showed that among the most frequently mentioned barrier was financial concerns. Other barriers cited with moderate frequency included lack of ability, difficulties adapting to college, time management, ability limitations, and negative social/family influences. Negative school/work experiences and work conditions were also mentioned, but with less frequency. Overall, at the technical college, participants reported encountering somewhat more barriers and having less access to supports. These researchers concluded that perceived barriers are important to individuals in the process of making a career decision.

More recently, Leal-Muniz and Constantine (2005) found that perceived career barriers were significantly predictive of Mexican American college students' tendency to limit their

career options. Specifically, the findings from a multivariate multiple regression analysis revealed that ethnic and gender occupational barriers strongly predicted students' tendency to narrow their career options. The authors concluded that for Mexican American students the perception of barriers is likely to constrain their career exploration process (openness to considering various career options) resulting in the exclusion of various vocational options.

Summary. Research evidence shows that people of color, including Latina/os, expect to face more career barriers than non-Latina/os. For instance, Mexican American students anticipate more gender and ethnic discrimination in their future jobs than their White counterparts. Recent findings supported the hypothesis that perceiving career-related barriers can result in compromising career choices. Although research findings reveal that college students, especially Latina/os, perceive career-related barriers, fewer studies have examined the variables that contribute to or mediate the degree to which barriers are perceived. Authors (Lent et al., 1994; Luzzo, 1996) have posited that depending on individual's self-efficacy beliefs, perceived career barriers can lead to deterring or motivating career-related behavior. Additionally, it has been suggested that individuals with a strong sense of ethnic identity, particularly when they belong to a minority group, may see barriers to career development as challenges to overcome (Leong & Chou, 1994). For this reason, the investigator tested the direct influence of ethnic identity on perceptions of career barriers. Consistent with the SCCT perspective, the researcher tested whether ethnic identity has an indirect influence on perceived career barriers (mediated by self-efficacy). In either case, it was expected that a higher ethnic identity among Latina/os would result in the perception of fewer career barriers.

Ethnic Identity

According to Cohen (1978), the term ethnicity emerged in the anthropological literature in the 1970s when it replaced the term tribe. In general, ethnicity refers to cultural practices, traditions, and values, of a group independent of their race. Race, on the other hand, is a sociopolitical social construction that refers to biological and phenotypic features (Carter & Pieterse, 2005). Scholars have found that the definitions of ethnicity and race have been debated, and at times, used interchangeably (Helms, 2007; Juby & Concepción, 2005). For example, the two terms may be used interchangeably by the same author to describe the same groups. According to Delgado-Romero, Galván, Maschino, and Rowland (2005), the controversy between the terms stems, partly, due to the previously used U.S. Census racial and ethnic classifications. These classifications included four racial categories—Black, White, Asian Pacific/Islander, and American Indian/Alaska Native and one ethnic category—Hispanic. Further, confusing race and ethnicity hinders the independent exploration of ethnicity and race and their impact on individual and group attitudes and behavior while also making the reality of racism less clear (Helms & Talleyrand, 1997; Juby & Concepción, 2005).

Theorists have found it challenging to define ethnic identity, arguing that it is a multidimensional construct (Phinney & Ong, 2007). To begin, identity refers to a social category which an individual is eligible to be a member (Chandra, 2006). In the psychology research literature, ethnic identity has been defined as “positive feelings for one’s group, a sense of belonging, pride, a secure sense of group membership, and positive attitudes toward one’s ethnic group” (Phinney & Ong, 2007; p. 272). In other words, ethnic identity is psychologically meaningful to the individual because it has a collective sense of self-consciousness. In social

psychology, the definition of ethnic identity was anchored on social identity theory which posits that people strive to achieve and maintain a positive group identity (Tajfel & Turner, 1986).

Ethnic identity has been distinguished from other constructs such as acculturation and racial identity. Scholars (Berry, Phinney, Sam, & Vedder, 2006; Phinney & Ong, 2007) point out that behaviors associated with a cultural group are different from ethnic identity and are more accurately assessed under acculturation. In addition, although ethnic identity and racial identity share similarities, including a sense of belonging to a group and attitudes toward a group, the two constructs are different and should be separated (Helms, 2007; Helms & Talleyrand, 1997; Phinney & Ong, 2007). To elaborate, ethnic identity is focused on a sense of self as a member of an ethnic group that results from exploration and commitment; while acculturation focuses on behaviors associated with cultural groups. The distinction between the two constructs is explained in more detailed under the discussion of acculturation (see p. 37).

Aspects of ethnic identity. Ethnic identity has several important components. A crucial aspect is the emotional value or valence that it has for an individual including the positive and negative feelings one holds for one's ethnic group. Another aspect of ethnic identity has to do with self-identification and self-labeling (e.g., Mexican, Chinese, Jamaican) oneself as a member of a particular group (Ashmore, Deaux, & McLaughlin-Volpe, 2004). Phinney and Ong contend that individuals will use different self-labels depending on the context they are in and how they are seen by others. For example, a Latina may identify as "Colombian" among other Latina/os to highlight her nationality, but will self-identify as "Latina" in the presence of non-Latina/os. In either case, she is self-labeling and claiming heritage to the ethnic group.

Commitment and strong attachment to a group are considered to be significant components of ethnic identity (Ashmore et al., 2004). But before an individual can feel a strong

attachment to his or her ethnic group, he or she must engage in a process of exploration. Phinney and Ong describe exploration as “seeking information and experiences relevant to one’s ethnicity...including reading and talking to people and attending cultural events” (p. 272). It is hypothesized that exploration is an important step in ethnic identity formation because without it, a person’s commitment to an ethnic group may be less stable (Phinney & Ong, 2007). Lastly, ethnic behaviors, such as language knowledge and use (e.g., Spanish), have been posited to be a major aspect of ethnic identity (Phinney & Ong, 2007). But, it is important to note that while behaviors refer to actions that can express an identity, ethnic identity is more accurately defined as “an internal structure that can exist without behavior” (Phinney & Ong, 2007, p. 272). Thus, ethnic identity has more to do with a secure sense of self and being knowledgeable about one’s ethnic group.

Assessing ethnic identity. Ethnic identity researchers (Phinney 1992; Phinney & Ong, 2007) have primarily examined individuals’ sense of belonging to an ethnic group that shares a cultural heritage, values, and traditions, among adolescents and college students of diverse ethnic and racial groups. In particular, by developing the *Multigroup Ethnic Identity Measure* (MEIM), Phinney (1992) created an opportunity for empirical research, particularly research among adolescents and young adults of color. According to the multidimensional definition, ethnic identity is composed of various aspects including: positive feelings for one’s group, self-labeling as a member of an ethnic group, and commitment to a group.

In an effort to avoid adding to the ambiguity of ethnic identity definitions, the present study used Phinney’s and Ong’s (2007) definition of ethnic identity as a multidimensional construct focused on how individuals feel about their ethnic socialization. In this investigation, ethnic identity (versus racial identity) was used since evidence suggests that Latina/os generally

do not identify with the racial classifications set forth by the U.S. Census (Rodriguez, 2000; Rodriguez, Castro, Garcia, & Torres, 1991). For instance, Portes and Rumbaut (2001) found that 40% of the participants in their study did not identify with the racial categories used in the Census (e.g., White, Black, African American, Asian Indian, and American Indian). Instead, many chose the “some other race” category. Similarly, a report by the Pew Hispanic Center and Kaiser Family Foundation (2002) indicates that 56% of respondents did not identify with the Census racial classifications; instead they identified as Latino or Hispanic only.

Cultural values, instead of demographic characteristics, are assumed to distinguish Latinas/os as one ethnic group. For instance, *familismo* (familism), which highlights the importance of extended family as a reference group and source of support, collectivism (collaboration), and *respeto* (respect) for elderly and authority figures, are among the values most likely to characterize Latinas/os despite their national background (G. Marín and B. Marín, 1991; Galanti, 2003). Alternatively, Latina/os who identify with the dominant cultural values are more likely to endorse individualism, self-determination, and egalitarian relationships rather than hierarchical relationships.

Ethnic Identity and Career Development

Following Erikson’s (1959) and Super’s (1957) hypotheses about the relationship between ego identity (i.e., sense of self) and career development, researchers have empirically demonstrated that ego identity is related to career exploration and commitment (Blustein, Devenis, & Kidney, 1989) and career decision making styles (Blustein & Phillips, 1990). Furthermore, it has been suggested that ethnic identity is an important part of overall ego identity and a strong ethnic identity can result in psychological well-being and functioning (Erikson, 1950; Phinney, 1990; Phinney & Kohatsu, 1999), higher self-esteem (Roberts, Phinney, Masse,

Chen, Roberts, & Romero, 1999), and higher life satisfaction and quality of life (Utsey, Chae, Brown, & Kelly, 2002). Among adolescents, including Latina/os, a strong ethnic identity was associated with higher psychological resiliency (Wong, Eccles, & Sameroff, 2003) and higher self-esteem (Martinez & Dukes, 1997; Phinney, Cantu, & Kurtz, 1997; Roberts, Phinney, Masse, Chen, Roberts, Romero, 1999). Similar findings have been shown among Latina/o adults (Ethier & Deaux, 1999; Lorenzo-Hernández, & Ouellette, 1998). The protective effects of a positive ethnic identity have also been described with regard to barriers such as discrimination. For example, Massakowski (2003) found that among a large sample of Filipino Americans ($N = 2,109$), having a strong sense of pride in ethnic identity was associated with fewer depressive symptoms associated with racial and ethnic discrimination. Similarly, Greene, Way and Pahl (2006) showed that ethnic identity was a protective factor against the negative effects of peer discrimination on the self-esteem of Latina/o, Black, and Asian American youth. Thus, the research suggests that for people of color, a strong ethnic identity can serve as a buffer against oppressive forces. As such, the present study examined the buffering effect of ethnic identity on the perception of career-related barriers.

Ethnic identity and vocational identity. According to Holland, Daiger, and Power (1980), vocational identity refers to a clear and stable sense of one's interests, abilities, and talents, the ability to set goals, and make career-related decisions. Super (1990) observed that vocational identity is based on an integrated sense of self. Also, some scholars (Arbona, 1995; Skorikov & Vondracek, 1998) have suggested that vocational identity is related to ethnic identity. Fouad and Arbona (1994) contend that to the extent that ethnic salience is important for an individual, it is likely to influence vocational identity development. One's vocational identity does not evolve in a vacuum; instead, it is influenced by psychological factors such as ethnic

identity. In fact, it has been suggested that a person's career development is a function of their ethnic identity and reference group (Smith, 1991). Consequently, vocational research with Latina/os may better capture their experience by examining their ethnic identity (Arbona, 1995).

Undeniably, ethnic identity and cultural group help to determine access and exposure to career learning experiences, which ultimately influence career self-efficacy beliefs and outcome expectations. For instance, the sociologist Pierre Bourdieu (1996) has written about the concept of "habitus" (i.e., beliefs, social etiquette, and resources), which is learned from the family's cultural capital (i.e., forms of knowledge, education, and advantages), and transferred from one generation to the next. Thus, ethnic minorities learn a socially determined "habitus" through the habitus of their family and diminished access to resources and opportunities which, ultimately, can facilitate or hinder vocational opportunities. Latina/os, particularly those who are not bicultural and who come from a low socioeconomic background, may be at a disadvantage as they engage in the tasks needed to pursue a career path. However, those that have a strong sense of belonging to their ethnic group may also have a stronger sense of collective efficacy which can lead to engagement in more career exploration tasks. Neville, Heppner, and Wang (1997), state that the psychological salience of one's ethnic group is more important than simply belonging to the group in predicting behavior. For this reason, it is important to assess feelings and attachment to an ethnic identity.

Arbona (1995; 1996) contends that the establishment of an ethnic identity (via exploration and participation) is an important task for Latina/os in that ethnic identity formation has significant consequences for vocational identity. For this reason, Arbona (1995) recommends that vocational researchers "examine to what extent the process of ethnic identity formation becomes a developmental task in itself that affects the process of resolving more directly

vocational tasks” (p. 49). Further, Arbona (1995) has suggested that ethnic identity might protect against the effects of racism on the career path of Latina/os and should be examined in the context of career theories.

Ethnic identity and career decision self-efficacy. It should be noted, however, that few studies have examined the role of ethnic identity in the career paths of Latina/os. For instance, some vocational researchers have examined ethnic identity in relation to career decision self-efficacy (Gloria & Hird, 1999; Gushue, 2006), gender role attitudes (Gushue & Whitson, 2006) and vocational maturity (Perron, Vondracek, Skorikov, Tremblay, & Corbiere, 1998). In the aforementioned studies, ethnic identity positively contributed to the various career-related variables. For example, Gloria and Hird (1999) investigated the influence of ethnic identity on the career decision self-efficacy of 687 undergraduate students (336 men and 551 women). Their sample included 589 White and 98 ethnic minority students (e.g., Latino, Asian, American Indian and others). Results from their empirical study revealed that ethnic identity (measured by the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992) was a more significant predictor of career decision self-efficacy for their ethnic minority participants than for their White participants. Further, ethnic minority students reported higher ethnic identity than did White students and lower career decision self-efficacy. Based on their findings, Gloria and Hird concluded that ethnic identity influences the career development of minorities more so than for Whites.

More recently, Gushue (2006) used path analyses to explore the relationship of ethnic identity, career decision self-efficacy, and career outcome expectations in a sample of 128 Latina/o high school students. The participants, who included 57% males and 41% females, were from various Latino subgroups including: 44% Dominican, 22% Puerto Rican, 8% Mexican, 7%

Central American, 6% South American, and 2% Cuban. Ten percent did not identify their ethnic group. Students completed the measure of ethnic identity (MEIM; Phinney, 1992) assessing their feelings of pride and belonging and attitudes toward their group, a measure of career decision self-efficacy to assess their self-efficacy expectations in relation to career decision making tasks, and a measure of outcome expectations which assesses the level of positive expectations regarding the outcome of one's career choice. Gushue found that ethnic identity had a direct and positive relationship to career decision self-efficacy. That is students' sense of belonging to their ethnic group directly influenced their beliefs in their ability to engage in career exploration tasks. Further, the influence of ethnic identity on outcome expectations was mediated by career decision self-efficacy. The results from this study lend support to the role of ethnic identity as a protective factor in the career development of Latina/os in that it contributes to their confidence in completing career tasks. The findings point to the need for more studies focusing on the influence of ethnic identity as a factor affecting the career development for Latina/os (Gushue, 2006).

In a different study, Gushue and Whitson (2006) extended SCCT to test the direct influence of ethnic identity (measured by MEIM; Phinney, 1992) and gender role attitudes on career decision self-efficacy and the degree to which career decision self-efficacy mediates the effect of ethnic identity and gender role attitudes on gender traditional career goals. The investigators collected data from a sample of 102 Black (51.9%), Latina (46%), and Black-Latina (1.9%) students in the 9th grade. Results from their path analyses indicated that, for their sample, career decision self-efficacy fully mediated the influence of egalitarian gender role attitudes and ethnic identity on gender traditional career choice goals. Gushue and Whitson concluded that "to the extent that a girl of color is successfully integrating race, ethnicity, and egalitarian gender

role attitudes as part of her self-understanding, she may also demonstrate a stronger belief in her ability to negotiate the tasks associated with career decision making” (p. 363). Therefore, consistent with the evidence for the positive influence of ethnic identity, it seems that for students in this study, a more integrated sense of self contributed to greater self-efficacy. The findings from this study provide support for the role of ethnic identity in career self-exploration and vocational guidance for Latinas.

Summary. In sum, while the existence of a relationship between ethnic identity and career development processes has been empirically demonstrated (e.g., Gloria & Hird, 1999; Gushue, 2006), its potential influence for Latina/o students has received little attention in the vocational literature. Because ethnic identity emerges from sociocultural experiences, it influences how people perceive themselves and the beliefs they hold about their abilities, and, ultimately, how they come to view barriers they perceive and their ability to cope with those barriers (Hacket & Byars, 1996; Leong & Chou, 1994). A strong ethnic identity, in particular, seems to buffer against perceived barriers by contributing to a greater sense of self-efficacy. By examining the role of ethnic identity on career decision self-efficacy, this study aimed to contribute to the understanding of the relationship between these two constructs. In addition, the relationships between ethnic identity and acculturation and acculturation and self-efficacy warranted more empirical attention.

Acculturation

Over the last twenty years, acculturation has been identified as a major variable in the psychological study of Latina/os. Acculturation as a construct first emerged in the anthropology literature when Redfield, Linton, and Herskovits (1936) stated that “acculturation comprehends those phenomena which result when groups of individuals having different cultures come into

continuous first hand contact, with subsequent changes in the original culture patterns of either or both groups...under this definition acculturation is to be distinguished from *culture change*, of which it is but one aspect, and *assimilation*, which is at times a phase of acculturation” (p. 149).

Early acculturation theories described acculturation as a unidirectional (the direction in which changes takes place) with two different cultures at polar ends (Cuéllar, Harris, & Jasso, 1980). Thus, an individual was viewed as either acculturated to the dominant group or unacculturated. This unidirectional process assumed an assimilation perspective. Alternatively, others described acculturation as a bidirectional process meaning there is a reciprocal influence between the two groups in contact and that both groups can adapt to cultural differences (Taft, 1977). Moreover, the directionality of acculturation is different from dimensionality in that the latter refers to changes taking place along a single dimension or two opposite dimensions. In the unidimensional process, it is thought that the more people adapt to the new culture, the less they retain of the native culture (LaFromboise, Coleman, & Gerton, 1993). The bidimensional process describes people as adapting to the new culture without losing their native culture (Berry, 1980). Thus, people are assumed to change in more than one dimension.

Berry (1980; 1997, 2003) offered a bidimensional framework of acculturation in which acculturation describes a process of behavioral change that occurs as individuals retain their culture of origin while adapting to a different/dominant culture. These behavioral changes include the adoption of attitudes, values, and beliefs of the dominant group as well as ways of speaking, dressing, and eating. In practice, it is assumed that the less dominant group usually experiences the changes resulting from the contact. Nonetheless, it is possible that change can occur in either group. Implied in acculturation is the acquisition of the host’s society language, behavioral norms, and values. Within the context of the United States where power inequities

exist, Anglo-Americans are the majority or the dominant group and individuals who have immigrated to the U.S. or who are not Anglo American (e.g., Latina/os) are considered to be the minority or non-dominant group.

Theoretical frameworks of acculturation. Several conceptual frameworks have described the process of acculturation. Berry's framework (1997, 2003) is one of the most widely cited acculturation models. According to Berry's conceptual framework, acculturation proceeds from the simultaneous participation in two cultures. Therefore, the model suggests that non-dominant groups can employ four different types of acculturation strategies which Berry called: assimilation, separation, integration, and marginalization. When individuals do not maintain their cultural identity and seek contact with the dominant group, they are using the *assimilation* strategy. On the other hand, when individuals wish to maintain their cultural identity and avoid contact with the dominant group, then the *separation* strategy is employed. In the *integration* strategy, individuals have interests in both cultures, their own and the dominant culture. Integration is considered the healthiest of the acculturation strategies because individuals maintain their group's cultural heritage while at the same time they are prepared to adapt to the dominant culture (Berry, 1997). In a sense, the integration strategy is reflective of a multicultural perspective in which cultural diversity is valued (Berry, 2003). Finally, when individuals do not maintain their culture of origin or are not interested in having contact with the dominant culture, *marginalization* results. These acculturation strategies are thought to influence educational and career goals and outcomes.

Szapocnik and Kurtines' (1980) offered an alternative acculturation theory which assesses acculturation level based on behavioral indicators and values. These theorists view acculturation as unidirectional or bidirectional depending on the cultural context in which people

live. For instance, when the cultural context is monocultural, acculturation will tend to be unidirectional as was the case for the first wave of Cuban immigrants who migrated to Miami and lived in their monocultural enclaves. In other words, Cubans changed (assimilated) to become like Anglos. On the other hand when the cultural context is bicultural, such as the case for later generations of Cuban immigrants, the process of acculturation is considered bidirectional. Thus, both Cubans and Anglos changed as a result of their contact. Today, most scholars endorse the bidirectional perspective rather than the unidirectional.

Szapocnik and Kurtines propose that individuals will learn the behaviors needed to survive in the dominant culture before they acquire the values of the majority-dominant group. According to this model, the most important variable in the acculturation process is the amount of time an individual is exposed to the majority culture. Thus, people who have experienced longer contact (e.g., over several generations) are more likely to be influenced by the dominant group. Conversely, the contact tourists experience during brief visits to another country is less likely to result in significant behavioral and value changes. Overall, this model suggests that acculturation is bidirectional and individuals will become bicultural as they adapt to the host culture as well as retain their culture of origin. Researchers (e.g., Phinney, 1993) have noted that a bicultural acculturation is associated with higher levels of self-esteem.

More recently, acculturation researchers have considered the contextual/environmental influences on acculturation. For example, due to the increases in population diversity in the United States, some ethnic groups may not face the same pressure to acculturate to the mainstream culture (Padilla & Perez, 2003). In contexts where an ethnic group is a minority, however, they may feel more pressure to acculturate to the culture and values of the dominant White group (Nguyen, Messe, and Stollak, 1999).

Acculturation versus ethnic identity. Examining acculturation raises the question of its relationship to ethnic identity. After all, ethnic identity and acculturation have been used interchangeably in the psychology literature. Yet, researchers (Berry, Phinney, Sam, & Vedder, 2006) argue that ethnic identity and acculturation should be assessed independently, as was the case in this study. As defined earlier, ethnic identity is a psychological construct that describes positive feelings of belonging, pride, and commitment to one's ethnic group. Acculturation, on the other hand, refers to the cultural behaviors associated with one's cultural group. For instance, Latina/os may acculturate to the Anglo culture by acquiring language proficiency and adopting some cultural values (e.g., less formal communication style), yet, they may retain and/or strengthen their ethnic identity or deny it as a result of their contact with the dominant group. For example, some Latina/os who have experienced discrimination may develop a stronger ethnic identity and consequently become reluctant to assimilate. Phinney (2003) asserts that although many Latina/os develop bicultural identities, they also retain their ethnic identity over time.

To clarify the relationship between acculturation and ethnic identity, Cuéllar, Nyberg, and Maldonado (1997) investigated whether ethnic identity changed depending on participants acculturation status (e.g., bicultural versus assimilated) and generational level (e.g., first versus second). Their sample included 1,367 college freshman from Mexican origin (of whom 83.6% identified as Mexican American, 10% as Mexican National, 4.4% as Anglo American and 1.3% as other). The participants completed the MEIM (Phinney, 1992) and Scale 1 of the Acculturation Scale for Mexican Americans-II (ARSMA-II: Cuéllar, Arnold, & Maldonado, 1995). These researchers found that acculturation and ethnic identity are related but separate constructs. Specifically, higher scores of ethnic identity were found among traditional acculturative types, meaning those oriented toward the Mexican culture, and first generation

students. The researchers concluded that ethnic identity weakens with behavioral acculturation among Mexican Americans. The findings imply that for individuals who are second generation and on, their ethnic identity becomes less salient. However, future studies are needed to contribute to the understanding of the relationship between acculturation and ethnic identity as a noticeable gap exists in the current literature. Therefore, this study hopes to contribute by clarifying how and to what degree the two constructs are related.

Acculturation scales. Various scales have been developed to measure acculturation, particularly among Latina/os. In the majority of measures, respondents answer Likert-scale questions about their language practices, cultural attitudes, and behaviors. Acculturation measures have been developed for adults (Marín & Gamba, 1996; Marín, Sabogal, Marín, Otero-Sabogal, & Perez-Stable, 1987; Norris, Ford, & Bova, 1996; Zea, Asner-Self, Birman, & Buki, 2003) and adolescents (Barona & Miller, 1994; Perez & Padilla, 2000; Szapocnik & Kurtines, 1981) as well as specific Latina/o subgroups (Cuéllar, Harris, & Jasso, 1980; Szapocnik & Kurtines, 1980). In a review of acculturation scales for Latina/os, Kim and Abreu (2001) identified 18 unidimensional or linear scales in which behaviors were the most common indicator assessed. For example, in the Acculturation Rating Scale for Mexican Americans (ARSMA-I; Cuéllar, et al., 1980), 70% of the items inquire about behavioral aspects of acculturation. Linear scales view measure acculturation as acculturated to the dominant group (Anglo) or unacculturated.

In contrast, bidimensional measures of acculturation assess various domains of acculturation such as acculturation to the Anglo culture and Latino culture. For example, the ARSMA-II (Cuéllar et al., 1995), one of the most extensively cited acculturation measures, consist of two scales; a Mexican orientation scale (MOS) and an Anglo orientation scale (AOS)

that measure behaviors (e.g., reading and listening to music). The scale also yields orthogonal acculturative categories consistent with Berry's (1997) strategies (Traditional, Low Bicultural, High Bicultural, and Assimilated) and five acculturation levels (e.g., Level 1- Very Mexican Oriented, Level 3- Slightly Anglo Oriented Bicultural, and Level 5-Anglicized). Cuéllar et al developed cut-off scores that allows for grouping of participants into these acculturation categories and levels (See Chapter 3 for specific information). Because of its utility, the ARSMA-II has been adapted for use with other Latina/o subgroups (e.g., Salvadoran and Guatemalan; Céspedes & Huey, 2008) and other ethnic minority groups (e.g., Asian Americans; Lee, Yoon, & Liu-Tom, 2006) in studying acculturation.

