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College Graduation Rates of Hispanic Students: A Review of the Literature

by

Jessica Hall

A master's thesis submitted to the Graduate Faculty in the Liberal Studies in partial fulfillment  
of the requirements for the degree of Master of Arts, The City University of New York

2015

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This manuscript has been read and accepted for the Graduate Faculty in Liberal Studies in satisfaction of the dissertation requirements for the degree of Master of Arts.

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## Abstract

### College Graduation Rates of Hispanic Students: A Review of the Literature

by

Jessica Hall

Advisor: Professor Susan Semel

This literature review examines what factors cause Hispanic college students to drop out before completing their bachelor's degrees. Factors include the type of college attended, financial aid, attending college part-time, enrolling in college later in life, stopping-out, taking a gap year, parents' educational levels, whether students are native- or foreign-born, high school academics, SAT and standardized test scores, college academics, the peer group, multiple disadvantages can compound for Hispanic students, sense of belonging on campus, stereotype threat, and a mentoring program. Recommendations are made for how non-college-educated Hispanic parents can be better informed about the college application process, what student support services on campuses have been shown to improve graduation rates, how passing the DREAM Act could help Hispanic students, how financial aid could be better distributed to help low-income students, and specific university policies that have been shown to improve college graduation rates for Hispanic students.

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## **Introduction**

President Barack Obama declared at the beginning of this decade that five million more college graduates must be added to the workforce in order to stay competitive in the global economy (as cited in DeAngelo, Franke, Hurtado, Pryor & Tran, 2011, p. 3). The United States currently ranks 12<sup>th</sup> worldwide in college degree attainment of 25-34 year olds, but was first in the year 1990 (The Executive Office of the President, 2014), indicating a decline in the US's ability to compete in the global economy. Many other countries of the world have started to outpace the United States in graduating college students, making them more competitive in the world market. In the year 2004, the Bureau of Labor Statistics' top 50 careers included 33 careers that required at least a bachelor's degree (Sullivan, 2007), meaning that the United States must continue to graduate more and more students from college in order to stay competitive and keep up in the world economy, as well as our own economy. The need for college-educated workers is likely to only increase as technology becomes more ubiquitous around the world.

The Hispanic population is continually growing in the United States, and is now the largest minority group (De los Santos & Cuamea, 2010; Maestas, Vaquera, & Zehr, 2007). According to the 2010 Census, 16% of the US population was of Hispanic or Latino origin. This 16% was made up of 50.5 million people, while in the year 2000 Hispanics made up just 13% of the population with 35.3 million people. The population of the country as a whole increased, but over half of the growth was by Hispanics (US Census Bureau, 2011).

In order to meet the President's mandate to increase the number of college graduates and return to our status as the country with the most college graduates in the world, more Hispanics will need to be college-educated. In the state of California, the state



with the largest Hispanic population, only 16% of Hispanics aged 25-64 had a college degree in 2010, while 50% of whites did (Moore & Shulock, 2010). There is a very large gap between working age Hispanics and whites that must be addressed in order to improve America's educational levels.

As the Hispanic population grows and more baby boomers retire, the U.S. economy will continuously depend more on Hispanics, who will need to be college-educated (Fry, 2002). However, the number of Hispanic college graduates is not increasing as the Hispanic population grows. Hispanic students are lagging behind their white and Asian counterparts in college graduation rates. De los Santos & Cuamea (2010) explain that even though Hispanics represented 14 percent of the total population, they only earned 6 percent of the bachelor's degrees in the 2004-2005 school year. In California in the year 2000, 42.5% of the population aged 18-24 in the state was Hispanic, while only a quarter of students enrolled in community colleges were Hispanic, 23% of California State University students were Hispanic, and 12% of students at the more prestigious University of California were Hispanic (Chapa & Schink, 2006). There are a great number of Hispanics that do not even enter into higher education at all.

In 2010, 12.9% of male Hispanics and 14.9% of female Hispanics over age 25 had earned a bachelor's degree, while 30.8% of white males and 29.9% of white females had done the same. The overall population mirrors that of the white population, with 30.3% of males and 29.6% of females in the United States having a bachelor's degree. (US Census Bureau, 2012). Less Hispanic students enroll in college than their white peers, and fewer Hispanic college students come away with a bachelor's degree after 6 years than their white classmates. Twenty-five percent of Hispanic college students graduate with a

bachelor's degree, while 42 percent of white students and 44 percent of Asian students obtain their degrees (DeAngelo, Franke, Hurtado, Pryor & Tran, 2011). Fewer Hispanics enroll in college than their white peers, fewer Hispanics graduate from college than their white peers, and fewer Hispanics over the traditional college age are as highly educated as their white counterparts. In order for America to compete in the global economy with other technology-driven countries, our higher education system evaluates itself to improve its practices and must enroll and graduate more Hispanics.

I have chosen this line of research because I am a teacher at a high school that professes to send 100% of graduates to college. My high school has a large minority population and most students come from working- and middle-class backgrounds. They are not privileged upper-class children who wouldn't think twice about their future in college, and yet they are basically guaranteed to go after graduation. When I interviewed for the position, I was impressed that every single student goes on to college. I did not think that a 100% rate of sending students to college could be possible. However, I am now in my third year at this school and I understand that there is a difference between sending students to college, including community college, and preparing students well enough that they earn a bachelor's degree. I do not have any statistics in regards to how many high school graduates from my high school actually graduate college within six years, but I have no doubt it is not 100%. My position at this high school has led to an interest in researching the factors that prevent students from graduating college. I focus specifically on Hispanic students because I am a Spanish teacher and about one-third of the students in my high school are Hispanic.

My research questions are as follows:

- Why are 4-year college graduation rates of Hispanic students so much lower than white students?
- What factors prevent Hispanic students from graduating college in 6 years or less? I intend to focus directly on the factors that influence students to drop out or succeed in college.

I know that the high school students attend is not all-determining of whether or not they graduate high school and I am interested in researching what other factors contribute to students' successes or failures in college. Pre-college factors include the educational attainment levels of students' parents, their financial background, what country they were born in, their high school academics, and their standardized test scores. In-college factors include the type of institution enrolled in, college GPA, sense of belonging on campus, and if the student has a mentor guiding him or her toward success in college.

The literature points to many factors that work together to exacerbate the college gap, preventing higher numbers of Hispanic students from graduating college. Pre-college factors include students' socioeconomic background, parents' education level, and high school experience. In-college factors include type of institute enrolled in, part- or full-time status, when the student starts college, and a sense of belonging. The purpose of this article is to bring to light the many different factors that affect Hispanic students that do not complete their bachelor's degree. In doing so, I hope to provide suggestions for where future research should head and what can be done about the graduation gap. My analysis begins by breaking down each factor found in the literature that negatively affects Hispanic students on the path to a bachelor's degree. Some factors are pre-college and some are

during college. Finally, I examine the suggestions in the literature as to what can be done to increase Hispanic students' college graduation rates.

## **Methods**

This thesis examines a variety of secondary sources. The search terms used were “Hispanic and college graduation rates”, “Latino and college graduation rates”, “Hispanic-serving institutions”, and “Hispanic college graduation rates at Hispanic-serving institutions” on Google scholar. Hispanic and Latino are used interchangeably in the literature; some articles use one term, some use the other, and some use both. Articles that focused solely on community college, articles that did not specifically address college graduation rates, and articles that did not specifically address the Hispanic population were all eliminated. Articles that were cited by a variety of sources were also included in this thesis, as well as education statistics on the US Census Bureau website.

Much of the literature uses the terms “Hispanic” and “Latino” interchangeably. I use the term “Hispanic” throughout my paper, unless directly quoting text with the term “Latino”. One of the problems with these terms, as Benitez (1998) points out, these terms cover many millions of people with diverse cultures and origins, from people of Mayan descent, to people whose lineage goes back to the Spanish, to people whose lineage goes back to Africa from slave ships. Hispanics in the United States range from recent immigrants, to having families that have lived in this country for many generations. Not all Hispanics speak Spanish natively – the more generations a student's family has been in the United States, the less likely it is that he or she speaks Spanish. People from much of the western world, from the Dominican Republic, to Mexico, to Argentina, all claim Hispanic

heritage, and yet these people are not all the same. But the literature treats them all as one homogenous group.

