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INFLUENCES ON HISPANIC-AMERICAN ACADEMIC FACTORS: A SELF-
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INFLUENCES ON HISPANIC-AMERICAN ACADEMIC FACTORS: A SELF-
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Dedications

I dedicate my dissertation work to my maternal grandmother, Mary Cherbonnier. Without learning about her experiences when serving as a principal at a school in south Texas, my dissertation work would have no foundation. Furthermore, I dedicate this work to my immediate and extended family. I am honored to be able to be raised in a family system that has instilled guiding values that I hope to pass on to future generations. I also dedicate my dissertation to unnamed individuals who have provided me with experience, strength, and hope. I am eternally grateful to have these people in my life. Finally, I dedicate my dissertation to the teachers and administrative personnel who devote their lives to the educational system. I have seen the love and care that these people have for the students they work with, and it served to motivate me during difficult times throughout this project.

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Table of Contents

Acknowledgements	iv
List of Tables	vi
List of Figures	vii
Abstract	viii
Introduction	1
Literature Review	3
Ecological Systems Theory	3
Brief History of Individuals of Hispanic Origin	7
Immigration in the United States	8
Relevant Historical Events for Hispanics in the United States	9
Contemporary Educational Issues	13
Communication Between the School System and the Family	21
Acculturation	22
Motivation	24
Academic Factors and Self-Efficacy	29
Ryan and Deci's Self-Determination Theory	31
Mediating Factors	33
Statement of Problem	35
Purpose	38
Hypotheses and Research Questions	39
Method	43
Participants	43
Measures	48
Procedure	53
Results	54
Correlations	54
Mediation tests	57
Hypotheses and Research Question	58
Discussion	63
Hypothesis One	63
Hypothesis Two	66
Hypothesis Three	68
Hypothesis Four	68
Research Question	69
Limitations, Implications, and Future Research	71
Appendix A: Measures	87

List of Tables

Table 1 Reported Ethnicity	45
Table 2 Highest Parental Level of Education Attained	47
Table 4 Regressions with DVs of Class Rank and CGSE	59
Table 5 Regressions with DVs of GPA and CGSE Persistence	61
Table 6 Intrinsic Motivation Mediating SES and Maternal Education	62
Table 7 Traditional Cultural Values and College-Going Self-Efficacy	63

List of Figures

Figure 1 Ecological Systems Theory with Constructs of Interest in the Study	5
Figure 2 The Motivational Continuum.....	25
Figure 3 Mediation Model for Hypotheses Two and Four	41
Figure 4 Mediation Model for Hypotheses One and Three.....	42

Abstract

Recent findings reveal that Hispanic-American high school students graduate at a rate 30% lower than Caucasian students. This study examined the influence of Hispanic cultural values, acculturation and familial factors on academic motivation, academic success and college going beliefs while conceptualizing the influences from an ecological systems perspective. Linear regression and mediation analyses were used to test two models. Results indicated that familial factors were significantly correlated with college going beliefs. Socioeconomic status as well as maternal educational attainment was significantly correlated with academic success and college going beliefs, respectively, and intrinsic academic motivation was found to mediate both of the aforementioned regressions. These findings support the feasibility of using a systems oriented approach to study how pertinent cultural and familial factors influence academic outcomes in Hispanic-American students.

Introduction

Hispanic-American students are likely to embark on their high school career with similar educational and career aspirations as those from a Caucasian population, yet there are historically disproportionate dropout rates and overall academic underachievement from students of Hispanic descent (Goldenberg, 1996; Henderson, 1997). Cultural as well as familial factors play large roles in Hispanic students' academic decisions (Freeberg & Stein, 1996). It is important to understand how wider cultural values as well as specific familial factors impacts the framework of adolescents (Freeberg & Stein, 1996). Additionally, the interaction between and within systems is important to consider. Knowing what factors impact academic motivation can inform practitioners, researchers, teachers and school support personnel.

