

DIFFERING EXPERIENCES OF HISPANIC-LATINO COMMUNITY COLLEGE
STUDENTS

By

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A THESIS PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS

UNIVERSITY OF FLORIDA

2008

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To my sister, Jenny, and the many like her who refuse to give in to life's obstacles and who persevere in hopes of achieving their own Hispanic-American dream.

ACKNOWLEDGMENTS

I thank my professors and committee chairs, Dr. Linda S. Hagedorn and Dr. Luis Ponjuan, for their patience and dedication to my success, and who saw in me things I could not. Additionally, I would not be here if not for the support given to me from my family who continue to be the strength and inspiration fueling my educational pursuits. I also thank my colleagues and scholars at the University of Florida who have accompanied me on this part of my journey. Lastly, I thank my students and family at my “home away from home” who are a daily reminder of the worth of my work.

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August 2008

Chair: Linda S. Hagedorn
Major: Educational Leadership

As Hispanics increasingly compose more and more of the U.S. population, it becomes even more imperative that we understand the educational pathways of Hispanics and the impacts different factors have in their educational attainment so that we may better facilitate their educational success to promote their societal and economic progress. Most Hispanics who pursue higher education do so through the community college in hopes of transferring to a four year college or university to obtain a bachelor's degree. Many of them never reach the point of transfer.

Most studies on Hispanic-Latinos in community colleges study them as one collective group and fail to explore the different experiences of Hispanic-Latinos by subgroups, oftentimes overlooking the experiences of individuals. The purpose of this study was to expand on the understanding of how multiple Hispanic-Latino subgroups vary in terms of background, educational aspirations, and academic preparation in their preparation for transfer. Based on a secondary analysis of data collected from the Los Angeles Community College District, a descriptive and exploratory analysis was used to look at the differences between different Latino subgroups in terms of student background, aspirations, academic preparation, and transfer

readiness. Findings from the analysis showed great differences between the subgroups in all areas. This supports a need for further research which looks at Hispanics not as a merged group, but as distinct cultures with varying experiences and influences.

CHAPTER 1 PROBLEM AND UNDERLYING FRAMEWORK

Introduction

More than 35 million Hispanic-Latinos live in the United States, surpassing African Americans as the largest minority group in the U.S. (Pew Hispanic Center, 2006). By the year 2050, it is projected that 25% of residents of the United States will be of Hispanic-Latino origin (U.S. Census Bureau, 2004). As baby boomers retire between now and 2025, according to the U.S. Census Bureau, the number of white, non-Hispanic workers will decline by 5 million, whereas the number of working aged Hispanic-Latinos will increase by 18 million (2004). It is predicted that the types of careers and occupations these Latinos will have is determined by the education young Latinos receive today (Valladares, 2003).

Undoubtedly, obtaining a college education is essential for economic success in the United States, and enhances the quality of life for individuals, their families, and the larger society as a whole (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2007; Castellanos & Jones, 2003). In addition, states with significant numbers of Latinos, such as California, Texas, and Florida, rely on the educational preparedness of Latinos for economic and social stability (Martinez & Fernandez, 2004). Although 66% of Hispanic high school graduates participate in higher education, two-thirds of these students never receive a bachelor's degree (Swail, Cabrera, & Lee, 2004), and approximately 60% of them begin their postsecondary careers at two-year institutions (Fry, 2004). Many Hispanics initially enroll in community colleges in hopes of utilizing them as a gateway to obtaining a bachelor's degree (Martinez & Fernandez, 2004; Hoachlander, Sikora, & Horn, 2003). However, the predilection of Hispanics to enroll in these institutions decreases their level of bachelor's degree completion, as only 18.9% successfully transfer from two to

four-year institutions, compared to 31.9% of their community college counterparts (Swail, et al., 2004).

Background and the Statement of the Problem

Hispanic-Latino demographics show that they have recently become the majority-minority in the United States. In this past decade alone, Hispanics accounted for one-half of the nation's growth, and make up 14.8% of the total U.S. population (U.S. Census Bureau, 2006). California, and particularly Los Angeles County, has the highest percentage of Hispanic-Latino residents of any other state or county in the U.S., with 47.3% of the county being of Hispanic-Latino background (U.S. Census Bureau, 2006). The state and local economies of these regions, and others in which Hispanics compose a large percentage of the population, rely on the careers and occupations, and in turn the educational attainment, of these individuals (Kuh, et al., 2007; Martinez & Fernandez, 2004; Castellanos & Jones, 2003).

In the United States, 27% of the general population has a bachelor's degree or higher; for Hispanics, that number is less than half as much, at merely 12.3% (U.S. Census Bureau, 2006). This poses great concern as to the possibility of upwards mobility of this group of people which is overrepresented in the lowest tier of society. Although great attainment gaps exist in the K-12 system for Hispanic-Latinos, of those who do graduate from high school more enroll in some form of postsecondary education as compared to the total high school graduate population—10% of Hispanic high school graduates versus 7% of the total population (Fry, 2002). The majority of these students elect community colleges as their postsecondary gateway, and enroll in these institutions in greater proportions than any other racial-ethnic group (Swail, et al., 2004; Horn, Peter, & Rooney, 2002; Fry, 2002; Lee & Frank, 1990; Nora, 1987).

Although the community college serves a variety of functions outside of transfer, many Hispanics attend these types of institutions in hopes of obtaining a bachelor's degree (Martinez

& Fernandez, 2004; Hagedorn, & Cepeda, 2004; Suarez, 2003; Fry, 2002; McCormick & Carroll, 1997). Closer proximity to home and lower tuition costs have been found as primary reasons as to why Hispanics choose community colleges over four-year colleges and universities (Arbona & Nora, 2007; Fry, 2002). Despite these baccalaureate aspirations, only a small percent of Hispanics actually persist through the community college system to transfer to a four-year institution, a prerequisite for bachelor's degree attainment (Arbona & Nora, 2007).

The literature cites low socioeconomic status (Wassmer, Moore, & Shulock, 2004; Swail, et al., 2004; Adelman, 1999), first-generation college student status (Swail, et al., 2004; Harrell & Forney, 2003), and lack of knowledge regarding educational system processes, such as that of financial aid and transfer (Chang, 2005), as barriers to successful transfer for Hispanic-Latino community college students. Additional barriers include the need to balance multiple roles and responsibilities outside of their role as a student (Ornelas & Solorzano, 2004), lack of academic preparation due to inadequate K-12 systems (Hurtado & Kamimura, 2003; Ornelas & Solorzano, 2004), and remedial education course requirements (Laden, 2004; Ornelas & Solorzano, 2004; Schmidt, 2003). Successful students are those who can overcome these barriers and others in order to increase their chances of successfully transferring to a four-year college to pursue their academic aspirations.

To provide background for this study and discuss the current research landscape, several bodies of literature concerning Hispanic-Latinos in higher education were reviewed. In particular, studies which focused on Hispanics at community colleges were the primary area of interest. In addition, demographics and the condition of education for Hispanic-Latinos in the United States are presented. Moreover, the review of the literature extends to include topics

related to community colleges, transfer, and transfer readiness. It concludes with a discussion of a lack of literature regarding the differences between Hispanic-Latino subgroups.

The problem with the disproportionate rates of Hispanic-Latino success in higher education and the pathways they choose in order to achieve a baccalaureate degree is a grave one which impacts the greater society. Of the over 200,000 Hispanic-Latino high school graduates who begin their postsecondary education at community colleges each year, 66% are academically prepared enough to attend more selective institutions (Fry, 2004; Swail, et al., 2004), and a great number of them utilize these institutions in hopes of persisting towards a bachelor's degree (Martinez & Fernandez, 2004; Hoachlander, et al., 2003). Thus, it would be expected that they would successfully persist through the community college system to transfer and achieve their baccalaureate aspirations, yet they do not. Less than 20% of these students successfully transfer from their initial two-year institutions to four-year colleges and universities, compared to 32% of the general community college student population (Swail, et al., 2004)

Transfer for community college students to four-year institutions is a highly researched problem in educational research for students of all racial and ethnic groups (Townsend & Wilson, 2006). However, most studies evaluate actual transfer and not transfer readiness, a better measure of the role community colleges play in preparing students to achieve their academic aspirations (Hagedorn, Moon, Cypers, Maxwell, & Lester, 2006). There is a deficiency in the literature in recognizing and assessing transfer readiness, which is a measure of students' progress through the community college. It is considered to yield less error than actual transfer measures, can be easily verified through transcript analysis, and is not limited to the restricting time spans of many studies (Hagedorn & Lester, 2006). Transfer readiness also allows for more accountability on the part of the institution, as it is up to the student to persist to

transfer and is not the responsibility of the community college (Hagedorn & Lester, 2006). In addition, there is a lack of focus in the literature which examines the differences between Hispanic-Latino students of varying ethnicities and nationalities, particularly for students at the community college. Of those studies which focus on one ethnic group focus exclusively on Chicanos and Mexican-Americans (i.e., Clayton, K.K., and others, 1993; Nora, 1987).