Researchers have critiqued the consistent use of unidimensional acculturation measures, despite advances in theory (Berry, 2003). However, because the ARSMA-II is a bidimensional measure and it is consistent with Berry's (1997; 2003) acculturation framework, it has received wide research attention. Another critique of the acculturation research is that bidimensional measures are less widely used making comparison across empirical studies impossible. To avoid the trend of using unidimensional scales, this study used a bidimensional measure (adapted ARSMA-II), to measure acculturation and examine its role to career-related variables.

Given the large increase of Latina/os in the United States, researchers are becoming even more interested in understanding the adaptations that these individuals make as a result of social interactions in the mainstream cultural environment. While acculturation has been identified as a major variable in the psychological study of Latina/os, empirical findings in the career research literature have yielded mixed results.

Acculturation and Career Development

Cultural variables have been suggested to be of critical importance in understanding the career paths of people of color because cultural variables may influence vocational behavior (Carter & Cook, 1992; Fouad, 1995; Fouad & Byers-Winston, 2005). For some racial and ethnic minorities, such as Latina/os, preserving their traditional cultural values (e.g., familism), can be particularly challenging as they navigate the dominant culture and adopt mainstream cultural values. Carter and Cook (1992) contend that for ethnic/racial minorities “acculturation has direct implications for the adjustment between the values of the American mainstream workforce and their [indigenous cultural values of the] home community” (p. 207). For instance, Latina/os may speak only English at work but prefer to speak only Spanish in their home and community.

Few career studies have examined the role of culturally related variables, such as acculturation, on the career path of Latina/os (Arbona, 1995). Particularly relevant to the present research are studies that examined the influence of acculturation on self-efficacy. Lent et al. (1994) indicated that within the SCCT framework, cultural variables, like acculturation, have a potentially significant impact on career behavior. In fact, findings from the few studies examining the role of acculturation on career-related self-efficacy within the SCCT model have provided support for the impact of cultural/contextual variables in career-related behaviors (e.g., Flores & O’Brien, 2002; Tang, Fouad, & Smith, 1999). It is important to note, however, that the influence of acculturation on career decision self-efficacy or coping efficacy has not been examined. For this reason, research studies examining the relationship of acculturation to career variables among Latina/os have been included in this review. Prior to the career-related studies, acculturation research focused primarily on its relationship to educational variables among Latina/os such as achieving styles (e.g., Gomez & Fassinger, 1994), college planning (Hurtado &

Gauvain, 1997), and educational aspirations (Ramos & Sanchez, 1995). In the following sections, the research examining acculturation among Latina/os and various career variables is presented.

Acculturation and self-efficacy. Miranda and Umhoefer (1998) conducted a study to examine how unidimensional acculturation, language use, and demographic variables predict career self-efficacy among Latina/os. Career self-efficacy pertains to efficacy judgments about the wide range of behaviors involved in career choice and adjustment (Miranda & Umhoefer, 1998). They sampled 95 adult Latina/os (ages 18-65, $M = 30.5$) seeking career counseling in a social services agency. The multiple regression analyses revealed that among the Latino men ($n = 50$) and women ($n = 35$), higher acculturation and greater use of English significantly predicted career self-efficacy. The investigators explained that higher acculturation and frequency of English use, likely contribute to a greater belief in the capacity to meet the demands of desired jobs, irrespective of educational level, length of residence in the US, and age.

More recently, Rivera, Chen, Flores, Blumberg, and Ponterotto (2007) used SCCT to investigate how acculturation (measured with the Bidimensional Acculturation Scale (BAS); Marín & Gamba, 1996), role models, and perceived barriers, predict the career self-efficacy and career considerations among Hispanic women. Based on a cutoff score, the BAS can be used to distinguish between Anglo and Hispanic acculturation based on several behavioral indicators. Participants in the study were a heterogeneous group of Latinas mostly born outside of the U.S, including Dominicans, Puerto Ricans, Ecuadorians, Colombians, Salvadorans, and Cubans among others. The participants were 131 students from an urban community college located in the east coast of the United States. The researchers analyzed two path models, a male-dominated career considerations model and a female-dominated career considerations model. The path

model analysis showed that Anglo acculturation explained significant variance to female-dominated career self-efficacy but not to male-dominated career self-efficacy. Additionally, Hispanic acculturation did not contribute to male-dominated career self-efficacy or to female-dominated career self-efficacy and consideration. As researchers (e.g., Flores & O'Brien, 2002) have pointed out, Anglo acculturated women are likely to stay away from male-dominated careers, perhaps, due to increased awareness of the sociopolitical environment they may have to navigate in male dominated work spaces. Perhaps, these women also anticipate facing more discrimination. For this reason, it would be important to assess their feelings about their ethnic identity to determine how it may help them to resist barriers.

In a different study, Navarro, Flores, and Worthington, (2007) tested a modified version of the SCCT model to examine the role of bidimensional acculturation (i.e., Anglo and Mexican orientation as measured by the ARSMA-II) as one of the background contextual affordance variables explaining the math and science goals of 409 Mexican American youth. In contrast to other studies, the results from structural equation modeling revealed that bidimensional acculturation was not influential in past math and science performance suggesting that it did not have a direct relationship to math and science self-efficacy and outcome expectations, as posited in the SCCT model. Perhaps, this finding may be explained by the age group included or the types of self-efficacy explored (math and science). Further, bicultural acculturation level did not influence math/science efficacy and outcome expectations. The findings, however, indicated a significant relationship between generational status, bidimensional acculturation, and social class. In turn, social class positively influenced past math/science performance accomplishments. Consistent with the positive relationship with acculturation and social class, the researchers concluded generational status and bidimensional acculturation are more strongly associated with

social class. Nonetheless, Navarro et al. recommend future research to determine the role of bidimensional acculturation in career path of Latinas/os and in the SCCT model.

Acculturation and other career related variables. Moreover, Lucero-Miller and Newman (1999) investigated the relationship between unidimensional acculturation and the career behavior of Mexican American students in two-year and four-year colleges. Specifically, the investigators examined career decision status, career salience, vocational identity, and career beliefs as predictors of acculturation level (measured with the ARSMA-I) among 176 students (ages 16-53). The results from a series of multiple regressions showed that highly acculturated (i.e., Anglo-oriented) students in their sample reported career behaviors similar to those reported by Whites in previous studies. For example, participants that endorsed higher levels of career decision status (i.e., certainty about a vocational decision) also endorsed higher levels of vocational identity formation. In contrast, those that were vocationally undecided had less well-developed vocational identities. Also, participants who had made a career decision also held stronger beliefs about persisting in their career goals and the potential for overcoming obstacles. Of the demographic variables (e.g., gender, age, generation level and socioeconomic status) included in this study, socioeconomic status was the most strongly correlated with acculturation. The authors concluded that their study results indicated that acculturation was an important variable to consider in the career behavior of minority groups, such as Latina/o.

Flores, Ojeda, Huang, Gee, and Lee (2006) demonstrated that Anglo acculturation and effective problem-solving abilities significantly predicted educational goals. These investigators researched the influence of acculturation (measured with the ARSMA-II), problem-solving abilities, and career decision making self-efficacy on the educational goals of 105 Mexican American high school students. The findings from the multiple regression analysis showed that

Mexican-oriented acculturation and career decision self-efficacy were not significant predictors of students' educational goals. Of the variables included, both Anglo acculturation and career decision self-efficacy were the two most significant predictors of educational goals. While this study does not examine career goals, it contributes to the vocational research among Latina/os by exploring how students' perceptions of their ability to make career decisions extend to the educational domain. That is, in the same way that Anglo acculturation and career decision self-efficacy predicted educational goals, they may also predict career goals. It has been observed that because many of the skills used to make career decisions overlap with educational planning and decisions, enhancing students' career decision self-efficacy can help to increase their educational goals and career exploration behaviors (Flores, et al., 2006). For example, increasing a female student's career decision self-efficacy could lead to her consideration of a wider range of occupations including those that are traditionally dominated by men (e.g., astronomy), despite perceived career barriers. In the section below, research focused on the career development of Latinas is discussed.

Acculturation and the career paths of Latinas. Although a wide range of occupations exist, men and women of color are disproportionately distributed in male and female dominated jobs (Arbona & Novy, 1991). For example, data from the U.S. Bureau of the Census (1994) show that women tend to be overrepresented in low paying jobs that are traditionally occupied by females (female-dominated jobs) and underrepresented in occupations traditionally occupied by men (male-dominated jobs). To better understand the relationship of acculturation in the career paths of women, particularly Latinas, several researchers have specifically sampled female participants. These studies are described below.

McWhirter, Hackett, and Bandalos (1998) were among the first to consider the role of acculturation in the career path of Latinas. Specifically, McWhirter and her colleagues tested a path model which included acculturation and perception of barriers to examine both the educational and career expectations of 282 Mexican American high school girls (juniors and seniors). To assess acculturation, these researchers used the Short Acculturation Scale (SAS; Marín, Sabogal, Marín, Utero-Sabogal, & Perez-Stable, 1987), a unidimensional scale in which higher scores reflect Anglo acculturation. Results from the path analysis indicated that of the two variables, acculturation level and perceived barriers, the level of acculturation accounted for a significant amount of the variance in explaining educational and career expectations. The findings from the study offer support for the inclusion of acculturation in future studies of the career paths of Latina/os (McWhirter et. al., 1998).

In a different study with Mexican American adolescents in 10th grade, Reyes, Kobus, and Gillock (1999) examined the relationship of acculturation status to career aspirations in male and female dominated careers. Initially, the participants included a total sample of 162 students ($n=100$ females and $n=62$ males). However, due to study's focus on females the analyses was restricted to the female data. The results showed that female students who aspired to careers primarily dominated by men (e.g., astronomy, architecture, aviation) were more acculturated to the dominant Anglo culture. Further, these participants also held higher expectations about attending college, graduating, and securing financially lucrative jobs in the future.

In contrast, in a study examining the career development of 831 Mexican American adolescent women, Flores and O'Brien (2002) tested the SCCT model by including acculturation level (assessed by ARSMA-II), as a contextual variable, and other social cognitive variables. They used path analysis to examine the contribution of acculturation on career aspiration, choice,

and traditionality. The results of the study showed a significant relationship between acculturation and career choice traditionality but not for nontraditional career self-efficacy. In other words, participants with higher levels of acculturation to the Anglo culture desired to pursue more traditional and less prestigious careers. To expand this study, Flores and O'Brien recommended that future researchers examine if acculturation level (e.g., Mexican acculturation) has a differential influence on nontraditional career self-efficacy among Mexican acculturated and bicultural individuals.

Finally, using a qualitative methodology, Gomez and her co-authors (2000) studied the development of 20 notable adult Latinas. Among the many predictors influencing their career path, culture and cultural identity were found to be important. Specifically, the results revealed that the majority of the women described themselves as bicultural because they felt efficacious about navigating both the Anglo American and Hispanic cultures. Furthermore, participants behaved differently, depending on whether they were in the Anglo context or their ethnic group context. Gomez et al., (2000) suggested that for these successful women, acculturation to their Latino sub-group was important as evidenced by their commitment and responsibility to family, a value important in the Latino culture.

Summary. Investigators have explored the relationship between acculturation and several career related factors including career self-efficacy, career consideration and traditionality, career aspirations, career expectations, and career choice (e.g., Flores & O'Brien, 2002; McWhirter, Hackett, & Bandalos, 1998; Miranda & Umhoefer, 1998; Reyes et al., 1999; Rivera et al., 2007; Tang et. al., 1999). Recently, several career researchers have examined acculturation within the SCCT model (Flores & O'Brien, 2002; Navarro, et al., 2007; Rivera et al., 2007) when considering the career behavior of Latina/os. The overwhelming majority of

these studies have examined acculturation and career-related variables with Mexican American samples.

Overall, the findings from the above studies suggest that the contribution of acculturation to career development is complex. Among Latina/o adolescents, some researchers (e.g., McWhirter, Hackett, & Bandalos, 1998; Reyes, Kobus, & Gillock, 1999) have found that acculturation level accounts for a significant amount of the variance in career expectations among adolescents. Among adolescent Mexican American Latinas, for example, higher levels of acculturation to the Anglo culture have been associated with a desire to pursue more traditional and less prestigious careers (Flores & O'Brien, 2002). Higher acculturation level and greater use of English language has been found to significantly predict career self-efficacy among Latina/o adults (Miranda & Umhoefer, 1998). Other studies (Gomez, et al., 2001) have revealed that bicultural acculturation influenced the career path of exceptionally successful Latinas. Thus, a person's acculturation level seems to contribute to career-related behavior such as the type of careers they are willing to consider and their career decisions. For example, acculturation level is likely to contribute to self-efficacy beliefs about achieving tasks related to making a career decision (e.g., managing an interview). The literature review below will discuss research findings relevant to a task specific self-efficacy, career decision self-efficacy.

Career Decision Self-Efficacy (CDSE) as a Mediator

Among all of the variables investigated in the career development research, career decision self-efficacy has been the most studied (Betz, Hammond, & Multon, 2005). CDSE pertains to one's self-efficacy beliefs about the ability to perform tasks in the process of making a career decision (Betz, Klein, Taylor, 1996). Additionally, what earlier research referred to as

career decision *making* self-efficacy is now more simply referred to as career decision self-efficacy (CDSE; Betz, et al., 2005).

Research in career decision self-efficacy began with the work of Betz and Hackett (1981; 1983) who were interested in studying women's career development. Specifically, they wanted to understand the underrepresentation of women in science related careers and together saw the utility of self-efficacy theory in their program of research. That is, they hypothesized that women's career decision making processes were influenced by their gender role socialization leading to weak self-efficacy beliefs. Indeed, Betz and Hackett (1981) demonstrated that women held higher levels of self-efficacy beliefs in traditional occupations (female dominated careers) but lower self-efficacy in non-traditional occupations. Subsequently, Taylor and Betz (1983) developed the first scale of career decision making self-efficacy (CDMSE) which was later revised to the career decision making self-efficacy-short form (CDMSE-SF; Betz, Klein, Taylor, 1996). The scale was revised once again to career decision self-efficacy-short form (CDSE-SF; Betz, et al., 2005).

In the past two decades, CDSE has been used to study a wide range of academic and career domains with diverse populations. For example, researchers have found that CDSE significantly predicted educational goals among high school students (Flores, Ojeda, Huang, Gee, & Lee, 2006). Vocational researchers have found a negative relationship between CDSE and vocational indecision (Betz, et al., 1996; Betz & Vuyten, 1997), and a positive relationship between CDSE and career maturity (Anderson & Brown, 1997). Interventions for increasing CDSE have also been explored. In the majority of experimental and quasi-experimental studies, the focus was on improving women's self-efficacy beliefs for careers dominated by men (Gainor, 2006). Generally, findings from the intervention studies also indicate that intervention programs can be

effective in improving students' CDSE (O'Brien, Bikos, Epstein, Flores, Dukstein, & Kamatuka, 2000; McWhirter, Rasheed, & Crothers, 2000). Collectively, these studies suggest that CDSE seems to be an important aspect in the career path of individuals.

Some authors have noted that career-related self-efficacy may be an important aspect of conceptualizing a model of career development for Latina/os (Arbona, 1995). Surprisingly, despite the burgeoning research on CDSE, relatively few studies have focused on the CDSE of Latina/os. Building on the perspective that career self-efficacy beliefs mediate the influence of personal and contextual factors on career behavior, researchers have examined ethnic identity among ethnic minority and White participants. Among these studies is Gloria's and Hird's (1999) investigation which examined CDSE by comparing Latina/o and other ethnic minorities and Whites. Participants included a sample of 98 ethnic minority students and 589 White students attending a university in the Rocky Mountain region of the United States. They found that Caucasian participants held significantly higher levels of CDSE compared to Latina/os (Gloria & Hird, 1999).

Another relevant study of CDSE, with regard to the variables in the present study, was conducted by Gushue, Clarke, Pantzer, and Scalan (2006). These researchers explored CDSE, perception of barriers, vocational identity, and career exploration behaviors in a sample of 128 urban Latina/o high school students. Findings indicated that higher levels of CDSE were associated with a clearer vocational identity and participation in more career exploration tasks. Students with a more differentiated vocational identity also perceived fewer career barriers. A different study conducted by Gushue (2006), assessing 128 Latina/o ninth grade students, offered evidence for the importance of CDSE on outcome expectations. That is, CDSE

had a direct influence on outcome expectations. Additionally, because the study was grounded on SCCT, as expected, CDSE mediated the influence of ethnic identity on outcome expectations.

Generally, CDSE has been primarily examined among four year college participants. Noticing this general trend, one study investigated CDSE among community college participants. Luzzo (1993b) included a diverse sample of 233 White, Hispanic, Asian, and African American participants ranging in age (18-52; $M = 24.74$). Participants were enrolled in a large Midwestern community college. Luzzo examined the influence of CDSE in predicting career decision-making attitudes (dispositions toward making choices and entering the workforce) and career decision-making skills (problem solving career dilemmas). Luzzo conducted a stepwise multiple regression analysis to determine which variables contributed most significantly to career decision making attitude and skills. The findings revealed that career decision making skills and CDSE were the strongest predictors of career decision making attitudes. Further, CDSE was only positively related to career decision-making attitudes and the age of the participants indicating that career decision-making may increase with age.

Summary. The extant studies suggest that a higher level of CDSE, or higher confidence in the ability to make career decisions, positively affect other career-related behaviors (e.g., career exploration, goals, maturity, and vocational identity). Further, the review of the CDSE research indicates that further research is necessary to clarify the variables that influence CDSE and to understand how CDSE, particularly the CDSE of Latina/os, contributes to career outcome expectations such as the perception of barriers. Additionally, more empirical examination is needed to understand how an individual's self-efficacy for coping with barriers influences his or her career path.

Coping Efficacy as a Mediator

Coping efficacy, another specific type of self-efficacy, refers to an individual's confidence in his/her ability to manage challenging obstacles (Bandura, 1997). Coping efficacy is thought to determine whether individuals will attempt to overcome perceived barriers to their career path (Hackett & Byars, 1996; Lent et al., 2000). In other words, for those with high levels of coping efficacy, perceived barriers may not prevent them from pursuing certain accomplishments. As Hackett and Byars have observed "strong efficacy for coping with barriers can result in successful performance despite expectations of barriers and impediments such as racism and discrimination (p. 329). For this reason, it has been postulated that coping efficacy may mediate the influence of perceived barriers on career paths (McWhirter, et al., 1998).

Similarly, Lent et al. (1994, 1996) contend that the way career barriers are perceived can influence how an individual copes with those barriers. Additionally, Swanson and Tokar (1991) have suggested that the way people cope with barriers differs depending on whether they are perceived as challenges to overcome or as opportunities. Although many studies have measured perceptions of career-related barriers, there is a paucity of research examining the role of coping efficacy. Among the exceptions found were four studies.

First, Luzzo's and McWhirter's (2001) study is among the few studies that assessed perceived career barriers and coping efficacy among European American and ethnic minority students ($n = 168$ females; $n = 118$ males). The ethnic and racial distribution of the sample was as follows: European American (89%), African American (7%), Native American (2%), Asian American (1%), and Hispanic (<1%). Findings from their diverse sample suggested that ethnic minority students reported lower coping efficacy for managing career barriers than their White counterparts. The findings from this study seemed to have increased the interest among

researchers with regard to coping efficacy. For example, in another study, Lent, Brown, Brenner, Chopra, Davis, Talleyrand, et al. (2001) used the SCCT framework to conduct a study examining barriers specific to the domain of math and science and coping efficacy among other variables. As expected, the results suggested that higher levels of coping efficacy resulted in perceiving fewer barriers.

Third, Lent, Brown, Schmidt, Brenner, Lyons, and Treistman (2003) explored the utility of the SCCT model, with a focus on perceived contextual supports and barriers and self-efficacy predicting educational choice goals and persistence of students majoring in engineering. Their sample was composed of 328 students (66 women, 248 men and 14 who did not report their gender) who were 18.63 years old, on average. These researchers tested two path models to fit the data. The results showed that both self-efficacy and coping mediated the influence of support and perceived barriers on goals. While the findings did not explain causal relations, the findings are consistent with the notion that contextual variables are proximal sources of self-efficacy.

Finally, given the dearth of studies investigating coping efficacy, Mejia, Navarro, and Gushue (2008) explored the role of ethnic identity, and career decision self-efficacy on coping efficacy and perceived career barriers among a sample of 162 college students. Their participants included 76.5% women and 23.5% men with 77.2% Mexican American, 13.6% Spanish American, 1.2% mixed Latino heritage, 0.6%, Central American, and 0.6% South American. Ninety-percent of these college students reported being born in the U.S. The researchers tested two path models using parts of SCCT. Results of the path analyses indicated that, for this sample, the effect of ethnic identity on the perception of barriers and coping efficacy was mediated by career decision self-efficacy. Specifically, the findings suggest that Latina/o students who had a stronger sense of pride in their ethnicity were more likely to feel efficacious

to make career decisions. In turn, higher self-efficacy beliefs resulted in perceiving fewer career barriers and higher confidence to overcome career barriers. Like many studies, however, this study was limited in its generalizability due to the selective sampling of Mexican Americans.

Summary. Coping efficacy influences anticipated outcome expectations of prospective actions which, in turn, guide career-related behavior. Because coping efficacy has to do with the judgments about one's capacity to manage obstacles related to career decisions, it is believed that those with higher coping efficacy perceive fewer career barriers. Based on the results of the evidence described above, the researcher examined coping efficacy as a mediator between ethnic identity, acculturation and perceived barriers. In addition, due to limited research between perceived barriers and coping efficacy, the current investigation included both variables.

Statement of the Problem

Latina/os are overrepresented in low paying occupations despite having high career aspirations. Sociohistorical, sociopolitical, and sociostructural barriers have contributed to this occupational segregation. Yet, most career development theories have ignored how these barriers limit access to work opportunities and shape a person's career path. For this reason, researchers have questioned the relevance of traditional career development theories to Latina/os and other groups who are in a position of disadvantage. Given the theoretical limitations of most career theories, researchers have proposed the EC framework for vocational research. EC considers how injustices and inequities impinge on people's career path and it advocates for the resistance and change of oppressive systems. To expand EC's utility, it is proposed that an integrated EC-SCCT framework can be used for research in vocational psychology. SCCT has been found to be useful for examining the career path of Latina/os due to its emphasis of social-contextual variables, such as barriers, that shape the career choice process.

Empirical research examining the influence of perceived career barriers has convincingly demonstrated that students of color and women perceive more career-related barriers than Anglo students. Students of color perceive barriers directly associated with their ethnicity and gender. Repeatedly, it has been shown that the perception of career-related barriers influence individuals' sense of efficacy about their decision making abilities, coping efficacy, and vocational choices. However, for some students, the perception of barriers may actually motivate them to resist those barriers. Ethnic identity and acculturation are hypothesized to be among the motivating factors that may help individuals to cope with barriers by influencing self-efficacy. The relationship between ethnic identity and acculturation on the career process, however, has not been studied sufficiently.

This study aimed to contribute to the vocational psychology literature by using an EC-SCCT conceptual framework. To date, no studies have used the EC-SCCT framework to investigate the career path of Latina/os. SCCT was selected for two reasons: 1) it describes how perceived barriers are accounted for by personal and contextual factors which influence career self-efficacy beliefs and coping efficacy; 2) it dovetails with the EC framework to conceptualize research exploring the career path of individuals whose career choices are limited by sociohistorical, sociopolitical, and sociostructural barriers.

Using a SCCT perspective, it was posited that personal and contextual factors would likely influence self-efficacy beliefs. Hence, career decision self-efficacy and coping efficacy are likely to be bolstered by the influence of ethnic identity and acculturation. In this way, ethnic identity and acculturation are thought to contribute to an overall sense of efficacy in career decision tasks and in coping with perceived barriers. In the SCCT model tested, ethnic identity was operationalized as a person input variable and acculturation as a contextual affordance. In

keeping with SCCT, person input and contextual background variables were hypothesized to influence specific types of self-efficacy, such as CDSE and coping efficacy. In turn, self-efficacy was hypothesized to directly influence outcome/process expectations (See Figure 2).

Finally, although prior research has explored the career path of Latina/os, the majority of studies have focused on Mexican American students, leaving many subgroups understudied. This is not surprising given that Mexican Americans comprise the largest (66%) subgroup in the United States (U.S. Census Bureau, 2008). This study attempted to examine within group differences related to ethnic identity and acculturation by sampling Latina/os from diverse nationalities.