Many first generation parents of adolescents immigrated to the United States to provide their children with academic opportunities, among other things (Lui & Rollock, 2012). With this opportunity comes an expectation to do well in school to support and honor the family (Chao, 1995). Hispanic-American adolescents are influenced by two unique cultural paradigms. Hispanic culture emphasizes group-based goals and close identification with one's family throughout life, known as collectivism (Freeberg & Stein, 1996). Mainstream American culture is more closely defined by individually oriented goals and independence. Hispanic-Americans' collectivistic ideals continue to influence an adolescent even after being exposed to a traditional mainstream American values (Freeberg & Stein, 1996). Therefore, it can be inferred that Hispanic-American adolescents retain values from their traditional culture while integrating values from American culture, known as acculturation (Ramírez, 1983). The desire to integrate

different cultures into one's life is an ongoing process, and can vary from rejection of the host culture, to complete assimilation to the host culture (Rumbaut, 1994).

Research exists on the impact of acculturation level, ethnic identity and parental factors on academic self-efficacy and college readiness with Hispanic-American students. A separate body of literature grounded in Ryan and Deci's (1985) self-determination theory (SDT) focuses on variables that impact academic motivation. Work has been done that integrates the ecological systems theory (Bronfenbrenner, 1979, 1994) within the context of Hispanic students (LaFromboise & Coleman, 1993; Zell, 2010).

No studies have been conducted that examine the influence of Hispanic cultural values, acculturation and familial factors on academic motivation, academic success and college going beliefs while conceptualizing the influences from an ecological systems perspective. To fully understand the ways in which various constructs can inform one another, the relevant literature will be presented in both a hierarchical and systems focused manner. A systems approach places the adolescent in the middle of three systems of varying degrees of interaction with the adolescent. Cultural and historical factors will be reviewed first and conceptualized as having only indirect interaction with the adolescent through direct interaction with the parental socioeconomic status and level of education. Next, cultural and familial values, with direct interaction with the adolescent will be reviewed. At this same interaction level, acculturation factors will be discussed. Finally, a review of factors that are closest to the individual will be reviewed and integrated. These factors are: academic motivation, academic achievement, and college-going beliefs. The ecological systems theory will be utilized throughout the

review of the literature as well as relied upon to conceptualize the hypotheses and statistical methods selected. A figure will be presented in the first section of the literature review that to visually demonstrate how the factors interact.