Purpose of the Study

Most studies on Hispanic-Latinos in community colleges study them as one collective group (i.e. Arbona & Nora, 2007; Martinez & Fernandez, 2004; Hoachlander, Sikora, & Horn, 2003) and fail to explore the different experiences of Hispanic-Latinos by subgroups, oftentimes overlooking the experiences of individuals (Torres, 2004). The purpose of this study is to expand upon the understanding of how multiple Hispanic-Latino subgroups vary in terms of background, educational aspirations, and academic preparation in their preparation for transfer.

Research Question

How do Hispanic-Latino subgroups vary in terms of background, educational aspirations, and academic preparation in their preparation for transfer?

Methodology

This study employs descriptive and exploratory analysis of data that has been collected, analyzed, and validated by the Transfer and Retention of Urban Community College (TRUCCS) project. TRUCCS used questionnaire survey and transcript data of 4,967 students from all nine institutions within the Los Angeles Community College District (LACCD) and investigated organizational and individual factors which advance the retention and persistence of urban community college students in Los Angeles, of which approximately half are of Hispanic-Latino background (Hagedorn, & Maxwell, 1999). For more information regarding the survey design and data collection by TRUCCS, please see *Research on Urban Community College Transfer*

and Retention: The Los Angeles TRUCCS Project (Hagedorn & Maxwell, 1999). Data for the individual variables involved in the study were collected solely from the TRUCCS Project, and descriptive analysis is used to describe the study sample with individual characteristics and transcript data and to explore how well the data addressed the research question of this study. As many studies view Hispanics as one group and overlook differences in experiences between Hispanic subgroups (Gonzalez Burchar, et al., 2005; Torres, 2004; Torres, 2003), the objective of this study is to describe Hispanic-Latino community college students by subgroups and the differences between their educational experiences, particularly as they prepare for transfer. Individual variables in this study are: background, which includes age, parental educational attainment and family socioeconomic status; educational aspirations, which includes anticipation of a bachelor's degree and/or transfer; academic preparation, including placement scores and remedial course enrollments; and transfer readiness, as defined by successful completion of transfer curriculum courses.

Assumptions

The following assumptions were used in this study:

1. The measures employed are reliable and valid indicators of the constructs to be studied.
2. The survey and transcript data being used was accurately recorded and analyzed.
3. The subjects were assessed in an appropriate atmosphere and responded to survey questions to the best of their ability.
4. The purposes, processes, and elements of the framework studied have a degree of applicability and generalizability to Hispanic-Latino community college students in urban districts throughout the U.S.

Limitations

1. This study is limited to subjects who participated in the TRUCCS survey.
2. This study is limited to the number of subjects surveyed and the amount of time available to conduct the study.

3. Validity of this study is limited to the reliability of the TRUCCS survey instruments used and the reliability of the participants' responses to the survey instruments.

Delimitations

This study is a secondary data analysis of data collected and analyzed by the TRUCCS Project, which used questionnaire survey and transcript data of 4,967 students from all nine institutions within the Los Angeles Community College District (LACCD) (Hagedorn & Maxwell, 1999). This study will confine itself to studying Hispanic-Latino participants in the TRUCCS project, and will focus on background, educational aspirations, academic preparation, and transfer readiness, as defined below.

Definition of Terms

Transfer readiness: a measure of the fulfillment of academic requirements for eligibility to be accepted into a four-year institution and to be considered at junior year status. In this study, transfer readiness is measured by the progression through certain IGETC course modules.

Transfer: there are various types of transfer, but in this study transfer is defined as the act of enrolling and attending a four-year college or university after first attending and earning college credits at a community college.

IGETC: Intersegmental General Education Transfer Curriculum (IGETC). Common core curriculum of general education courses with the purpose of easing the process of transfer from community colleges to the public university and state college systems in the state of California.

Academic aspirations: highest academic degree hoped to obtain by student. For community college students, this includes vocational certificate, associate degree, bachelor's degree, master's degree, doctoral degree, or professional degrees.

Remedial education: academic preparatory courses which are considered to be below the college level, and are generally offered in mathematics, English, and reading in order to prepare students to take college level courses.

Hispanic-Latino: the terms “Hispanic”, “Latino”, and “Hispanic-Latino” are used interchangeably throughout this paper in order to describe individuals who are from or descendent of the countries of Spain, South and Central America, and the Spanish speaking countries of the Caribbean.

Mexican: “Mexican” refers specifically to individuals who were born in Mexico.

Mexican-American/Chicano: used for individuals born in the United States to Mexican or Mexican-American parents.

Central American: individuals with backgrounds of the countries of Central America, including Guatemala, El Salvador, Panama, Nicaragua, and others. Can be born in the United States to parents or grandparents who are from Central American countries.

South American: individuals with backgrounds of the countries of South America, including Argentina, Colombia, Venezuela, Chile, Bolivia, Brazil, and others. Can be born in the United States to parents or grandparents who are from South American countries.

Multiethnic: used to encompass individuals of multiple Hispanic-Latino, racial, and ethnic backgrounds, including biracial and multiracial persons.

Other: includes individuals from other Hispanic-Latino countries not identified, including Spain and the Spanish speaking countries of the Caribbean.

CHAPTER 2 REVIEW OF THE LITERATURE

Introduction

To conflate cultures is to destroy them; to take away the name of a group, as of an individual, is to make pale the existence of the group. (Shorris, 1992, pp. xvi)

Many Hispanics initially enroll in community colleges in hopes of utilizing these institutions as a gateway to obtaining a bachelor's degree (Martinez & Fernandez, 2004; Hoachlander, et al., 2003). However, the predilection of Hispanics to enroll in these institutions decreases their level of bachelor's degree completion (Swail, et al., 2004). Due to the nature of community colleges, the difficulties involved in the transfer process, and several barriers specific to Hispanic-Latino students, Hispanic community college students are not persisting through to the bachelor's degree at the same rate as other types of students (KewalRamanian, Gilbertson, Fox, & Provasnik, 2007; Swail, Cabrera, Lee, & Williams, 2005; Hoachlander, et al., 2003; Fry, 2002). Therefore, this review provides an exhaustive description of the extant research literature on Hispanic-Latino students in the community college system. First, I will discuss the unique contributions community colleges provide student who wish to transition from high school to postsecondary education. Next, I will focus on the transfer and transfer readiness issues related to Hispanic-Latino students. I will then examine the unique status of Hispanic-Latino students as community college students and the unique challenges associated with pursuing a postsecondary degree. The section concludes with a discussion on the diversity among Hispanic-Latinos.

Community Colleges

The community college is a uniquely American institution, with its earliest campuses not just over 100 years old. They currently enroll over 11 million students nationwide, composing

almost half of all undergraduates in higher education (American Association of Community Colleges [AACC], 2007). These institutions are designed to prepare students for transfer to senior institutions by offering general education courses in smaller class settings and at a lower cost than would be found at four-year colleges and universities (Boswell, 2004; McCormick & Carroll, 1997). In addition, they serve the purpose of providing job training, vocational certificates, and terminal associate's degrees (Dougherty & Kienzl, 2006; Hoachlander, et al., 2003).

Community colleges have long been the institution of choice for older adults, students of color, those from less affluent family backgrounds, immigrants, and part-time, commuting students who have full-time jobs and family responsibilities (Boswell, 2004; Chang, 2005). They are viewed as a source of open access and great opportunity, with perhaps their most important function being that of providing access to ethnic and racial minorities, first-generation, and low-income students (Rendon, 2000). Due to the nature and accessibility of the community college, many of the students who choose to attend two-year colleges may be less academically prepared than those who begin at four-year institutions (Sandy, Gonzalez, & Hilmer, 2006). Far too many students enroll in these colleges with intentions of pursuing to a bachelor's degree, and do not obtain these degrees within a reasonable period of time, wasting their personal time and money, as well as that of the state (Boswell, 2004). Even still, the transfer function of the community college plays a great role in maintaining access to higher education for those students who may not be eligible for four-year or university admission immediately after high school (Laanan, 2001).