Hypotheses

In this study two path models were tested: a fully mediated model and a partially mediated model (see Figure 2). In accordance with SCCT, the following hypotheses were tested for the fully mediated model:

Hypothesis 1: It was predicted that ethnic identity would have a direct effect on career decision self-efficacy and coping efficacy.

Hypothesis 2: It was hypothesized that acculturation level would have a direct effect on career decision self-efficacy and coping efficacy.

Hypothesis 3: It was expected that career decision self-efficacy and coping efficacy would have a direct negative influence on the perception of barriers.

In other words, higher levels of career decision self-efficacy would be associated with perceiving fewer career barriers and higher levels coping efficacy would be associated with perceiving fewer barriers.

Hypothesis 4: It was hypothesized that ethnic identity would have an indirect effect on perceived career barriers through career decision self-efficacy and coping efficacy. As such, career decision self-efficacy is a mediating variable for the effect of ethnic identity on perceived barriers.

Hypothesis 5: It was predicted that acculturation would have an indirect effect on perceived career barriers through career decision self-efficacy and coping efficacy. Thus, career decision self-efficacy and coping efficacy would mediate the effect of acculturation on perceived barriers.

Alternative path model. Weston and Gore (2006) suggest that researchers consider testing alternative models. In accordance with the literature review, the following hypotheses were tested in the partially mediated model (see Figure 2):

Hypothesis 6: It was predicted that acculturation would have a direct influence on the perception of barriers.

Hypothesis 7: It was predicted that ethnic identity would have a direct negative influence on the perception of barriers.

Hypothesis 8: It was predicted that there would be a statistically significant weak correlation between ethnic identity and acculturation.

Hypothesis 9: It was predicted that there would be a statistically significant strong correlation between career decision self-efficacy and coping efficacy.

Figure 2. Hypothesized Fully Mediated Path Model Predicting Perceptions of Career Barriers and Partially Mediated Path Model Predicting Perceptions of Career Barriers

Chapter III

METHOD

This chapter describes the research methodology and analysis procedures used in this study. A description of the participants' demographics is provided first; followed by the analyses procedures conducted to test the study's hypotheses.

Participants

The sample consisted of 357 Latina/o undergraduate students who completed all of the measures in the study. A total of 435 participants partially completed the survey, and 358 completed the survey in full (82%) resulting in an overall response rate of 79%. Of the 358, only one participant was identified as a multivariate outlier and was excluded from the analyses. Only participants who self-identified as Latina/o or Hispanic in the demographic information form were included in this study.

Of the 357 participants, 247 were females (69.2%) and 110 were males (30.8%). The mean age was 22.54 (Median = 21.00, Mode = 20.0, SD = 5.72) with a range of 18 to 63 years old. As Table 1 indicates, the majority of the participants (38.4%) were in their senior year of undergraduate studies followed by juniors (24.4%) and sophomores (24.4%), and freshman (12.9%). A significant number of the participants (73.1%) were matriculated in four-year universities; 22.4% were enrolled in community colleges; 2.5% attended two-year colleges, and 2.0% reported "other" as their type of college.

In addition to recruiting Latina/o students from four-year universities, the researcher included students in community college given that Latina/os attending these institutions have been ignored in vocational research (Wild & Ebbers, 2002). Moreover, community colleges play

a key role in the education of first-generation college students, those born outside of the U.S., and those from low-socio economic status families (Bailey, 2006).

As shown in Table 1, participants self-reported their ethnicity as follows: 4.8% Chicana/o, 16.0% Mexican, 13.7% Mexican American, 5.6% Caribbean (i.e., Cuban, Dominican, and Puerto Rican), 3.1% South American (i.e., Colombian, Peruvian, Venezuelan), 2.0% Central American (i.e., Salvadoran, Costa Rican, and Nicaraguan), 26.6% Hispanic, 23.2% Latina/o, and 5.0% were of Mixed ethnicity (e.g., Costa Rican/Puerto Rican, Mexican American/Puerto Rican, Mexican and Guatemalan). The majority of participants (51.3 %) indicated that they were second generation followed by 31.4% who were first generation and 17.4% who were third generation.

A large portion of the participants (35.1%) were between 1 and 5 years old when they immigrated to the United States. Of those that immigrated, the majority (30.1%) reported that they have lived in the U.S, between 6-10 years. Additionally, most participants (45.4%) in this sample were categorized in the “slightly Anglo oriented bicultural” acculturation level using cut-off scores described by Cuéllar et al. (1995). Only English speaking individuals were sampled since all of the study materials were available in English.

With regards to their family’s socioeconomic status, 35.0% of the participants self-identified as working class. The remainder of the participants reported that they were from middle class (23.5%), poor/low income (17.1%), lower middle class (16.8%), upper middle class (7.3%) and upper class (0.3%) family backgrounds. Participants were also asked to report their income level. A wide range was found among self-reported income level with most participants (17.4%) falling in the \$35,000 to \$49,999 bracket. Additional participant demographics are shown in Table 1.

Table 1

Demographic Characteristics for the Total Sample ($N = 357$)

Characteristic	<i>N</i>	%
Class Standing		
Freshman	46	12.9
Sophomore	87	24.4
Junior	87	24.4
Senior	137	38.4
Type of College		
Community College	80	22.4
Junior College	9	2.5
Four-Year University	261	73.1
Other	7	2.0
Ethnicity		
Chicana/o	17	4.8
Mexican	57	16.0
Mexican American	49	13.7
Caribbean ^a	20	5.6
South American ^b	11	3.1
Central American ^c	7	2.0
Hispanic	95	26.6
Latina/o	83	23.2
Mixed	18	5.0
Generational Status		
First Generation	112	31.4
Second Generation	183	51.3
Third Generation	62	17.4
Age of Immigration		
1-5 years	33	35.1
6-10 years	28	29.8
11-15 years	22	23.4
16-20 years	6	6.4
21-25 years	3	3.2
26-30 years	0	0.0
31-35 years	2	2.1

^a Caribbean (e.g., Dominican, Puerto Rican, Cuban); ^b South American (e.g., Colombian, Peruvian, Venezuelan);^c Central American (e.g., Salvadoran, Guatemalan, Costa Rican, Nicaraguan).

Table 1

Demographic Characteristics for the Total Sample (continued)

Characteristic	<i>N</i>	%
Years lived in the U.S.		
1-5 years	6	5.8
6-10 years	31	30.1
11-15 years	23	22.3
16-20 years	24	23.3
21-25 years	12	11.7
26-30 years	6	5.8
31-35 years	1	1.0
Acculturation Level		
Level 1-Very Latino Oriented	6	1.7
Level 2-Balanced Bicultural	128	35.9
Level 3-Slightly Anglo Oriented Bicultural	162	45.4
Level 4- Strongly Anglo Oriented	59	16.6
Level 5-Anglicized	2	0.6
Acculturation Status/Group		
Traditional Latino Orientation	18	5.0
Low Bicultural	105	29.4
High Bicultural	166	46.5
Assimilated	68	19.0
Family Socioeconomic Status		
Poor/Low Income	61	17.1
Working Class	125	35.0
Lower Middle Class	60	16.8
Middle Class	84	23.5
Upper Middle Class	26	7.3
Upper Class	1	0.3
Income Level		
\$1 to \$9,999 or less	28	7.8
\$10,000 to \$14,999	28	7.8
\$15,000 to \$24,999	55	15.4
\$25,000 to \$34,999	57	16.0
\$35,000 to \$49,999	62	17.4
\$50,000 to \$ 64,999	49	13.7
\$65,000 to \$74,999	31	8.7
\$75,000 to \$99,999	27	7.6
\$100,000 or more	20	5.6

Instruments

The following self-administered instruments were used in this study: 1) Demographic Information Form; 2) Multi-Group Ethnic Identity Measure-Revised; 3) Acculturation Rating Scale for Mexican Americans-II Revised (adapted for this study); 4) The Career Decision Self-Efficacy- Short Form; 5) The Coping with Barriers Scale; and 6) The Perceptions of Barriers Scale-Revised.

Demographic Information Form. A demographic survey (see Appendix A) was included to obtain gender, age, ethnicity, country of origin, length of residence in the U.S., age at arrival to the U.S., city and state of residence, demographic region, college/university enrollment, class standing (i.e., sophomore, junior), transfer status, and socioeconomic status (e.g., working class, middle class, and upper class). Using Cuéllar et al.'s (1995) definitions for generational status, participants were asked to indicate whether they are first, second, or third generation. Specifically, first generation was used for participants born outside the U.S. in native country. Second generation was used for participants born in the U.S. and whose parents were born in their native country. Third generation refers to participants and parents born in the U.S. but whose grandparents are born in their native country. It was expected that individuals who are 3rd generation are more likely to be Anglo acculturated (Cuéllar et al., 1995).

In addition, one item asked participants to indicate if they have made a career decision. Participants who respond "yes" were asked a follow up question to list their career choice. This data was used to group respondents into groups (career decided vs. career undecided) and compare the two groups on their level of efficacy and perceived barriers.

Revised Multigroup Ethnic Identity Measure (Roberts, Phinney, Masse, Chen, Roberts, & Romero, 1999). This 12-item scale was revised, from the originally 14-item scale

designed for high school and college students (MEIM, Phinney, 1992), to assess ethnic identity among adolescents from diverse ethnic groups. This revised version contains two subscales that measure respondents' sense of group membership, feelings of belonging and pride, positive attitude, and involvement with their ethnic group. A total of seven items are included in the Affirmation/ Belonging subscale and five items total the Exploration subscale. Responses are rated on a four-point scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Examples of the affirmation/belonging items include: "*I have a lot of pride in my ethnic group*" and "*I have a clear sense of my ethnic background and what it means to me.*" Items from the exploration subscale include: "*I participate in cultural practices of my own group, such as special food, music, and customs*" and "*I spent time trying to figure out more about my ethnic group, such as its history, traditions, and customs.*" In addition to the 12-items, Roberts et al., (1999) recommend for researchers to include three items in which participants are asked to select their ethnicity and their parents ethnicity from a list. These items assess ethnic self-identification and are not included as part of the ethnic identity score. The scale yields a total score derived by summing the items and obtaining a mean. Higher scores indicate a stronger ethnic identity or attachment and positive feelings for one's ethnic group. The internal consistency reliability of the 12-item MEIM has yielded an alpha coefficient of .84 with an ethnically and racially diverse sample of young adolescents (755 Mexican American; 253 Central Americans; 304 Vietnamese American; 188 Indian Americans; 177 Chinese Americans; 155 Pakistani Americans; 101 Pacific Islander; 755 European Americans; 1,237 African Americans; and 342 mixed ancestry). Phinney (1992) reported an alpha of .81 for ethnic identity for a sample of high school and college students from various ethnic groups including (134 Asian Americans, 131 African Americans, 89 Latina/os, 41 multiracial, 12 Whites, and 10 other). Further, Cuéllar et al. (1997)

reported an alpha of .85 for ethnic identity in a young adult ($M = 21$, age range: 17-60) sample of Mexican origin. Reliability analysis for the present study revealed an alpha of .67 (see Table 2 for the reliability coefficients for all of the measures used in this study).

Furthermore, convergent validity has been shown by positive correlations between the Multi-Group Ethnic Identity Measure-Revised and other measures of psychological well being including self-esteem, coping ability, and mastery (Roberts, et al., 1999). A copy of this scale is included in Appendix B.

Acculturation Rating Scale for Mexican Americans-II (ARSMA-II; Cuéllar, Arnold, & Maldonado, 1995). In this study, the ARSMA-II was used to measure acculturation level. The ARSMA-II is considered the most prominent measure of acculturation (Gamst, Dana, Der-Karabetian, Aragón, Arellano, & Kramer, 2002) and it has been reliably adapted with other Latina/o subgroups such as Salvadoran and Guatemalans (Céspedes & Huey, 2008) and other ethnic minority groups including Asians Americans. Previous studies have adapted the ARSMA-II by rewording “Mexican” to “Latino” (Céspedes & Huey, 2008); however the ARSMA-II has yet to be validated with other Latina/o subgroups other than Mexicans. In the present study, items that refer to involvement and affiliation with the “Mexican” culture were changed to “Latina/os.” For example, “*I associate with Mexicans and/or Mexican Americans*” was reworded to: “*I associate with Latina/os.*” A copy of the modified scale for this study is attached in Appendix C.

The 30 items of the ARSMA-II measure respondents’ involvement in the Mexican culture (17 items) and Anglo culture (13 items) by asking questions about cultural practices, language proficiency and preferences, social and ethnic affiliation. Participants responded to the items using a 5-point Likert scale ranging from (1) *not at all* to (5) *extremely often or almost*

always. For example, items from the Anglo Orientation Subscale (AOS) include: “*I speak English*” and “*My thinking is done in English*” whereas items from the Mexican Orientation Subscale (MOS) include: “*I speak Spanish*” and “*I write (e.g., letters) in Spanish.*” To compute a linear acculturation score that indicates acculturation along a continuum from very Mexican oriented to very Anglo oriented, participants mean scores on the MOS and AOS were calculated first. Then, each participants’ MOS mean was subtracted from the AOS mean (AOS Mean–MOS Mean) to determine individual acculturation scores. Based on the score, respondents were categorized into five different acculturation levels and four acculturative types using cut-off scores developed by Cuéllar et al. For example, a cut-off score of <-1.33 is indicative of a level one or the least acculturated (*very Latino/a oriented*). A level three ($>-.07$ and <1.19) indicates a bicultural orientation (*slightly Anglo oriented bicultural*) and level five (>2.45) indicates the most Anglo acculturated (*Anglicized*). Additionally, the following cut-off points were used to obtain four orthogonal acculturative types: *traditional* (MOS ≥ 3.7 ; AOS ≤ 3.24), *low bicultural* (MOS ≤ 3.59 ; AOS ≤ 3.7), *high bicultural* (MOS ≥ 3.59 ; AOS ≥ 3.7), and *assimilated* (MOS ≤ 2.44 ; AOS ≥ 4.11). Cuéllar et al. reported an alpha of .83 and .88 for the AOS and MOS, respectively. Cuéllar et al. (1997) reported an alpha of .92 for the MOS subscale and an alpha of .80 for the AOS subscale for acculturation in a large sample ($n = 1,367$) of college freshman of whom the majority (82%) was Mexican ($M = 21$, age range: 17-60). According to Kim and Abreu (2001), 76% of the items on the MOS and 85% of items on AOS are behavioral, making an appropriate measure for assessing acculturation in this sample. In the present study, reliability analyses revealed an alpha of .87 for the MOS subscale and .74 for the AOS subscale. Reliability analysis for the entire scale indicated an alpha of .77.

The Career Decision Self-Efficacy-Short Form (CDSE-SF; Betz, Klein, & Taylor, 1996). The CDSE-SF was used to examine the degree to which an individual believes he or she can successfully complete tasks about career decision making (see Appendix D). This measure was developed from the original 50-item Career Decision-Making Self-Efficacy Scale (Taylor & Betz, 1983). The revised scale consists of five subscales with five items each: Accurate Self-Appraisal, Gathering Occupational Information, Goal Selection, Making Plans for the Future, and Problem Solving. Participants were asked to respond to 25 statements on a 5-point scale ranging from 1 (*no confidence at all*) to 5 (*complete confidence*). Sub-scale scores are calculated by adding the responses to each subscale's items and the total score is computed by summing the five sub-scale scores and obtaining the mean. For this study, the total score was used with higher scores indicating higher levels of CDSE. Examples of items include: "*How much confidence do you have that you could choose a career that will fit with your preferred lifestyle*" and "*How much confidence do you have that you could successfully manage a job interview process.*" Betz et al. (1996) obtained an alpha of .94 for total CDSE scale in a college sample of students attending a large university. In addition, they found that CDSE had a strong inverse relationship with measures of career indecision and a positive relationship with career choice certainty and vocational identity. Gloria and Hird (1999) reported Cronbach's alphas of .95 and .97, respectively, for CDSE among 589 White and 98 undergraduate students of color (30 Asian, 21 biracial, 20 international, 12 Latino, 7 Pacific Islander, 4 American Indian, and 4 African American students). Gushue and Whitson (2006) reported an alpha coefficient of .86 for CDSE in a sample of 102 9th grade Latina (46.2%) and Black students (51.9%). Luzzo (1993) used the original 50-item scale of CDSE and found a .83 test-retest reliability for the full scale in a community college sample of 18-52 years ($M = 24.74$). However, the shorter scale has yet to be

validated in a community college sample. Reliability analysis for the present study revealed an alpha of .95 for the total CDSE scale.

The Coping with Barriers Scale (CWB; Luzzo & McWhirter, 2001). The CWB contains 28-items designed to measure individuals' efficacy for coping with specific barriers to their career and educational goals. The CWB has two subscales, career-related barriers (7 items) and educational barriers (21 items) that parallel the content of Perception of Barriers Scale (POB; Luzzo & McWhirter, 2001) subscale (described next). Because this study is examining career-related barriers, only the 7-items assessing an individual's degree of confidence to overcome potential career barriers were included. A total score was calculated by adding all of the items and obtaining the mean. Respondents indicated their degree of confidence in being able to overcome barriers on a 5-point scale ranging from 1 (*not at all confident*) to 5 (*highly confident*) with higher scores indicating a higher degree of perceived ability to cope with barriers. Items include "*Please rate your degree of confidence that you could overcome discrimination due to your ethnicity*" and "*Please rate your degree of confidence that you could overcome negative comments about my ethnic/racial background (insults, jokes, etc.)*." One item asks respondents about their general coping efficacy, "*In general, I think I will be able to overcome any barriers that stand in the way of achieving my career goals.*" This item is meant to be analyzed separately from the other coping efficacy items. Luzzo and McWhirter (2001) have reported an internal consistency of .88 for coping with the Career-Related Barriers subscale and .93 for the Educational Barriers subscale in a sample of ethnic minority and European American college students. In addition, test-retest reliabilities indicated moderate stability coefficients of .50 and .49 for the Career and Educational Barriers subscales, respectively. Reliability analysis for the

present study revealed an alpha of .84 for the 7-items used in the COB scale. A copy of this scale is included in Appendix E.

Perceptions of Barriers Scale-Revised (POB-R; Luzzo & McWhirter, 2001). A modified version of the original scale developed by McWhirter (1997), the POB-R assesses the degree to which respondents perceive barriers to achieving their career and educational goals. It contains two subscales, career-related barriers (11 items) and educational barriers (21 items). Because this study assessed career-related behavior, only the 11-items pertaining to career-related barriers were used and total score was calculated. Example of items include: *“In my future career I will probably be treated differently because of my ethnic racial background”* and *“In my future I will probably have a harder time getting hired than people of other ethnic/racial backgrounds.”* Respondents indicate the extent to which they agree with items on a Likert-type-5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) with higher scores indicating perceptions of more barriers. In addition to the specific barriers, one item corresponds to a general perception of barriers, *“In general I think there are many barriers facing me as I try to achieve my career goals.”* This item can be analyzed separately with respect to gender differences. Luzzo and McWhirter (2001) have reported an internal consistency measured by Cronbach’s alpha as .90 for the entire scale, and .86 for the Career-Related Barriers subscale in a college sample of ethnic minority and European American students. Additionally, test-retest reliability showed stability coefficients of .72 for the Career-Related Barriers subscale. In the present study, reliability analysis revealed an alpha of .90 for the 11 items used in the POB scale. For a copy of this scale, please refer to Appendix F.

Procedure

After obtaining approval from the Teachers College Institutional Review Board, participants were recruited through the use of online snowball sampling. Participants were recruited via electronic invitations, listservs, and student clubs and organizations. Participants received an electronic invitation, with a hyperlink to the survey, inviting them to participate in an online study examining attitudes and perceptions about career issues. A copy of the electronic invitation can be found in Appendix G.

Special efforts were made to recruit students enrolled in U.S. colleges and universities known for their commitment to educating Latina/o students. For this reason, Hispanic Serving Institutions (HSI's) where Hispanic students represent a minimum of 25% of the total enrollment were included. A list of HSI's was downloaded from the Hispanic Association of Colleges and Universities (HACU) webpage (the list of HSI's is included in Appendix I).

Participants who volunteered to participate were directed to an online hyperlink (http://academictrial.qualtrics.com/SESID=SV_4Ymgs0GeAuV3GCg&SVID=Prod) where they read a consent form describing background information about the investigator, the purpose of the study, time involvement, incentive for participation, risks and benefits of participation, anonymity and confidentiality, and raffle information. Participants were encouraged to contact the investigator should they have questions or concerns at any point during their participation. Then, participants were directed to a "participant's rights" page that preceded the study instruments (see Appendix H for a copy of the consent form and participants rights). After giving consent (by indicating they "agree" to participate in the study), participants had up to seven days to complete the survey and had to answer each question before moving on to the next instrument. Thus, a participant was unable to skip ahead in the survey or elect not to respond to an item. In

addition, participants had the right to withdraw from the study at any point by closing the internet browser. On average, participants completed the study in about 10 to 25 minutes.

The online survey consisted of: Demographic Information Form, Revised Multigroup Ethnic Identity Measure (Roberts, Phinney, Masse, Chen, Roberts, & Romero, 1999), Acculturation Rating Scale for Mexican Americans-II (ARSMA-II; Cuéllar, Arnold, & Maldonado, 1995), The Career Decision Self-Efficacy-Short Form (CDSE-SF; Betz, Klein, & Taylor, 1996), The Coping with Barriers Scale (CWB; Luzzo & McWhirter, 2001), Perceptions of Barriers Scale-Revised (POB-R; Luzzo & McWhirter, 2001).

At the end of the survey, participants were provided with a debriefing thanking for their participation and explaining the purpose of the study. All participants who completed the online study had the opportunity to enter in a raffle to win a grand prize of an Apple Ipod and two second prizes of \$100 American Express cards. The drawing was established at the conclusion of the study.

Chapter IV

RESULTS

This chapter summarizes the data analyses procedures and results of this study.

Descriptive statistics and correlation analyses are presented first followed by a series of multivariate analysis of variance (MANOVA) tests which examined potential mean differences across the variables. Then, the results from the path analyses are described.

Preliminary Analyses

Missing values. A total of 435 college students participated in this study. Of the 435, a total of 77 participants did not complete the surveys in full. After a careful examination of the frequencies from the 77 cases, it was inferred that the incomplete values were not missing in a systematic pattern. Therefore, due to their incomplete survey responses, these cases were deleted from the analyses.

Normality and outliers tests. The normality of the data for each of the variables in the study was examined using the macro developed by DeCarlo (1997) for univariate and multivariate tests of skewness and kurtosis, Q-Q plots, stem-and-leaf, and histograms with a normal curve. The macro results revealed one multivariate outlier (value 26.33, higher than the critical value of 24.30) and no extreme non-normality (See Table 2 for the normality statistics for all variables).

Descriptive statistics. Frequencies, means, standard deviations, and reliabilities were obtained. Descriptive statistics for the study variables are reported in Table 2. For all instruments, the mean score represents an average global score with higher numbers indicating greater endorsement. For example, the mean score for ethnic identity falls within the middle range indicating that participants endorsed a moderately strong ethnic identity.

Additionally, the score for the acculturation level reported in Table 2 represents participants' acculturation level which is derived by subtracting the Mexican Orientation Subscale (MOS) mean from the Anglo Orientation Scale (AOS) mean. According to the cut-off scores developed by Cuéllar et al., the mean score for acculturation level ($M = 0.28$) indicates that, on average, the majority of the participants (45.4%) in this study are *slightly Anglo oriented bicultural* since their mean score falls in the level three range ($> -.07$ and < 1.19) when acculturation is considered along a continuum from very Latino oriented to very Anglo oriented. Similarly, the means for the Anglo ($M = 3.81$) and Mexican ($M = 3.53$) Orientation Subscales indicate that the participants in this study have a *low to high bicultural* acculturation status. Further, the efficacy measures have ranges that fall in the high range, indicating higher confidence on these scales. In contrast, the mean for perceived barriers ($M = 2.66$) falls in the lower range of possible scores, suggesting that participants perceived few career barriers.

Table 2

Means, Standard Deviations, Reliability Coefficients, Skewness, Kurtosis and Range of Scales

Variable Range	M	SD	α	Skewness	Kurtosis	Actual Range	Potential
EI	2.98	0.33	.67	-0.54	-0.21	1.9-3.6	1.0-4.0
ACCL	0.28	0.88	.77	0.27	-0.17	-2.2-2.8	-5.0-5.0
MOS	3.53	0.66	.87	-0.15	-0.59	1.7-4.9	1.0-5.0
AOS	3.81	0.45	.74	-0.24	0.60	2.0-5.0	1.0-5.0
CDSE	4.00	0.63	.95	-0.45	-0.11	2.0-5.0	1.0-5.0
CWB	3.98	0.70	.84	-0.37	-0.40	1.7-5.0	1.0-5.0
POB	2.66	0.86	.90	0.11	-0.26	1.0-5.0	1.0-5.0

$N = 357$. Note. α = Cronbach's alpha reliability coefficients. EI = Ethnic Identity; ACCL = Acculturation Level (AOS Mean - MOS Mean); MOS = Mexican Orientation Subscale; AOS = Anglo Orientation Subscale; CDSE = Career Decision Self-Efficacy; CWB = Coping with Barriers; POB = Perception of Barriers.