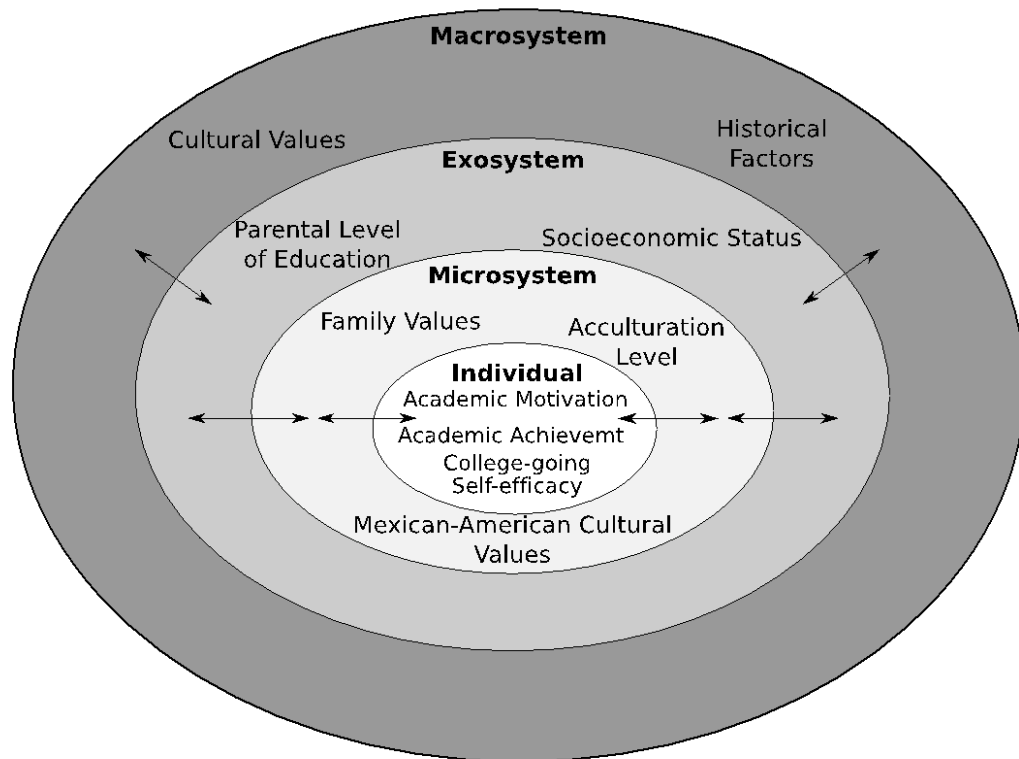
Literature Review

Ecological Systems Theory

Given the number of factors (i.e., history, culture, familial values and acculturation) that combine to influence the adolescents' academic mindset, a framework to consider these factors in is necessary. The adolescent interacts within systems, and is an active agent of change to these systems. Bronfenbrenner (1979, 1995) is one of the primary researchers who has focused on the ways in which individuals develop within various levels of systems. This concept is especially relevant when considering family, culture, and the interaction between and across systems. For instance, "change in one aspect of the social ecology system may affect other parts of the system or the system as a whole" (J. O. Berry, 2009, p. 48). The role of the parent is valued within this theory because the parents own capacity to function is influenced by culture and other external factors, and is just as relevant as the functioning of the child (J. O. Berry, 2009). Similarly to SDT, ecological systems theory assumes that individual development occurs due to active involvement within the five system levels, all of which have their own governing norms, cultures, and styles of interactions (Bronfenbrenner, 1979, 1995). The four systems, in order of increasing distance from the individual, discussed in this theory that are most relevant to the current study are the microsystem, mesosystem, exosystem and macrosystem. The microsystem is "the immediate system within which the individual exists", such as the family and school (J.

O. Berry, 2009, p. 48). One's mesosystem is understood as the connections between microsystems, such as a student's parent interacting with the school system. The mesosystem will not be used to conceptualize the constructs in this study. The exosystem is the interaction between the microsystems, but in which the individual has no direct involvement. For example, a child benefits from his or her parents' healthcare without making any active decisions regarding the selection of the policy. The macrosystem encompasses the historical and political influences that can be seen as overarching and more stable across time (Bronfenbrenner, 1994). The last system, which will not be utilized in the current study, is the chronosystem. The chronosystem looks at change over time and the development of the person or environmental system. Please see Figure 1 for a depiction of this model. The arrows indicate how interactions between systems are conceptualized as occurring in both directions.

Figure 1 Ecological Systems Theory with Constructs of Interest in the Study



Ecological Systems Theory will assist with the understanding of how influences from the family, culture and school all impact the student. In a typical day, students are impacted by these systems, whether they are acutely aware of the impact or completely blind to it. The systems are also interacting with one another, although possibly not on a daily basis. Studies have started to examine how these systems impact Hispanic students' motivation. For instance, one study demonstrated that an individual value of self competence was correlated with academic achievement, but parental involvement was not found to be a significant contributor (Marchant, Paulson, & Rothlisberg, 2001). Within the microsystem of the school, one study found students' sense of belonging was found to directly impact academic achievement with a population of Hispanic students (Roeser, Midgley, & Urdan, 1996), whereas another demonstrated only indirect effects

on academic performance (Chun & Dickson, 2011). Thinking more broadly, the cultural values held by the parents can impact the behaviors of the students, even if this is not directly discussed within the family context (Cruz et al., 2011).

The current study will assess how numerous systems impact the student in both direct and indirect ways. While historical factors will not be directly measured in the study, it is important for the reader to have an understanding of the temporal impact on the family and student. Cultural values will be measured and will encompass religious beliefs, respect for elders, and traditional gender roles. These factors will be elaborated on in the Mexican American cultural values section. Historical factors and cultural values are understood to fall into the macrosystem; they directly influence the exosystem (i.e., level of parental education and socioeconomic status) and indirectly influence the macrosystem and the individual. The exosystem directly influences the microsystem, with indirect influence on the individual. Socioeconomic status will be assessed from the students' perspective and will include the subjective status of their family within American society. Family values will be measured and will encompass support from the family, obligation to the family, and the identification of the self within the family. Acculturation level is conceptualized as falling under the microsystem, as it is a proximal indicator of the individuals' direct interaction within the microsystems (i.e., school, home and community). The factors of academic motivation, academic success and self-efficacy towards attending college are viewed as being most closely linked with the student. Throughout the remainder of the literature review, the Ecological Systems Theory can help ground the various constructs and

provide a framework to understand the complex connections that occur between systems.