## **Literature Review**

I have read extensively and I have fifty-three articles that pertain to my research question. Thirteen of the articles are written by a government or educational organization, and the vast majority of sources are written by researchers. Twenty of the articles use large nationwide data sets to conduct their research. Some of these sources include all undergraduate students at four-year universities in a particular year, and some sources limit their data to students at elite private colleges. Nationwide data ranges from students who graduated high school in 1972 to students who graduated college in 2007. Ten sources use data with over 1,000 students in the data set from more than one institution, but are limited geographically in one way or another so the data set is not nationwide. These data sets range from select California community colleges, to 367 four-year institutions in a particular range of years. Eleven sources use data with less than 1,000 students in their data set from one particular institution. These researchers focused on small groups of Hispanic students at particular institutions. All the data, whether it is from a nationwide data set, or an interview with a college administrator, focuses on what hinders Hispanic students from graduating college.

There is a dearth of research on the success stories and what helped successful Hispanic students complete their studies. Many Hispanic students graduate from college every single year, and yet all the research focuses on the factors that prevent students from graduating, rather than the factors that help them reach graduation day. Researchers use

the terms “retention” and “persistence”, but only in terms of whom colleges do not retain and which students do not persist. Examining the college graduation gap from the other side, that is examining students who do graduate and the factors that help them persist to graduation, may bring more information to light and help colleges and universities create better policies to support Hispanic students.

Many articles use data sets that follow students from 8<sup>th</sup> grade through 6 years after they enroll in college – 10 years total. This makes the data more comprehensive in terms of understanding what percentage of students graduate high school, as compared to the number enrolled in 8<sup>th</sup> grade, what percentage of high school graduates go on to college, and what percentage of students that enroll in college graduate within 6 years. However, this means that the data from articles written in the late 1990s and early 2000s use data from students in the 1980s. Several researchers (Adelman, 1999; Alon & Tienda, 2005; Arbona & Nora, 2007; Carnevale & Rosa, 2003) use the National Education Longitudinal Study of 1988, which follows almost 30,000 students who were in 8<sup>th</sup> grade in 1988. While their data is comprehensive of the entire nation’s students, by the time their research was published 10 to 15 years after the students started 8<sup>th</sup> grade, it may not be as relevant to today’s students. That is not to say that the data from 1988’s 8<sup>th</sup> grade students is irrelevant; the same college graduation gap still persists among Hispanic students as it did in the late 1980s, however data on today’s students entering 8<sup>th</sup> grade, graduating high school, and enrolling in college will not be available for another decade. In order for the research to be comprehensive, it must lag behind the times by a decade or more.

Having data that spans a decade may give a clearer picture of the choices students nationwide are making, however it actually gives a better picture of the choices students

nationwide *were* making. Having the nationwide data sets is a trade-off with interviewing students on a one-on-one basis. Researchers can interview Hispanic students to find out why they dropped out of college or what helped them persist to graduation day, and they can have answers to their questions within minutes. However, that data will only be representative of one person, or a small focus group. The nationwide data is more revealing of large trends, however it takes much longer to obtain that data. There is much more nationwide data largely available and in use by researchers than the one-on-one data that reveals the hurdles Hispanics students face today and not in the early 1990s.

The majority of the nationwide data sets that researchers use to analyze what factors affect student college attrition rely on students in four-year institutions. The High School & Beyond (HS&B) database (employed by Adelman, 1999; Alon & Tienda, 2005; Carnevale & Rose 2003) focuses on students who attended four-year institutions. The College & Beyond (C&B) database (employed by Alon, 2005; Alon, 2007; Alon, Domina, & Tienda, 2010; Alon & Tienda, 2005), focuses on students who attended elite private four-year institutions. The National Longitudinal Survey of Freshmen (employed by Fischer, 2007; Fischer, 2010) surveyed 4,000 freshmen entering selective colleges and universities. Selective and elite schools are only four-year institutions. There is a dearth of nationwide data regarding students in community colleges. Astin & Oseguera (2004) used the Cooperative Institutional Research Program (CIRP) for their data sets, and CIRP surveys approximately 400,000 entering freshman in all types of institutions around the country. However, all the other data regarding students in community colleges is from much smaller sets of data – either from focus groups or from less than 1,000 students at a few select community colleges. There is still much research to be done regarding students in

community college and the factors that encourage them to persist and transfer to four-year institutions.

All of the nationwide databases use students who are U.S. citizens or permanent residents. The articles that interview students in focus groups do not comment on the residency of the students. The articles that survey several hundred students from a few particular universities also do not comment on the residency status of the students. There are many thousands of undocumented students in the higher education system, and they are affected by all the same factors as students with citizenship, yet there is very little data regarding their academic choices. How many undocumented students are there in public or private higher education? How do their academic struggles affect the choices they make regarding higher education? Why are they left out of nationwide data as if they do not exist?

Hispanic students are treated as one and the same across the majority of the literature. Hispanic students can come from 20 different countries, or even can be only English-speaking from the United States. There is such a broad array of differences, it does not make sense that a student who has lived his entire life in the United States and whose family has been in this country for generations would be grouped together with a student who just immigrated to this country from Mexico or the Dominican Republic or Argentina or any other Spanish-speaking country. The immigrant student may face language barriers and may or may not be undocumented, while the American student does not face those barriers to higher education. Some of the literature (Contreras, 2005; Hernandez & Lopez, 2004; Kao & Thompson, 2003) does break down Hispanics by country of origin. Contreras, for example, breaks down SAT scores by Mexicans, Puerto Ricans, and Other Latinos.



Hispanics of all backgrounds are probably grouped together because the majority of Hispanics are Mexican, so even though there is quite a bit of diversity within the group “Hispanic”, it is in a small minority. Kao & Thompson (2003) state that more than 75% of all Hispanics in the United States are Mexican.

### **Factors affecting graduation rates**

Nora (1987) describes four types of students with regards to attrition and retention: “(1) the persister, (2) the stop-out, (3) the attainer, and (4) the dropout” (p. 36). The persister graduates without any interruptions in enrollment. The stop-out also graduates, but leaves school for a period of time before returning. The attainer does not graduate, but drops out after attaining a particular goal. The dropout does not graduate and never comes back to complete his or her degree. Much of the research focuses on what causes students to be dropouts instead of persisters. For Hispanic students, there are many hurdles between them and graduating college, preventing them from being the persisters every student hopes to be. These hurdles include of pre- and in-college factors, such as the type of institution a student chooses to enroll in, their financial background, their parents’ levels of educational attainment, the rigor of their high school classes, their standardized test scores, their GPA in college, who their friends are, their sense of belonging on campus, and if they have a mentor in college to help guide them. Each factor that affects Hispanic students’ college completion rates will be discussed in detail.

### *Post-Secondary Education*

More Hispanic high school graduates tend to choose to attend a community college over a four-year college. In 1992, of the Hispanic students attending college 58% enrolled

at a two-year college, while the remaining 42% enrolled at a four-year college (Arbona & Nora, 2007). To frame it another way, Martinez & Fernandez (2004) state that Hispanic students represent just 9% of all students in higher education, and yet 60% of Hispanic students choose a community college over than a 4-year college. A small minority of Hispanic students choose to continue their education beyond high school, and yet the majority of those that do enroll in college, choose a two-year college. Hispanic students' enrollment at community colleges has continued to remain high, with over half of all college-bound Hispanic high school graduates enrolling at two-year colleges (Nevarez, 2001; Hernandez & Lopez, 2004; Fry, 2004) for the past ten years. In fact, more Hispanic high school graduates elect to attend a community college than their White or Black counterparts. Fry (2002) states "about 40 percent of Latino 18- to 24-year old college students attend two-year institutions compared to about 25 percent of white and black students in that age group" (p. vi). There is a large difference in college choices among Hispanic students, versus students of any other race.

Hispanic enrollment at community colleges is even higher in states with large Hispanic populations. In California, 80% of Hispanic high school graduates choose to attend a community college after high school (Hernandez & Lopez, 2004) instead of a four-year institution. California has such a vast system of community colleges, with 112 in the state, that nearly 25% of all students enrolled in community colleges around the nation are in California (Moore & Shulock, 2010). This makes California a particularly important state in terms of graduating more Hispanic students. Moore & Shulock found in California that only 14% of Hispanic degree-seeking community college students transferred to a university, while 29% of white students did. The 86% of Hispanic students that were

originally seeking a degree did not obtain it since they did not transfer to a four-year university. A boost in the graduation rates in just that one state would impact nationwide data. The Hispanic population is also expected to grow in California, making it one of the most important places to focus on the higher education of Hispanics. In 2010 about 34% of the state population was Hispanic, and that number is projected to grow to 40% in 2020 and 50% in 2040 (Moore & Shulock, 2010). In a state where half the population is expected to be Hispanic within the next 25 years, the importance of California's community college system in the education of Hispanics cannot be understated.