The means, standard deviations, and range of the study variables were also examined for men and women in the sample and are reported in Table 3. On average, the results indicate that men and women in this sample (a) endorsed similar attitudes toward their ethnic identity; (b) are slightly Anglo oriented bicultural with regards to their acculturation level; (c) and fall within a highly bicultural acculturation status. In contrast, men endorsed higher confidence in their ability to make career decisions and cope with barriers than women. Women respondents indicated that they perceived more career barriers than men.

Table 3

Means, Standard Deviations, and Range of Variables by Gender

Variable	<u>Women (n = 247)</u>			<u>Men (n = 110)</u>		
	M	SD	Range	M	SD	Range
EI	2.9	0.33	1.9-3.5	2.9	0.33	2.3-3.6
ACCL	.26	0.89	-2.2-2.8	.32	0.84	-1.5-2.3
MOS	3.6	0.67	1.7-4.9	3.5	0.63	2.3-4.8
AOS	3.8	0.44	2.0-5.0	3.8	0.47	2.3-4.9
CDSE	3.9	0.64	1.9-5.0	4.1	0.59	2.0-5.0
CWB	3.9	0.71	2.1-5.0	4.1	0.66	1.7-5.0
POB	2.7	0.89	1.0-5.0	2.5	0.77	1.0-5.0

EI = Ethnic Identity; ACCL= Acculturation Level; MOS = Mexican Orientation Subscale; AOS = Anglo Orientation Subscale; CDSE = Career Decision Self-Efficacy; CWB = Coping with Barriers; POB = Perception of Barriers.

Intercorrelations for the study variables were calculated and are included in Table 4. As Table 4 indicates, statistical significant correlations were found among all of the study variables

except for ethnic identity and coping with barriers and acculturation level and coping with barriers.

Table 4

Summary of Variable Intercorrelations ($N = 357$)

Variable	1	2	3	4	5
1. EI	1.00				
2. ACCL	-.44**	1.00			
3. CDSE	.16**	.12*	1.00		
4. CWB	.05	.10	.50**	1.00	
5. POB	.14**	-.11*	-.28**	-.35**	1.00

Note. *indicates that the correlation is significant at the 0.05 level; ** indicates that the correlation is significant at the 0.01 level. EI = Ethnic Identity; ACCL = Acculturation Level; CDSE = Career Decision Self-Efficacy; CWB = Coping with Barriers; POB = Perception of Barriers.

MANOVA Results. A series of multivariate analysis of variance (MANOVA) tests were conducted to examine potential mean score differences across the main study variables (i.e., ethnic identity, acculturation level, career decision self-efficacy, coping efficacy, and perception of barriers) for the entire sample.

First, a MANOVA was conducted to test for significant mean score differences on the main study variables by college type. Using college type (e.g., four-year college, community college, junior college, and other) as the independent variable and ethnic identity, acculturation level, career decision self-efficacy, coping efficacy, and perception of barriers as the dependent variables, the results indicated that students from the four different types of colleges differed across the main study variables, Wilks' Lambda = .90, $F(15, 963) = 2.4$, $p < .05$, $\eta^2 = .03$. Since the multivariate analysis was significant for college type, univariate analyses of variance were

assessed. The follow-up univariate analyses revealed that college type had a small but significant effect on the perception of career barriers, ($F(3, 353) = 5.7, p < .01, \eta^2 = .05$). In general, the results showed that students enrolled in the “other” college type category ($n = 7$) perceived more career barriers ($M = 3.4, SD = 0.73$) than students enrolled in four-year universities ($M = 2.7, SD = 0.85$), junior colleges ($M = 2.7, SD = 0.87$), and community colleges ($M = 2.4, SD = 0.83$). A Bonferroni post-hoc test revealed significant mean differences in the perception of career barriers between Latina/o students attending four-year universities ($n = 261$), community colleges ($n = 80$), and “other” type ($n = 7$).

Previous studies have revealed gender differences in career socialization and indecision (Flores & O’Brien, 2002; Betz & Vuyten, 1997). Therefore, a second MANOVA was conducted in which the main study variables (i.e., ethnic identity, acculturation level, career decision self-efficacy, coping efficacy, and perception of barriers) were the dependent variables and gender and career decision status (decided vs. undecided) were the independent variables. The results of the overall model revealed that there was a main effect for career decision status, Wilks’ Lambda = .89, $F(5, 349) = 9.1, p < .001, \eta^2 = .12$, but no main effect for gender Wilks’ Lambda = .97, $F(5, 349) = 2.1, ns, \eta^2 = .03$, and no interaction effects (gender X career decision status), Wilks’ Lambda = .97, $F(5, 349) = 1.9, ns, \eta^2 = .03$. The follow-up univariate analysis revealed that career decision status had a small but significant effect on career decision self-efficacy ($F(1, 353) = 35.4, p < .001, \eta^2 = .09$) and coping with barriers ($F(1, 353) = 10.6, p < .01, \eta^2 = .03$). Participants who had made a decision about their career scored higher on career decision self-efficacy and coping efficacy than those who had not made a career decision. Among participants who were career undecided, participants scored lower on career decision self-efficacy than

coping efficacy. Table 5 shows a summary of the career decision self-efficacy and coping efficacy score means and standard deviations for the career decided and undecided groups.

Table 5

Means and Standard Deviations for Career Decision Self-Efficacy and Coping with Barriers by Career Decision Status

Career Decision Status	<i>N</i>		CDSE	CWB
Career Decided	275	<i>M</i>	4.12	4.04
		SD	0.59	0.69
Career Undecided	82	<i>M</i>	3.61	3.77
		SD	0.59	0.69

Note. CDSE = Career Decision Self-Efficacy; CWB = Coping with Barriers.

Because findings from previous studies (Flores & O'Brien, 2002; Tang, Fouad, & Smith, 1999) have found support for the role of acculturation in career related variables, another multivariate analysis of variance (MANOVA) was conducted using acculturation level (i.e., L 1 = very Latino oriented, L 2 = Latino oriented to approximately balanced bicultural, L 3 = slightly Anglo oriented bicultural, L 4 = strong Anglo oriented, and L 5 = Anglicized) as the independent variable and the career variables in this study (i.e., career decision self-efficacy, coping efficacy, and perception of barriers) as the dependent variables. The analyses found that acculturation level was not significant, Wilks' Lambda = .97, $F(12, 926) = .99$, $p > .05$, $\eta^2 = .01$.

A different MANOVA was used to test for significant mean score differences in the career variables (i.e., career decision self-efficacy, coping with barriers, and perception of barriers) by generational status (i.e., first, second, and third generation). Using the generational status as the independent variable and the career variables as the dependent variables, the analysis showed that generational status was significant, Wilks' Lambda = .96, $F(6, 704) = 2.2$,

$p < .05$, $\eta^2 = .02$. The follow-up univariate analysis revealed that significant generational differences existed in the perception of career barriers ($F(2, 354) = 3.8$, $p < .05$, $\eta^2 = .02$) such that third generation respondents, on average, perceived fewer barriers than first and second generation participants. Table 6 includes a summary of the means and standard deviations scores for the perception of barriers by generational status.

Table 6

Means and Standard Deviations for Perception of Barriers by Generational Status

Generational Status		First	Second	Third
Perception of Barriers	<i>M</i>	2.61	2.77	2.43
	<i>SD</i>	0.84	0.86	0.81

A final MANOVA was used to examine potential mean score differences among the career variables (i.e., career decision self-efficacy, coping with barriers, and perception of barriers) by self-reported family socioeconomic status (i.e., poor, working class, lower middle class, middle class, upper middle class, upper class). Since there was only one participant in the upper socioeconomic status group, the case was excluded from the analysis resulting in a total of 356 participants. Using the self-reported family socioeconomic status as the independent variable and the career variables as the dependent variables, the analyses indicated a small but significant main effect for socioeconomic status, Wilks' Lambda = .93, $F(12, 923) = 2.2$, $p < .01$, $\eta^2 = .02$. Examination of the univariate analysis revealed that socioeconomic status had a small but significant effect in the perception of career barriers ($F(4, 351) = 3.9$, $p < .01$, $\eta^2 = .04$, (See Table 7). A Bonferroni post-hoc test indicated that Latina/o students who self-identified their

socioeconomic class as poor perceived significantly more career barriers ($M = 2.90$, $SD = .79$) than those who self-identified their socioeconomic status as middle class ($M = 2.39$, $SD = .78$).

Table 7

Means and Standard Deviations for Perception of Barriers by Self-Reported Socioeconomic Status

Socioeconomic status	Poor	Working Class	Middle class
Perception of Barriers	<i>M</i> 2.90	2.74	2.39
	<i>SD</i> 0.79	0.81	0.78

Primary Analysis

Using Version 6.1 of the Mplus statistical package (Muthén & Muthén, 1998-2010), path analyses were conducted next to determine whether the data adequately fit the two hypothesized models. Although causality cannot be concluded, path analysis allows the researcher to test direct and indirect (mediated) effects simultaneously (Kline, 2005). The researcher specifies a model by hypothesizing the directionality, or direct and indirect causal effects, a priori. In this study, the direct and indirect effects were specified a priori in hypotheses 1 thru 7. Kline (2005) suggested that a minimum of 10 to 20 participants per estimated model parameter is appropriate to test a path model.

Model Identification

It was determined that in the fully mediated model there are 12 parameters to be estimated (7 paths and 5 error variances) and 5 observed variables (ethnic identity, acculturation level, career decision self-efficacy, coping with barriers, and perception of barriers). Using the formula “number of observed variables [no. of observed variables + 1]/2,” it was calculated that

there are 15 known parameters ($5 \times 3 = 15$) and 3 degrees of freedom ($15 - 12$) in the fully mediated model. The fully mediated model is said to be overidentified because the degrees of freedom are greater than zero. Adding two additional paths in the partially mediated model yields 14 parameters to be estimated (9 paths and 5 error variances) and 5 observed variables (ethnic identity, acculturation level, career decision self-efficacy, coping with barriers, and perception of barriers). Thus, there are 15 known elements leaving 1 degree of freedom ($15 - 14$). Thus, the partially mediated model is also overidentified.

In both the fully and partially mediated models, there are two exogenous variables (ethnic identity and acculturation level), two mediators (career decision self-efficacy and coping with barriers efficacy) and one endogenous variable (perception of career barriers—See Figures 3 and 4). In the fully mediated model direct paths were tested from ethnic identity to career decision self-efficacy and coping with barriers, from acculturation level to career decision self-efficacy and coping with barriers, and from career decision self-efficacy and coping with barriers to perception of barriers (See Figure 3). In the partially mediated model two more paths were added: a direct path from ethnic identity to perception of barriers and a direct path from acculturation level to perception of barriers (see Figure 4).

Path Analysis Results

In this section, the procedure for splitting the data into two random samples will be first discussed. A brief description of the goodness-of-fit indices for path analysis is presented next. Then, the results for the fully and partially mediated path models are described followed by a discussion of the hypotheses tested. In the last section, the results of the modified path model are presented.

Split samples. Before conducting the path analyses, the original total sample of 357 Latina/o students was randomly split into two separate samples ($n = 100$ and $n = 257$). A random sample consisting of 100 Latina/o students was used to test the original fully and partially mediated path models. The remainder (cross-validation) random sample of 257 was set aside to confirm potential modifications to the proposed models. Using Version 6.1 of the Mplus statistical package (Muthén & Muthén, 1998-2010), separate path analysis were conducted to determine if the data fit the two hypothesized models of Latina/o college students' career path.

Fit indices and interpretation for path models. Several fit indices were used to evaluate how well the hypothesized models fit the observed data (Kline, 2005; Weston & Gore, 2006). These fit indices include: chi-square (X^2), Comparative Fit Index (CFI), the goodness-of-fit index (GFI), Root Mean Square Error of Approximation (RMSEA), and the Standardized Room Mean Square Residual (SRMR). The values of each of these indices was examined to determine if the model was accepted or rejected according to acceptable model fit criteria.

The first criterion is a non-statistically significant X^2 test which is indicative of a model that adequately fits the data. However, X^2 is limited in that it is sensitive to sample size (Kline, 2005). Therefore, it is important to consider additional fit indices to assess how well the models fit the observed data. The CFI, for instance, is a goodness of fit measure in which values $> .90$ or 1.0 are indicative of a good fit (Kline, 2005; Weston & Gore, 2006). The RMSEA is a measure of misfit where values of $.05$ or less suggest that the model has a close approximate fit and a value of $.00$ indicates that the model exactly fits the data (Kline, 2005). As for the SRMR, smaller values are indicative of a better fit ($< .05$ suggests a good fit and value of $.00$ indicates perfect fit).

Fully mediated model. In the fully mediated model, the effects of ethnic identity and acculturation level on perceived career barriers were proposed to be mediated by career decision self-efficacy and coping efficacy (See Figure 3). The results of the path analysis indicated that the goodness-of-fit indices for the fully mediated model fit the data poorly. The model chi-square statistic was statistically significant $X^2(3, n = 100) = 25.41, p < .001$, suggesting a poor fit. The CFI was .43, a value below the recommended cut-off of 0.95. The SRMR was .11 and the RMSEA was .27 (90% confidence interval 0.180, 0.374), both above the acceptable model fit criteria. For this reason, the fully mediated model was rejected. The fit indices for the fully mediated model are reported in Table 8.

Partially mediated model. Weston and Gore (2006) suggest that researchers consider testing alternative models. In accordance with the literature review, a partially mediated model was hypothesized. As in the fully mediated model, it was hypothesized that ethnic identity and acculturation level each had an indirect effect on perceived career barriers through career decision self-efficacy and coping with efficacy. Further, it was hypothesized that ethnic identity and acculturation level each had a direct effect on perceived career barriers (See Figure 4).

The goodness-of-fit indices for the partially mediated model also indicated a poor fit for the data. The model chi-square statistic was statistically significant $X^2(1, n = 100) = 21.09, p < .001$. The value (0.49) of the CFI is below the recommended cut-off of 0.95. The SRMR value was .10 and the RMSEA was .45 (90% confidence interval 0.295 to 0.624) indicating poor fit. Consequently, the partially mediated model was also rejected. The path analyses results for the hypothesized partially mediated model are reported in Table 8.

Since the two hypothesized models were rejected, modifications were specified and then tested with the cross validation sample ($n = 257$). The results of the modified model are discussed following the analyses of the hypotheses.

Table 8

Summary of Model Fit Indices for Proposed Models ($n = 100$)

Model	X^2	df	p	CFI	SRMR	RMSEA	90% CI
Fully Mediated	25.14	3	.001	0.43	.11	.27	[0.180, 0.374]
Partially Mediated	21.09	1	.001	0.49	.10	.45	[0.295, 0.624]

Note. X^2 = chi square; CFI = Comparative Fit Index; SRMR = Standardized Root Mean Square Residual; RMSEA = Root Mean Square Error of Approximation; CI = Confidence Interval.

Analyses of Hypotheses Tested

Fully mediated path model. Hypotheses tested in the fully mediated model (see Figure 3) are as follows:

Hypothesis 1: It was predicted that ethnic identity would have a direct effect on career decision self-efficacy and coping efficacy. Contrary to expectation, the results of the path analysis revealed that ethnic identity did not predict career decision self-efficacy ($\beta = .09$, ns) or coping efficacy ($\beta = .09$, ns). See Table 9 for the standardized and unstandardized parameter estimates in the fully mediated model.

Hypothesis 2: It was hypothesized that acculturation level would have a direct effect on career decision self-efficacy and coping efficacy. The path analysis used to test hypothesis 2 revealed that acculturation level had a significant direct effect on career decision self-efficacy ($\beta = .24$, $p < .05$) but not on coping efficacy ($\beta = .19$, ns).

Figure 3. Estimated Fully Mediated Path Model

Standardized parameter estimates shown

* $p < .05$; $n = 100$.

Hypothesis 3: It was expected that career decision self-efficacy and coping efficacy would have a direct negative influence on the perception of barriers. The path analysis revealed that the path between career decision self-efficacy and perception of barriers was not significant ($\beta = -.18$, ns). However, coping efficacy had a significant negative effect on perception of barriers ($\beta = -.26$, $p < .05$). Consistent with expectations, the correlation between coping efficacy and perceived barriers was negative ($r = -.35$, $p < .01$); likewise, career decision self-efficacy was inversely related to perceived barriers ($r = -.28$, $p < .01$) indicating that higher levels of efficacy were associated with perceiving fewer barriers among study participants.

Hypothesis 4: It was hypothesized that ethnic identity would have an indirect effect on perceived career barriers through career decision self-efficacy and coping efficacy. As such, career decision self-efficacy and coping efficacy are mediating variables for the effect of ethnic identity on perceived barriers. The results from the path analysis showed that neither career

decision self-efficacy ($\beta = -.02$, ns) nor coping efficacy ($\beta = -.02$, ns) significantly mediated the effect of ethnic identity on perceived barriers.

Hypothesis 5: It was predicted that acculturation would have an indirect effect on perceived career barriers through career decision self-efficacy and coping efficacy. Thus, career decision self-efficacy and coping efficacy would mediate the effect of acculturation on perceived barriers. The results from the path analysis indicate that hypothesis 5 was not supported. That is, the effect of acculturation was not mediated by career decision self-efficacy ($\beta = -.04$, ns) or coping efficacy ($\beta = -.05$, ns).

Table 9

Parameter Estimates for the Fully Mediated Path Model ($n = 100$)

Parameter	Standardized	Unstandardized	SE
EI→CDSE	.09	0.19	0.38
ACCL→CDSE	.24	.18*	.08
EI→CWB	.09	.19	.25
ACCL→CWB	.19	.17	.09
CDSE →POB	-.18	-.23	.14
CWB →POB	-.26	-.30*	.13
EI→CDSE →POB	-.02	-.04	.06
EI→CWB→POB	-.02	-.06	.08
ACCL→CDSE→POB	-.04	-.04	.03
ACCL→CWB→POB	-.05	-.05	.04

Note. EI = Ethnic Identity; ACCL= Acculturation Level; CDSE = Career Decision Self-Efficacy; CWB = Coping with Barriers; POB = Perception of Barriers.

* $p < .05$.

Partially mediated path model. The results for hypotheses 6 through 9 which were tested in the partially mediated model (see Figure 4) are presented next

Hypothesis 6: It was predicted that acculturation level would have a direct effect on the perception of barriers. Path analysis was used to test hypothesis 6. Examination of the path coefficient for the direct effect of acculturation level on the perception of barriers indicates that it is not significant ($\beta = .08$, ns); see Table 10 for the parameter estimates of the partially mediated model.

Hypothesis 7: It was predicted that ethnic identity would have a direct negative influence on the perception of barriers. The results of the path analysis indicate that ethnic identity had a direct influence on the perception of barriers ($\beta = .21$, $p < .05$) and an inverse relationship was not found ($r = .14$, $p < .01$).

Figure 4. Estimated Partially Mediated Path Model

Standardized parameter estimates included

* $p < .05$; $n = 100$.

Hypothesis 8: It was predicted that there would be a statistically significant weak correlation between ethnic identity and acculturation. The findings revealed a significant negative modest relationship between ethnic identity and acculturation level ($r = -.44, p < .01$). That is, lower levels of ethnic identity are associated with higher levels of acculturation level. Further, the modest correlation between ethnic identity and acculturation level indicates that the constructs are separate but related, as expected

Hypothesis 9: It was predicted that there would be a statistically significant positive correlation between career decision self-efficacy and coping efficacy. Hypothesis 9 was explored by conducting a Pearson correlation. As predicted and consistent with theoretical expectation, career decision self-efficacy correlated moderately strong to coping efficacy ($r = .50, p < .01$). Thus, the higher the confidence in career decision making, the higher the efficacy to cope with barriers. This moderately strong relationship suggests that they two measures reflect overlapping aspects of perceived efficacy.

Table 10

Parameter Estimates for the Partially Mediated Path Model ($n = 100$)

Parameter	Standardized	Unstandardized	SE
EI→CDSE	.09	.19	.22
ACCL→CDSE	.24	.18*	.08
EI→CWB	.09	.19	.25
ACCL→CWB	.19	.17	.09
CDSE →POB	-.19	-.25	.14
CWB →POB	-.27	-.31*	.12
EI→POB	.21	.55*	.27
ACCL→POB	.08	.08	.10
EI→CDSE →POB	-.02	-.05	.06
EI→CWB→POB	-.02	-.06	.08
ACCL→CDSE→POB	-.05	-.05	.03
ACCL→CWB→POB	-.05	-.05	.04

Note. EI = Ethnic Identity; ACCL= Acculturation Level; CDSE = Career Decision Self-Efficacy; CWB = Coping with Barriers; POB = Perception of Barriers.

* $p < .05$.

Summary of Results

Overall, the proposed fully and partially mediated models do not fit the sample data as indicated by the various fit indices (e.g., X^2 , CFI, RMSEA, and SRMR). In addition to considering the overall model fit, the significance of the estimated parameters, which are analogous to regression coefficients, was examined. These parameter estimates were evaluated for significance in predicting direct and indirect effects. Acculturation was shown as directly

affecting career decision self-efficacy in the two proposed models. Coping efficacy also had a direct negative influence on perceived barriers. In both the fully and partially mediated models, the effect of ethnic identity on perceived barriers was not mediated by coping efficacy or career decision self-efficacy. Similarly, the effect of acculturation level was not mediated by career decision self-efficacy or coping efficacy in either model. Furthermore, only ethnic identity had a significant direct effect on perceived barriers in the partially mediated model.

Path Model Modifications

Modifications to improve the fit of the hypothesized models were made based on the use of modification indices, results from the analysis of variance; and theoretical considerations. Specifically, two modifications were made. First, the addition of correlated residuals between career decision self-efficacy and coping efficacy ($r = .50, p < .01$). Second, the direct path between acculturation level and perceived career barriers was excluded because the partially mediated model indicates that acculturation level is a poor predictor of perceived barriers and because the MANOVA results revealed no significant mean score differences among the career variables based on acculturation level. Additionally, deleting the path from acculturation level to perceived barriers was justified on the basis of prior studies that did not support the relationship between acculturation and perceived barriers (Rivera et al., 2007). Once these modifications were implemented, the modified model was rerun using the sample of 100 participants. Once again, the goodness-of-fit indices were evaluated. In the modified model all of the indices reached conventionally used criteria suggesting an improved fit to the data (See Table 11 for a summary of the fit indices for the modified model).

Finally, the modified model was tested on the cross validation sample of $n = 257$. Results revealed that the fit indices indicated an excellent fit to the data (see Table 12 for the parameter

estimates of the modified model). Specifically, the chi-square statistic was not significant ($X^2 = 0.3, p > .05$) and the CFI was 1.0 indicating an excellent fit. The RMSEA was .00 (90% confidence interval .000 to .091 and the SRMR value was .00 suggesting an excellent fit to the data. Figure 5 illustrates the modified model with the standardized parameter estimates.

Table 11

Fit Indices for Modified Model between Split Samples of Latina/os

Model	X^2	df	p	CFI	SRMR	RMSEA	90% CI
Modified Model ^a	0.55	1	.46	1.0	.01	.00	[0.000, 0.237]
Modified Model ^b	0.03	1	.85	1.0	.00	.00	[0.000, 0.091]

Note. X^2 = chi square; CFI = Comparative Fit Index; SRMR = Standardized Root Mean Square Residual; RMSEA = Root Mean Square Error of Approximation; CI=Confidence Interval.

^a $n = 100$. ^b $n = 257$.

Parameter estimates. Next, the standardized coefficients of the paths among the five variables were examined to ascertain which paths were statistically significant. As seen in Table 12, the findings revealed that both ethnic identity ($\beta = .32, p < .001$) and acculturation level ($\beta = .23, p < .001$) were significant predictors of career decision self-efficacy. Furthermore, ethnic identity had a direct ($\beta = .18, p < .01$) and indirect effect ($\beta = -.05, p < .05$) on perceptions of barriers through career decision self-efficacy. Although the direct path between acculturation and coping efficacy was marginally significant ($p = .047$), neither ethnic identity ($\beta = .23, ns$) nor acculturation level ($\beta = .14, ns$) were significant predictors of coping efficacy. Additionally, coping efficacy did not mediate the effect of ethnic identity ($\beta = -.04, ns$) or acculturation level ($\beta = -.04, ns$) on students' perception of barriers. As expected, coping efficacy negatively predicted perceived barriers ($\beta = -.29, p < .01$).

Career decision self-efficacy was predicted to correlate strongly with coping efficacy. The findings indicated a moderately strong relation between the two measures ($r = .51, p < .001$), suggesting that they reflect overlapping aspects of perceived efficacy. Finally, the bidirectional correlational path between ethnic identity and acculturation level is statistically significant ($\beta = -.45, p < .001$) suggesting a modest negative association between the two. For an illustration of the modified model with the standardized estimates see Figure 5. The implications of those findings will be discussed in the following chapter.