Brief History of Individuals of Hispanic Origin

The United States (U.S.) population has become increasingly diversified in regards to the ethnic makeup of individuals who live in the states. First and foremost, this study will focus on those of Hispanic origin. It is important to clearly define how the Hispanic population is identified, both by the individual and the governing bodies. Hispanic origin can be viewed as the heritage, nationality group, lineage or country of birth of the person or the person's parents or ancestors before their arrival in the United States (Ennis, Rios-Vargas, & Albert, 2011). People who define their origin as Hispanic, Latino, or Spanish may be any race (Ennis et al., 2011).

The Hispanic population is estimated to include 53 million people living in the United States (U.S. Department of Health & Human Services, 2014), which comprise 16.9% of the total U.S. population. More than half of the growth in the total population of the United States between 2000 and 2010 was due to the increase in the Hispanic population (Ennis et al., 2011). In the South, where the current study took place, the population experienced a growth of 57% in the Hispanic population, which was four times the growth of the total population in the South (Ennis et al., 2011).

People who claim Hispanic origin can have family lineage from Cuba, Mexico, Puerto Rico, South or Central America or Spain. Those of Mexican descent make up the majority (64.3%) of all those who identify as Hispanic (U.S. Department of Health & Human Services, 2014). This majority subgroup of Mexican-Americans is crucial to focus on due to the history of political and cultural discord that has occurred in the U.S.

Another important component, especially due to the current study focusing on Hispanic High School students, is that 33.2% of Hispanics were under the age of 18 in comparison to 19.7% of non-Hispanic whites (U.S. Department of Health & Human Services, 2014). By the year 2020, it is estimated that Hispanic adolescents will account for 25% of the youth population in the United States (Kaplan, Turner, & Badger, 2007). This large and growing population of younger individuals of Hispanic descent has great potential for impacting various systems within the United States.

Immigration in the United States

To immigrate is defined as “to come into a country of which one is not a native for permanent residence” (Merriam-Webster Online, 2014). Immigration of diverse people with deeply ingrained customs, language and culture to the U.S. is a key historical component to understand. One reason for this is that the blending of people who speak a different language and whose custom differ from those who resided in the area prior to the arrival of immigrants has potential to create a volatile mix. In the mid nineteenth century, the influx of British, German and Irish immigrants made up 90% of all immigration (North, 1966). Amongst these three primary groups, the Irish were not as financially well off, which led to them being the most targeted by anti-immigrant groups (Goldenberg, 1996). The decision to target the Irish immigrants was also fueled by more outwardly apparent customs that were drastically different from the Americans who currently resided in the area. It is apparent that a specific group of people is more likely to be targeted when they differ from the majority population in both explicit and implicit ways. Furthermore, less monetary capital contributes to a subset of immigrants being viewed as atypical or less than.

Hispanics living in the U.S. are comprised of those who were living here prior to the American Southwest becoming part of the United States as well as those who have immigrated afterward (Goldenberg, 1996). Regardless of generation status, Hispanics have persevered through a longstanding history of covert and overt racism, especially within the educational system. In addition to ethnicity, Hispanic students and their families have faced hardship due to socioeconomic and worker status. To fully appreciate the current state of affairs it is important to more fully understand the complexity of historical factors that influence the student and their family.

Relevant Historical Events for Hispanics in the United States

Difficulties started in the mid 1800's, prior to the Mexican War. Mexicans were granted citizenship by not only Texas, which gained independence from Mexico in 1836, but also by the U.S., which annexed Texas in 1845 (Vela, 2012). According to Congress, all individuals were recognized as citizens of the former Texas Republic to be United States citizens when Texas joined the Union. Furthermore the Treaty stipulated that all inhabitants in the ceded territory, territory lost by Mexico to the U.S. at the signing of the Treaty, who did not either leave the territory or announce their intent to remain Mexican citizens would automatically become U.S. citizens after one year (Wilson, 2003, Spring). Therefore, the courts concluded that Congress intended that Mexicans were entitled to become citizens (Vela, 2012). The court upheld that Mexicans were white within the meaning of the naturalizations laws and thus Mexicans were given the benefit of the doubt with regard to their legal *whiteness* (G. Martinez, 1977, Fall). Nonetheless in the 1930s census, the Census Bureau counted Mexicans as a separate race—as persons born in Mexico or with parents born in Mexico and who were

not white... (Wilson, 2003, Spring). In the 1940s Census, individuals of Mexican descent were reclassified as *white* if they were not *definitely Indian or of other nonwhite race* (Wilson, 2003, Spring). A review of these policy changes has evidenced that citizenship rights and how Mexicans were or were not considered *white* has undergone many changes throughout the years.