The Transfer Function of the Community College

Transfer to a four-year institution is a prerequisite for community college students who aspire towards a bachelor's degree (Arbona, & Nora, 2007). Not all students who begin their

postsecondary education at community colleges have the same goals (Wirt, et al., 2004) and many students begin at two-year colleges with goals other than transfer. However, interest in the transfer function has regained strength in the past decade or so, as it still remains a very important function of the community college (Dougherty & Kienzl, 2006). Community colleges remain an important and necessary option as students pursue their goals of obtaining a baccalaureate degree. These pursuits are often difficult when external forces such as increasing numbers of high school graduates, increasingly competitive admissions requirements, greater cost of tuition at four-year colleges and universities, and greater numbers of minorities and low-income students pursuing college degrees (Wellman, 2002).

A large proportion of students begin at two-year institutions to take advantage of the academic transfer function, of which only a handful actually successfully transfer to a four-year institution (Hoachlander, et al., 2003; Laanan, 2003; Adelman, 1999; McCormick & Carroll, 1997). However, the bachelor's attainment rate for those who successfully transfer to a four-year college or university is fairly high (Adelman, 1999), which demonstrates transfer as a salient option for many students. The greatest hurdle for community college students who aspire for the baccalaureate is reaching the point of transfer in spite of the many obstacles they face. Student transfer to a four-year institution has been found to be strongly influenced by student background and socioeconomic status (Lee & Frank, 1990). Additional research has found much of the impact of social background on transfer to be indirect and operating through the intervening variables of parental socioeconomic status, age, gender, and race-ethnicity (Dougherty & Kienzl, 2006). Parental socioeconomic status and education level have been found to be strongly associated with whether or not community college students successfully transfer to four-year colleges (Dougherty & Kienzl, 2006; Laanan, 2003).

Transfer Readiness

An alternative to measuring actual student transfer is to evaluate transfer readiness. Transfer readiness is defined as “a measure of the progress of a community college student on the path to transfer while still enrolled in the community college” (Hagedorn & Lester, 2006, p.835), and is a measure of the fulfillment of academic requirements for eligibility to be accepted into a four-year institution and to be considered at junior year status. It is considered to have less error, can be easily verified through transcript analysis, and due to its continuous nature, is not limited to restricting time spans, as tends to be true of many transfer studies (Hagedorn, & Lester, 2006). Transfer may occur at any point in a student’s life, and there may be several years separation between community college enrollment, completion, and transfer. In 1988, the California postsecondary education systems were mandated by California policymakers to collaboratively create a universal core general education curriculum for the purpose of easing the process of transfer (Cepeda, 1991). As a result, the Intersegmental General Education Transfer Curriculum (IGETC) was created, a common curriculum consisting of a variety of courses in six different subject areas: English Communication, Mathematics, Arts and Humanities, Social and Behavioral Sciences, Physical and Biological Sciences, and a Foreign Language. Courses must be completed with a passing grade of “C” or better (Assist, n.d.). Although not required for transfer, successful completion of IGETC promises community college students transfer to either the California State University (CSU) or University of California (UC) system without needing to take additional general education courses to fulfill graduation requirements once at the CSU or UC institution (Cepeda, 1991). Community college students with transfer aspirations are advised to complete IGETC (Assist, n.d.). Several studies (Hagedorn, et al., 2006; Hagedorn & Lester, 2006) use IGETC module completion as a means of measuring transfer readiness in California.

Hispanic-Latino Community College Students

Hispanic-Latinos enroll in community colleges in greater proportions than any other racial-ethnic group (Swail, et al., 2004; Horn, et al., 2002; Fry, 2002; Lee & Frank, 1990; Nora, 1987), and attend these institutions as a means of obtaining a bachelor's degree (Martinez & Fernandez, 2004; Hagedorn & Cepeda, 2004; Suarez, 2003; Fry, 2002; McCormick & Carroll, 1997). Students who begin their postsecondary education at community colleges have been labeled in the literature as being of "lower quality" (Sandy, et al., 2006). However, lack of academic preparation for a four-year institution does not adequately reflect Hispanic community college students' reasons for choosing to initially enroll in these institutions. Research has indicated that many Hispanic community college students are sufficiently academically qualified to attend four-year institutions directly following high school, but opt to begin at a community college (Swail, et al., 2004). Closer proximity to home and lower tuition costs have been reported as primary reasons why Hispanics may choose community colleges over four-year colleges and universities (Arbona & Nora, 2007; Fry, 2002).

Still, attrition rates for Hispanics in community colleges remain high (Fry, 2004; Hoachlander, et al., 2003; Garcia, 2001) and of a great concern for administrators, policy makers, and researchers. Although more Hispanics than African Americans/Blacks are enrolled in postsecondary institutions, Hispanics lag in bachelor's degree attainment rates (KewalRamanian, et al., 2007). Transfer preparation and the transfer experience of Hispanic-Latino community college students continue to be of concern due to the lagging numbers of Latinos who successfully transfer to four-year institutions (Laden, 2004). Hispanic students face unique challenges in their pathway towards a bachelor's degree (Swail, et al., 2004). These students are

more likely to be of first generation, need remedial education, and have the highest rate of part-time attendance (Swail, et al., 2005; Horn, et al., 2002). Studies of community college transfer have found that a need for remedial education at community colleges significantly increased a student's risk of leaving the institution (Clagett, 1996; Voorhees, 1993), which poses an additional difficulty for the large percentage of community college Hispanic students who require remedial education before taking transfer level coursework. In addition, Hispanic students are more concerned about academic ability and finances, work longer hours, and are more likely to work for personal or family obligations than students of any other racial-ethnic group (Longerbeam & Sedlacek, 2004).

Barriers/Markers to Transfer for Hispanic-Latino Students

Hispanic community college students face unique challenges in their pathways towards transfer, as they are more likely to be first-generation college students and have parents with little to no knowledge on the college experience (Swail, et al., 2004; Harrell & Forney, 2003), be of lower socioeconomic status (Wassmer, et al., 2004; Swail, et al., 2004; Adelman, 1999), balance multiple roles and responsibilities outside of their role as a student (Ornelas & Solorzano, 2004), arrive from primary and secondary educational systems which do not prepare them adequately for postsecondary education (Hurtado & Kamimura, 2003; Ornelas & Solorzano, 2004), require remedial education courses (Laden, 2004; Ornelas & Solorzano, 2004; Schmidt, 2003), and lack knowledge of educational system processes, such as that of financial aid and transfer (Chang, 2005). In addition, many of these students go through their educational experiences with high levels of self-doubt regarding their academic ability (Ornelas & Solorzano, 2004; Wolf-Wendell, Twombly, Morpew, & Socich, 2004). Interestingly however, several studies have found that these factors which have posed as barriers for some students serve as a catalyst towards success for others (Ornelas & Solorzano, 2004; Suarez, 2003).

Some markers for successful transfer for Hispanic students include rigorous high school curriculum, high academic preparedness, and pre-college achievement (Arbona & Nora, 2007; Wassmer, et al., 2004; Harrell & Forney, 2003; Adelman, 1999), little to no delay of entry into postsecondary education following high school graduation (Arbona & Nora, 2007; Dougherty & Kienzl, 2006; Hoachlander, et al., 2003), continuous postsecondary enrollment, institutional and goal commitments, and academic integration (Arbona & Nora, 2007). Conversely, Hispanic two-year college students have been found to be less academically prepared, delay entry into postsecondary education, attend discontinuously, and attend college on a part-time basis in greater numbers than students of other racial-ethnic groups (KewalRamanian, et al, 2007; Swail, et al., 2004; Fry, 2002). These social and background variables are effective in gaining a better understanding of the factors which need to be considered when advising or researching Hispanic-Latino community college students. Cross-sectional studies fail to recognize that many students, in particular Hispanic-Latino community college students, attend school part-time and take remedial courses, prolonging their time to transfer. Additionally, many studies on community college students research enrollment within two years of high school graduation (for example, Hoachlander, et al., 2003; Lee & Frank, 1990), which fails to consider the large numbers of community college students and Hispanics who delay entry into community colleges and choose to enroll well into their twenties and beyond. Moreover, self-reported data from students is not reliable in terms of attendance patterns (Adelman, 1999), nor can it completely speak to the course taking patterns or successful course completion rates of these students.