Table 12

Parameter Estimates for the Modified Path Model ($n = 257$)

Parameter	Standardized	Unstandardized	SE
EI→CDSE	.32	.60**	.13
ACCL→CDSE	.23	.16**	.05
EI→CWB	.13	.26	.14
ACCL→CWB	.14	.11	.05
CDSE →POB	-.16	-.23*	.09
CWB →POB	-.29	-.36**	.08
EI→POB	.18	.48*	.15
EI→CDSE →POB	-.05	-.14*	.06
EI→CWB→POB	-.04	-.09	.06
ACCL→CDSE→POB	-.04	-.04*	.02
ACCL→CWB→POB	-.04	-.04	.02

Note. EI = Ethnic Identity; ACCL= Acculturation Level; CDSE = Career Decision Self-Efficacy; CWB = Coping with Barriers; POB = Perception of Barriers.

** $p < .01$; * $p < .05$.

Figure 5. Modified Path Model

Note. Ethnic identity has a direct and indirect effect on perceptions of barriers, through career decision self-efficacy. Career decision self-efficacy partially mediates the relationship between acculturation level and Latina/o students' perception of career barriers. Standardized parameter estimates are depicted.

** $p < .01$; * $p < .05$; $N = 257$.

Chapter V

DISCUSSION

Introduction

The purpose of the present investigation was to explore the role of ethnic identity and acculturation in the career path of Latina/os and to investigate the validity of Social Cognitive Career Theory (SCCT; Lent's et al., 1994; 2000; 2004) with a diverse Latina/o college sample. Specifically, the researcher tested the direct effect of ethnic identity (person input variable) and acculturation (background contextual variable) on career decision self-efficacy (mediator), coping efficacy (mediator), and perceived career barriers (outcome expectations). The path analyses showed that a modified model provided a good fit for this sample of Latina/o students. This study was the first to integrate SCCT and the emancipatory communitarian (EC; Blustein et al., 2005) approach to test a career path model with a sample of Latina/o college students. SCCT was combined with the EC perspective to highlight how the career paths of Latina/os must be considered within the context of sociohistorical, sociopolitical, and sociostructural barriers.

This chapter begins with an overview of the significant findings. In this section, the researcher presents a discussion of the major hypotheses guiding the research, as well as data interpretations related to SCCT. Next, the researcher considers future directions and implications based on present research findings. These implications are presented relative to the areas of theory, research, practice, and training. Finally, the chapter concludes with a discussion of the study's limitations.

Overview of Significant Findings

Within SCCT, personal and background contextual variables interact with self-efficacy beliefs to shape career behavior. In turn, self-efficacy beliefs are thought to mediate the influence of personal and contextual factors on outcome expectations. In the path model tested, ethnic identity was operationalized as a personal variable and acculturation as a background contextual variable. The model tested included two self-efficacy mediators: career decision self-efficacy and coping efficacy. Perception of barriers was operationalized within SCCT as outcome/process expectations that are influenced by self-efficacy beliefs and personal and societal factors (e.g., sociopolitical, sociohistorical, and sociostructural barriers). The integration of an EC-SCCT conceptual framework was used to highlight the interplay among personal, behavioral, and societal factors thought to play a role in the career path of Latina/os. The study was grounded on the EC perspective for its considerable emphasis on the role of structural barriers in the career path of oppressed groups.

Discussion of correlation hypotheses. As predicted in hypothesis 8, ethnic identity was found to be negatively related to acculturation level. The modest negative correlation between ethnic identity and acculturation suggests that the two variables are related but separate constructs as suggested by Cuéllar et al. (1997) and Phinney (1992). Specifically, lower scores on ethnic identity were found among more Anglo oriented bicultural types, meaning those oriented toward the Anglo culture. Interestingly, the findings suggest that Latina/o college students in this study may adopt behaviors associated with the Anglo culture while also identifying with their ethnic identity. As such, it seems that a bicultural orientation toward Anglo culture may not be necessarily contradictory with one's feelings toward one's ethnic group. Rather, these Latina/o students seem to have integrated behavioral cultural practices of both

cultures and, depending on the context, may endorse different behaviors such as speaking English at school and Spanish at home. This biculturalism is not surprising given that the majority of the Latina/o college students in this study self-identified as second generation (i.e., born in the U.S.) and of those that immigrated to the U. S., the majority were between one and five years old at time of immigration. Similarly, in a study of high achieving Latinas, Gomez and her coauthors (2000) also found that the successful women in their study adopted a bicultural behavioral orientation as a strategy to successfully navigate two different cultural contexts. Consequently, the maintenance of ethnic identity and an Anglo bicultural orientation may serve as a positive adjustment to socialization in an ethnically and racialized polarized society (Padilla, 2006). This bicultural approach seems consistent with multicultural competence, or having the knowledge, awareness, and skills to interact effectively with diverse groups. For these Latina/o students, their multicultural competence may give them the freedom to maintain their ethnic identity while participating fully in a mainstream Anglo context.

In addition, consistent with theoretical expectation, there was a moderately strong correlation between career decision self-efficacy and coping efficacy (hypothesis 9) suggesting that the two measures reflect overlapping aspects of perceived self-efficacy. This finding seems consistent with the notion that coping efficacy complements domain specific self-efficacy, such as career decision self-efficacy, in that they operate jointly in enabling career choices and behavior (Lent et al., 2000). For example, a student may feel confident that she can overcome gender discrimination in a male-dominated career (coping efficacy). Her beliefs in her coping capabilities are likely to contribute to her confidence that she can successfully manage tasks related to making a career decision, such as successfully managing a job interview (career decision self-efficacy).

Despite their strong theoretical relation, the career decision self-efficacy and coping efficacy scales used in this study seem to assess fundamentally different aspects self-efficacy beliefs. For instance, the career decision self-efficacy scale asked respondents to accurately rate their confidence about successfully completing various discrete tasks related to appraising ability to conduct a job search, gathering occupational information, selecting reasonable goals, making future plans, and solving job search problems. On the other hand, the coping with barriers scale, measured individuals' efficacy beliefs about coping with career barriers of a more abstract, hypothetical nature. For example, the coping with barriers scale measured participants' efficacy beliefs about broader, more complex, issues such as responding to discrimination, negotiating family demands, and finding daycare.

Exploration of SCCT propositions. Several SCCT propositions were supported by the data from this sample of Latina/o college students. First, consistent with hypothesis one and as predicted by the SCCT model, Latina/o students' identification with their ethnic group directly influenced their beliefs in their ability to accomplish career-related tasks. This finding was supported by previous research that demonstrated the relation between ethnic identity and career decision self-efficacy with a sample of Latina/o high school students (Gushue, 2006; Gushue & Whitson, 2006), minority college students (Gloria and Gird, 1999), and Mexican college students (Mejia et al., 2009). Additionally, the magnitude of the path coefficients between ethnic identity and career decision self-efficacy follow the findings reported by Gushue (2006).

As hypothesized by Lent et al., and consistent with previous research (Lent, et al., 2001), background contextual variables (i.e., acculturation) predicted career decision self-efficacy (hypothesis 2). Specifically, for this sample of Latina/o students, higher acculturation level or an Anglo bicultural orientation, predicted career decision self-efficacy. This finding suggests that

adopting behaviors of the Anglo culture likely contribute to a greater belief in the capacity to complete tasks related to making career decisions. Previous studies (e.g., Flores & O'Brien, 2006; Rivera, 2007), for instance, found that Anglo orientation predicted self-efficacy beliefs in careers dominated by women. As Flores and O'Brien noted, Anglo bicultural Latinas are likely to be aware of the sociopolitical context and may feel more confident in careers traditionally occupied by women. Interestingly, when comparing the effect among ethnic identity and acculturation to career decision self-efficacy, the larger value of the path coefficient suggests that for this sample ethnic identity may have a greater effect on career decision self-efficacy than acculturation level.

Consistent with the SCCT model, self-efficacy expectations had a direct negative influence on outcome expectations operationalized as perceived barriers in this study (hypothesis 3). Specifically, both career decision self-efficacy and coping efficacy had a direct negative influence on the perception of career barriers. As such, students' beliefs in their competence to complete specific career tasks and cope with career-related barriers contributed to perceiving fewer barriers to achieving their career goals. These findings are supported by previous research that found that higher levels of career decision self-efficacy resulted in perceiving fewer barriers for Latina/o college students (Mejia et al., 2008), and African decent community college students (Twomey, 2010). Similarly, higher coping efficacy has been found to negatively predict barriers among a diverse sample of college students (Lent et al., 2001; Luzzo, 1996; Luzzo & McWhirter, 2001). Of the two self-efficacy variables, coping efficacy seems to be a stronger predictor of perceived barriers.

The findings also support SCCT propositions that suggest career decision self-efficacy mediates the influence of ethnic identity on perception of barriers (hypothesis 4). As in previous

studies (Mejia et al., 2008), these findings indicate that a positive identification with a Latina/o group contributes to greater efficacy in completing career-related tasks, thus perceiving fewer career-related barriers. As expected, career decision self-efficacy mediated the influence of acculturation level on perception of barriers (hypothesis 5). Based on these findings, it seems that to the extent that students acquire proficiency in mainstream culture, they also gain confidence in their ability to complete the discrete tasks associated with making a career decision (e.g., gathering career information). Their confidence, in turn, mediates the influence of acculturation level on perceived career barriers.

Although not posited by SCCT, the findings showed that ethnic identity had a direct positive influence on perceived barriers (hypothesis 6). Interestingly, the positive path between ethnic identity and the perception of career barriers indicates that feelings of ethnic belonging, a secure sense of group membership, and positive attitudes toward one's ethnic group are salient in perceiving career barriers, particularly ethnic, racial, and gender discrimination. One possible explanation for these findings is that Latina/o students who have a secure sense of their ethnic identity and are knowledgeable about their ethnic group may be more aware of the barriers (e.g., ethnic and gender discrimination) inherent in the sociocultural power dynamics found within American mainstream society. In this way, a positive sense of belonging to a group that has been stigmatized in this sociocultural context may contribute to an increased awareness about the barriers that may be encountered in the process of making a career decision and pursuing career choices within the same context. Weinreich (1983), for instance, speculated that ethnic identity is crucial to the psychological functioning of members of oppressed groups because it provides the support needed in the presence of discrimination. As such, ethnic identity seems to serve a protective role in that individuals are better equipped to deal with ethnic group stressors. This

finding lends support to the notion that ethnic identity buffers the influence of risk factors such as discrimination (Greene, Way, & Pahl, 2006).

In addition, it is important to consider that the perception of barriers may vary depending on individual interpretation (Bandura, 1997; Luzzo & McWhirter, 2001). For instance, barriers may be interpreted as challenges for some individuals and as opportunities for others. In their study, Yosso, Smith, Ceja and Solórzano (2009) found that Latina/o undergraduates confronted discrimination about their group by building supportive communities and learning to navigate multiple contexts. It is also possible that individuals who are bicultural and identify with their ethnic group understand that experiences of ethnic discrimination are likely due to systemic oppression and not internal characteristics (Quintana, Castaneda-English, & Ybarra, 1999). For example, a bicultural student who self-identifies as Guatemalan and has positive attitudes toward this group may be aware that he may be offered a lower salary than his White counterparts due to systemic inequities and injustices. For others, barriers may motivate them to counter injustices by relentlessly pursuing their vocational choices and adopting a transformational resistance (Cammarota, & Fine, 2008).

Although several SCCT tenets were supported in this study, two propositions posited by SCCT were not replicated. First, ethnic identity did not predict coping efficacy and coping efficacy did not mediate the effect of ethnic identity on perception of barriers (hypotheses 1 and 4). Similarly, acculturation level did not predict coping efficacy and coping efficacy was not a mediating variable between acculturation and perceived barriers (hypotheses 2 and 5). SCCT contends that self-efficacy expectations mediate the effect of person inputs and background contextual variables on outcome expectations via their relationship with learning experiences. While learning experiences were not measured in this study, it was expected that ethnic identity

and acculturation level would directly influence efficacy beliefs since learning experiences shape efficacy beliefs. Perhaps, for this sample of Latina/o students, ethnic identity and acculturation level are positive predictors of students' capacity to successfully complete specific *tasks* associated with their career goals but not salient in augmenting students' confidence in their ability to overcome broader fundamental barriers related to gender, ethnic, and racial discrimination.

Another possible explanation is that coping efficacy may have less to do with these students' collective sense of ethnic group belonging and more to do with an individual sense of agency. Perhaps, Latina/o students' beliefs about coping with career barriers related to gender, ethnicity, and race are more a reflection of their individual identities instead of their collective identity. That is, some participants in this study might feel very connected to their ethnic group and perceive multiple barriers associated with this designation; however, they might also feel strongly about their *individual* capacities to transcend these barriers associated with the *group*. This finding might also be illustrative of the nuances of ethnic identification for students in a "post-Obama" sociohistorical context. This sample might represent a snapshot of the identity negotiation among Latina/o students who identify with the Latino ethnic experience, participate in mainstream culture with a bicultural or Anglo orientation, demonstrate an awareness of barriers associated with their ethnic group, but, ultimately, sees the capacity to manage barriers as function of individual agency instead of group destiny. Of course, future research would need to take place to explore this possibility. Also, as researchers have pointed out, for this sample of Latina/o college students, beliefs about career decision self-efficacy tasks could have been attributed as internally derived whereas coping efficacy for barriers related to discrimination as

more externally caused (Lent et al., 2000). Consequently, coping efficacy for barriers related to discrimination are likely to be perceived as less within individual control.

As for acculturation level, the findings suggest that Latina/o college students in this sample are already participating in mainstream culture via their college experiences. The college context, particularly in White majority institutions, may call for relatively low levels of Latino culture related behaviors (i.e., greeting friends with a kiss on the cheek, using titles to address authority figures, privileging family over self) and high levels of Anglo cultural knowledge and skills (i.e., addressing authority figures by first name, privileging individualism, reading and writing English effectively). As such, Latina/o students have learned to adopt an Anglo bicultural orientation which may or may not augment their coping efficacy for career barriers. Perhaps, components that reflect an Anglo bicultural orientation such as autonomy and independence may be less significant in predicting coping efficacy for barriers that are perceived to be more systemic and less within personal control.

Furthermore, acculturation level did not directly predict the perception of barriers suggesting that for this sample of Anglo bicultural Latina/o students their orientation was not a predictor of perceived barriers (hypothesis 6). While the direct influence of acculturation level on perceived barriers is not posited by SCCT, it was expected that background contextual affordances in the SCCT model may influence the perceptions of barriers. For instance, it was expected that bicultural individuals may be better equipped to overcome culturally related stressors and barriers. Perhaps, acculturation level, when measured linearly, has little or no relationship to coping efficacy given that the correlational analysis indicated a non-significant relationship between acculturation level and coping efficacy. Additionally, it is possible that the

influence of acculturation level on coping efficacy is captured under career decision self-efficacy given the significant relationship between the two measures.

Finally, the fact that coping efficacy was not a significant mediating variable among ethnic identity, acculturation level, and perceived barriers may have resulted from the instrument used in this study. Specifically, the brief scale (8 items) used asked participants about their confidence to cope with career barriers related to gender, ethnic, racial discrimination, family, and daycare responsibilities. Some of the questions, such as those related to daycare, may not have been particularly relevant or valid for college students who may not have yet encountered such hurdles. Hence, the relationship among ethnic identity, acculturation level, and this coping efficacy scale may be irrelevant to the developmental experiences of these Latina/o students. It is possible that asking Latina/o college students about their coping efficacy in relation to other more relevant career barriers they expect to face in the college-to-work transition (e.g., financial constraints) may have yielded different results.

Implications

Theoretical considerations. Multiple empirical studies have shown that SCCT is relevant to exploring the career path of people of color, including Latina/os (Arbona, 1995; Flores & O'Brien, 2002; Gushue, 2006; Gushue, Clarke, Pantzer, & Scalan, 2006; Gushue & Whitson, 2005; McWhirter, 1997; McWhirter, Hackett, & Bandalos, 1998; Navarro, Flores, & Worthington, 2007). This study contributes additional empirical support for several of the SCCT propositions. For example, self-efficacy beliefs had a direct negative impact on the perception of barriers which were operationalized within SCCT as outcome/process expectations because they include barriers encountered in the “process of making a career decision” (Lent et al., 2000, p. 44).

In the present study, variables thought to be relevant to the career path of Latina/o college students were selected. Within the SCCT model, ethnic identity and acculturation were situated as person input and background contextual variables that influence self-efficacy beliefs. Inconsistent with SCCT, however, the tests of self-efficacy mediators produced mixed results. Specifically, the findings revealed that ethnic identity and acculturation predicted career decision self-efficacy but they did not predict coping efficacy. Alternate explanations for this unexpected finding were considered, particularly the limitations of the coping efficacy scale. However, given that coping efficacy has been understudied as an efficacy mediator in the SCCT model, future studies might examine the direct effects of person inputs and background contextual variables on coping efficacy.

Further, while the findings of the present study indicate that the SCCT model provides a useful theoretical framework for understanding the career path of Latina/o college students, future studies with SCCT and the EC perspective are needed to continue to advance vocational psychology theories that emphasize social justice. EC offers a useful lens by which to frame vocational psychology research and advance systemic changes in the working lives of all groups. As such, researchers can contribute to the scholarship that attempts to promote equity and dismantle oppressive systems. With regard to model fitness, the hypothesized model was improved by adding a bidirectional path between career decision self-efficacy and coping efficacy and removing the path from acculturation level to perceived barriers. Future studies can test the modified model with these considerations.

Lastly, this study was among the first to operationalize perceived barriers as outcome/process expectations within the SCCT model. As Lent et al. (2004) noted barriers can be defined as outcome expectations encountered in the *process* of making a career decision or

completing career-related tasks. Clearly additional research is needed to better understand how career barriers can be best represented in the SCCT model (Lent et al., 2000; Swanson et al., 1996). The findings suggest that the perception of barriers is particularly relevant for college students who are in the process of making career decisions and transitioning from college-to-work. Future research studies can also explore the significance of barriers among individuals who are at different stages in their career path (e.g., graduate students).

Research considerations. While the SCCT model proved to be useful in understanding the career path of Latina/o college students, there were two paths that were not justified by this data. Given these unexpected findings, it seems that future studies can replicate the modified model by removing the unsupported paths among ethnic identity, acculturation level, and coping efficacy. On the other hand, given the possible limitations of the coping with barriers measure, further investigation on coping efficacy is warranted to understand coping efficacy beliefs in relation to career barriers that may be more pertinent to Latina/o college students. For example, in addition to asking about systemic barriers (e.g., ethnic discrimination), it may be important to understand Latina/o students' coping efficacy related to adapting to college, financial constraints, and acculturative stress.

Future studies might also investigate the role of ethnic identity and acculturation level in predicting self-efficacy beliefs and perceived career barriers among Latina/os who successfully complete college and those who do not. This knowledge could help improve retention of Latina/o students who may be at risk of dropping out of college or those who may feel insecure about their ability to overcome potential barriers. In particular, it may be valuable to explore whether Latina/o students who do not finish college do so because they perceive significantly more barriers that they are not prepared to overcome or because of structural inadequacies (e.g.,

insufficient resources) that hinder their college success and vocational choices. Clearly, further research is also needed to understand the complex relationship between acculturation and ethnic identity among Latina/os.

Additional research is also needed to explore the phenomenological aspects of acculturation. The overwhelming majority of research studies, including this one, have examined acculturation by only using scales (Dana, 1996). The ARSMA-II is one of the most extensively cited acculturation measures because of its utility in assessing acculturation on a continuum and orthogonally. While it was originally developed and normed for Mexican origin population, the ARSMA-II has been modified to measure acculturation with other Latina/o subgroups including Central Americans (Céspedes & Huey, 2008; Lee et al., 2006), as was the case in the present study. Nonetheless, it is important to consider the validity of the scale across all Latino populations. Consequently, future studies may want to gather information about acculturation behaviors and experiences through the use of interviews. By using qualitative and quantitative approaches, research can address how and why behavioral acculturation outcomes vary among Latina/o populations. It is possible that both individual characteristics and contextual factors influence acculturation behaviors of Latina/o college students in ways that cannot be captured through quantitative research methodologies alone. These may include phenotype characteristics and discriminatory experiences, as well as receiving college campus environment.

Alternatively, researchers may want to partner with Latina/o students by conducting participatory action research to investigate the cultural factors that empower them to resist barriers. Participatory action research has the potential to transform young people and alter barriers in communities of marginalized groups (Cammarota & Fine, 2008). For instance, by identifying the protective psychological and behavioral factors that help Latina/os students resist

barriers to their vocational paths; participants can acquire knowledge about oppressive systems and activate their agency to liberate themselves from oppression. Blustein et al. (2005) note that participatory action research is in line with the EC perspective in that emphasizes the importance of *concientización* (developing critical consciousness) and aims to empower individuals to become active agents in changing their oppressed status (Freire, 1970). In other words, participation in the research itself can be an empowering and emancipatory experience.

Moreover, in this study acculturation was measured as bidimensional by assessing adherence to Latina/o culture and Anglo mainstream culture. However, in the path model tested acculturation level was explored by using a single score. Other researchers (e.g., Flores & O'Brien, 2002; Flores, Navarro et al., 2006; Navarro et al., 2007) have examined Anglo and Mexican acculturation separately among Mexican American high school students and found that both orientations have an influence on academic and career goals depending on the domains studied (e.g., career choice traditionality, math and science disciplines). Future studies might also examine Anglo and Latina/o acculturation orientations separately by including both scores in path models and by exploring potential differences in acculturation practices for men and women.

Practice considerations. The results of the present study have implications for counseling and vocational psychologists. First, the findings suggest that practitioners may want to consider the role of acculturation level in the career path of Latina/o college students. Because of their proficiency and knowledge of both cultures, bicultural Latina/o college students may have a more sophisticated understanding of the potential systemic barriers they may encounter in their career path (e.g., ethnic discrimination, limited access to work opportunities). Consequently, these barriers may be viewed as opportunities to activate coping strategies,

strengths, and personal agency to pursue their career choices rather than as challenges that may limit career choice. Therapists then would work to change the systems that create unequal barriers (e.g., community outreach) while helping Latina/o clients anticipate and prepare them to resist those barriers as they transition from college-to-work. This type of intervention is consistent with the perspective that therapists can affirm the career choices for all people, especially disenfranchised groups, by serving as advocates and agents of change.

Practitioners working with Latina/o college students can implement interventions that identify and deconstruct these potential barriers and increase students' self-efficacy beliefs for resisting those obstacles while collaborating with businesses to create mentoring and work opportunities. In this way, practitioners are empowering students to liberate themselves from oppressive systems, while also working to change the systems and structures that perpetuate unequal barriers. This approach is consistent with the focus of social justice highlighted in the emancipatory-communitarian (EC) framework in that practitioners are considered key players in helping to increase individuals' agency and empowerment while working to eliminate injustices and liberate groups from oppression. In other words, practitioners can assist Latina/o college students to overcome barriers and work toward removing those barriers.

Moreover, this study points to the importance of ethnic identity in Latina/o college students' career path. Specifically, this is consistent with previous studies that have demonstrated the salience of ethnic identity in augmenting Latina/os students' career decision self-efficacy (Gushue, 2006; Gushue & Whitson, 2006). Given these findings, counseling psychologists can contribute to Latina/o students' career decision making and choices by affirming their positive feelings about their Latino ethnic group and accurately assessing and strengthening their self-efficacy beliefs. In addition to intervening at the individual level, counseling and career

psychologists can provide group counseling to help Latina/o college students explore their ethnic identity, self-efficacy beliefs, and barrier perceptions. Such groups can also help students to feel supported and less alone as they transition from college-to-work.

Although Latina/os vary greatly in their self-identification, in this study, approximately half of the participants self-identified their ethnicity as “Hispanic or Latino,” a term created by the U.S. Census. This is interesting given that these terms are not generally used in Latin America but rather adopted after arriving to the United States (Phinney, 2003). However, given that the majority of the participants were second generation and slightly more Anglo bicultural, they may be more willing to adopt the labels or identifications used in the mainstream society. Nonetheless, it is important to note that most Latina/os are faced with the task of deciding what the labels “Hispanic/Latina/o” mean to them. As such, there may be different meanings associated with identifying with these labels instead of country of origin. Given the relationship between a healthy ethnic identity and psychological resiliency (Wong, Eccles, & Sameroff, 2003), counseling psychologists can explore preferences and meanings of different labels and empower Latina/o students to develop a healthy ethnic identity. Interventions that recognize, appreciate, and support the diversity of Latina/o students’ self-identifications (i.e., Latina, Mexican American, Chicana, and Mexican), and expressions of ethnic identity are likely to convey practitioners’ multicultural competence (Sue, Arredondo, & McDavis, 1992).