In 1893, three years prior to Plessy v. Ferguson, the Texas legislature enacted a statute to provide separate but *impartial* public free school for *white and colored* children (Vela, 2012). Initial responses to this statute demonstrated the continuation of derogatory views towards Hispanic Americans. Anglo school officials, with their beliefs that Mexican American school children were culturally deficient, created separate classrooms for Mexican students within Anglo schools, or made entirely separate schools (Vela, 2012). The idea of a truly impartial nature of separate schools breaks apart very early on. In 1905, the legislature enacted a statute that stated “it shall be the duty of every teacher in the public free schools...to use the English language exclusively and to conduct all recitations and school exercises exclusively in the English language” (Wilson, 2003, Spring, p. 155). As stated previously, an immigrant group is most easily targeted when differing outward appearances and a foreign language are present in conjunction with less monetary means. Similar to the Irish immigrants, Mexican immigrants lacked substantial economical capital. This led to complications within the educational system. A regional study funded by the Office of Education reported that adequate and appropriate teaching materials were all but absent within these separate and impartial public schools (Valencia, 2008).

By the late 1920s, ninety percent of the public schools in South Texas were segregated according to the Anglo or Mexican enrollment (Montejano, 1987). Superintendents of school districts justified this segregation due to the fact that many of the Mexican American children were from migrant families who worked at distant farms for much of the school year. Anglo children, for the most part, were not from migrant families and therefore would have an educational advantage in the classroom. Superintendents cited these circumstances as likely influencing the self-esteem when the scholastic scores of migrant children were held up against the pre-existing standards set in place by non-migrant children (Vela, 2012). Segregation, according to these factors, was decided upon not due to race and attempted to offer both groups of children with a fair opportunity (Wilson, 2003, Spring).

In later years, some forward progress towards inclusion was made, but students were oftentimes still segregated due to language differences and migrant worker status (Vela, 2012). In 1945, segregation on the basis of national origin, not race, occurred in the Main Street Elementary School of the Westminster School District in California (Valencia, 2008). Facts like this demonstrated that the American educational system was going the wrong direction. It was evident to the Hispanic people that support was not likely to come from within the educational or political systems at the time. In the 1940s, the League of United Latin Americans Citizens (LULAC) was formed to combat efforts by nativist groups (Vela, 2012). Although this group never officially formed a litigation committee within the organization, it was a major supporter of lawsuits seeking to protect Mexican American rights (Vela, 2012). The 1960s did not prove to be a very active decade in regards to the Mexican American community and education

lawsuits. In the 1970s the question was posed as to whether the Mexican students were protected under the previous statute that made it illegal to segregate schools based on race ("Brown v. Board of Education," 1954). On August 2, 1971, it was affirmed that the ruling that segregation of Mexican Americans and African Americans was unconstitutional ("Jose Cisneros v. Corpus Christi Independent School District," 1972). In 1982, the supreme court ruled on the case Plyler v. Doe, which ensured that schools could not refuse education to students based on immigration status ("Plyler v. Doe," 1982).

Progress within the, now racially diverse classrooms, continued over the years. However, deficits in this forward progress were brought to light in 2006. Luresia Mayorga Santamaria had three children who were enrolled in an integrated school where “with-in school segregation” persisted (Vela, 2012, p. 172). Mexican American children were being segregated from their white classmates because they were forced into English as a Second Language (ESL) classes even though they were proficient in English ("Santamaria v. Dallas Independent School District," 2006). Further insult to injury came from more details within this case. The plaintiffs noted that different tours of the school were presented to the parents of Anglo children (Vela, 2012). Parents of Anglo children were assured that their children would not be placed in classes with a high number of minority children, since specialized classes would be provided to them due to Limited English Proficiency (Vela, 2012). The judge’s ruling included damages against the school principal, eliminating racial segregation of the school that was previously being run as a private school for Anglo children behind a façade of an integrative school ("Santamaria v. Dallas Independent School District," 2006).