Hispanic Diversity

Although much research has been done on Hispanics in higher education, many “Hispanic” studies have been conducted on populations which are mostly Mexican or Chicano/a (Torres, 2004). Latinos differ in terms of attitudes, beliefs, and experiences (Gonzalez Burchar,

et al., 2005; Torres, 2004; Torres, 2003; Broadie, Steffenson, Valdez, Levin, & Suro, 2002; Ferdman & Gallegos, 2001), and bring these varied perspectives with them to colleges. If institutions of higher education hope to succeed in attracting, retaining, and graduating Latinos, they must understand these differences (Torres, 2003). More research is needed on the diversity among Hispanics in higher education (Torres, 2004), and in particular, at the community college where the majority of Hispanics in pursuit of higher education enroll, and yet where the literature remains the most silent.

Conclusions and Implications

Previous research on Hispanic-Latino community college students indicates the many challenges and barriers they face in their pathway towards achieving their academic aspirations of a bachelor's degree or higher. Many not only do not reach their transfer goals, but are not adequately prepared academically by their secondary schools to perform at the postsecondary level, nor are they being readied during their time at the community for transfer to a four-year institution. More needs to be done by the two-year institutions in order to help facilitate the preparation for transfer of these students. In accordance with Hagedorn and associates (2006), more assessment of student transfer readiness as oppose to actual transfer is needed. Aside from the inaccurate measures of community college student outcomes (Mudhenk, 2000), transfer readiness places more responsibility on the institution, whereas actual transfer is the responsibility of the student and can occur at any time during a student's life (Hagedorn, et al, 2006; Hagedorn, & Lester, 2006). Additionally, as the Hispanic-Latino population in the United States grows and diversifies, more research is needed on the diversity among Hispanics in order to identify an address the unique needs and challenges of Hispanics of varying subgroups.

The purpose of this study is to expand upon the understanding of how multiple Hispanic-Latino subgroups vary in terms of background, educational aspirations, and academic

preparation in their preparation for transfer. The information gathered from this study will be beneficial in filling a large gap in Hispanic-Latino higher education research and understanding, and can be used to better recognize and ameliorate the distinctive challenges faced by Hispanic-Latinos as they pursue college education.

CHAPTER 3 RESEARCH METHODOLOGY

The purpose of this study is to expand upon the understanding of how multiple Hispanic-Latino subgroups vary in terms of background, educational aspirations, and academic preparation in their preparation for transfer. This chapter revisits the research question and discusses the study population and sample, variables of interest, and a description of the data analysis.

Research Question

How do Hispanic-Latino subgroups vary in terms of background, educational aspirations, and academic preparation in their preparation for transfer?

Population and Sample

This study used data from the Transfer and Retention of Urban Community College Students (TRUCCS) project. TRUCCS used questionnaire survey and transcript data of 4,967 students from all nine institutions colleges within the Los Angeles Community College District and investigated organizational and individual factors which advance the retention and persistence of urban community college students in Los Angeles, of which approximately half are of Hispanic-Latino background (Hagedorn & Maxwell, 1999). Los Angeles County has the largest proportion of Hispanics of any other county in the United States (U.S. Census Bureau, 2006). In the Los Angeles Community College District (LACCD), Hispanics compose almost half (48%), of all credit-seeking students (Los Angeles Community College District [LACCD], 2008), and about 37% of these students successfully transfer to either a University of California (24.1%) or California State University (45.7%) campus (LACCD, 2008). For more details on the survey design and data collection by TRUCCS, please see *Research on Urban Community*

College Transfer and Retention: The Los Angeles TRUCCS Project (Hagedorn & Maxwell, 1999).

For this study, TRUCCS participants became the experimentally accessible population from which I sampled. The sample included those participants who identified as being a part of at least one Hispanic-Latino subgroup in the TRUCCS survey. Question 30 in the survey asked, “what is your ethnic group(s)?,” and participants were asked to mark all that apply. The survey included five options for Hispanic-Latinos: Mexican, Mexican-American/Chicano, South American, Central America, and Other Latino/Hispanic. After gathering all participants who had at least one of the Hispanic-Latino options marked, data was then conditioned so that the categories of Mexican, Mexican-American/Chicano, South American, and Central American included only those individuals who selected only one option for ethnicity (i.e. only marked Mexican, or only marked South American). Individuals who marked multiple options for ethnicity, including multiple Hispanic options, were grouped with the individuals who marked “Other Latino/Hispanic” (i.e. an individual who marked both Chinese and Central American and an individual who marked South American, Central American, and Mexican would be grouped in the Multiethnic/Other Hispanic-Latino category). Participants who did not mark either of the Hispanic-Latino options were not used in the sample.

The sample consisted of 2,227 participants, with the following ethnic breakdown: 568 individuals, or 25.5% of the sample were Mexican; 818 individuals, or 36.7% of the sample identified as Mexican-American/Chicano; 83 participants identified as South American, making up 3.7% of the sample; 496 participants indicated that they were Central American, composing 22.3% of the sample; and a total of 262 individuals, or 11.8% of the sample, were either multiethnic or identified as belonging to another Latino subgroup. Table 3-1 shows frequencies

for each Latino ethnic group. Of the total sample, 39.5% were male and 60.5% were female. Overall, the majority of the sample, over 60%, was of traditional college age, between 18 and 24 years old. Between groups, multiethnic and other Latinos had the highest percentage, 72.7%, of traditional aged students, with South Americans having the least at 45.8%. Conversely, South Americans had the highest percentage of students over the age of 40, with 19.3% of South Americans in the sample. Mexican-Americans had the lowest percentage, at nearly 4%. Table 3-2 shows age categories by Latino ethnic group.

Measures

The variables of interest in this descriptive analysis were background, academic aspirations, academic preparation, and transfer readiness. Background variables included parental education and family socioeconomic status. Academic aspirations were measured by anticipation of transfer, anticipation of a bachelor's degree, and highest degree aspirations. Academic preparation was assessed by transcript data variables, which included placement tests results in English and mathematics, and number of remedial education courses taken by the student. The last measure, transfer readiness, was derived from transcript data previously conditioned and analyzed through the TRUCCS project, and quantified by the number of IGETC modules completed by the student. Please refer to Table 3-3 for an explanation and clarification of variables used, variable type, and scale used for each.

Background Variables

The background variables in the study were measured through survey responses from the TRUCCS survey. They included parental education and family socioeconomic status. According to the literature, Hispanics are more likely to be first-generation college students and have parents with little to no knowledge on the college experience (Swail, et al., 2004; Harrell & Forney, 2003), which has been found to serve as a barrier to students in their educational

pathways. Parental education was a self-reported response to the question: “What is the highest level of formal education obtained by your parents either in the U.S. or in another country?.” The responses were recoded so that those who dropped out of school before or during high school, those who completed high school with a diploma or equivalent degree, or those who were unsure, were given a value of “1”. Those who had taken some college courses at both the two and four year levels, or completed a community college or four-year degree were assigned a value of “2”. The remaining who persisted to graduate or professional school were given a value of “3”, even if they did not complete their graduate degree. For the analysis, I chose the highest educational attainment level between the mother and father.

Related to educational attainment, family income and socioeconomic status have been found in the literature to impact Hispanic-Latino persistence, retention, and transfer, with Hispanics tending to be of lower socioeconomic levels (Dougherty & Kienzl, 2006; Longerbeam & Sedlacek, 2004; Wassmer, et al., 2004; Swail, et al., 2004; Adelman, 1999). In order to address this, a variable calculating the parent’s occupational status score (OSS) was used and is based on the percentage of incomes at a certain level, and also reflects completion of a certain level of education and prestige of various occupations (Nams & Terrie, 1994). OSS scores were derived from self-reported open responses which asked participants to report their mother’s and father’s main job while the student was growing up, and were determined based on the works of Nams and Terrie (1994) on a scale of zero to one hundred. The highest OSS of the mother’s and father’s reported values were used, and descriptive analysis was used to present the mean, minimum, maximum, and standard deviation.

Academic Aspirations

Academic aspirations have been cited in the literature to be significant in determining transfer for Hispanics (Arbona & Nora, 2007; Nora, 1987). In order to assess transfer aspirations, self-reported TRUCCS survey data was used. Aspirations were evaluated based on three survey questions, which were anticipation of transfer, anticipation of a bachelor's degree, and highest degree aspirations. The TRUCCS survey asked two questions: "As things stand today, do you think you will a) Get a bachelor's degree, b) Transfer to a 4-year college or university," and participants were given the following response options: "definitely not," "probably not," "maybe," "probably," and "definitely." This variable was recoded such that participants who responded as not having any aspirations to transfer or who were not sure, were assigned a value of "1", and those who definitely or probably aspired towards transfer, were assigned a value of "2".