Attending a community college instead of a four-year college or university is important in terms of graduation rates because two-year colleges typically have lower rates of graduation and transfer than four-year institutions and students there are less likely to earn a bachelor's degree (Nevarez, 2001). In Arbona & Nora's 2007 study on students who entered college in 1992, by the year 2000 only 7% of Hispanic students who initially attended a two-year college had achieved a bachelor's degree, while 44% who started out at a four-year institution had earned their bachelor's degree by the same year. Martinez & Fernandez (2004) explain "studies show even after controlling for background, ability, and aspirations, students at community colleges are 10 to 18 percent more likely to drop out of college during the first two years than students at four-year colleges with similar backgrounds" (p. 53). Students may start at a community college with the intention of transferring to a four-year college in two years, but the overwhelming majority do not complete that task. The fact that more than half of Hispanic students attending college choose a two-year college dooms them from the very start. There are several reasons that I

will examine that lead Hispanic students to choose community colleges over four-year institutions.

Bensimon & Dowd (2009) discuss the “transfer choice gap”, which is “the phenomenon of students who are academically eligible for transfer to a selective university but elect to transfer instead to a less selective institution or not transfer at all” (p. 635). In California, the University of California system of colleges are the most selective, but very few Hispanic students who are eligible to transfer to a UC school actually do. Bensimon & Dowd cite that five in every thousand eligible community college students transfer to a UC school. Just 13% of the students in UC schools are Hispanic, while 43% of the entire college-going population in California is Hispanic. Academically well-prepared Hispanic students choose lower-tier colleges than what they can get into, which does not help them graduate.

Hispanic-Serving Institutions (HSIs) are defined as institutions of higher education where at least 25% of the undergraduate full-time students are Hispanic (Hernandez & Lopez, 2004; Santiago, 2006; Santiago, 2007). The majority of HSIs are located in California, Texas, Florida, New York, New Mexico, Illinois, Arizona, Colorado, New Jersey, and Puerto Rico (Benitez, 1998). These states are of course where Hispanic students mostly live in the United States. Additionally, these institutions cannot be for-profit, must offer at least two-year degrees, must be accredited, must have a high enrollment of needy students, low expenditures, and at least half of their Hispanic students must be both low-income and first-generation college students (Benitez, 1998). These institutions do not choose to be HSIs as a part of their mission, but rather Hispanic students choose them. In the 2003-04 school year nearly half of all Hispanic students were enrolled in the 6 percent

of HSIs in the country, which are just 236 institutions (Santiago, 2006; Santiago, 2007). In that same school year, HSIs were located in 12 states and Puerto Rico (Santiago, 2006; Santiago, 2007), but as the Hispanic population fluctuates and grows, so do the HSIs of the country. There is no definite list of HSIs, as student enrollment rather than their school's mission determines them.

So many Hispanic students choose to enroll in so few institutions for a variety of reasons. Santiago (2007) explains:

The majority of HSIs (60 percent) have open admissions, 70 percent are public institutions, and the majority is located in communities with large Latino populations. Further, the average tuition and fees at HSIs are lower than those of comparable institutions. These three factors – access, location, and affordability – may explain why so many Latino students choose to concentrate in so few institutions. (p. 5)

Santiago (2007) conducted focus groups with Hispanic college students across the country and investigated what made them choose the college they enrolled in. She found that Hispanic students that chose to attend an HSI were there because it had a lower tuition than other comparable schools, it was close to where they lived, and the open admissions makes it an accessible school. She also found that students who did not choose to attend an HSI “were more likely to prioritize financial aid, institutional prestige, and academic programs as critical factors influencing their college choice” (p. 3). While conventional wisdom is that students choose the “best” school they can get into, meaning the most prestigious and most selective, students that chose HSIs did not follow this advice. Santiago found these students believed they would get a quality education at any college, so long as they were motivated and did what was required of them.

Despite serving some of the neediest students, HSIs typically have very low revenues. Benitez (1998) cites that “endowment revenues at HSIs per FTE student are 91

percent less than at other institutions, HSIs spend 43 percent less on instruction per FTE student than other schools. HSIs spend 51 percent less on academic support functions... HSIs spend 27 percent less on student services” (p. 61). How are these schools going to take the neediest students and provide them with a quality education when they have half the resources and finances? Despite their shortcomings, HSIs seem to be making the best of their financial situation and providing the best services to their students as they can. In 1997, HSIs graduated nearly half of the Hispanic students nationwide that completed associates degrees, as well as those that completed bachelor’s degrees. Imagine what they could do if their funding matched those of public universities.

Carnevale & Rose (2003) point out that it would seem intuitive for less selective colleges, with less rigorous academic programs, to have higher graduation rates and more selective institutions to have lower graduation rates, since they are more academically demanding. In fact, the more selective a college is, the more likely it is that students will graduate. Selective colleges spend more money on their students, provide more services to students, and students that enter these institutions are better prepared for college-level work. Carnevale & Rose cite that 86% of students who enrolled in the 146 top-tier colleges graduated in 1996, while 71% of students in second-tier colleges graduated, 61% in third-tier colleges, and 54% of students in the lowest fourth-tier colleges. Even comparing students in different tiers with the same SAT scores, the students at higher-tier schools have higher graduation rates, among all races. Yet few Hispanic students enroll in top-tier colleges and universities. Carnevale & Rose define top-tier institutions as those that accept 15% of applicants or less. In those institutions, just 6% of the student body was Hispanic in 1996, while 22% was Asian, 6% was black, and the remaining two-thirds was white.

There are just 50,000 undergraduate freshmen enrolled in the top 25 most selective colleges each year (Alon & Tienda, 2005) and a small portion of those students is Hispanic. Affirmative action helps minorities gain access to elite universities; however, opponents of affirmative action argue that minorities that are accepted to top tier universities, with lower standardized test scores than their white classmates, are not qualified to be in that school. Alon & Tienda refer to this idea as the “mismatch” hypothesis, “that minority students with lower credentials than the institutional average are ‘mismatched’ at selective institutions and thus have worse outcomes” (p. 295). Alon & Tienda have found that minority students are more likely to graduate at more selective colleges than at less selective colleges, disproving the mismatch hypothesis.

### *Finances*

Astin & Oseguera (2004) refer to the “Catch-22 of financial aid” (p. 323). The surest way for a university to increase its revenue is to increase tuition, yet increasing tuition raises the poorest students’ financial needs. Universities need more money, so they raise the price tag of admission, which means more students need financial aid in order to enroll. It’s a slippery slope of tuition prices, and the poorest students are most affected. Titus (2006) states that public higher education institutions, from 1981 to 2000 have received 12% less money from state appropriations. In 1981, 44% of public higher education institutions’ revenue came from state appropriations, and that number fell to 32.3% in the year 2000. Meanwhile, these same institutions have increased their revenue from tuition by almost 6% over the same time period. In 1981 public higher education institutions derived 12.9% of their revenue from tuition, while in the year 2000 that number rose to 18.5%. As state budgets become tighter and less money is allocated to institutions of

higher education, these colleges and universities are forced to squeeze students' budgets by raising tuition prices in order to keep their same levels of revenue flow.

Hispanics seem to be the most impacted group when it comes to raising tuition prices. Santiago & Brown (2004) show that Hispanics typically receive the lowest amount of financial aid of any ethnic group, along with the smallest grants, larger loans, and lower work-study awards. In 2002, Hispanics averaged \$7,032 in any aid, while white students averaged \$8,659, black students \$8,476, Asians \$9,221, and American Indians \$8,343. That is a \$1,311 difference between Hispanics and the next highest group. Hispanics averaged the lowest amount received in grant money with \$4,244, while Asians received the highest in grant money with \$5,819. Hispanics borrowed \$5,400 in loans, while American Indians borrowed the least with \$5,234. Hispanics earned an average of \$1,650 in work-study money, while Asians earned the most with \$2,008. Hispanics seem to be the most affected by the rising tuition prices and the scarcity of financial aid. There needs to be more research on why Hispanics receive less financial aid across the board and borrow more money, meaning they finish college in more debt than any other racial group.

Financial aid can be very important for students to be able to attend college. It allows students to worry less, or maybe even not worry at all, about how they are going to pay for college. But not all financial aid is the same. Loans must be paid back and they accrue interest, whereas grants and scholarships do not have to be paid back and students do not get into deep debt with these forms of financial aid. Alon (2005) conducted a study in which she examined how financial aid affected various students' chances of graduating from elite universities. She found that "financial aid is able to promote college graduation, and helps equalize initial racial and ethnic background differences" (p. 309). This indicates



that financial aid helps level the playing field and financial aid helps Hispanic students complete their bachelor's degree when they might not without the aid. Alon suggests that grant aid should be "used as a tool to address goals of diversity and equality" (p. 309). Colleges and universities should provide grants and scholarships to students of low socioeconomic status, since they need the money the most, and that money has a higher impact on their persistence to the degree.