Training considerations. Several training considerations emerged from the findings of the current investigation. Because a bicultural orientation contributed to a greater belief in the capacity to complete tasks related to career decision, training programs should integrate bidimensional acculturation theories (e.g., Berry, 1997, 2003) in career counseling coursework. Specifically, it is essential that counseling trainees understand how a bicultural acculturation

level may help Latina/o college students successfully participate in two or more different cultures and contribute to greater self-efficacy about executing actions in pursuit of their career goals.

Training programs should include career counseling specific to oppressed groups who have had limited, if any, access to the occupational opportunity structure. It is important for counseling trainees to consider how and why Latina/o college students make decisions about their career goals. Particular attention needs to be paid to how decisions are made in response to opportunities and barriers encountered in their sociocultural environments. Equally important, counseling psychology trainees also need to learn about the importance of developing a positive ethnic identity, particularly among members of historically stigmatized groups (Quintana, 2007). The findings of this study provide support for the role of ethnic identity in augmenting Latina/o students' career decision self-efficacy and increasing awareness about career barriers (e.g., ethnic and gender discrimination). Likewise, counseling psychology trainees must be aware of how attitudes and feelings toward their ethnic identity influence their view of their clients.

Further, programs should consider integrating EC as a relevant framework in career development courses and emphasizing the role of counseling psychologists as social justice advocates. Career development courses are ideal for conveying information about the sociohistorical, sociopolitical, and sociostructural barriers that shape people's working lives. Therefore, career development courses must consciously integrate theories that prepare counseling trainees to work with diverse populations, including oppressed groups. As Fassinger and Gallor (2006) have suggested, counseling psychology training programs can transform the scientist-practitioner model into a scientist-practitioner-*advocate* model to teach trainees how to advocate for micro and macro level social change. For example, training programs can partner

with community organizations to help trainees develop research projects intended to build collaborative partnerships, empower the community, raise awareness, and influence policy (i.e., participatory action research).

Limitations of the study. While the results of the current study advance the career research pertaining to Latina/o college students, there are several limitations that must be considered. First, while a total of 17 Latino nationalities were represented in this study, the sample sizes were too small to conduct group comparisons. Specifically, a significant portion of the participants self-identified as “Mexican American” or “Mexican”. The considerable representation of Mexican American/Mexican students in the present study is not surprising given that people from Mexican decent make up 66% of the total Latina/o population in the United States (U.S. Census Bureau, 2008). Furthermore, in 2000, approximately 4.7% of first generation and 15.4% of second generation Mexicans attended college full-time (Waldinger & Reichl, 2006). Thus, the study did not examine the experiences of a diverse group of Latina/os, as was hoped, limiting the generalizability to various subgroups.

Additionally, while attempts were made to include a heterogeneous sample of Latina/os in different levels of acculturation and generational status, the majority of the participants in this study self-identified as “second generation”. This large representation is consistent with data from the U.S. Census Bureau (2008) that indicates that 61% of Latina/os are second generation. In light of the large percentage of Mexican/Mexican Americans and second generation Latina/os in the U.S and the percentage of second generation Mexicans in U.S. colleges, the considerable representation of these groups in colleges and universities sampled in this study is not surprising. Nonetheless, there may be generational differences that exist based on country of origin and immigration history, limiting generalizations to different Latina/o groups.

Further, although attempts were made to recruit students from community college, the majority of the participants in this study included Latina/os enrolled in four year universities. While community colleges have considerable enrollment of Latina/os, first-generation college students, those born outside the U.S., and those from low socioeconomic status (Bailey, 2006; Pew Hispanic Center, 2004), the underrepresentation of community college Latina/o students in this study is puzzling. One possible explanation is that Latina/o students enrolled in community colleges tend to have work and family responsibilities that may compete with volunteering in psychology research. Fry (2002) points out that the strong commitment to family and work may explain Latino/a student's part-time college enrollment. Another possibility is that psychology research may not be a significant part of the college experience as it is in undergraduate universities where research is usually conducted as part of a course requirement. As a result, community college students may be less accustomed to participating in research endeavors.

Certainly, because the study was conducted online, participants self-selected to participate. Therefore, it is possible that those who did not participate could have provided different data that may have significantly altered the results of the study. For example, it is possible that participants who did not feel a positive sense of belonging to their Latino group or who did not feel confident about making career decisions may have elected not to participate in the study.

Finally, generalizations based on these results are limited as causal effects cannot be assumed with path analysis despite its usefulness in testing simultaneous effects. While this study built a path model anchored within SCCT, it is important to note that the model is generally applied to specific career domains or disciplines (e.g., math, science). The present study examined career path more broadly and with less specificity to a career discipline. For

instance, career decision self-efficacy pertains to the ability to accomplish broad tasks involved in career decision making and less to do with the ability to navigate tasks related to math or science career choices. Finally, this study did not measure the influence of learning experiences on self-efficacy expectations. The inclusion of a measure of learning experiences may have helped to explain the influence of ethnic identity and acculturation level on coping self-efficacy for this group of Latina/o college students.

Summary and Conclusions

Given the unequivocal need for a college education in today's competitive labor market and the growing representation of Latina/o students in U.S. colleges and universities, it becomes increasingly important to understand the factors that contribute to a successful college-to-work transition. The present study investigated the role of ethnic identity and acculturation in the career path of Latina/os and the validity of SCCT tenets with a diverse Latina/o college sample. An EC-SCCT framework was used to explore the relationships among ethnic identity, acculturation level, career decision self-efficacy, coping efficacy, and perceived barriers. The findings point to the role of ethnic identity in augmenting Latina/o students' career decision self-efficacy and increasing awareness about career barriers (e.g., ethnic and gender discrimination). Furthermore, higher acculturation level, or an Anglo bicultural orientation, predicted career decision self-efficacy and coping efficacy had a direct negative influence on the perception of career barriers. Findings from the present study provide support for the utility of an EC-SCCT conceptual framework in understanding the career path of Latina/o college students, while also illuminating paths for future inquiry.

Using career theories that account for sociostructural, sociohistorical, and sociopolitical barriers and examining protective factors that help to buffer those barriers can help counseling

psychologists empower Latina/o students to overcome the oppressive systems that compromise career choices. In this study, the results of a modified path model demonstrated that career decision self-efficacy, for instance, mediated the protective role of ethnic identity and Anglo bicultural orientation on the perception of career barriers. Additionally, the research findings point to the complex relationship between ethnic identity and acculturation among Latina/o college students. While this was the first study to integrate an EC-SCCT framework, it is hoped that this study will stimulate further research involving other ethnic and racially diverse college samples; particularly other Latina/o subgroups who have been historically underrepresented and oppressed. Finally, the current study contributes to the growing literature promoting a liberational approach to vocational and counseling psychology theory, research, and practice.

References

- Anderson, S., & Brown, C. (1997). Self-efficacy as a determinant of maturity in urban and rural high school seniors. *Journal of Career Assessment*, 5, 305-315.
- Arbona, C. (1990). Career counseling research and Hispanics: A review of the literature. *The Counseling Psychologist*, 18, 300-323.
- Arbona, C. (1995). Theory and research on racial and ethnic minorities: Hispanic Americans. In F.T. Leong (Ed.), *Career development and vocational behavior of racial and ethnic minorities* (pp. 37-66). Mahwah, NJ: Erlbaum.
- Arbona, C. (1996). Career theory and practice in multicultural context. In M. L. Savickas & W. B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. 45-54). Palo Alto, CA: Davies-Black.
- Arbona, C. & Novy, D. M. (1991). Career aspirations and expectations of Black, Mexican American, and White students. *Career Development Quarterly*, 39, 231-239.
- Ashmore, R., Deaux, K., & McLaughlin-Vope, T. (2004). An organizing framework for collective identity: Articulation and significance of multidimensionality. *Psychological Bulletin*, 130, 80-114.
- Bailey, T. (2006). *Beyond traditional college: The role of community colleges, career and technical postsecondary education in preparing a globally competitive workforce*. New York: Community College Research Center, Teachers College, Columbia University.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychology Review*, 84, 191-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Englewood Cliffs, NJ: Prentice Hall.

- Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science*, 9, 75-78.
- Barona, A. & Miller, J. A. (1994). Short acculturation scale for Hispanic youth (SASH-Y): A preliminary report. *Hispanic Journal of Behavioral Sciences* 16, 155-162.
- Becker, G. S. (1998). Human capital and poverty. *Action Institute Religion & Liberty*, 8 (1), 5-7, 11.
- Bendick, M., Jr., Jackson, C. W., Reinoso, V. A., Hodges, L. E. (1991). Discrimination against Latino job applicants: A controlled experiment. *Human Resource Management*, 30 (4), 469-484.
- Berry, J. W. (1980). Acculturation as varieties of adaptation. In A. Padilla (Ed.), *Acculturation: Theory, models and new findings* (pp. 9-25). Boulder, CO: Westview Press.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied psychology: An International Review*, 46, 5-68.
- Berry, J. W. (2003). Conceptual approaches to acculturation. In K. M. Chun, P. B. Organista, & G. Marín (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 17-37). Washington, DC: American Psychological Association.
- Berry, J., Phinney, J., Sam, D., & Vedder, P. (2006). *Immigrant youth in cultural transition: Acculturation, identity, and adaptation across national contexts*. Mahwah, NJ: Erlbaum.
- Betz, N. E. (2005). Reliability and validity of five-level response continua for the career decision self-efficacy scale. *Journal of Career Assessment*, 13, 131-149.
- Betz, N. E., & Hackett, G. (1981). The relationship of career-related self-efficacy expectations to perceived career options in college women and men. *Journal of Counseling Psychology*, 28, 399-410.
- Betz, N. E., & Hackett, G. (1983). The relationship of mathematics self-efficacy expectations to the selection of science-based college majors. *Journal of Vocational Behavior*, 23, 329-345.

- Betz, N. E., Hammond, M. S., & Multon, K. D. (2005). Reliability and validity of five-level response continua for the career decision self-efficacy scale. *Journal of Career Assessment, 13*, 131-149.
- Betz, N. E., Klein, K. L., Taylor, K. M. (1996). Evaluation of a short form of the Career Decision-Making Self-Efficacy Scale. *Journal of Career Assessment, 4*, 47-5.
- Betz, N.E., & Voyten, K. K. (1997). Efficacy and outcome expectations influence career exploration and decidedness. *Career Development Quarterly, 46*, 179-189.
- Birman, D. (1998). Biculturalism and perceived competence of Latino immigrant adolescents. *American Journal of Community Psychology, 26*, 335-354.
- Blustein, D. L. (1989). The role of goal instability and career self-efficacy in the career exploration process. *Journal of Vocational Behavior, 35*, 194-203.
- Blustein, D. L. (2006). *The psychology of working: A new perspective for career development, counseling, and public policy*. Mahwah, NJ: Erlbaum.
- Blustein, D. L., Chaves, A. P., Diemer, M.A., Gallagher, L. A., Marshall, K. G., Sirin, S., et al., (2002). Voices of the forgotten half: The role of social class in the school-to-work transition. *Journal of Counseling Psychology, 49*, 311-33.
- Blustein, D. L., Devenis, L. E., & Kidney, B. (1989). Relation between the identity formation process and career development. *Journal of Counseling Psychology, 36*, 96-202.
- Blustein, D. L., McWhirter, E. H., & Perry, J. C. (2005). An emancipatory communitarian approach to vocational development theory, research, and practice. *The Counseling Psychologist, 33*, 141-179.
- Blustein, D. L., & Phillips, S. D. (1990). Relation between ego identity statuses and decision-making styles. *Journal of Counseling Psychology, 37*, 160-168.
- Bourdieu, P. (1996). *The state of nobility: Elite schools in the field of power*. Stanford, CA: Stanford University Press.

- Brown, M. T. (1995). The career development of African Americans: Theoretical and Empirical Issues. In F. T. L. Leong (Ed.), *Career development and vocational behavior of racial and ethnic minorities* (pp. 7-36). Mahwah, NJ: Erlbaum.
- Cammarota, J. & Fine, M. (2008). Youth participatory action research: A pedagogy for transformational resistance. In Cammarota, J. & Fine, M. (Eds.) *Revolutionizing education: Youth participatory action research in motion* (pp. 1-12). New York: Routledge.
- Carter, R. T., & Cook, D. A. (1992). A culturally relevant perspective for understanding the career paths of visible racial/ethnic group people. In Z. Leibowitz & D. Lea (Eds.), *Adult career development* (pp. 192-217). Alexandria, VA: National Career Development Association.
- Carter, C. & Pieterse, A. (2005). Race: A social and psychological analysis of the term and its meaning. In Carter, R. T. (Ed), *Handbook of racial-cultural psychology and counseling* (Vol. I, pp. 41-63). Hoboken, NJ: John Wiley & Sons, Inc.
- Céspedes, Y. M., & Huey, Jr., S. J. (2008). Depression in Latino adolescents: A cultural discrepancy perspective. *Cultural Diversity Ethnic Minority Psychology*, 14, 168-172.
- Chandra, K. (2006). What is ethnic identity and does it matter? *Annual Review of Political Science*, 9, 397-424.
- Cohen, R. (1978). Ethnicity: Problem and focus in anthropology. *Annual Review of Anthropology*, 7, 379-403.
- Cuéllar, I., Arnold, B., & Maldonado, R. (1995). Acculturation Rating Scale for Mexican Americans-II: A revision of the original ARSMA scale. *Hispanic Journal of Behavioral Sciences*, 17, 275-304.
- Cuéllar, I., Harris, L. Jasso, R. (1980). An acculturation scale for Mexican American normal and clinical populations. *Hispanic Journal of Behavioral Sciences*, 2, 199-217.
- Cuéllar, I., Nyberg, B., Maldonado, R. (1997). Ethnic identity and acculturation in a young adult Mexican origin population. *Journal of Community Psychology*, 25, 535-549.

- Dana, R. H. (1996). Assessment of acculturation in Hispanic populations. *Hispanic Journal of Behavioral Sciences, 18*, 317-328.
- DeCarlo, L. T. (1997). On the meaning and use of kurtosis. *Psychological Methods, 2*, 292-307.
- Delgado-Romero, E. A., Galván, N., Maschino, P., & Rowland, M. (2005). Race and ethnicity in empirical counseling and counseling psychology research. *The Counseling Psychologist, 33*, 419-448.
- Erikson, E. H. (1950). *Childhood and society*. New York: Norton.
- Erikson, E. H. (1959). Identity and the life cycle. *Psychological Issues, 1*, 18-164.
- Ethier, K., & Deaux, K. (1990). Hispanics in Ivy: Assessing identity and perceived threat. *Sex Roles, 22*, 427-440.
- Fassinger, R.E. & Gallor, S. M. (2006). Tools for remodeling the master's house: Advocacy and social justice in education and work. In R. Toporek, L. Gerstein, N. Fouad, G. Roysircar, & T. Israel (Eds.), *Handbook for social justice in counseling psychology: Leadership, vision, and action* (pp. 256-275). Thousand Oaks, CA: Sage Publications.
- Fitzgerald, L. F. & Betz, N. E. (1994). Career development in cultural context: The role of gender, race, class, and sexual orientation. In M.L. Savickas & R. W. Lent (Eds.), *Convergence in career development theories: Implications for science and practice* (pp. 103-117). Palo Alto, CA: Consulting Psychology Press.
- Flores, L. & O'Brien, K. (2002). The career development of Mexican American adolescent women: A test of Social Cognitive Career theory. *Journal of Counseling Psychology, 49*, 14-27.
- Flores, L. Y., Ojeda, L., Huang, Y.-P., Gee, D., Lee, S. (2006). The relation of acculturation, problem-solving appraisal, and career decision-making self-efficacy to Mexican American high school students' educational goals. *Journal of Counseling Psychology, 53*, 260-266.

- Fouad, N. A. (1995). Career behavior of Hispanics: Assessment and intervention. In F.T.L. Leong (Ed.), *Career development and vocational behavior of racial and ethnic minorities* (pp. 165-192). Mahwah, NJ: Erlbaum.
- Fouad, N. A., & Arbona, C. (1994). Careers in cultural context. *The Career Development Quarterly*, 43, 96-104.
- Fouad, N. A., & Brown, M. T. (2000). The role of race and class in development: Implications for counseling psychology. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (3rd ed., pp. 379-408). New York: Wiley.
- Fouad, N. A., & Byars-Winston, A. M. (2005). Work: Cultural perspectives on career choices and decision making. In R. T. Carter (Ed.), *Handbook of racial-cultural psychology and counseling, theory and research* (Vol. 1, pp. 232-255). Hoboken, NJ: John Wiley & Sons.
- Freire, P. (1970). *Pedagogy of the oppressed*. New York: Continuum.
- Fry, R. (2002). *Latinos in higher education: Many enroll, few graduate*. Washington, DC: Pew Hispanic Center.
- Gainor, K. A. (2006). Twenty-five years of self-efficacy in career assessment and practice. *Journal of Career Assessment*, 14, 143-160.
- Gainor, K., & Lent, R. W. (1998). Social cognitive expectations and racial identity attitudes in predicting the math choice intentions of Black college students. *Journal of Counseling Psychology*, 45, 403-413.
- Galanti, G. A. (2003). The Hispanic family and male-female relationships: An overview. *Journal of Transcultural Nursing*, 14, 180-185.
- Gamst, G., Dana, R. H., Der-Karabetian, A., Aragón, M., Arellano, L. M., Kramer, T. (2002). Effects of Latino acculturation and ethnic identity on mental health outcomes. *Hispanic Journal of Behavioral Sciences*, 24, 479-504.

- Gloria, A., & Hird, J. S. (1999). Influences of ethnic and nonethnic variables on the career decision making self-efficacy of college students. *Career Development Quarterly*, 48, 157-174.
- Gomez, M., J. & Fassinger, R. E. (1994). An initial model of Latina achievement: Acculturation, biculturalism, and achieving styles. *Journal of Counseling Psychology*, 41, 205-215.
- Gomez, M., J., Fassinger, R. E., Prosser, J., Cooke, K., Mejia, B., & Luna, J. (2000). Voces abriendo caminos (voices forging paths): A qualitative study of the career development of notable Latinas. *Journal of Counseling Psychology*, 48, 286-300.
- Greene, M. L., Way, N., & Pahl, K. (2006). Trajectories of perceived adult and peer discrimination among Black, Latino, and Asian American adolescents: Patterns and psychological correlates. *Developmental Psychology*, 42, 218-238.
- 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, 85-95.
- Gushue, G.V., Clarke, C. P., Pantzer, K. M., & Scalan, K. R. L. (2006). Self-efficacy, perception of barriers, vocational, and career exploration behavior of Latino/a high school students. *The Career Development Quarterly*, 54, 307-317.
- Gushue, G.V., & Whitson, M. L. (2006). The relationship of ethnic identity and gender role attitudes to the development of career choice goals among Black and Latina girls. *Journal of Counseling Psychology*, 53, 379-385.
- Hackett, N.E. & Betz, N. (1981). A self-efficacy approach to the career development of women. *Journal of Vocational Behavior*, 18, 326-339.
- Hackett, G. & Byars, A. M. (1996). Social cognitive theory and the career development of African American women. *The Career Development Quarterly*, 44, 422-340.
- Helms, J. E. (2007). Some better practices for measuring racial and ethnic identity constructs. *Journal of Counseling Psychology*, 52, 235-246.

- Helms, J. E., & Piper, R. E. (1994). Implications of racial identity theory for vocational psychology. *Journal of Vocational Behavior*, 44, 124-138.
- Helms, J.E. & Talleyrand, R. (1997). Race is not ethnicity. *American Psychologist*, 52, 1246-1247.
- Holland, J. L., Daiger, D. C., & Power, P. G. (1980). *My vocational situation: Description of an experimental diagnostic form for the selection of vocational assistance*. Palo Alto, CA: Consulting Psychologists Press.
- Hurtado, M. T., & Gauvain, M. (1997). Acculturation and planning for college among youth of Mexican descent. *Hispanic Journal of Behavioral Sciences*, 19, 506-516.
- Johnson, A. G. (2006). *Privilege, power, and difference* (2nd edition). Boston: McGraw-Hill.
- Juby, H. L., & Concepción, W. (2005). Ethnicity: The term and its meaning. In. Carter, R. T. (Ed), *Handbook of racial-cultural psychology and counseling* (Vol. I, pp. 26-40). Hoboken, NJ: John Wiley & Sons, Inc.
- Kim, B.S.K., & Abreu, J. M. (2001). Acculturation measurement: Theory, current instruments, and future directions. In J.G. Ponterotto, J. M. Casas, L. A. Susuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (2nd ed., pp. 394-424). Cambridge: Cambridge University Press.
- Kline R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York: The Guilford Press.
- Kozol, J. (1991). *Savage inequalities: Children in America's schools*. New York: Crown.
- LaFromboise, T., Coleman, H. L. K., & Gerton, J. (1993). Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin*, 114, 395-412.
- Lauver, P. J., & Jones, R. M. (1991). Factors associated with perceived career options in American Indian, White, and Hispanic rural high school students. *Journal of Counseling Psychology*, 38, 159-166.

- Leal-Muniz, V., & Constantine, M.G. (2005). Predictors of the career commitment process in Mexican American college students. *Journal of Career Assessment*, 13, 204-215.
- Lee, R. M., Yoon, E., & Liu-Tom, H-T. T. (2006). Structure and measurement of acculturation/enculturation for Asian Americans using the ARSMA-II. *Measurement and Evaluation in Counseling and Development*, 39, 42-55.
- Lent, R. W., Brown, S. D. (1996). Social cognitive approach to career development: An overview. *The Career Development Quarterly*, 44, 310-321.
- Lent, R. W., Brown, S.D., Brenner, B., Chopra, S.B., Davis, T., Talleyrand, R., & Suthakaran, V. (2001). The role of contextual supports and barriers in the choice of math/science educational options: A test of social cognitive hypothesis. *Journal of Counseling Psychology*, 48, 474-483.
- Lent, R. W., Brown, S.D., & Hackett, G. (1994). Toward unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45, 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, 36-49.
- Lent, R. W., Brown, S.D., & Hackett, G. (2002). Social cognitive career theory. In D. Brown (Ed.), *Career choice and development* (4th ed., pp. 255-311). San Francisco: Jossey-Bass.
- 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, 458-465.
- Lent, R. W., Brown, S. D., Talleyrand, R., McPartlan, E. B., Davis, T., Chopra, S. B., Alexander, M. S., Suthakaran, & V., Chai, C. (2002). Career choice barriers. *Journal of Vocational Behavior*, 60, 61-72.
- Leong, F. T. L., & Chou, E. L. (1994). The role of ethnic identity and acculturation in the vocational behavior of Asian Americans: An integrative review. *Journal of Vocational Behavior*, 44, 155-172.

- Leung, S. A. (1995). Career development and counseling: A multicultural perspective. In J.G. Ponterotto, J. M. Casas, L.A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 549-556). Thousand Oaks, CA: Sage.
- Lindley, L. D. (2006). The paradox of self-efficacy: Research with diverse populations. *Journal of Career Assessment*, 14, 143-160.
- Lorenzo-Hernández, J., & Ouellette, S. C. (1998). Ethnic identity, self-esteem, and values in Dominicans, Puerto Ricans, and African Americans. *Journal of Applied Social Psychology*, 28, 2007-2024.
- Lucero-Miller, D. & Newman, J. L. (1999). Predicting acculturation using career, family, and demographic variables in a sample of Mexican American students. *Journal of Multicultural Counseling and Development*, 27, 75-92.
- Luzzo, D. A. (1993a). Ethnic differences in college students' perceptions of barriers to career development. *Journal of Multicultural Counseling & Development*, 21, 227-236.
- Luzzo, D. A. (1993b). Value of career-decision-making self-efficacy in predicting career decision-making attitudes and skills. *Journal of Counseling Psychology*, 40, 194-199.
- Luzzo, D. A. (1996). Exploring the relationship between the perception of occupational barriers and career development. *Journal of Career Development*, 22, 239-248.
- Luzzo, D. A., & Hutcheson, K. G. (1996). Causal attributions and sex differences associated with perceptions of occupational barriers. *Journal of Counseling and Development*, 75, 124-130.
- Luzzo, D.A., & McWhirter, E. H. (2001). Sex and ethnic differences in the perception of educational/career-related barriers and levels of coping efficacy. *Journal of Counseling and Development*, 79, 61-67.
- Marín, G., & Gamba, R. J. (1996). A new measurement of acculturation for Hispanics: The Bidimensional Acculturation Scale for Hispanics (BAS). *Hispanic Journal of Behavioral Sciences*, 18, 297-316.