The survey also included a separate question, which asked, "If there were no obstacles, what is the highest academic degree you would like to attain in your lifetime?," and included eight answer choices, from no degree, to community college degrees, to graduate and professional degrees. This variable was recoded into four categories. Participants who indicated that they would be taking classes but did not intend to earn a degree were assigned a value of "1", those who aspired towards a vocational certificate or associate's degree were given a value of "2", those who hoped for a bachelor's degree and maybe further education were designated a value of "3", and those who desired a master's, doctoral, or medical degree were assigned a value of "4".

Academic Preparation

An additional barrier identified in the literature for Hispanics is lack of academic preparation (Hurtado & Kamimura, 2003; Ornelas & Solorzano, 2004). Due to this inadequacy

in academic preparedness, Hispanics are more likely to need remedial education when they arrive to a community college (Laden, 2004; Ornelas & Solorzano, 2004; Schmidt, 2003). In studies of community college transfer, taking remedial courses has been found to significantly increase a student's risk of leaving the institution (Clagett, 1996; Vorhees, 1993).

In order to measure the academic preparation of the students in this sample, placement test scores in English and mathematics were used. The highest English and mathematics placement scores were taken from transcript data and placed into six categories: not assessed, no placement, remedial level, basic level, intermediate level, and transfer level. For the purposes of this study, the variable was recoded into three different areas. A value of "1" was given to those who were not assessed or not placed, where students who were not program placed were not required to take a placement test, a value of "2" was given to those at the remedial or basic levels, and a value of "3" was given to those at intermediate or transfer levels. Transcript data was also used in order to assess the total number of remedial courses taken, which ranged from zero to four. This variable was coded such that those having taken no remedial courses were given a value of "1", those having taken one or two were given a value of "2", and those having taken three or four remedial courses were given a value of "3".

Transfer Readiness

The last variable in this study is transfer readiness. As defined earlier, transfer readiness is a measure of a community college student's academic progress towards transfer, and is here measured through the student's completion of IGETC modules. Completion of IGETC modules, or subject areas, was taken from transcript data and is the number of IGETC modules which were successfully completed. That is, all courses required for the given subject areas were taken by the student and completed with a "C" or better. This variable does not take into account which module was completed, only the number of modules that were finished. The original data

set gave a range of zero to seven for module area completion. For this study, a value of “1” was given to students who had not completed any modules, a value of “2” given to students who completed one to three module areas, and a value of “3” given to those who completed four to seven module areas.

Analytic Method

This study is based on a secondary analysis of data gathered by the TRUCCS project. The TRUCCS data of almost 5,000 participants has been analyzed, validated, and refined through data analysis processes using sampling design that maximized variation in the independent variables in the sample to allow researchers to make internally valid comparisons of subgroups (Hagedorn & Maxwell, 1999). The data was conditioned in order to identify a sample of only the Hispanic-Latino participants, which resulted in being over half the size of that of the original TRUCCS data set. Descriptive analysis, including frequencies and cross tabulations, will be employed utilizing SPSS in order to tell an unspoken story about the uniqueness of urban Hispanic-Latino community college students in the Los Angeles Community College District.

Limitations

In addition to the limitations stated in chapter one, several other limitations emerge from the data. First, we are limited by participants’ understanding of the ethnicity question in the TRUCCS survey, and whether or not their self-identification matches the definition I gave to each ethnic category. For instance, I define Mexican-American and Chicano/a as individuals who were born in the United States to Mexican or Mexican-American parents; however, some individuals who may have been born in Mexico but immigrated to the United States may identify as Mexican-American. This also raises another limitation, as generation and immigrant status of participants is unknown in the analysis. We do not know whether a Central American participant is third-generation, or whether a South American participant is a recent immigrant. This is a

strong limitation, as native and foreign born status of Hispanics in the United States accounts for many differences between them (Broadie, et al., 2002).

As the analysis is limited to the five Latino ethnic groups identified in the TRUCCS survey, and in order to obtain the cleanest data possible, the multiethnic and other Latino subgroup was created. This group must be approached with caution, as it includes all “other Latino” identified participants, but also includes participants who multiply identified either racially and/or ethnically. One last limitation in this study is that actual transfer is not utilized in the analysis, as I am trying to address how prepared students are to transfer, which holds the institution more accountable. This poses as a limitation in that not all students who intend to transfer do so after completing IGETC modules. They may enroll in a few remedial courses and then transfer without completing any IGETC modules. However, as actual transfer measures are difficult to evaluate and not always reliable, it is left out of this study.

Table 3-1. Hispanic-Latino frequencies and percentages by subgroup.

Latino Subgroup	Frequency	Percentage of Sample Population
Mexican	568	25.5%
Mexican-American/Chicano	818	36.7%
South American	83	3.7%
Central American	496	22.3%
Multiethnic/Other Latino	262	11.8%
Total	2,227	100.0%

Table 3-2. Age by Latino subgroup.

Age	Mexican	Mexican-American/Chicano	South American	Central American	Multiethnic/Other Latino
17 or younger	0.2%	0.2%	0.0%	1.0%	1.2%
18-24	51.9%	68.9%	45.8%	51.4%	72.7%
25-39	39.3%	27.2%	34.9%	38.7%	20.8%
40 or older	8.6%	3.7%	19.3%	8.9%	5.4%

Table 3-3. Variables used in the data analysis by variable name, type, and scale used for coding.

Variable Name	Variable Type	Scale
Parent's education	Single item-categorical	1=High school degree or less 2=Bachelor's degree or less 3=Graduate or professional degree
Parent's OSS	Continuous	0-100
Aspiration toward transfer	Dichotomous	1=Aspiration towards transfer 2=Aspiration not towards transfer
Aspiration toward bachelor's degree	Dichotomous	1=Aspiration towards bachelor's degree 2=Aspiration not towards bachelor's degree
Highest degree aspirations	Single item-categorical	1=None 2=Associate's degree or vocational certificate 3=At least bachelor's degree 4=Graduate or professional degree
Highest English placement	Single item-categorical	1=Not assessed or no placement 2=Remedial or basic 3=Intermediate of transfer
Highest mathematics placement	Single item-categorical	1=Not assessed or no placement 2=Remedial or basic 3=Intermediate of transfer
Remedial courses taken	Single item-categorical	1=None taken 2=One-two taken 3=Three-four taken
Number of IGETC modules completed	Single item-categorical	1=None completed 2=One-three completed 3=Four-seven completed

CHAPTER 4 FINDINGS

Results of this chapter are presented in six sections, discussing the findings of the descriptive and exploratory analyses for the variables of student background, academic aspirations, academic preparation, and transfer readiness. Exploratory data analysis found that clear differences exist between Latino subgroups.

Student Background

To examine student background, the variables examined were derived from self-reported data on the TRUCCS survey. Student background was assessed in terms of parental educational attainment level and socioeconomic status. These were all found in past research to significantly affect Hispanics and serve as barriers for Hispanic-Latinos as a whole in their pathways through higher education, and particularly, community colleges. For educational attainment, the cross tabulation found that Mexican parents are the least educated, with over 92% of the population having a high school diploma or less. South American parents were found to have the highest rate of bachelor's degrees, with 11% having at least a high school diploma and a bachelor's degree or less. Multiethnic and Other Latino students were the least likely to have parents with a Graduate or Professional degree, with less than one percent of the students reporting so on the TRUCCS survey. Mexican students had the lowest average OSS score, with a mean of 38.69, more than 20 points less than the highest mean value of all groups, South Americans with an average OSS of almost 60. Table 4-1 presents cross tabulations for educational attainment and table 4-2 presents descriptive statistics for socioeconomic status.

Academic Aspirations

For transfer aspirations, 25% of the entire Latino sample did not anticipate transferring to a four-year college or university. Mexicans had the lowest rate of transfer aspirations, with

29.4% not aspiring towards transfer, and South Americans had the highest rate of transfer aspirations, with 81% indicating transfer to a four-year college or university as a definite academic objective. See Table 4-3 for further details regarding transfer aspirations for the study sample. Bachelor's degree aspirations yielded similar and dissimilar results. As with transfer aspirations, South Americans had the highest rate of bachelor's degree aspirations, with over 82% so indicating. However, it was multiethnic and other Latinos who had the lowest aspirations towards a bachelor's degree with approximately 32% not aspiring towards a bachelor's degree. Table 4-4 shows cross tabulations for bachelor's degree aspirations by Latino subgroup. Additionally, highest degree aspirations were also assessed. For Hispanic-Latinos as a group, the majority aspired towards a graduate or professional degree, with 55.5% so indicating. Two percent of Mexicans did not plan on obtaining any type of degree, whereas 0% of South Americans and multiethnic and other Latinos had the same response. Multiethnic and other Latinos were also the group which had the least amount of students who indicated aspirations towards a graduate or profession degree, whereas South Americans as a group had the most, with 49.8% and 61.4% respectively. Table 4-5 shows highest degree aspirations by Latino subgroup.