Attending college is an expensive endeavor and many students leave college thousands of dollars in debt, with or without a degree. The cost itself can be a big deterrent for students, encouraging them to enroll in a two-year instead of a four-year college, or to not enroll at all. Brown, Santiago, & Lopez (2003) explain that that many Latino families choose to attend a community college instead of a four-year college or university based on the "sticker price" (p. 44). According to Sullivan (2007), nearly 170,000 low-to mid-income students that were academically prepared for college in 2002, did not intend to enroll due to the cost (p. 407). The price tag per semester of a community college is cheaper, on average, than a four-year school and community colleges are also located close to home, meaning students can save money on housing by living with their parents. Santiago (2007) explains that in the 2003-04 school year, the average in-state tuition for public four-year universities was \$3,400, while it was \$1,977 at public two-year institutions (p. 8). Students can save an average of \$1500 a year on tuition, and even more by living at home. But unfortunately what the sticker price does not tell them is that they are significantly less likely to finish college with a bachelor's degree when they start at a community college.

#### *Part Time Status*

Students that choose to go to school part time make that choice because they must work while in school in order to pay their bills. Electing a part time status is related to finances and financial aid, and choosing to go to school part-time has a similar effect on graduation rates as financial trouble does. A student's chances of graduating from college take a nosedive when that student chooses to go to school part time. Fry (2002) explains that the chances of dropping out increase for part-time students of all races and ethnicities, all courses of study, and students at both two- and four-year institutions. Arbona & Nora studied (2007) the 1992 cohort of college freshmen nationwide and found that half of all Hispanic students enrolled part-time, while just below 40 percent of all students in the whole cohort enrolled part-time. Hispanic students are the most likely of all races to enroll in college part-time (Fry, 2002; Arbona & Nora, 2007; Santiago & Brown, 2004), which makes them more likely to drop out and helps contribute to their low rates of college graduation.

### *Non-traditional Students*

Being a "non-traditional" student, or an undergraduate college student over the age of 25, goes hand-in-hand with being a part-time student. Older students frequently have families or children to support, meaning they must work while in school. Being a nontraditional student in and of itself adds to a student's chances of dropping out of school before completing a degree. Fry (2004) refers to having financial dependents to support while in school as "college persistence risk factors" (p. 16). Having children or family responsibilities can easily distract a student from his or her studies or interfere with classes enough that the student is forced to drop out.

### *Stop-out*

Stopping-out, as opposed to dropping-out, is defined as taking at least one semester (4 months not including summer) off from school and then re-enrolling in classes. Adelman (1999) explains that students who are continuously enrolled in classes are twice as likely to graduate as students who stop-out for some time period. Hispanic students are also the most likely to stop-out, or to take a break from college for a semester or two and then come back. Maintaining continuous enrollment is also linked to graduating college. In the same group of freshmen in 1992, 43 percent of Hispanic students maintained continuous enrollment, while 67 percent of the entire cohort that year maintained continuous enrollment (Arbona & Nora, 2007). Students of all other races are more likely to stay in school once they get there, and therefore are more likely to complete their bachelor's degree than Hispanic students.

### *Gap Year*

Much of the literature supports the idea that taking a gap year between high school graduation and college enrollment diminishes the likelihood of college graduation (Adelman, 1999; Fry, 2004; Santiago & Brown, 2004). This statistic is true of all races, but Hispanic students are more likely than their white peers to wait at least a year after high school to enroll in college. Arbona & Nora (2007) cite that Hispanics who enrolled in college immediately after high school graduation increased their chances of graduating college by 42%. Fry (2004) cites that 19% of Hispanic students and 12% of white students waited more than a year to enroll in a four-year undergraduate program. Santiago & Brown (2004) state that Hispanic students are outright less likely to graduate college through a "traditional" path. The traditional path is for students to enroll in college immediately after high school graduation, remain continuously enrolled, and graduate

within 6 years of enrollment. Just 4% of Hispanic students that were in 8<sup>th</sup> grade in 1988 completed their college program through a traditional path, while 15% of whites and 23% of Asian students took this route.

### *Parents*

While there are Hispanic families that have been in the United States for many generations, the Hispanic immigrant population is growing at a very rapid pace. Many Hispanic families come from countries with low levels of educational attainment or little formal education (Brown, Santiago, & Lopez, 2003). These families are unfamiliar with the American system of higher education and have more trouble traversing the tricky terrain of college application and enrollment than families who are already familiar with our system of higher education. Hispanic high school students may look to their families for help completing high school and getting into college, but parents who have low levels of education themselves cannot help their children.

Hispanic students whose parents are not college-educated are automatically at a disadvantage to students whose parents have already attended college and understand the system. Much research has found that first-generation college students, whose parents do not have a college degree, are at a distinct disadvantage to those students whose parents are college-educated (Alon, 2007; Alon, Domina, & Tienda, 2010; Gándara, 2010; Nora, 1987). Gándara (2010) even goes so far as to suggest that “there is no better predictor of how well children will fare in school than parents’ education attainment” (p. 26). Kao & Thompson (2003) agree that parental education along with income are the best predictors of a student’s eventual educational attainment, and Alon, Domina, & Tienda (2010) concur that there is a link between Hispanic youth’s low rates of college attendance and the low

educational status of their parents. Fischer (2007) found that first-generation college students of all races were less likely to persist to graduation than their peers whose parents were college-educated. This indicates that colleges and universities should be made aware of which students are first-generation college students and should gear programs toward helping these students specifically persist in college until graduation. Parental education levels is a factor that students cannot control, but it can absolutely hurt their chances of completing a degree.

Hispanic students whose parents are not college-educated may not be graduating from college themselves because they may not have parents that push them or expect them to graduate once enrolled in college. Cherng, Calarco, & Kao (2013) found that more educated and more affluent parents were more likely to expect their children to go to college than less educated or less affluent parents. Arbona & Nora (2007) found that 10<sup>th</sup> grade students with parents who expected them to go to college and complete their degree were 33% more likely to do so than their peers whose parents had lower expectations. Alon, Domina, & Tienda (2010) describe this parental expectation as a “floor below which offspring are not likely to fall” (para. 5). Parents without a college education may not always see the value in an undergraduate degree, may not understand the college application and enrollment process, and may not expect their children to complete a degree, while parents who have a degree and see the economic benefits will be more likely to impress these values upon their children, they understand the college landscape, and they can invest more in their child’s future success in college.

Hispanic students are less likely than their white peers to have college-educated parents. According to Gándara (2010), more than 40% of Latina mothers lack a high school

diploma, while just 6% of white mothers do, and only about 10% of Latina mothers have a college degree, while nearly 30% of white mothers do. Hispanic students are already disadvantaged upon starting college, simply because of the educational level of their parents. Cherng, Calarco, & Kao (2013) found that having a college-educated mother made students 230% more likely to complete a college degree. Fischer (2007) found that in a national sample of incoming college freshmen in 1999, about 30% of Hispanic students were first-generation college students, while just 9% of white students didn't have college-educated parents. If parental educational attainment levels are a strong predictor of a student's educational attainment levels, then Hispanic students are going to close the college graduation gap at a very slow pace over the course of several generations.

Adelman (1999) had one note of caution in using data regarding parents' educational attainment. Adelman found that most students know what their parents do for a living, but "their idea of the highest level of education attained by their parents leaves something to be desired" (p. 35). Many students could not accurately answer what their parents' highest level of educational attainment was. Thirty-five percent of sophomores in the cohort Adelman examined reported that their parents had continued their education beyond high school, while 44 percent of the parents reported doing so. High school seniors were slightly more accurate in their reporting of their parents' educational attainment, but still not completely correct. Parental educational attainment may be a big predictor of a student's success in college, however researchers must be careful that they get their information from the parents and not from the students.

*Native- vs. Foreign-born Students*

Hispanic students who were born abroad are less likely to pursue a college degree, and also less likely to attain one than their U.S.-born peers. About 40% of U.S.-born Hispanic students who finished high school attend college, while only about a quarter of foreign-born Hispanic students do (Fry, 2002; Hernandez & Lopez, 2004). Foreign-born students may have more trouble understanding the application and enrollment process for higher education in this country, they may not value an undergraduate degree as much, and they are more likely to have parents with a low level of educational attainment. All of these factors differentiate native- and foreign-born Hispanic students.