- Marín, G., & Marín, B.V. (1991). *Research with Hispanic populations*. Newbury Park, CA: Sage.
- Marín, G., Sabogal, F., Marín, B. V., Otero-Sabogal, R. Perez-Stable, E. (1987). Development of a short acculturation scale for Hispanics. *Hispanic Journal of Behavioral Sciences*, 9, 183-205.
- Martín-Baró, I. (1994). Writings for a liberation psychology. In A. A. Aron & S. Corne (Eds.), *Writings for a liberation psychology*. Cambridge: Harvard University Press.
- Martinez, R. O., & Dukes, R. L. (1997). The effects of ethnic identity, ethnicity, and gender in adolescent well-being. *Journal of Youth and Adolescence*, 26, 503–516.
- McWhirter, E.H. (1997). Perceived barriers to education and career: Ethnic and gender differences. *Journal of Vocational Behavior*, 50, 124-140.
- McWhirter, E. H., Hackett, G., & Bandalos, D. L. (1998). A causal model of educational plans and career expectations of Mexican American high school girls. *Journal of Counseling Psychology*, 45, 166-181.
- McWhirter, E. H., Rasheed, S., & Crothers, M. (2000). The effects of high school career education on social– cognitive variables. *Journal of Counseling Psychology*, 47, 330–341.
- Mejia, B. X., Navarro, R. L., & Gushue, G. V. (2008, November). *Latina/o college students: The positive influence of ethnic identity on career decision self-efficacy, perception and coping with career barriers*. Poster session presented at the 2008 National Latina/o Psychological Association Conference, Costa Mesa, CA.
- Miranda, A. O., & Umhoefer, D. L. (1998). Acculturation, language use, and demographic variables as predictors of the career self-efficacy of Latino career counseling clients. *Journal of Multicultural Counseling & Development*, 26, 39-51.
- Morrison, E. W. (2002). The school-to-work transition. In D. C. Feldman (Ed.), *Work careers: A developmental perspective* (pp. 126–158). San Francisco: Jossey-Bass.

- Mossakowski, K. N. (2003). Coping with perceived discrimination: Does ethnic identity protect mental health? *Journal of Health & Social Behavior*, 44, 318–331.
- Murguía, E. (1991). On Latino/Hispanic ethnic identity. *Latino Studies Journal*, 2, 8-17
- Muthén, L.K. and Muthén, B.O. (1998-2010). *Mplus User's Guide. Sixth Edition*. Los Angeles, CA: Muthén & Muthén.
- Navarro, R. L., Flores, L. Y., & Worthington, R. L. (2007). Mexican American middle school students' goals intentions in mathematics and science: A test of social cognitive career theory. *Journal of Counseling Psychology*, 54, 320-335.
- Neville, H. A., Heppner, P. P., & Wang, L. (1997). Relations among racial identity attitudes, perceived stressors, and coping styles of African American college students. *Journal of Counseling and Development*, 75, 303-311.
- Nguyen, H. H., Messe, L. A., & Stollak, G. E. (1999). Toward a more complex understanding of acculturation and adjustment: Cultural involvements and psychosocial functioning in Vietnamese youth. *Journal of Cross-Cultural Psychology*, 30, 5-31.
- Norris, A. E., Ford, K., & Bova, C.A. (1996). Psychometrics of a brief acculturation scale for Hispanics in a probability sample of urban Hispanic adolescents and young adults. *Hispanic Journal of Behavioral Sciences*, 18, 29-38.
- O'Brien, K. M., Bikos, L. H., Epstein, K. L., Flores, L. Y., Dukstein, R. D., & Kamatuka, N. A. (2000). Enhancing the career decision-making self-efficacy of Upward Bound students. *Journal of Career Development*, 26, 277–293.
- Osipow, S.H., & Fitzgerald, L. (1996). *Theories of career development* (4th ed.). Needham Heights, MA: Allyn & Bacon.
- Padilla, A. (2006). Bicultural social development. *Hispanic Journal of Behavioral Sciences*, 28, 467-497.
- Padilla, A., & Perez, W. (2003). Acculturation, social identity, and social cognition: A new perspective. *Hispanic Journal of Behavioral Sciences*, 25, 35-55.

- Perez, W. & Padilla, A. (2000). Cultural orientation across three generations of Hispanic adolescents. *Hispanic Journal of Behavioral Sciences*, 22, 390-398.
- Perron, J., Vondracek, F. W., Skorikov, V. B., Tremblay, C., & Corbiere, M. (1998). A longitudinal study of vocational maturity and ethnic identity development. *Journal of Vocational Behavior*, 52, 409-42.
- Peterson, N., & Gonzalez, R. C. (2000). *The role of work in people's lives: Applied career counseling and vocational psychology*. Belmont, CA: Wadsworth/Thomson Learning.
- Pew Hispanic Center (2004). *Hispanic college enrollment: Less intensive and less heavily subsidized*. Washington, DC: Pew Hispanic Center.
- Pew Hispanic Center & Kaiser Family Foundation (2002). *2002 National survey of Latinos: Summary of findings*. Menlo Park, CA: Henry J. Kaiser Family Foundation, and Washington, DC: Pew Hispanic Center.
- Phinney, J. S. (1990). Ethnic identity in adolescence and adulthood: A review of research. *Psychological Bulletin*, 108, 34-49.
- Phinney, J. S. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with diverse groups. *Journal of Adolescent Research*, 7, 156-176.
- Phinney, J. S. (1993). A three-stage model of ethnic identity development in adolescence. In G. P. Knight & M. E. Bernal (Eds.), *Ethnic identity: Formation and transmission among Hispanics and other minorities* (pp. 61-79). Albany: State University of New York Press.
- Phinney, J. S. (1996). When we talk about American ethnic groups, what do we mean? *American Psychologists*, 51, 918-927.
- Phinney, J. S. (1998). Ethnic identity in adolescents and adults: Review of research. In P. B. Organista, K. M. Chun, & G. Marín (Eds.), *Readings in ethnic psychology* (pp. 73-99). New York: Routledge.
- Phinney, J. (2003). Ethnic identity and acculturation. In K. Chun, P. Organista, & G. Marín (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 63-81). Washington, DC: American Psychological Association.

- Phinney, J. S., Cantu, C. L., & Kurtz, D. A. (1997). Ethnic and American identity as predictors of self-esteem among African American, Latino, and White adolescents. *Journal of Youth and Adolescence*, 26, 165–185.
- Phinney, J. S., & Kohatsu, E. (1997). Ethnic and racial identity and mental health. In J. Schulenberg, J. Maggs, & K. Hurrelmann (Eds.), *Health risks and developmental transitions during adolescence* (pp. 420-443). New York: Cambridge University Press.
- Phinney, J. S., & Ong, a. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology*, 54, 371-281.
- Portes, A. & Rumbaut, R. G. (2001). *Legacies: The story of the immigrant second generation*. Berkeley: University of California Press.
- Prilleltensky, I. (1997). Values, assumptions and practices: Assessing the moral implications of psychological discourse and action. *American Psychologist*, 52, 517-535.
- Quintana, S. M. (2007). Racial and ethnic identity: Developmental perspectives and research. *Journal of Counseling Psychology*, 54, 259–270.
- Quintana, S. M., Castaneda-English, P., & Ybarra, V. C. (1999). Role of perspective-taking abilities and ethnic socialization in development of adolescent ethnic identity. *Journal of Research on Adolescence*, 9, 161-184.
- Ramos, L., & Sanchez, A. R. (1995). Mexican-American high school students: Educational aspirations. *Journal of Multicultural Counseling and Development*, 23, 212-221.
- Redfield, R., Linton, R., & Herskovits, M. (1936). Memorandum for the study of acculturation. *American Anthropologist*, 38, 149-152.
- Reyes, O., Kobus, K., & Gillock, K. (1999). Career aspirations of urban Mexican American adolescent females. *Hispanic Journal of Behavioral Sciences*, 21, 366-382.
- Richardson, M. S. (1993). Work in people's lives: A location for counseling psychologists. *Journal of Counseling Psychology*, 40, 425-433.

- Richie, B. S., Fassinger, R. E., Linn, S. G., Johnson, J., Prosser, J., & Robinson, S. (1997). Persistence, connection, and passion: A qualitative study of the career development of highly achieving African-American-Black and White women. *Journal of Counseling Psychology, 44*, 133-144.
- Rivera, L. M., Chen, E. C., Flores, L. Y., Blumberg, F., Ponterotto, J. G. (2007). The effects of perceived barriers, role models, and acculturation on the career self-efficacy and career consideration of Hispanic women. *The Career Development Quarterly, 56*, 47-61.
- Roberts, R., Phinney, J., Mase, L., & Chen, Y., Roberts, C. & Romero, A. (1999). The structure of ethnic identity in young adolescents from diverse ethnocultural groups. *Journal of Early Adolescence, 19*, 301-322.
- Rodriguez, C. E. (2000). *Changing race: Latinos, the Census, and the history of ethnicity in the United States*. New York, NY: New York University Press.
- Rodriguez, C. E., Castro, A., Garcia, O., & Torres, A. (1991). Latino racial identity: In the eye of the beholder. *Latino Studies Journal, 2*, 33-48.
- Rosenbaum, J. E. (2001). *Beyond college for all: Career paths for the forgotten half*. New York: Russell Sage Foundation.
- Scandura, T. A. (2002). The establishment years: A dependence perspective. In D. C. Feldman (Ed.), *Work careers: A developmental perspective (pp. 159-185)*. San Francisco: Jossey-Bass.
- Skorikov, V. B., & Vondracek, F. W. (1998). Vocational identity development: Relationship to other identity domains and to overall identity development. *Journal of Career Assessment, 6*, 13-25.
- Smith, E. J. (1991). Ethnic identity development: Toward the development of a theory within the context of majority/minority status. *Journal of Counseling and Development, 70*, 181-188.
- Sue, D. W., Arredondo, P., & McDavis, R. J. (1992). Multicultural counseling competencies/standards: A call to the profession. *Journal of Multicultural Counseling and Development, 20*, 64-88.

- Super, D. E. (1957). *The psychology of careers*. New York: Harper & Row.
- Swanson, J. L., Daniels, K. K., & Tokar, D. M. (1996). Assessing perceptions of career-related barriers: The Career Barriers Inventory. *Journal of Career Assessment*, 4, 219-244.
- Swanson, J. L., & Tokar, D. M. (1991). College students' perception of barriers to career development. *Journal of Vocational Behavior*, 38, 92-106.
- Szapocnik, J. & Kurtines, W. (1980). Acculturation, biculturalism, and adjustment among Cuban Americans. In A.M. Padilla (Ed.), *Acculturation: Theory models and some new findings* (pp.139-159). Boulder, CO: Westview Press.
- Szapocnik, J. & Kurtines, W. (1981). Bicultural Involvement and adjustment in Hispanic-American youths. *International Journal of Intercultural Relations*, 4, 353-365.
- Taft, R. (1977). Coping with unfamiliar cultures. In N. Warren (Ed.), *Studies in cross-cultural psychology* (Vol. I, pp. 143-155). London: Academic Press.
- Tajfel, H. & Turner, J. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. Austin (Eds.), *Psychology of intergroup relations* (pp. 7-24). Chicago: Nelson-Hall.
- Tang, M., Fouad, N., & Smith, P. (1999). Asian Americans' career choices: A path model to examine factors influencing their career choices. *Journal of Vocational Behavior*, 54, 142-157.
- Taylor, K. M. & Betz, N. E. (1983). Applications of self-efficacy theory to the understanding and treatment of career indecision. *Journal of Vocational Behavior*, 22, 63-81.
- Tolbert, E. L. (1980). *Counseling for career development* (2nd ed.). Boston: Houghton Mifflin.
- Twomey, J. P. (2010). The relation of career decision self-efficacy and perceived barriers to academic preparedness for community college students of African descent. Retrieved from *Dissertation Abstracts International: Section A. Humanities and Social Sciences* 70 (7-A), 2389.

- U.S. Bureau of Labor Statistics (2007). *Labor force statistics from the Current Population Survey*. Retrieved from <http://www.bls.gov/pcs>.
- U.S. Bureau of the Census. (1994). *Statistical abstract of the United States: 1994* (114th ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Census Bureau (2003a). *Occupations: 2000*. Washington, DC: Author
- U.S. Census Bureau (2003b). *Employment status: 2000*. Washington, DC: Author.
- U.S. Census Bureau (2004). *Population division, ethnic & Hispanic statistics branch*. Washington, DC: Author.
- U.S. Census Bureau (2008). *Hispanic Americans by the numbers*. Washington, DC: Author.
- U.S. Department of Labor (2001). *Report on the American workforce*. Washington, DC: U.S. Government Printing Office.
- U. S. General Accounting Office (1990). *Immigration reform, employer sanctions, and the question of discrimination*. Washington, DC: U.S. Government Printing Office.
- Utsey, S. O., Chae, M. H., Brown, C. F., & Kelly, D. (2002). Effect of ethnic identity group membership on ethnic identity, race related stress, and quality of life. *Cultural Diversity and Ethnic Minority Psychology*, 8, 366-377.
- Waldinger, R. & Reichl, R. (2006, March). *Second-generation Mexicans: Getting ahead or falling behind?* Retrieved from Migration Information Source website: <http://www.migrationinformation.org/about.cfm>.
- Weinreich, P. (1983). Emerging from threatened identities. In G. Breakwell (Ed.), *Threatened identities* (pp. 149-185). New York: Wiley.
- Weston, R., & Gore, P. (2006). A brief guide to structural equation modeling. *The Counseling Psychologist*, 34, 719-751.

Wild, L., & Ebbers, L. (2002). Rethinking student retention in community colleges. *Community College Journal of Research and Practice*, 26, 503-519.

Wilson, W. J. (1996). *When work disappears: The world of the new urban poor*. New York: Random House.

Wong, C. A., Eccles, J. S., & Sameroff, A. (2003). The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioemotional adjustment. *Journal of Personality*, 71, 1197-1232.

Worthington, R. L., & Juntunen, C. L. (1997). The vocational development of non-college-bound youth: Counseling psychology and the school-to-work transition movement. *The Counseling Psychologist*, 25, 323-363.

Yosso, T.J., Smith, W.A., Ceja, M., Solórzano, D. (2009). Critical race theory, racial microaggressions, and campus racial climate for Latina/o undergraduates. *Harvard Educational Review*, 79, 659-786.

Zea, M. C, Asner-Self, K. K., Birman, D., & Buki, L. P. (2003). The abbreviated multidimensional acculturation scale: Empirical validation with two Latino/Latina samples. *Cultural Diversity and Ethnic Minority Psychology*, 9, 107-126.

APPENDIX A

Demographic Information Form

1. **Gender:** ☐ Male ☐ Female 2. **Age:** _____
3. **Ethnicity:** (Please list ethnic group(s) you most identify with) _____
4. **Country of Origin:** _____
(The country you, your parents, or grandparents came from (e.g., Dominican Rep, El Salvador, Peru))
5. **If you were not born in the United States, how long have you lived in the US?** _____
6. **If you immigrated to the United States, how old were you when you arrived to the US?** _____
7. **In which city and state do you currently reside?** _____
8. **What is your demographic region where you have lived the majority of your life?**
☐ Region I- NY, ME, VT, NH, RI, MA, CT, NJ
☐ Region II- PA, DE, MD, DC, VA, WV, OH
☐ Region III- MN, IA, MO, WI, IL, IN, KY, MI
☐ Region IV- AR, LA, MS TN, AL, NC, SC, GA, FL, Caribbean
☐ Region V- MT, WY, CO, NM, ND, SD, NE, KS, OK, TX
☐ Region VI- AK, WA, OR, CA, NV, AZ, HI, ID, UT
☐ Other (Please specify) _____
9. **In which type of college or university are you currently enrolled?**
☐ Community College ☐ Junior College ☐ Four-Year University ☐ Other
10. **What is your class standing?**
☐ Freshman ☐ Junior
☐ Sophomore ☐ Senior
11. **Did you transfer from a community college or junior institution?**
☐ No ☐ Yes _____
- 11a. **If yes, from where did you transfer?** ☐ Community College ☐ Junior College ☐ Other
12. **Generational Status:**
☐ First Generation (You were born in Latin American country)
☐ Second Generation (You were born in the US, either parent born outside of US)
☐ Third Generation (You were born in the US, both parents born in the US, all grandparents born outside of U.S.)
13. **Which of the following best describes the way you think of your family's socioeconomic status?**
☐ Poor/Low Income ☐ Lower Middle Class ☐ Upper Middle Class
☐ Working Class ☐ Middle Class ☐ Upper Class
14. **What is your parent's yearly income level?** ☐ \$1 to \$9,999 or less ☐ \$10,000 to \$14,999
☐ \$15,000 to \$24,999 ☐ \$25,000 to \$34,999 ☐ \$35,000 to \$49,999 ☐ \$50,000 to \$ 64,999
☐ \$65,000 to \$74,999 ☐ \$75,000 to \$99,999 ☐ \$100,000 or more

Demographic Information Form (Cont.)**15. What is your mother's highest level of education?**

- ☐ Less than 7th grade ☐ Junior High/ Middle school (9th to 12th grade)
☐ High School graduate ☐ Some College (at least one year) ☐ Associate Degree
☐ College Degree ☐ Graduate Degree

16. What is your fathers' highest level of education?

- ☐ Less than 7th grade ☐ Junior High/ Middle school (9th to 12th grade)
☐ High school graduate ☐ Some College (at least one year) ☐ Associate Degree
☐ College Degree ☐ Graduate Degree (e.g., Masters, Ph.D., JD)

17. How many people live in your household? _____ (enter #)**18. Have you made a career decision? ☐ Yes ☐ No**

18a. If yes, what is your career choice? _____

APPENDIX B

Revised Multigroup Ethnic Identity Measure

Instructions: In this country, people come from a lot of different cultures and there are many different words to describe the different backgrounds or *ethnic groups* that people come from. Some examples of the names of ethnic groups are Mexican-American, Latina/o, Black, Asian-American, American Indian, Anglo-American, and White. Every person is born into an ethnic group, or sometimes two groups, but people differ on how important their *ethnicity* is to them, how they feel about it, and how much their behavior is affected by it. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it. Use the numbers given below to indicate how much you agree or disagree with each statement.

Strongly Agree	Agree	Disagree	Strongly Disagree
4	3	2	1
<hr/>			
1. I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs.			1 2 3 4
2. I am active in organizations or social groups that include mostly members of my own ethnic group.			1 2 3 4
3. I have a clear sense of my ethnic background and what it means for me.			1 2 3 4
4. I think a lot about how my life will be affected by my ethnic group membership.			1 2 3 4
5. I am happy that I am a member of the group I belong to.			1 2 3 4
6. I have a strong sense of belonging to my own ethnic group.			1 2 3 4
7. I understand pretty well what my ethnic group membership means to me.			1 2 3 4
8. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.			1 2 3 4
9. I have a lot of pride in my ethnic group.			1 2 3 4
10. I participate in cultural practices of my own group, such as special food, music, and customs.			1 2 3 4
11. I feel a strong attachment towards my own ethnic group.			1 2 3 4
12. I feel good about my cultural or ethnic background.			1 2 3 4

Revised Multigroup Ethnic Identity Measure (Cont.)

Write in the number that fits the best answer to each question.

13. My ethnicity is (select a number from below): _____

- (1) Dominican (Dominican Republic)
- (2) Central American (Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama)
- (3) Cuban or Cuban American
- (4) Mexican or Mexican American
- (5) Puerto Rican (Puerto Riqueña/o)
- (6) South American (Argentina, Bolivia, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela)
- (7) Mixed; parents are from two different groups
- (8) Other (write in): _____

14. My father's ethnicity is (use numbers above) _____

15. My mother's ethnicity is (use numbers above) _____

Roberts, R., Phinney, J., Masse, L., Chen, Y., Roberts, C., & Romero, A. (1999). The structure of ethnic identity in young adolescents from diverse ethnocultural groups. *Journal of Early Adolescence*, 12, 301-322.

APPENDIX C

Acculturation Rating Scale for Mexican Americans-II (ARSMA-II; Modified)

Instructions: Circle a number between 1 and 5 next to each item that best applies to you.							
<i>Not at All</i>	<i>Very little or Not Very Often</i>	<i>Moderately</i>	<i>Much or Very Often</i>	<i>Extremely Often Almost Always</i>			
1	2	3	4	5			
1. I speak Spanish.			1	2	3	4	5
2. I speak English.			1	2	3	4	5
3. I enjoy speaking Spanish.			1	2	3	4	5
4. I associate with Anglos/Whites.			1	2	3	4	5
5. I associate with Latina/os or Hispanics.			1	2	3	4	5
6. I enjoy listening to Spanish language music.			1	2	3	4	5
7. I enjoy listening to English language music.			1	2	3	4	5
8. I enjoy Spanish language TV.			1	2	3	4	5
9. I enjoy English language TV.			1	2	3	4	5
10. I enjoy English language movies.			1	2	3	4	5
11. I enjoy Spanish language movies.			1	2	3	4	5
12. I enjoy reading (e.g., books) in Spanish.			1	2	3	4	5
13. I enjoy reading (e.g., books) in English.			1	2	3	4	5
14. I write (e.g., letters) in Spanish.			1	2	3	4	5
15. I write (e.g., letters) in English.			1	2	3	4	5
16. My thinking is done in English language.			1	2	3	4	5
17. My thinking is done in Spanish language.			1	2	3	4	5
18. My contact with my native Latino country of origin has been			1	2	3	4	5
19. My contact with the USA has been			1	2	3	4	5
20. My father identifies or identified himself as "Latino" or "Hispanic"			1	2	3	4	5
21. My mother identifies or identified herself as "Latina" or "Hispanic."			1	2	3	4	5
22. My friends, while I was growing up, were of Latina/o origin.			1	2	3	4	5
23. My friends, while I was growing up, were of Anglo/White origin.			1	2	3	4	5
24. My family cooks Latino foods.			1	2	3	4	5
25. My friends now are of Anglo origin.			1	2	3	4	5

Acculturation Rating Scale for Mexican Americans-II (ARSMA-II; Modified)
(Cont.)

26. My friends now are of Latina/or origin.	1	2	3	4	5
27. I like to identify myself as an Anglo American.	1	2	3	4	5
28. I like to identify myself as Latin American.	1	2	3	4	5
29. I like to identify myself as Latina/o or Hispanic.	1	2	3	4	5
30. I like to identify myself as an American.	1	2	3	4	5

Cuellar, Arnold, & Maldonado (1998) [Modified by Mejia, B. (2009)]. Acculturation rating scale for Mexican Americans-II: A revision of the original scale. *Hispanic Journal of Behavioral Sciences*, 17, 275-304.

APPENDIX D

Career Decision Self-Efficacy-Short Form (CDSE-SF)

Instructions: For each statement below, please read carefully and indicate how much confidence you have that you could accomplish each of these tasks by marking your answer according to the following 5-point continuum.

No Confidence at all 1	Very Little Confidence 2	Some Confidence 3	Much Confidence 4	Complete Confidence 5
------------------------------	--------------------------------	-------------------------	-------------------------	-----------------------------

Example: How much confidence do you have that you could:

a. Summarize the skills you have developed in the jobs you have held?

If your response on the 5-point continuum was 5, "Some confidence", you would circle the number 5 next to the question.

HOW MUCH CONFIDENCE DO YOU HAVE THAT YOU COULD:

1.	Find information in the library about occupations you are interested in.	1 2 3 4 5
2.	Select one major from a list of potential majors you are considering.	1 2 3 4 5
3.	Make a plan of your goals for the next five years.	1 2 3 4 5
4.	Determine the steps to take if you are having academic troubles with an aspect of your chosen major.	1 2 3 4 5
5.	Accurately assess your abilities.	1 2 3 4 5
6.	Select one occupation from a list of potential occupations you are considering.	1 2 3 4 5
7.	Determine the steps you need to take to successfully complete chosen major.	1 2 3 4 5
8.	Persistently work at your major or career goal even when you get frustrated.	1 2 3 4 5
9.	Determine what your ideal job would be.	1 2 3 4 5
10.	Find out the employment trends for an occupation over the next ten years.	1 2 3 4 5
11.	Choose a career that will fit your preferred lifestyle.	1 2 3 4 5
12.	Prepare a good resume.	1 2 3 4 5
13.	Change majors if you did not like your first choice.	1 2 3 4 5
14.	Decide what you value most in an occupation.	1 2 3 4 5
15.	Find out about the average yearly earnings of people in an occupation.	1 2 3 4 5
16.	Make a career decision and then not worry about whether it was right or wrong.	1 2 3 4 5
17.	Change occupations if you are not satisfied with the one you enter.	1 2 3 4 5
18.	Figure out what you are and are not ready to sacrifice to achieve your career goals.	1 2 3 4 5
19.	Talk with a person already employed in the field you are interested in.	1 2 3 4 5
20.	Choose major or career that will fit your interests.	1 2 3 4 5
21.	Identify employers, firms, institutions relevant to your career possibilities.	1 2 3 4 5
22.	Define the type of lifestyle you would like to live.	1 2 3 4 5

Career Decision Self-Efficacy-Short Form (CDSE-SF)
(Cont.)