Academic Preparation

For English placement scores, South Americans had 61% had the largest proportion of students placing in remedial and basic level courses, a proportion greater than that of any other group. Mexican-Americans had the greatest proportion of intermediate and transfer level placement in English, with 47% of these students having so placed. For mathematics placement, it was the exact opposite. South Americans had the largest share of students placing at the intermediate and transfer levels, at approximately 19%, and Mexican-Americans at the remedial and basic levels at 83%. Tables 4-6 and 4-7 show the placement scores by Latino subgroups.

South American students also had the highest rates of taking zero and three to four remedial courses, with multiethnic and other Latino students having the highest rates of taking one to two remedial courses at 20%. Table 4-8 displays remedial education cross tabulations.

Transfer Readiness

Multiethnic and other Latino students were the most likely not to complete any modules (about half completed zero IGETC modules). Mexican-Americans were a bit more likely to complete one to three course modules, with Mexicans and Central Americans having similar percentages (40.9%, 39.8%, and 39.1% respectively), and more likely to complete four to seven IGETC modules. Table 4-9 presents cross tabulations for the number of IGETC modules completed per Latino subgroup.

Table 4-1. Parent's highest level of educational attainment by Latino subgroup, N=1,999.

Education Level	Mexican	Mexican-American/Chicano	South American	Central American	Multiethnic/Other Latino	Total for all Latinos
High school degree or less	92.3%	91.8%	87.8%	89.4%	90.8%	91.2%
Bachelor's degree or less	6.7%	6.9%	10.8%	9.0%	8.7%	7.7%
Graduate or professional degree	1%	1.3%	1.4%	1.6%	0.5%	1.2%

Table 4-2. Parent's OSS by Latino subgroup, N=1,890.

Latino Subgroup	Minimum	Maximum	Mean	Standard Deviation
Mexican	2.70	99.10	38.69	24.17
Mexican-American/Chicano	0.70	99.10	43.36	22.79
South American	8.00	99.80	59.29	26.54
Central American	5.30	99.80	43.22	26.17
Multiethnic/Other Latino	2.70	99.80	46.92	24.82

Table 4-3. Aspirations toward transfer to a four-year college or university by Latino subgroup, N=2,142.

Aspiration	Mexican	Mexican-American/Chicano	South American	Central American	Multiethnic/Other Latino	Total for all Latinos
Not toward transfer	29.4%	20.7%	19.0%	28.4%	24.5%	25%
Toward transfer	70.6%	79.3%	81.0%	71.6%	75.5%	75.0%

Table 4-4. Aspirations toward bachelor's degree by Latino subgroup, N=2,137.

Aspiration	Mexican	Mexican-American/Chicano	South American	Central American	Multiethnic/Other Latino	Total for all Latinos
Not toward bachelor's degree	27.5%	27.9%	17.5%	25.7%	32.1%	27.4%
Toward bachelor's degree	72.5%	72.1%	82.5%	74.3%	67.9%	72.6%

Table 4-5. Highest degree aspirations by Latino subgroup, N=2,199.

Aspiration	Mexican	Mexican-American/ Chicano	South American	Central American	Multiethnic/ Other Latino	Total for all Latinos
None	2.0%	1.1%	0.0%	1.4%	0.0%	1.2%
Associates degree/vocational certificate	12.8%	7.5%	7.2%	12.7%	10.5%	10.4%
At least bachelor's	31.9%	32.9%	31.3%	30.6%	39.7%	32.9%
Graduate or professional degree	53.3%	58.4%	61.4%	55.2%	49.8%	55.5%

Table 4-6. Highest English placement by Latino subgroup, N=1,710.

Placement	Mexican	Mexican-American/ Chicano	South American	Central American	Multiethnic/ Other Latino	Total for all Latinos
Not assessed-no placement	2.9%	3.7%	4.7%	7.4%	7.2%	4.7%
Remedial-basic	59.9%	49.2%	60.9%	53.5%	53.8%	53.9%
Intermediate-transfer	37.2%	47.0%	34.4%	39.1%	39.0%	41.4%

Table 4-7. Highest mathematics placement by Latino subgroup, N=1,710.

Placement	Mexican	Mexican-American/ Chicano	South American	Central American	Multiethnic/ Other Latino	Total for all Latinos
Not assessed-no placement	7.0%	4.7%	20.3%	11.3%	8.7%	7.7%
Remedial-basic	79.3%	83.1%	60.9%	80.2%	82.1%	80.5%
Intermediate-transfer	13.7%	12.3%	18.8%	8.5%	9.2%	11.8%

Table 4-8. Number of remedial courses taken by Latino subgroup, N=2,138.

Courses taken	Mexican	Mexican-American/ Chicano	South American	Central American	Multiethnic/ Other Latino	Total for all Latinos
None Taken	83.2%	81.8%	89.2%	79.6%	79.5%	81.7%
One-two	16.6%	17.9%	1.8%	19.7%	20.1%	17.9%
Three-four	0.2%	0.3%	2.4%	0.6%	0.4%	0.4%

Table 4-9. Number of IGETC modules completed by Latino subgroup, N=2,138.

Number of modules	Mexican	Mexican-American/ Chicano	South American	Central American	Multiethnic/ Other Latino	Total for all Latinos
None completed	43.5%	37.6%	44.6%	46.2%	48.4%	42.5%
One-three	39.8%	40.9%	34.9%	39.1%	38.5%	39.7%
Four-seven	16.8%	21.5%	20.5%	14.7%	13.1%	17.8%

CHAPTER 5 DISCUSSION

In addition to giving voices to unique Hispanic-Latino groups which as we have established here face different challenges, this paper aims to provide community college administrators, faculty members, and academic counselors knowledge and guidance on how to best serve their Hispanic-Latino students and guide them to and through the transfer process. In this chapter, we will interpret the findings presented in chapter four and their significance as compared to previous research. I will then conclude with what implications these results might have for researchers and community college administrators, faculty members, academic counselors, and students.

There is a lack of research surrounding the differing experiences of Hispanic-Latinos in higher education, particularly at the community college. As Hispanic-Latinos enroll in community colleges in greater proportions than any other racial-ethnic group (Swail, et al., 2004; Horn, et al., 2002; Fry, 2002; Lee & Frank, 1990; Nora, 1987), more attention needs to be given to these individuals who differ from one another. Hispanic-Latinos are a heterogeneous group and a complex population to study (Gonzalez Burchar, et al., 2005; Ferdman & Gallegos, 2001), thus lumping them together for research does not necessarily yield valid results. This study hoped to reveal some of the diversity among the experiences of Hispanics in community colleges.

There were several limitations in this study, which have implications for the interpretation of results. As this is a secondary data analysis, the research was limited to the sample and data of the TRUCCS project. This limited the analysis of Latino subgroups to five, the most prevalent in the Los Angeles Community College District. If a similar study were conducted in the community college district of Miami Dade, Florida, for example, another

Hispanic serving urban community college district, the demographics might yield very dissimilar results due to the diverse Hispanic demographics of the two areas.

In addition, as students in the survey self-identified in terms of their race and ethnicity, Hispanic identity development must be considered. As aforementioned, Hispanics are a heterogeneous and diverse group (Gonzalez Burchar, et al., 2005; Torres, 2004; Torres, 2003; Broadie, Steffenson, Valdez, Levin, & Suro, 2002). Latinos do not conform easily into preexisting racial categories in the United States, and often adopt the “Latino” label while still maintaining identification to their Latino subgroup and national origin (Ferdman & Gallegos, 2001). In addition, research has found that many Hispanic-Latinos treat their ethnic identity as a race (Hitlin, Brown, & Elder, 2007); however, this study found that many Hispanics multiply identified as one or more of the racial categories along with their Hispanic-Latino subgroup identification. These results must be approached with caution. Generational status is a factor when considering how assimilated in American culture a participant in this study may be, thus affecting the degree of impact of their Hispanic heritage.