### *High School Academics*

High school should prepare students for their college experience, and students who are under-prepared end up in remedial classes and do not start college with the study skills necessary for success. Arbona & Nora (2007) found that the quality and rigor of a student's high school curriculum is "one of the strongest predictors of bachelor degree attainment" (p. 251). Students who take challenging classes and gain study skills in order to be successful in those classes can take those study skills and drive with them to college, helping them in the long run complete their bachelor's program. Arbona & Nora also found that students who completed rigorous classes in high school were 46% more likely to enroll in a four-year college than students who took vocational classes. Enrolling in a four-year college, as previously discussed, also gives students a bigger shot at graduating college. Latino students were just as likely as white students to do well in college, given the same academic preparedness, meaning that race isn't a factor in how high school curriculum choices affect college preparedness, just the high school curriculum choices themselves.

Being prepared, or underprepared, for college can be a choice of the student's in terms of how rigorous the classes are that he or she signs up for each year in high school. The literature wavers on how prepared graduating Hispanic high school seniors are for college. Fry (2004) boldly states "those Latino students who do graduate from high school in many cases have completed a less rigorous curriculum" (p. 1). He goes on to explain that nearly half of all Hispanic high school graduates have not completed an Algebra 2 course, commonly taken in junior year, while just 28 percent of white students have not taken Algebra 2 by the time they graduate. This study was before Common Core and also before No Child Left Behind, so depending on the state students may or may not be required to take Algebra 2 to graduate high school now. Yet three pages later, Fry admits "53 percent of Hispanics who graduated high school in 1992 were at least minimally qualified to do four-year college work" (p. 4). It seems impossible that so many students have not even taken an Algebra 2 class, yet more than half are qualified to enroll in a four-year university. Unfortunately, the number of Hispanics who are qualified for a four-year college has not improved much since the 1992 high school graduating class.

Some students are underprepared for college not because of the less rigorous classes they chose in high school, but rather because of the less rigorous classes their high school offered. Kao & Thompson (2003) explain that "low-income, urban schools do not offer the same range and level of courses as their more affluent suburban counterparts" (p. 425). Urban, predominantly minority schools with low-income students are less likely to offer advanced placement courses or classes for gifted and talented students, while wealthy schools and white schools are much more likely to offer these classes. Those schools' students are also much more likely to enroll in these more rigorous



courses. Hispanic students who attend low-income or predominantly minority schools are already at a disadvantage enrolling in college because they did not even have the same course offerings at their admittedly inferior high school as some of their white or wealthy peers who are better prepared for their college experience. In the year 2000, 77% of public elementary and secondary school students attended schools with a minority population of 50% or more, while just 12% of white students attended high-minority schools (US Department of Education, 2003). The overwhelming majority of Hispanic students entering college are coming from high schools with less rigorous curricula than many of their non-Hispanic classmates. Sullivan (2007) describes predominantly minority schools' less rigorous course offerings as "a misalignment between high school curriculums and the expectations of postsecondary institutions" (p. 405), which leads to students' under-preparation for college, not by their own choices and out of their control. Then when they get to college, they are more likely to find themselves in remedial classes or they drop out because they are not academically prepared enough to graduate.

In New York City, the largest city in the United States, 72% of students in the public school system are minorities (Hancock & Kolodner, 2015, para. 23). Students have to take a standardized test in order to get into the most elite public schools in the city. In the 2014-2015 school year, just 7% of incoming freshmen students were Hispanic, 5% were black, and the remaining 88% were white and Asian. White and Asian students out-perform Hispanic and black students at an astounding rate. Standardized test scores do not accurately portray minority students' levels of academic abilities, yet this one test determines who receives a superior high school education, and who doesn't. The students

at these elite high schools are more likely to be better prepared for college, and get into a better college because of their elite high school.

High school grades have been shown to be factor in terms of students' persistence through college, but are not all-determining in terms of college graduation. Nora (1987) found that high school grades account for roughly 10% of the variance in student drop out rates. They are certainly a factor, as students who perform poorly in high school will be under-prepared for college level work and will be more likely to drop out before graduation, but there are many other factors that influence students' decisions to stay in college. Nora adds that high school rank is also a factor in decisions to persist through college. Again, students at the top of their high school class are better prepared for college-level work because of the study skills they gain, as opposed to their peers at the bottom of the high school rank. Adelman (1999) found that "high school curriculum reflects 41 percent of the academic resources students bring to higher education; test scores, 30 percent; and class rank/academic GPA 29 percent" (p. vi). Adelman attributes high school rank and grades as 29%, as opposed to Nora's 10%, but both researchers recognize that high school grades are but a small factor of many that determine a student's persistence through college. Adelman adds in the value of a rigorous high school curriculum, as well as the importance of standardized test scores in helping students graduate college.

In an effort to reduce concerns regarding affirmative action, several states have created top percent plans. Students in the top X percent of their high school graduating class are guaranteed admission to their state's universities. In California this is called "eligibility in the local context" and the top 9 percent of seniors are guaranteed admission to their closest four-year college. They can also get into a California State University school

with a 3.0 GPA and no SAT score. In Texas the top 10 percent of students in each graduating class are guaranteed admission to the public university of their choice (Hancock & Kolodner, 2015). These policy changes are critical to Hispanic students in particular because a high portion of the student population in California and Texas are Hispanic. These students must do well in high school to be guaranteed admission to their state's public universities. Adelman (1999) describes these policies as "cheap and easy" (p. 99) because nearly one-fifth of all high schools nationwide do not use class rank, and over half of all high schools nationwide use non-academic courses in their GPA calculations. These policies were created to eliminate the controversy surrounding affirmative action, but may simply continue to help students from affluent families get into college and make it harder for students from less affluent backgrounds to earn a bachelor's degree.

SAT scores have become a controversial factor in college admissions because minority students have been shown time and time again to perform poorer than their white or Asian peers due to test bias (Contreras, 2005; Hoffman & Lowitzki, 2005), but standardized test scores continue to be a factor in many colleges' admissions decisions. Hancock & Kolodner (2015) point out that low-income students are at a disadvantage because they cannot afford the same test prep courses or private tutoring that wealthy students have in order to boost their SAT scores. Students of all income levels could initially score the same on their SAT the first time they take it, but wealthy and affluent students will pay for a test prep class or tutoring classes, and will also take the test multiple times to potentially get the best possible score. Low-income students cannot afford the same classes and are likely to take the test less times, settling on whatever score they get the first time.

Hispanic students do not perform as well as white and Asian students on the SAT. In the 2011-2012 school year, Mexican American students scored an average of 448 on the reading, 465 on the math, and 443 on the writing. White students scored an average of 527, 536, and 515 respectively (US Department of Education, 2013). The average Mexican American score of 450 (rounded up from 448) on the reading was in the 34<sup>th</sup> percentile, while the average white reading score of 530 (rounded up from 527) was in the 60<sup>th</sup> percentile. The average Mexican American math score of 470 (rounded up from 465) was in the 40<sup>th</sup> percentile, while the average white math score of 540 (rounded up from 536) was in the 64<sup>th</sup> percentile. The average Mexican American writing score of 440 (rounded down from 443) was in the 34<sup>th</sup> percentile, while the average white writing score of 510 (rounded down from 515) was in the 58<sup>th</sup> percentile (The College Board, 2011). The average Mexican American student scores in the upper 30<sup>th</sup> percentile on the SAT, while the average white student scores in the lower 60<sup>th</sup> percentile. There is about a 25 percentile point difference between the two average students of both races. The average white student will have higher-tier colleges that he can potentially be accepted to than the average Mexican American student, simply because of SAT scores.

Many colleges have made the SAT optional for admission. Hancock & Kolodner (2015) cite that over 800 four-year colleges so far, which is roughly one-third of the nation's four-year colleges, have made standardized test scores optional for admission. Hancock & Kolodner continue and explain that a 2010 Princeton University analysis of selective colleges that made standardized test scores optional for admission found that "racial diversity vastly improved" (para. 21). Many Hispanic students may be well-prepared for college and may have the qualities an elite college is looking for except for the

standardized test scores. Eliminating these as admission criteria helps many Hispanic college-bound students gain admission to more top-tier colleges, which in turn boosts their likelihood of graduation.

### *College Academics*

Grades in college are important not only because students do not want to fail out due to bad grades, but also because first year grades can be indicative of future success or failure in college. Arbona & Nora (2007) found that students' GPA at the end of their freshman year of college was "three times more important in college persistence for Hispanic and African American students than it was for their White counterparts" (p. 251). This may indicate that Hispanic students may feel dissatisfied enough with themselves if they do not perform academically as well as they feel they should, that they may decide to drop out before graduation, even with passing grades. This may indicate that white students care less about whether their grade is an A or a C, so long as it is passing, while Hispanic students take greater insult to lower grades. No matter what this statistic indicates, Hispanic students with lower grades should automatically be a red flag to colleges, since freshman year GPA is such a high indicator of successful graduation for Hispanic students.