23.	Find information about graduate or professional schools.	1 2 3 4 5
24.	Successfully manage the job interview process.	1 2 3 4 5
25.	Identify some reasonable major or career alternatives if you are unable to get your first choice.	1 2 3 4 5

Betz, N. E., Klein, K. L., Taylor, K. M. (1996). Evaluation of a short form of the Career Decision-Making Self-Efficacy Scale. *Journal of Career Assessment*, 4, 47-5.

APPENDIX E

COPING WITH BARRIERS SCALE (CWB)

Instructions: Please rate your degree of confidence that you could overcome each of the potential career barriers listed below.

	Not at All Confident			Highly Confident	
1. Discrimination due to my gender.	1	2	3	4	5
2. Discrimination due to my ethnicity.	1	2	3	4	5
3. Negative comments about my sex (insults, jokes).	1	2	3	4	5
4. Negative comments about my racial/ethnic background (insults, jokes).	1	2	3	4	5
5. Difficulty finding quality daycare.	1	2	3	4	5
6. Difficulty getting time off when my children are sick.	1	2	3	4	5
7. Difficulty finding work that allows me to spend time with my family.	1	2	3	4	5

Please indicate your level of agreement with the following statements:

	Strongly Disagree		Not Sure	Strongly Agree	
8. In general, I think I will be able to overcome any barriers that stand in the way of achieving my career goals.	1	2	3	4	5

Luzzo, D. A., & McWhirter, E. H. (2001). Gender and ethnic differences in the perception of educational/career-related barriers and levels of coping efficacy. *Journal of Counseling & Development*, 79(1), 61-67.

APPENDIX F

PERCEIVED BARRIERS SCALE-REVISED (POB-R)

Instructions: Each of the statements below begins with, "In my future career, I will probably...", or a similar phrase. Please respond to each statement according to what you **think (or guess)** will be true for you.

"In my future career, I will probably..."	Strongly Disagree		Not Sure		Strongly Agree	
1. ... be treated differently because of my sex.	1		2	3	4	5
2. ... be treated differently because of my ethnic/racial background.	1		2	3	4	5
3. ... experience negative comments about my sex (such as insults or rude jokes).	1		2	3	4	5
4. ... experience negative comments about my racial/ethnic background (such as insults or rude jokes).	1		2	3	4	5
5. ... have a harder time getting hired than people of the opposite sex.	1		2	3	4	5
6. ... have a harder time getting hired than people of other racial/ethnic backgrounds.	1		2	3	4	5
7. ... experience discrimination because of my sex..	1		2	3	4	5
8. ... experience discrimination because of my racial/ethnic background.	1		2	3	4	5
9. ... have difficulty finding quality daycare for my children.	1		2	3	4	5
10. ... have difficulty getting time off when my children are sick.	1		2	3	4	5
11. ... have difficulty finding work that allows me to spend time with my family.	1		2	3	4	5

Please indicate your level of agreement with the following statements:

	Strongly Disagree		Not Sure		Strongly Agree	
12. In general, I think that there are many barriers facing me as I try to achieve my career goals	1	2	3	4	5	

Luzzo, D. A., & McWhirter, E. H. (2001). Gender and ethnic differences in the perception of educational/career-related barriers and levels of coping efficacy. *Journal of Counseling & Development*, 79(1), 61-67.

APPENDIX G
ELECTRONIC INVITATION

Dear Student:

I am a Latina doctoral student in the Counseling Psychology program at Teachers College, Columbia University in New York. I am writing to invite you to participate in my online dissertation study about undergraduate Latina/o students' attitudes related to their career path.

This survey takes only about 10-25 minutes to complete and all of your responses are confidential and anonymous.

Your participation can help to improve the understanding about the unique career issues that face Hispanic/Latino students.

As an incentive, everyone who participates can enter a raffle to win one of two American Express gift cards each with a \$100.00 value or an Ipod.

Mil gracias (thank you) in advance for taking the time to participate in this study. Please feel free to forward this email to other Latina/o undergraduate students enrolled in four-year colleges, two year colleges, and community colleges.

To start the survey, please click on the link below:

http://academictrial.qualtrics.com/SE?SID=SV_4Ymgs0GeAuV3GCg&SVID=Prod

Thank you again and best wishes for the new academic year and your future career endeavors!

Brenda

Brenda X. Mejia, MA
Ph.D. Candidate
Department of Clinical and Counseling Psychology
Teachers College, Columbia University
Horace Mann 4th floor
525 West 120th St.
New York, NY 10027
bm434@columbia.edu
IRB Approval #: 09-288

APPENDIX H

INFORMED CONSENT

Dear Participant:

I am a Latina doctoral student in the Counseling Psychology Program at Teachers College, Columbia University and I would like to invite you to participate in a research study examining attitudes and perceptions about career issues among Latina/o students. Your participation in this study can help researchers, clinicians, and educators to improve the understanding of the unique career issues that affect Latina/o students as they transition from college-to-work.

STUDY DESCRIPTION: If you agree to participate, you will be asked to share some basic information about yourself and answer a series of questions. The questions in the survey will ask you about your thoughts on belonging to the Latino culture, your confidence to manage career-related tasks and your views about career barriers. You will only be asked to participate in this study once and you will not be contacted for future related research. You also have the right to withdraw at any time.

TIME INVOLVEMENT: This survey will take approximately 10-25 minutes to complete and your responses will be kept confidential.

INCENTIVES FOR PARTICIPATION: At the end of the survey, you will have the opportunity to enter in a raffle to win one of three prizes. One prize winner will receive an Apple Ipod and two second prize winners will receive \$100 American Express cards (1% chance of winning each prize). To enter the raffle, you will be directed to a separate web page from your answers where you can enter your email address. Thus, there is no way of connecting your email address to your survey answers. The raffle drawing will take place at the conclusion of the study. Only the raffle winners will be contacted through the provided email.

RISKS AND BENEFITS: Your participation in this study may possibly benefit you in that it may help you to think about the role of your Latina/o background in career related issues. There are no anticipated physical or psychological risks involved in participating in this study. You are simply asked to express your views. It is possible that you could experience discomfort during or after completing the survey, however, it is expected that any discomfort that is experienced should be the same as to what is commonly experienced in every day interactions.

HOW WILL RESULTS BE USED: The results of this study may be published and/or presented at professional conferences. Because this research is anonymous, all of your answers will be kept confidential. Your answers will be combined with the data from other respondents and reported as grouped data.

DATA STORAGE TO PROTECT CONFIDENTIALITY: All of the study data will be kept in an electronic data file available to me and the research supervisor, Dr. George V. Gushue, Associate Professor of Psychology and Education at Teachers College, Columbia University. The data on the electronic file can only be opened with the use of my password. It may be possible that your answers can be viewed by an outside party if you do not close your internet browser after completing the survey.

If you are interested in receiving information about the results of this study, please contact me at bm434@columbia.edu. Please print a copy of this page for your records. For a pdf version click [here](#).

PARTICIPANT'S RIGHTS

- I have read or discussed the Research Description with the researcher. I have the opportunity to ask questions about the purposes and procedures regarding this study to the researcher Brenda X. Mejia by contacting her at bm434@columbia.edu.
- I understand that my participation in this research involves filling out a survey and that my participation is voluntary. If I decide participate, I am free to withdraw or discontinue my participation at any time without any negative consequences or jeopardy to future medical care, employment, student status or other entitlements.
- I understand that my answers in this study will be collected for research purposes and that the researcher, Brenda X. Mejia, MA will take all reasonable measures to protect the confidentiality my answers and my identity. All answers I give are anonymous and any information derived from the research project that personally identifies me will not be voluntarily released or disclosed without my separate consent, except as specifically required by law.
- If at any time I have any questions regarding the research or my participation, I can contact the investigator, Brenda X. Mejia, MA who will answer my questions. The investigator's email is bm434@columbia.edu.
- I understand that this research study is being conducted under the supervision of George V. Gushue, Ph.D. Associate Professor of Psychology and Education at Teachers College, Columbia University.
- If at any time I have comments, or concerns regarding the conduct of the research or questions about my rights as a research subject, I should contact the Teachers College, Columbia University Institutional Review Board /IRB. The phone number for the IRB is (212) 678-4105. Or, I can write to the IRB at Teachers College, Columbia University, 525 W. 120th Street, New York, NY, 10027, Box 151.
- I have read and understand the information regarding my participation in this research study. I give my consent to participate in this study by clicking the button below that says "Yes I AGREE." If you do not agree to participate in this study, please click "No, I DO NOT AGREE" to exit.

☐ Yes, I AGREE

☐ No, I DO NOT AGREE

Please print a copy of this page for your records. For a pdf version click [here](#).

APPENDIX I

HACU MEMBER HISPANIC-SERVING INSTITUTIONS (HISs) LIST

[Arizona](#) | [California](#) | [Colorado](#) | [Connecticut](#) | [Florida](#) | [Illinois](#) | [Kansas](#) | [New Jersey](#)
[New Mexico](#) | [New York](#) | [Pennsylvania](#) | [Texas](#) | [Washington](#)

Arizona

Institution Name	Membership Type
Arizona Western College <u>www.azwestern.edu</u>	Hispanic-Serving Institution
Central Arizona College <u>www.centralaz.edu</u>	Hispanic-Serving Institution
Cochise College, Douglas <u>www.cochise.edu</u>	Hispanic-Serving Institution
Estrella Mountain Community College <u>www.estrellamountain.edu</u>	Hispanic-Serving Institution
GateWay Community College <u>www.gatewaycc.edu</u>	Hispanic-Serving Institution
Northern Arizona University, Yuma Branch Campus <u>http://yuma.nau.edu/</u>	Hispanic-Serving Institution
Phoenix College <u>www.pc.maricopa.edu</u>	Hispanic-Serving Institution
Pima Community College <u>www.pima.edu</u>	Hispanic-Serving System/District
South Mountain Community College <u>www.southmountaincc.edu</u>	Hispanic-Serving Institution
University of Arizona South <u>www.uas.arizona.edu</u>	Hispanic-Serving Institution

California

Institution Name	Membership Type
Allan Hancock College <u>www.hancockcollege.edu</u>	Hispanic-Serving Institution
Bakersfield College <u>www.bakersfieldcollege.edu</u>	Hispanic-Serving Institution
California State Polytechnic University, Pomona	Hispanic-Serving Institution

www.csupomona.edu	
California State University System Office www.calstate.edu	Hispanic-Serving System/District
California State University, Bakersfield www.csub.edu	Hispanic-Serving Institution
California State University, Channel Islands www.csuci.edu	Hispanic-Serving Institution
California State University, Dominguez Hills www.csudh.edu	Hispanic-Serving Institution
California State University, Fresno www.csufresno.edu	Hispanic-Serving Institution
California State University, Fullerton www.fullerton.edu	Hispanic-Serving Institution
California State University, Long Beach www.csulb.edu	Hispanic-Serving Institution
California State University, Los Angeles www.calstatela.edu	Hispanic-Serving Institution
California State University, Monterey Bay www.csumb.edu	Hispanic-Serving Institution
California State University, Northridge www.csun.edu	Hispanic-Serving Institution
California State University, San Bernardino www.csusb.edu	Hispanic-Serving Institution
California State University, San Marcos www.csusm.edu	Hispanic-Serving Institution
California State University, Stanislaus www.csustan.edu	Hispanic-Serving Institution
Chaffey College www.chaffey.edu	Hispanic-Serving Institution
Citrus College www.citruscollege.edu	Hispanic-Serving Institution
College of the Desert www.collegeofthedesert.edu	Hispanic-Serving Institution
College of the Sequoias www.cos.edu	Hispanic-Serving Institution
Crafton Hills College www.craftonhills.edu	Hispanic-Serving Institution
Cypress College www.cypresscollege.edu	Hispanic-Serving Institution

East Los Angeles College www.elac.edu	Hispanic-Serving Institution
El Camino College www.elcamino.edu	Hispanic-Serving Institution
Evergreen Valley College www.evc.edu	Hispanic-Serving Institution
Fresno City College www.fresnocitycollege.edu	Hispanic-Serving Institution
Fresno Pacific University www.fresno.edu	Hispanic-Serving Institution
Fullerton College www.fullcoll.edu	Hispanic-Serving Institution
Hartnell College www.hartnell.edu	Hispanic-Serving Institution
Imperial Valley College www.imperial.edu	Hispanic-Serving Institution
Kern Community College District www.kccd.edu	Hispanic-Serving System/District
La Sierra University www.lasierra.edu	Hispanic-Serving Institution
Long Beach City College www.lbcc.edu	Hispanic-Serving Institution
Los Angeles City College www.lacitycollege.edu	Hispanic-Serving Institution
Los Angeles Community College District www.laccd.edu	Hispanic-Serving System/District
Los Angeles County College of Nursing and Allied Health http://ladhs.org/wps/portal/CollegeOfNursing/	Hispanic-Serving Institution
Los Angeles Harbor College www.lahc.edu	Hispanic-Serving Institution
Los Angeles Mission College www.lamission.edu	Hispanic-Serving Institution
Los Angeles Southwest College www.lasc.edu	Hispanic-Serving Institution
Los Angeles Trade Technical College www.lattec.edu	Hispanic-Serving Institution
Los Angeles Valley College www.lavc.edu	Hispanic-Serving Institution
Los Medanos College	Hispanic-Serving Institution

www.losmedanos.edu	
Merced College www.mccd.edu	Hispanic-Serving Institution
Modesto Junior College www.mjc.edu	Hispanic-Serving Institution
Moreno Valley College www.rcc.edu	Hispanic-Serving Institution
Mount St. Mary's College www.msmc.la.edu	Hispanic-Serving Institution
Mt. San Antonio College www.mtsac.edu	Hispanic-Serving Institution
Mt. San Jacinto College www.msjc.edu	Hispanic-Serving Institution
National Hispanic University www.nhu.edu	Hispanic-Serving Institution
North Orange County Community College District www.nocccd.edu	Hispanic-Serving System/District
Notre Dame de Namur University www.ndnu.edu	Hispanic-Serving Institution
Occidental College www.oxy.edu	Hispanic-Serving Institution
Oxnard College www.oxnardcollege.edu	Hispanic-Serving Institution
Pacific Oaks College www.pacificoaks.edu	Hispanic-Serving Institution
Palo Verde College www.paloverde.edu	Hispanic-Serving Institution
Palomar College www.palomar.edu	Hispanic-Serving Institution
Pierce College www.piercecollege.edu	Hispanic-Serving Institution
Porterville College www.portervillecollege.edu	Hispanic-Serving Institution
Rio Hondo College www.riohondo.edu	Hispanic-Serving Institution
San Bernardino Community College District www.sbccd.org	Hispanic-Serving System/District
San Bernardino Valley College www.valleycollege.edu/	Hispanic-Serving Institution

San Diego State University, Imperial Valley Campus www.ivcampus.sdsu.edu	Hispanic-Serving Institution
San Joaquin Delta College www.deltacollege.edu	Hispanic-Serving Institution
San José City College www.sjcc.edu	Hispanic-Serving Institution
San José/Evergreen Community College District www.sjeccd.edu	Hispanic-Serving System/District
Santa Monica College www.smc.edu	Hispanic-Serving Institution
Taft College www.taftcollege.edu	Hispanic-Serving Institution
University of California, Merced www.ucmerced.edu	Hispanic-Serving Institution
University of California, Riverside www.ucr.edu	Hispanic-Serving Institution
University of La Verne www.ulv.edu	Hispanic-Serving Institution
Ventura College www.venturacollege.edu	Hispanic-Serving Institution
Victor Valley College www.vvc.edu	Hispanic-Serving Institution
West Hills College Coalinga www.westhillscollege.com/coalinga	Hispanic-Serving Institution
West Hills College Lemoore www.westhillscollege.com/lemoore	Hispanic-Serving Institution
West Hills Community College District www.westhillscollege.com	Hispanic-Serving System/District
West Los Angeles College www.wlac.edu	Hispanic-Serving Institution
Whittier College www.whittier.edu	Hispanic-Serving Institution
Woodbury University www.woodbury.edu	Hispanic-Serving Institution
Woodland Community College http://wcc.yccd.edu/	Hispanic-Serving Institution

Colorado

Institution Name	Membership Type
Adams State College www.adams.edu	Hispanic-Serving Institution
Colorado State University, Pueblo www.colostate-pueblo.edu	Hispanic-Serving Institution
Community College of Denver www.ccd.edu	Hispanic-Serving Institution
Otero Junior College www.ojc.edu	Hispanic-Serving Institution
Pueblo Community College www.pueblocc.edu	Hispanic-Serving Institution
Trinidad State Junior College www.trinidadstate.edu	Hispanic-Serving Institution

Connecticut

Institution Name	Membership Type
Capital Community College www.ccc.commnet.edu	Hispanic-Serving Institution

Florida

Institution Name	Membership Type
Barry University www.barry.edu	Hispanic-Serving Institution
Broward College www.broward.edu	Hispanic-Serving Institution
Carlos Albizu University, Miami www.mia.albizu.edu	Hispanic-Serving Institution
Florida International University www.fiu.edu	Hispanic-Serving Institution
Hodges University, Fort Myers Campus www.hodges.edu	Hispanic-Serving Institution
Nova Southeastern University www.nova.edu	Hispanic-Serving Institution

St. Thomas University
www.stu.edu

Hispanic-Serving Institution

Valencia Community College District
www.valenciacc.edu

Hispanic-Serving
 System/District

Valencia Community College, Osceola
www.valenciacc.edu

Hispanic-Serving Institution

Illinois

Institution Name	Membership Type
Morton College www.morton.edu	Hispanic-Serving Institution
Northeastern Illinois University www.neiu.edu	Hispanic-Serving Institution
Richard J. Daley College, City Colleges of Chicago http://daley.ccc.edu/	Hispanic-Serving Institution
St. Augustine College http://www.staugustine.edu/	Hispanic-Serving Institution
Waubonsee Community College www.waubonsee.edu	Hispanic-Serving Institution

Kansas

Institution Name	Membership Type
Donnelly College www.donnelly.edu	Hispanic-Serving Institution

New Jersey

Institution Name	Membership Type
Bergen Community College www.bergen.edu	Hispanic-Serving Institution
Hudson County Community College www.hccc.edu	Hispanic-Serving Institution
New Jersey City University www.njcu.edu	Hispanic-Serving Institution
Passaic County Community College	Hispanic-Serving Institution

www.pccc.edu

Saint Peter's College
www.spc.edu

Hispanic-Serving Institution

Union County College
www.ucc.edu

Hispanic-Serving Institution

New Mexico

Institution Name	Membership Type
Central New Mexico Community College www.cnm.edu	Hispanic-Serving Institution
Eastern New Mexico University, Main www.enmu.edu	Hispanic-Serving Institution
Eastern New Mexico University, Roswell www.roswell.enmu.edu	Hispanic-Serving Institution
New Mexico Highlands University www.nmhu.edu	Hispanic-Serving Institution
New Mexico Junior College www.nmjc.edu	Hispanic-Serving Institution
New Mexico Military Institute www.nmmi.edu	Hispanic-Serving Institution
New Mexico State University, Alamogordo http://nmsua.edu	Hispanic-Serving Institution
New Mexico State University, Carlsbad http://artemis.nmsu.edu	Hispanic-Serving Institution
New Mexico State University, Grants www.grants.nmsu.edu	Hispanic-Serving Institution
<u>New Mexico State University, Main</u> www.nmsu.edu	Hispanic-Serving Institution
Northern New Mexico College www.nnmc.edu	Hispanic-Serving Institution
Santa Fe Community College www.sfccnm.edu	Hispanic-Serving Institution
University of New Mexico, Main www.unm.edu	Hispanic-Serving Institution
University of New Mexico, Taos http://taos.unm.edu	Hispanic-Serving Institution
University of New Mexico, Valencia Campus	Hispanic-Serving Institution

www.unm.edu/~unmvc

Western New Mexico University, Main
www.wnmu.edu

Hispanic-Serving Institution

New York

Institution Name	Membership Type
Boricua College www.boricuacollege.edu	Hispanic-Serving Institution
Borough of Manhattan Community College, CUNY www.bmcc.cuny.edu	Hispanic-Serving Institution
Bronx Community College, CUNY www.bcc.cuny.edu	Hispanic-Serving Institution
City College of New York, CUNY www1.ccny.cuny.edu/	Hispanic-Serving Institution
College of Mount Saint Vincent www.mountsaintvincent.edu	Hispanic-Serving Institution
Eugenio Maria de Hostos Community College, CUNY www.hostos.cuny.edu	Hispanic-Serving Institution
Lehman College, CUNY www.lehman.cuny.edu	Hispanic-Serving Institution
Mercy College www.mercy.edu	Hispanic-Serving Institution
New York City College of Technology, CUNY www.citytech.cuny.edu	Hispanic-Serving Institution
Vaughn College of Aeronautics and Technology www.vaughn.edu	Hispanic-Serving Institution

Pennsylvania

Institution Name	Membership Type
Esperanza College of Eastern University http://esperanza.eastern.edu/	Hispanic-Serving Institution

Texas	
--------------	--

Institution Name	Membership Type
Alamo Colleges www.alamo.edu/	Hispanic-Serving System/District
Austin Community College www.austincc.edu	Hispanic-Serving Institution
Coastal Bend College www.coastalbend.edu	Hispanic-Serving Institution
Dallas County Community College District www.dcccd.edu	Hispanic-Serving System/District
Eastfield College www.efc.dcccd.edu	Hispanic-Serving Institution
El Centro College www.elcentrocollege.edu	Hispanic-Serving Institution
El Paso Community College www.epcc.edu	Hispanic-Serving Institution
Galveston College www.gc.edu	Hispanic-Serving Institution
HACU	Hispanic-Serving Institution
Houston Community College System www.hccs.edu	Hispanic-Serving System/District
Laredo Community College www.laredo.edu	Hispanic-Serving Institution
Lone Star College System www.lonestar.edu	Hispanic-Serving System/District
Midland College www.midland.edu	Hispanic-Serving Institution
Mountain View College www.mvc.dcccd.edu/	Hispanic-Serving Institution
North Lake College www.northlakecollege.edu	Hispanic-Serving Institution
Our Lady of the Lake University www.ollusa.edu	Hispanic-Serving Institution
Palo Alto College www.accd.edu/pac	Hispanic-Serving Institution
San Antonio College www.alamo.edu/sac	Hispanic-Serving Institution

San Jacinto College Central www.sjcd.edu	Hispanic-Serving Institution
San Jacinto College District www.sanjac.edu	Hispanic-Serving System/District
San Jacinto College North www.sanjac.edu	Hispanic-Serving Institution
San Jacinto College South www.sanjac.edu	Hispanic-Serving Institution
South Plains College www.southplainscollege.edu	Hispanic-Serving Institution
South Texas College www.southtexascollege.edu	Hispanic-Serving Institution
Southwest Texas Junior College www.swtjc.net	Hispanic-Serving Institution
St. Edward's University www.stedwards.edu	Hispanic-Serving Institution
St. Mary's University www.stmarytx.edu	Hispanic-Serving Institution
St. Philip's College www.alamo.edu/spc	Hispanic-Serving Institution
Sul Ross State University, Alpine and Rio Grande College www.sulross.edu	Hispanic-Serving Institution
Tarrant County College, Trinity River Campus www.tccd.edu	Hispanic-Serving Institution
Texas A&M International University www.tamiu.edu	Hispanic-Serving Institution
Texas A&M University, Corpus Christi www.tamucc.edu	Hispanic-Serving Institution
Texas A&M University, Kingsville www.tamuk.edu	Hispanic-Serving Institution
Texas A&M University, San Antonio www.tamuk.edu/sanantonio/	Hispanic-Serving Institution
Texas State Technical College, Harlingen www.harlingen.tstc.edu	Hispanic-Serving Institution
Texas State University, San Marcos www.txstate.edu	Hispanic-Serving Institution
University of Houston, Clear Lake www.uhcl.edu	Hispanic-Serving Institution

University of Houston, Downtown www.uhd.edu	Hispanic-Serving Institution
University of St. Thomas www.stthom.edu	Hispanic-Serving Institution
University of Texas at Brownsville and Texas Southmost College www.utb.edu	Hispanic-Serving Institution
University of Texas at El Paso www.utep.edu	Hispanic-Serving Institution
University of Texas at San Antonio www.utsa.edu	Hispanic-Serving Institution
University of Texas Health Science Center at San Antonio www.uthscsa.edu	Hispanic-Serving Institution
University of Texas of the Permian Basin www.utpb.edu	Hispanic-Serving Institution
University of Texas-Pan American www.utpa.edu	Hispanic-Serving Institution
University of the Incarnate Word www.uiw.edu	Hispanic-Serving Institution
Victoria College www.victoriacollege.edu	Hispanic-Serving Institution
Western Texas College www.wtc.edu	Hispanic-Serving Institution
Winniefred University	Hispanic-Serving Institution

Washington

Institution Name	Membership Type
Columbia Basin College www.columbiabasin.edu	Hispanic-Serving Institution
Heritage University, Toppenish www.heritage.edu	Hispanic-Serving Institution