Nevertheless, the results do indicate that Hispanic-Latino subgroups have different characteristics in terms of background and academic preparation for transfer. The variables found to be the show the greatest differences between subgroups were age, parental education, family socioeconomic status, transfer aspirations, and English and math placement scores. Additional difference was found highest degree aspirations and transfer readiness.

Significance of Findings

Mexican-Americans, or Chicanos, make up 36.7% of the study sample, the largest by far of any other group. They are the most likely to place academically in remedial or basic math courses, but are also among the most likely to aspire to graduate and professional degrees behind South Americans, and are the most transfer ready of all other students. This supports findings by

Arbona and Nora (2007) in their study which found that high aspirations and goal commitments by Hispanic community college students helped facilitate successful transfer. Mexican-Americans and Mexicans have the lowest level of parental educational attainment of all of the groups, both having 95.3% of their parents with a high school diploma or less. Some Mexican-Americans may have parents born in Mexico, as would the parents of Mexicans which might help to explain these similarities, however it is also the case that Mexican-Americans maybe be several generations removed from Mexico.

Parental education is where the similarities between Mexican-Americans and Mexicans end. Mexicans have lower OSS', do not aspire towards transfer, and are more likely to have their educational aspirations ending at community college degrees. Although in relation to other subgroups they are not less academically prepared, their academic objectives are different. Mexicans have more in common with other Central Americans in fact, who share low OSS'. This could be explained by the potential immigrant status of Central Americans; however, a great limitation of this analysis is that we do not know the immigrant or generational status of the participants. Common immigrant status could yield similar results, as supported by a recent report by the Pew Hispanic Center which found that the native and foreign born status of Hispanics in the United States accounts for many of their differing experiences (Broadie, et al., 2002).

This may partially explain the similarities between Mexicans and Central Americans, however it does not account for the great differences between South Americans and all other Latino subgroups. South Americans are vastly different in terms of age, placement in English and mathematics, and degree aspirations. A greater proportion of South Americans enroll in remedial courses and their completion of IGETC modules is second to Mexican-Americans. Due

to their age difference, perhaps support avenues are less available to them, or they are more hesitant to seek that support to help them achieve their academic objectives. In addition, these differences could be explained by the different sociopolitical factors and immigration patterns of South Americans.

Caution must be taken when considering the multiethnic and other Latino group. In order to obtain the cleanest data sample, multiracial and multiethnic persons, that is, those who marked at least one Hispanic-Latino category and at least one other category, along with individuals who marked multiple Hispanic categories were grouped with individuals who identified as “Other Latino/Hispanic”. Due to the vastness and ambiguity of this category, it cannot be assumed that for instance, individuals from the Spanish speaking countries of the Caribbean who were not given a separate category to mark on the TRUCCS survey would have similar experiences as the individuals in the multiethnic and other Latino category.

Recommendations

In accordance with Brodie and associates (2002), a more dynamic approach should be taken with the ever changing and diverse Hispanic-Latino population in the United States, and particularly in higher education. The findings of this study have various implications for researchers and those who work at and attend community colleges. For one, researchers must be transparent when using the term “Hispanic” or “Latino/a” to describe a sample population which may be more heterogeneous in nature. Although this study does reveal great differences between the experiences of different Latino subgroups, it also highlighted the distinctiveness of South Americans, who are older and have different academic aspirations from their other Latino counterparts. Although their objectives are higher, they are not achieving transfer readiness at rates proportionate to their aspirations.

Different approaches must be taken by community colleges when working with distinct Hispanic populations in order to address the particular needs of that community. More research is needed to look at the relationships between these variables beyond descriptive statistics. We no longer exist in a time which allows for one or two check boxes for Hispanic-Latinos to choose from. If systems of higher education wish to truly address the needs of the majority-minority and invest in its educational attainment, additional specificity is key. As telling as the TRUCCS project has been for the experiences of Hispanic community college students, the use of the term “Hispanic” in addressing this student population must be used cautiously. The demographics of the Hispanic population of Los Angeles is predominantly Mexican and Chicana/o. Using the term “Hispanic” may not be most appropriate as the sample population in this study, and that in much of the research on Hispanic-Latino students, does not reflect the great diversity among Hispanic and Hispanic-Americans (Torres, 2004). In order to gain a better understanding of the true Hispanic experience, similar studies need to be employed in urban, Hispanic-serving community college districts, such as in the Miami Dade Community College District, and the community colleges of the City University of New York. This framework must be kept in mind when working with and trying to understand Hispanic student populations, and particularly those as diverse as that at community colleges.

LIST OF REFERENCES

- Adelman, C. (1999). *Answers in the tool box: Academic intensity, attendance patterns, and bachelor's degree attainment* (Document #PLLI 1999-8021). Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- American Association of Community Colleges. (2007). *CC stats*. Retrieved March 1, 2008, from <http://www2.aacc.nche.edu/research/index.htm>
- Arbona, C., & Nora, A. (2007). The influence of academic and environmental factors on Hispanic college degree attainment. *The Review of Higher Education*, 30(3), 247-269.
- Assist. (n.d.). *IGETC-Intersegmental general education transfer curriculum*. Retrieved March 4, 2008, from <http://www.assist.org/web-assist/help/help-igetc.html>
- Boswell, K. (2004). Bridges or barriers? Public policy and the community college transfer function. *Change*, 36(6), 22-29.
- Broadie, M., Steffenson, A., Valdez, J., Levin, R., & Suro, R. (2002). *2002 National Survey of Latinos*. Washington, DC & Menlo Park: Pew Hispanic Center and Henry J. Kaiser Family Foundation.
- California Postsecondary Education Commission. (2007). *College-going rates by ethnicity and gender*. Retrieved March 6, 2008, from <http://www.cpec.ca.gov/OnLineData/CACGREthnicity.asp>
- Castellanos, J., & Jones, L. (2003, Eds.). *The Majority in the Minority: Expanding the representation of Latina/o faculty, Administrators, and Students in Higher Education*. Sterling, VA, Stylus.
- Cepeda, R. (1991). *Adoption of the intersegmental general education transfer curriculum*. Sacramento: Board of Governors of California Community Colleges. (ERIC Document Reproduction Service No. ED 26271).
- Chang, J.C. (2005). Faculty-student interaction at the community college: A focus on students of color. *Research in Higher Education*, 46(7), 769-802.
- Clayton, K.K., and others (1993). *Family Influence Over the Occupational and Educational Choices of Mexican American Students*. Berkley, Calif.: National Center for Research in Vocational Education, 1993. (ED 367 786)
- Claggett, C.A. (1996). Correlates of success in the community college: Using research to inform campus retention efforts. *Journal of Applied Research in the Community College*, 4(1): 49-68.

- Dougherty, K.J., & Kienzl, G.S. (2006). It's not enough to get through the open door: Inequalities by social background in transfer from community colleges to four-year colleges. *Teachers College Record*, 108(3), 452-487.
- Ferdman, B., & Gallegos, P. (2001). Racial identity development and Latinos in the United States. In C. L. Wijeyesinghe & B. W. Jackson III (Eds.), *New perspectives on racial identity development* (pp.32–66). New York: New York University Press.
- Field, A. (2005). *Discovering Statistics Using SPSS*. London: Sage Publications Ltd.
- Fry, R. (2004). *Latino Youth Finishing College: The Role of Selective Pathways*. Washington DC: Pew Hispanic Center.
- Fry, R. (2002). *Latinos in higher education: Many enroll, too few graduate*. Washington DC: Pew Hispanic Center.
- Garcia, P. (2001). *Understanding the obstacles and barriers to Hispanic baccalaureates*. Notre Dame, IN: University of Notre Dame Institute for Latino Studies.
- Gonzalez Burchard, E., et al. (2005). Latino populations: A unique opportunity for the study of race, genetics, and social environment in epidemiological research. *American Journal of Public Health*, 95(12), 2161-2168.
- Hagedorn, L.S., & Lester, J. (2006). Hispanic community college students and the transfer game: Strikes, misses, and grand slam experiences. *Community College Journal of Research and Practice*, 29(8), 827-853.
- Hagedorn, L.S., Moon, H.S., Maxwell, W.E., & Lester, J. (2006). Transfer between community colleges and 4-year colleges: The all-American game. *Community College Journal of Research and Practice*, 30(3), 223-242.
- Hagedorn, L.S., & Cepeda, R. (2004). Serving Los Angeles: Urban community colleges and educational success among Latino students. *Community College Journal of Research and Practice*, 28(3), 199-211.
- Hagedorn, L.S., & Maxwell, W. (1999). *Research on urban community college transfer and retention: The Los Angeles TRUCCS project*. Retrieved on January, 23, 2008, from http://www.coe.ufl.edu/Leadership/ihe/TRUCCS/Files/Research_on_Urban.pdf
- Harrell, P.E., & Forney, W.S. (2003). Ready or not, here we come: Retaining Hispanic and first-generation students in postsecondary education. *Community College Journal of Research and Practice*, 27(2), 147-156.
- Hitlin, S., Brown, J.S., & Elder, G.H. (2007). Measuring Latinos: Racial vs. ethnic classification and self-understandings. *Social Forces*, 86(2), 587-612.