Kuh, Cruce, Shoup, & Kinzie (2008) report that students that engage in "educationally purposeful activities" during their freshman year are more likely to persist to graduation, "even after controlling for background characteristics, other college experiences during the first college year, academic achievement, and financial aid" (p. 551). These educationally purposeful activities include interacting with faculty either face-to-face or over e-mail, preparing for or being engaged in a classroom project or assignment either

alone or with a group of classmates, and tutoring. This indicates not only that academic achievement is not the end-all-be-all of persistence to graduation, but it also stresses the importance of students' engagement in their own learning. Kuh, Cruce, Shoup, & Kinzie stress that colleges and universities should identify students with at least two disadvantages and work to ensure that they are engaged in educationally purposeful activities. Disadvantages include coming from a low-income family, having parents that are not college-educated, and having low standardized test scores. Engaging these students would promote higher levels of college graduation rates and would also work to close the college graduation gap that exists between white and minority students.

### *Peer Groups*

Research shows that students' peer groups in high school and beyond have a strong influence on their academic choices and successes. Arbona & Nora (2007) found that "Latinos who reported that at least some of their friends planned to attend college were 40% more likely to obtain a bachelor's degree than their peers who reported that none or few of their peers planned to attend college" (p. 259). Students tend to make friends with people who are similar to them, including their college aspirations. Arbona and Nora surmise that students with high college aspirations tend to make friends with like-minded students because high schools track students. That is to say, students who are focused and driven when it comes to academics are grouped together in the same classes, and they are more likely to be college-bound, so students make friends with their classmates, keeping the college-bound students together. Arbona and Nora also found that high school students who make friends with other college-bound students are more likely in college to make friends with more successful students in college as well. Being friends with students who

are successful academically can help boost students who might not make it to college graduation otherwise.

Cherng, Calarco, & Kao (2013), found that high school students whose best friends' mothers were college-educated were twice as likely to graduate from a four-year college than students whose mothers were not college-educated. Having a best friend whose mother was college-educated increased that student's chances of graduating college by 60%. Students tend to choose to be friends with people they have many things in common with, including desire to attend and graduate from college. College-focused high school students are more likely to be friends with other college-focused high school students, rather than students with lower educational expectations. This concentrates the benefits of having best friends whose mothers are college-educated on a select few students. Cherng, Calarco, & Kao, however, found that "after controlling for adolescents' and best friends' resources, college expectations, and GPAs, Hispanic and Black adolescents have significantly higher likelihoods of college completion than do their White counterparts" (p. 94). There is no explanation of why this may be the case, but Hispanic students are more likely, according to this study, to graduate from college given the same background characteristics as their white peers. Cherng, Calarco, & Kao also found the benefits of having friends with college-educated parents are shared by all students, no matter their gender, race, socioeconomic status, and regardless of their own parents' levels of education. However, having friends with less educated parents has a negative effect on students' college aspirations. Just as having adult role models that support a college education encourages high school students to enroll in and graduate from college, having adult role models that do not have a college degree and may not value a higher education

makes these students less likely to graduate from a 4-year college. This is even true for students whose own parents are college-educated. Peer relationships can have a strong influence over students' college choices.

### *Multiple Disadvantages*

Hispanic students may have lower college graduation rates than their white counterparts not only because many Hispanic students come from lower socioeconomic backgrounds, or because many Hispanic students have lower standardized test scores, but because these multiple disadvantages compound. Alon (2007) looked specifically at black, Hispanic, white, and Asian students at elite universities and examined how disadvantages overlap and the effect the overlap has upon graduation rates. She defined disadvantages as coming from a low socioeconomic status, having low SAT scores, and having non-college-educated parents. She found that 56 percent of blacks, 44 percent of Hispanics, 16 percent of whites, and 12 percent of Asians had more than one disadvantage. Twenty-eight percent of blacks, 20 percent of Hispanics, 5 percent of whites, and 4 percent of Asians suffered from all three disadvantages. Hispanic students are much more likely than their white classmates to be disadvantaged, and even more likely to experience all three disadvantages, making it that much harder for them to graduate. While 6 percent of Hispanics experienced all three advantages (high socioeconomic status, high SAT scores, college-educated parents), 16 percent of white students enjoyed all three advantages. The more advantages a student has, the more likely he or she is to graduate college.

Advantaged students have parents who know how to navigate the college application process and understand the college experience while in school, their parents have high academic expectations, advantaged students perform well academically and have high SAT



scores, and they have the financial background to pay for school, meaning they do not have to worry about working during school to make ends meet.

### *Sense of Belonging*

Students are more likely to stay in college, and eventually graduate, if they feel like they belong to the college community (Fischer, 2007; Johnson et al, 2007; Maestas, Vaquera & Zehr, 2007). Students can develop a sense of community in many ways – by living on campus, by participating in extracurricular activities, and by feeling supported by faculty. Students that live on campus are more likely to participate in extracurricular activities. Maestas, Vaquera & Zehr (2007) found that “freshmen students who live on campus participate in campus events at almost twice the rate compared to those students who live off campus” (p. 250). Johnson et al (2007) found that students living on campus felt higher levels of peer support and felt more social integrated into the campus community than students who were living off-campus. Unfortunately, almost half of Hispanic students at four-year colleges choose to live with their parents, while less than 20 percent of their white counterparts make that choice (Fry, 2004). Johnson et al suggest that students living on campus in residence halls may experience a higher sense of belonging because of the close relationships that are formed and the experiences gained during students’ first years in residence halls. Hispanic students may be more likely to leave college before graduation due to lack of connection with the campus, since so many of them choose to live off-campus with their parents.

Students who take part in extracurricular activities on campus are more likely to feel a sense of belonging and more attached to the campus community, leading to persistence through college and eventual graduation. Fischer (2007) found that such ties

to the campus community can be especially important to minority students. The absence of connections to the university has been found to increase the likelihood of dropping out or transferring to a different college. Fischer states that a greater involvement in extracurricular activities reduced the likelihood of dropping out for minority students by 83%. Besides extracurricular activities, students who form study groups with other students are more likely to persist, as well as students who take advantage of the enrichment services their college provides. Formal activities, such as extracurricular activities, and informal activities, such as making friends, were both positively related to higher levels of satisfaction with the college for all races, leading to higher persistence and graduation rates.

When students do not feel a sense of belonging in the college community, they may feel marginalized instead. Hernandez & Lopez (2004) found that Hispanic students at white-majority campuses who found a Latino community were more likely to stay in college. They explain “departure is more likely where a sense of marginality exists and when students see themselves located in enclaves” (p. 43). Students that feel alienated by the community, rather than a part of it, are not likely to continue their education at that institution. Nevarez (2001) argues for the importance of colleges and universities admitting a “proportional racial/ethnic representation” (para. 9) so that minority students at predominantly white institutions are more likely to find students like them and less likely to feel marginalized by the dominant white culture. Historically white colleges and universities in particular need to admit students of a variety of backgrounds so that the minority students don’t feel marginalized.

Everyone who has been to college knows that it takes some adjustment to acquire the time management and study skills needed to be successful, however Fischer (2007) points out that “race and ethnicity have a fundamental impact on how college is experienced by minority students and therefore their adjustment process cannot be assumed to be the same” (p. 128). The racial climate of a college can be extremely important, especially for minority persistence to graduation. Minority students at predominantly white institutions have been shown by much research to report more hostile racial climates than their white peers (Fischer, 2007; Johnson et al, 2007; Jones Castellanos Cole, 2002; Lopez, 2005; Museus Nichols Lambert, 2008; Sullivan, 2007), making them inherently more likely not to persist to graduation. Experiencing a more challenging environment underlines the importance for minority students to take part in extracurricular activities, join study groups, make friends with their residence hall mates, and feel a greater connection to the institution. Fischer (2007) suggests that colleges should inform incoming freshmen at orientations about the importance of getting involved in the campus community, as it has been shown to help students persist to graduation day.

Highly selective institutions may be the most challenging for minority students to adjust to – not just because the academics are much more demanding than less selective institutions, but also because the minority student population is smaller than at many less selective colleges. Lopez (2005) found that “the more selective the institution, the more likely Latino students will experience a hostile campus racial climate during their transition” (p. 355). In many highly selective schools, racial minority students are frequently viewed as having gotten into the school because of affirmative action alone, rather than based on their own merit. These views discredit Hispanic and other minority

students who have worked just as hard for a spot in that college as their white peers. Jones, Castellanos, & Cole (2002) explain that minority students at predominantly white institutions can experience stress due to “(a) social climate stresses, (b) interracial stresses, (c) racial discrimination, (d) within-group stresses, and (e) achievement stress” (p. 23). It can be difficult to adjust to college without feeling racial discrimination, so these stresses add to the already heavy stress minority students feel as they enter college at highly selective predominantly white colleges and universities.