- Hoachlander, G., Sikora, A.C., & Horn, L. (2003). *Community College Students: Goals, Academic Preparation, and Outcomes* (NCES 2003-164). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Horn, L., Peter, K., & Rooney, K. (2002). *Profile of Undergraduates in U.S. Postsecondary Institutions: 1999-2000* (NCES 2002-168). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Hurtado, S., & Kamimura, M. (2003). Latino/a retention in four-year institutions. In J. Castellanos & L. Jones (Eds.), *The majority in the minority: Expanding the representation of Latina/o faculty, administrators, and students in higher education* (pp. 139-152). Sterling, VA: Stylus Publishing.
- Kerr, C. (1960). *A master plan for higher education in California, 1960-1975*. Sacramento: California State Department of Education. Retrieved on March 5, 2008 from http://www.cpec.ca.gov/CompleteReports/ExternalDocuments/MASTER_PLAN.pdf.
- KewalRamani, A., Gilbertson, L., Fox, M.A., & Provasnik, S. (2007). *Status and trends in the education of racial and ethnic minorities* (NCES 2007-039). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Kuh, G. D., Cruce, T., Shoup, R., Kinzie, J., & Gonyea, R. M. (2007). *Unmasking the Effects of Student Engagement on College Grades and Persistence*. Paper presented at the American Educational Research Association, Chicago, IL.
- L.A. County Online. (2008). *General info: Overview*. Retrieved March 6, 2008 from, <http://lacounty.info/overview.htm>
- Laanan, F.S. (2001). Transfer student adjustment. In F.S. Laanan (Ed.). *Transfer students: Trends and issues. New Directions for Community Colleges*, no. 114, 5-13. San Francisco: Jossey-Bass.
- Laanan, F.S. (2003). Degree aspirations of two-year college students. *Community College Journal of Research and Practice*, 27, 495-518.
- Los Angeles Community College District. (2008). *Enrollment by Ethnicity: Fall 1972-Fall 2007*. Retrieved on March 7, 2008, from <http://research.laccd.edu/studentcharacteristics/enrollment-by-ethnicity.htm>
- Laden, B.V. (2004). Introduction. *Community College Journal of Research and Practice*, 28(3), 177-180.
- Lee, V.E., & Frank, K.A. (1990). Student characteristics that facilitate transfer from two-year to four-year colleges. *Sociology of Education*, 63, 178-193.
- Longerbeam, S.D., Sedlacek, W.E., & Alatorre, H.M. (2004). In their own voices: Latino student retention. *NASPA Journal*, 41(3), 538-550.

- Martinez, M., & Fernández, E. (2004). Latinos at community colleges. *New Directions for Student Services, 105*, 51-62.
- McCormick, A.C., Carroll, C.D. (1997). *Transfer behavior among beginning postsecondary students: 1989-94* (NCES 97-266). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Mudhenk, R.T. (2000). The Trouble With Outcomes. *Community College Journal of Research and Practice, 70*(6), 13-15.
- Nora, A. (1987). Determinants of retention among Chicano college students: A structural model. *Research in Higher Education, 26*, 31-57.
- Ornelas, A., & Solorzano, D.G. (2004). Transfer conditions of Latina/o community college students: A single institution case study. *Community College Journal of Research and Practice, 28*, 233-248.
- Pew Hispanic Center. (2006). *Hispanics at Mid-Decade: Pew Hispanic Center tabulations of 2005 American Community Survey*. Washington D.C.
- Rendon, L. (2000). *Fulfilling the promise of access and opportunity: Collaborative community colleges for the 21st century. New expeditions: charting the second century of community colleges. Issues paper no. 3*. Washington DC: American Association of Community Colleges.
- Sandy, J., Gonzalez, A., & Hilmer, M.J. (2006). Alternative paths to college completion: Effect of attending a 2-year school on the probability of completing a 4-year degree. *Economics of Education Review, 25*, 463-471.
- Schmidt, P. (2003). Academe's Hispanic future. *The Chronicle of Higher Education, 50*(14), A8. Retrieved February 28, 2008, from <http://www.admin.colostate.edu/caucus/documents/hispanicfuture.pdf>
- Shansby, J.B. (1987). *The master plan renewed: Unity, equity, quality, and efficiency in California postsecondary education*. Sacramento: California State Department of Education. Retrieved on March 5, 2008, from http://www.cpec.ca.gov/CompleteReports/ExternalDocuments/MASTER_PLAN_RENEWED.pdf.
- Shorris, E. (1992). *Latinos: A Biography of the People*. New York: W.W. Norton & Company.
- Suarez, A.L. (2003). Forward transfer: Strengthening the educational pipeline for Latino community college students. *Community College Journal of Research and Practice, 27*(2), 95-117.
- Swail, W.S., Cabrera, A.F., Lee, C., & Williams, A. (2005). *Latino students and the educational pipeline. Part III: Pathways to the bachelor's degree for Latino students*. Washington, DC: Educational Policy Institute and Lumina Foundation for Education.

- Swail, W. S., Cabrera, A. F., & Lee, C. (2004). *Latino Youth and the Pathway to College*. Washington, D.C.: Pew Hispanic Center.
- Terrie, E.W. & Nam, C.B. (1994). *1990 and 1980 Nam-Powers-Terrie Occupational Status Scores*. Working Paper Series 94-118. Center for the Study of Population. Tallahassee: Florida State University.
- Torres, V. (2004). The diversity among us: Puerto Ricans, Cuban Americans, Caribbean Americans, and Central and South Americans. *New Directions for Student Services*, 2004(105), 5-16.
- Torres, V. (2003). Mi casa is not exactly like your house: A window onto the experience of Latino students. *About Campus*, 8(2), 2-7.
- Townsend, B.K., & Wilson, K.B. (2006). The transfer mission: Tried and true, but troubled? *New Directions for Community Colleges*, 136, 33-41.
- U.S. Census Bureau (2004). *U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin*. Retrieved February 22, 2007, from <http://www.census.gov/ipc/www/usinterimproj/>
- U.S. Census Bureau. (2006). *American Community Survey*. Retrieved March 6, 2008 from <http://www.census.gov/acs/www/>
- Valladares, M. (2003). Getting past enrollment: Many Latino students are entering college. But few graduate. *Hispanic*, 16(5), 30-34.
- Voorhees, R. A. (1993). Toward building models of community college persistence: A logit analysis. *Research in Higher Education*, 26(2), 115-129.
- Wassmer, R., Moore, C., & Shulock, N. (2004). Effect of racial/ethnic composition on transfer rates in community colleges: Implications for policy and practice. *Research in Higher Education*, 45(6), 651-672.
- Wellman, J.V. (2002). *State policy and community college-baccalaureate transfer* (National Center Report #02-6). San Jose: The National Center for Public Policy and Washington DC: Higher Education and The Institute for Higher Education Policy.
- Wirt, J., Choy, S., Rooney, P., Provasnik, S., Sen, A., and Tabin, R. (2004). *The condition of education 2004* (NCES 2004-077). Washington DC: U.S. Department of Education, National Center for Education Statistics.
- Wolf-Wendel, L., Twombly, S., Morphew, C., & Socich, J. (2004). From the barrio to the bucolic: The student transfer experience from HSIs to Smith College. *Community College Journal of Research and Practice*, 28, 213-231.

BIOGRAPHICAL SKETCH

Desiree Danielle Zerquera was born in 1986 in Miami, Florida. She remained in South Florida until 2003, when she moved to Gainesville, Fl to attend the University of Florida. She earned her B.A. in mathematics with a minor in general education in May 2007, and immediately began her graduate program in educational leadership, with a concentration in higher education administration. Upon completion of her Master of Arts in Education degree in May, Desiree will enroll in the Ph.D. program in higher education administration at Indiana University-Bloomington.