Minority students that enroll in a college where there are few other minority students, that is to say the college lacks a “critical mass,” may feel more culture shock upon starting college. Hagedorn, Chi, Cepeda, & McLain (2007) point out that even in Los Angeles, where Hispanic students are the majority in elementary and secondary schools, they may still be in the minority on a college campus, which may very well be the first time in their lives that they have been in a minority group. These minority students, either at a school that lacks a critical mass of minority students in the population, or simply at a predominantly white institution, may feel stereotype threat. Fischer (2010) explains stereotype threat as:

persons who belong to a group for which there is a negative stereotype about them may be vulnerable to underperformance in the domain to which the stereotype pertains, particularly if this domain is an important part of their identity. The person does not have to believe the stereotype him/herself. Rather the effect of stereotype threat is related to the extent he or she believes that others subscribe to the negative stereotype. (p. 20)

At predominantly white institutions, or institutions with very few minority students, minority students may feel as though their nonminority peers are judging their successes and failures, and they may feel anxiety about confirming negative stereotypes about their race in the eyes of their nonminority peers. This anxiety then causes students to perform

at lower academic levels than they are actually capable of. Fischer (2010) explains that this anxiety can eventually lead students to disengage from their studies and may not persist to graduation due to stereotype threat and the anxiety it causes. Fischer found that minority students who expressed more negative stereotypes about their own group were more likely to study less and performed less well academically than their minority peers who did not associate themselves with negative stereotypes. The stereotype threat may come true for those that believe it, and may even lead to minority students dropping out.

Minority students at predominantly white institutions and at elite institutions may also feel performance burden, in addition to stereotype threat. Performance burden makes students feel like they have to represent their entire race and are hyperaware of how others are judging their intelligence level or academic abilities, as their shortcomings will then be projected to be the shortcomings of all people of their race. Fischer (2010) found that white students were the least likely of all races to feel performance burden. Minority students may feel the most pressure of performance burden at elite schools, where their nonminority peers are most likely to feel that their black and Hispanic classmates are there due to affirmative action, rather than due to their own academic credentials. Performance burden and stereotype threat are added stresses in the lives of Hispanic students that may work to prevent them from graduating.

### *Mentoring*

Mentoring students can be through a formal mentoring program, or simply through casual contact with students outside of the classroom in an informal setting. Professors who meet with students outside of the classroom must meet with those students regularly, and preferably early in the students' college careers, which is when they are most likely to

drop out (Nagda, Gregerman, Jonides, von Hippel, & Lerner, 1998). This contact has been shown to improve students' academic integration into the university, helping them feel a sense of belonging, and making students more likely to persist through college until graduation (Fischer, 2007; Nagda, Gregerman, Jonides, von Hippel, & Lerner, 1998; Santos & Reigadas, 2002; Sullivan, 2007).

Research shows that students feel more connected to the university when they have a relationship with a professor outside of the classroom. They are more engaged in their coursework as well, which helps them succeed academically (Fischer, 2007). Fischer (2007) points out that students who talk to professors outside of class and most likely to be highly engaged with the academic subject the professor teaches, and while that professor may turn into a mentor for that student, these students probably do well in college with or without the mentoring because they are already academically motivated. However, getting to know professors outside of the classroom helps all students of all races. Students are more likely to rate the university positively and be more engaged with their academics, helping them persist through college.

Students who enroll in a mentoring program through their university experience the same benefits as students who informally meet regularly with a professor outside of the classroom. Santos & Reigadas (2002) point out that a mentoring faculty member may help a mentee become aware of academic resources available at the college so the student can be more successful academically. At-risk students are in particular need of a mentor to help them stay in college and better adjust to the academic demands of their classes. Mentors can also provide emotional support to students who are stressed by their classes. Santos & Reigadas found that a successful mentoring relationship can lead to "feelings of

self-efficacy, personal control, respect for oneself, and a sense of being valued and respected by significant others” (p. 42). This feeling of self-efficacy and the boost in self-esteem can lead students to more academic success, and eventually to graduation. Santos & Reigadas found that a healthy mentoring relationship with a faculty member can be especially important for Hispanic students, since many students are first-generation college students and may not know anyone outside of the campus community that can mentor them or guide them toward academic success. Having a mentor on campus serve as the guidance that many Hispanic students need to reach college graduation.

Santos & Reigadas found that students get more from the mentor-mentee relationship when their mentor is from the same ethnic background as themselves. Students who had a same-ethnic mentor reported more satisfaction with the mentoring program, they perceived their mentors to be more helpful than students with ethnic-other mentors did, and they rated themselves as more academically capable than students with ethnic-other mentors did. In order for universities with mentoring programs to match students with faculty of the same ethnicity, there must be a sufficient number of minority faculty members willing to be mentors.

### **Suggestions for How to Improve Hispanic College Graduation Rates**

Uncovering the factors that discourage Hispanic students’ college persistence logically leads to discussing what policy changes can be enacted to better support Hispanic students through secondary and postsecondary institutions. Alon & Tienda (2005) explain that “understanding their success in higher education – both who gains admission to and who graduates from selective institutions – holds promise for the design of policy that is

geared to improve their standing in postsecondary institutions and beyond” (p. 297). It is important not only to understand who graduates from selective institutions, but also who successfully transfers from two- to four-year institutions, and who graduates from four-year institutions at all tiers. Policies should then be enacted, as a result of that data, in order to better support Hispanic students, and all students, through colleges of all selectivity levels so that the United States can maintain a highly educated population that is capable of competing in the world economy. The following recommendations include informing parents and students of the college application process, especially parents that have never attended college themselves, incorporating proven programs such as the Puente Project into community colleges to increase transfers to four-year institutions, supporting the DREAM Act federally and in states, creating programs that catch students who are in danger of failing out of college, making systematic changes in community colleges based on data, leveling the playing field for low-income students through financial aid, and encouraging a sense of belonging on all college campuses through clubs and organizations.

### *Dissemination of Information*

Many Hispanic high school students’ parents did not attend college and do not know a lot about the college application process or how to navigate the college field. High school counselors need to make sure Hispanic students and their families understand the college application process, admissions process, financial aid, and everything else that goes along with college. Nevarez (2001) found that “as a group, college-qualified Latino students are significantly less likely than other college-qualified students to have the information necessary to participate in postsecondary institutions” (p. 3). Several states have a



program funded by Kellogg, called ENLACE (Engaging Latino Communities for Education), which supports students from middle school through college entrance. Programs like ENLACE help close the information gap, which in turn will close the college gap among Hispanic families so they can make informed decisions about college. Similar programs include Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP), and the Federal TRIO Programs, which both target middle school students in low-income, high-poverty schools (Santiago & Brown, 2004). These programs need to be expanded so all Hispanic families can have access to the necessary information they need and all students can be prepared for college, as well as recognize that it is possible for them to attend college. Arbona and Nora (2007) also recommend that outreach programs start in middle school so that families have several years to learn about the college process before they have to get started planning for their own child. They recommend that programs emphasize the importance not only of attending college, but doing so immediately after high school graduation and attending a four-year college. Attending a four-year college and attending immediately after high school are both factors that increase a student's chances of graduating college.

### *The DREAM Act*

The DREAM Act is a piece of federal legislation that arrived on the floor of Congress in 2001, but has not yet passed into law (Sullivan, 2007). The DREAM Act, which stands for Development, Relief, and Education for Alien Minors, would provide a pathway to citizenship for undocumented minors who came to this country as children. They would be able to compete for financial aid, they would pay in-state tuition rates at public universities instead of international rates, and they would receive the same educational opportunities

as their classmates who were born in the United States (Contreras, 2009). As of 2009, ten states had passed laws, allow undocumented students to pay in-state tuition rates (Contreras, 2009). These states include California, Texas, Washington, Kansas, Utah, New York, Oklahoma, Illinois, New Mexico, and Nebraska. Contreras points out that undocumented students live in a perpetual state of fear that they or their family members may be deported and they will be separated from the people they love, they have a great deal of difficulty paying for college because of such limited access to financial aid, and they are likely to experience discrimination on campus because of their non-resident status. Passing a federal DREAM Act would alleviate the stress these students face with regards to higher education, they could have the same access to financial aid resources as their peers, helping them become more successful and more likely to graduate from college.

### *Community Colleges*

Since more than half of all Hispanic students enroll at community colleges, yet so few transfer to a four-year college and graduate with a bachelor's degree, community colleges need to consider what policies they can enact to improve Hispanic college graduation rates. They serve, or underserve, the majority of Hispanic students that ever enroll in college. Arbona & Nora (2007) suggest "policymakers must begin to focus on institutional practices in community colleges that serve large numbers of Hispanic students and examine to what extent these practices create a culture of transfer and facilitate transfer behavior" (p. 265). It only makes sense to examine why so many students don't last just two years in community college and what can be done to help them transfer to a four-year college. Martinez & Fernandez (2004) believe that many Hispanic students simply don't receive "the socialization, encouragement, and mentoring to be able to take

advantage of higher education” (p. 53). Community colleges need to develop programs, or incorporate already proven programs such as the Puente Project, that better support their students to degree completion.

Nora (1987) explains that “community colleges have implemented a wide variety of instructional and programmatic innovations. However, the implementation or evaluation of these attempt to reduce attrition has not been very systematic” (p. 32). She goes on to explain that community colleges do not base their changes on any theoretical basis, but rather make changes to the program willy-nilly and hope for the best. Crossing your fingers and saying a prayer is not the best method for implementing a program with any hope of improving attrition rates. Moore & Shulock (2010) give an extensive list of common problems community colleges face and suggested policy changes that might help solve those problems. They first suggest that chancellors should systematically analyze data for each cohort of students, supporting Nora’s advice more than a decade before Moore & Shulock. Other suggestions include helping students meet milestones, such as completing college-level English and math classes, which are required to transfer to a four-year institution, so that students can be college-ready.

### *Financial Aid*

Financial aid has been shown to influence students’ academic success and college graduation rates. Colleges and universities should give out grant money whenever they can, as grant money has been shown to help students more and make them more likely to graduate than loan money (Alon, 2005). Grant money does not have to be paid back and is gifted to the student, while with loans the student not only has to pay the money back, but

has to pay interest on the money, so the student has to worry about being able to pay back even more money than he or she borrowed.

Carnevale & Rose (2003) state that “unmet financial need – the total price tag minus all student aid – was roughly equivalent across income classes in the 1974-75 school year and is still the same for the high-income families but has since doubled for low-income families” (p. 155). Colleges and universities need to consider what they can do to ease this burden, especially for low-income families. If the financial need has doubled for low-income families, this indicates that family income for low-income families has not risen as quickly as the price tags to attend college have risen in the past 35 years. If college prices are consistently rising, they must stay in step with the rate of inflation and the rate of rising income levels across all income levels, but especially for low-income students, as they are the neediest financially. Financial aid and grant money must be the solutions to easing the financial burden and leveling the financial playing field.

Carnevale & Rose suggest that low-income students are discouraged from applying to college, especially expensive colleges, because financial aid decisions are made after admissions instead of before. They argue that colleges and universities should reach out to low-income students in high school and offer them financial help, should they choose to attend that college or university. This would ease low-income families’ minds regarding the financial burden of college, and also make students more likely to apply to expensive, selective schools, knowing they have already been offered financial aid. This would also help more low-income students get into selective colleges, simply because more of them would apply.

*College and University Policies*

Maintaining good grades in college is important because grades, obviously, count toward graduation, but grades in students' freshman year are predictive of their success in their future years. Arbona & Nora (2007) found that "students' cumulative grade point average at the end of their first year in college was three times more important in college persistence for Hispanic and African American students than it was for their White counterparts" (p. 251). Colleges and universities should use this information to identify students who need more support before they fail out of school so more students can successfully complete their degrees.

While many factors that hold students back from graduating college are pre-college factors, that is elements of their lives that are determined before they even step foot onto a campus, some problems that hold students back from completing their bachelor's degree could be fixed by colleges. Universities must acknowledge that Hispanic students are not completing college at the same rates as their white classmates, and universities need to address these issues by changing their policies and doing their part to support their students. Arbona & Nora (2007) say it best:

Administrators and faculty in four-year universities must continue to address the challenges faced by Hispanic students to increase their retention rates. Strategies must be designed to help students navigate the institutions in which they are found. They must also monitor the academic adjustment of students on campus and should provide academic, advising, and mentoring services to help in that adjustment and in obtaining financial assistance and aid. More than anything, institutional practices should strive to develop appropriate support systems for students and among students. (p. 266)

Nothing is going to change over night, but nothing is going to change at all if no one takes the first step. Universities need to step up to the plate and do their part to support their students academically, with advising, by providing mentors, and by helping students obtain financial assistance when necessary.

Some colleges and universities have stepped up to the plate and have worked to decrease the college graduation gap. Engle & Theokas (2010) examined several colleges and universities around the country that decreased, or completely eliminated the college graduation gap at their schools from 2002 to 2007. Towson University, outside of Baltimore, Maryland, has retention programs that target minority students, provides continued academic support for its students throughout their years in college, provides intervention for students the university “deems likely to experience academic problems” (p. 4), helps students find financial aid, and has special first-year courses to support incoming freshmen. More research needs to be done like Engle & Theokas have done, finding exactly what elements successful institutions have incorporated into their policies, so that similar institutions can copy and help Hispanic students across America graduate college.

Considering how important it is for students to feel a sense of belonging on campus, colleges and universities should work to foster inclusive climates for students of all races, ethnicities, genders, religions, and any other characteristics that may make students feel ostracized or discriminated against. Johnson et al. (2007) explain that students should not be required to “adapt to an unalterable campus context” (p. 537), but rather the students’ perceptions of the campus “should guide campus stakeholders in fostering inclusive climates that relate positively to diverse students’ sense of belonging” (p. 537). Predominantly white campuses are especially prone to the minority students feeling culture shock or like they do not belong. Colleges and universities across the nation should ensure that they have a welcoming atmosphere on campus, and that they have cultural

centers and organizations where students of all backgrounds can feel welcome and make friends just like themselves.

Engle & Theokas (2010) studied several colleges and universities around the country that eliminated the college graduation gap among Hispanic students. Three universities that closed that gap from 2002 to 2007 did so by participating in the Access to Success (A2S) Initiative, which is a nationwide effort to cut the college-completion rate in half by 2015. If more universities and colleges, especially HSIs, were involved in A2S, or a similar initiative, even more Hispanic students could benefit and graduate college.

The Puente Project is another program that support student success in college. It was started in a community college in California in 1981 and is now in 2 middle schools, 32 high schools, and 59 community colleges in California, with about 14,000 students enrolled (“About the Puente Project”, 2015). The Puente Project targets first-generation college students, which many Hispanic students are (Laden, 1999). The Puente Project has been so successful because it incorporates students’ cultural identities into an intensive freshman English class, counselors are appointed to students to help them face the academic challenges ahead of them, and the students are also paired with mentors from the Hispanic professional and academic community. Students in the program get academic and career guidance, along with support and motivation, which can be key to helping first-generation students complete community college and successfully transfer to a four-year institution. In 1999, Laden reported that 48% of students in the Puente program transferred to a four-year institution within 3 years, while just 7 % of non-Puente students did. Programs like the Puente Project need to be replicated in community colleges with high Hispanic

populations all over the country in order to better support Hispanic students and help them successfully complete a bachelor's degree.

### **Lessons to be Learned**

All Hispanic students are treated in the literature as though they are the same, but the term Hispanic encompasses people from many different countries. The literature lacks the ability as of yet to distinguish among the Hispanic students and see if certain groups are more successful than others and why that may be. Almost all the data derives from large nationwide databases, making it impossible to distinguish between students from Guatemala and students from Argentina. Researchers need to focus on specific Hispanic groups to see how different groups find success, and also on individuals who have successfully earned their bachelor's degrees. What lessons can be learned from their stories? The literature focuses on all the reasons that hold students back from graduating, but none of the reasons that help students walk across the graduation stage. Arbona & Nora (2007) point out that many community college students who successfully transferred to a four-year college "shared precollege characteristics with students who started college in a four-year institution" (p. 251). Why aren't these students starting at a better (four-year) school? What can be done to identify these students and what can be done to better support students who aren't as driven to graduate? None of the literature yet has any answers to these questions.

### **Conclusion**



This thesis highlights the factors holding back many Hispanic students from graduating college at the same rate as their white classmates. The literature presents a variety of pre-college and in-college factors to the student experience that may serve as roadblocks preventing Hispanic students from completing their college degrees. These factors include the selectivity of the college, the student's financial background, the student's academic preparation in high school, and the student's sense of belonging in college. The literature makes a few suggestions for how Hispanic students can be helped so that more of them graduate college. These suggestions include dissemination of information to middle and high school students, providing financial aid in the form of grant money to underrepresented students, and aligning college and university policies with the goal of increasing Hispanic students' graduation rates. As the Hispanic population grows, universities must better address Hispanic students' needs in order to improve the U.S. economy down the road.

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