In summary, the mid 1800's, were the start of historical issues for Mexicans living in the U.S. In 1893 the Texas legislature enacted a statute to provide separate but impartial public free school for white and colored children. However, this statute did not translate to observable equality in the school system. In later years, some forward progress towards inclusion was made, but students were oftentimes still segregated due to language differences and migrant worker status. Progress within inclusive classrooms has and will continue to change over the years, leading to new challenges.

Contemporary Educational Issues

The educational gap between Hispanic students and students of other ethnicities is an issue throughout the various educational institutions. According to a 2012 U.S. Census Bureau report, 64% of Hispanics in comparison to 92% non-Hispanic Whites have a high school diploma (U.S. Department of Health & Human Services, 2014). This discrepancy continues to widen when students pursue higher education. Recent findings estimate 13.8% of Hispanics in comparison to 32.5% of non-Hispanic Whites have a bachelor's degree or a more advanced degree (U.S. Department of Health & Human Services, 2014). School success is among the most significant correlates of overall physical, mental and social wellbeing (C. R. Martinez, DeGarmo, & Eddy, 2004). Therefore, it is imperative to more fully understand contemporary educational issues faced by Hispanic-American students and their families.

The educational system faces the challenge of adapting curriculum and methods of teaching to students of various ethnicities. With the population of people of Hispanic descent continuing to increase, it would be wise for school systems to focus their time and attention on this population. Historically, school systems in regions where the

proportion of students of Mexican descent is increasing have had a difficult time adapting to this change (Henderson, 1997). In addition to the longstanding history of racism, cultural exclusivity and segregation based on working status families funding shortcomings complicate the issue. Immigrants of Hispanic descent oftentimes come with limited levels of education and little monetary capital (Goldenberg, 1996). It is apparent that the classrooms where the students are prepared to learn in are also faced with financial struggles. A regional study funded by the Office of Education reported that adequate teaching materials for Mexican children were deficient in the schools (Valencia, 2008). Hispanic students not being offered the same quality of educational opportunities as their fellow Caucasian classmates (Henderson, 1997) was attributed to both economic differences (Chun & Dickson, 2011) and discontinuities between language and values from the home and school (Tyler et al., 2008).

Differing educational trajectories between Hispanic-American and Caucasian students starts from a young age (Woolley, 2009). Educational trajectories can be influenced by many sources, and social relationships with adults across various settings that adolescents are involved in are important aspects to consider (Woolley, 2009). It was discussed previously that Hispanic-American families might not have similar amounts of financial capital when compared to Caucasian families. However, only considering one type of capital would be painting an incomplete picture. Social capital, which will be discussed in depth in a later section, is a resource that Hispanic-American families can have in abundance. Social capital can be understood as educational expectations, social support, academic presence (i.e., parents being involved in homework, programs pushing for an academic focus, and schools encouraging students

to succeed in homework prior to attending to recreational activities; (Woolley, 2009). Valdés (1996) discussed how a lack of understanding between Mexican immigrant parents and teachers contributes to a rift, where the students eventually suffer. Misunderstandings can be traced back to the most basic concept of the term education. Hispanic-American parents include formal education as well as the more holistic upbringing of a child within the cultural and familial values relevant to the nuclear and extended family, known as *educación* (Reese, Balzano, Gallimore, & Goldenberg, 1995). When conceptualizing the construct of education from this perspective, the parents are placed at the center of the child's education to adulthood. Educational settings the youth participates in are viewed as secondary yet essential components (Woolley, 2009). It is not a stretch to assume that, oftentimes, the Hispanic parents will be focused on *educación*, and teachers focused on education (Valdes, 1996).

Mexican-American cultural values. Mexicans, Cubans and Puerto Ricans are the three largest Hispanic groups living in America (Ortiz, Valerio, & Lopez, 2012). Everyone is impacted by their access to social capital (i.e., group membership, educational institutions, access to information, language and SES; Ortiz et al., 2012). Another type of capital, known as cultural capital, can be viewed as language, art, food, history and other preferences that are passed down through the generations (Monkman, Ronald, & Théràmène, 2005). There are some differences across these three ethnic groups. For instance, Mexican-Americans' ethnic ties have continued to provide them with rich cultural capital but not in the way of social capital, as evidenced by them falling behind both the Cubans and Puerto Ricans in regards to educational attainment (Ortiz et al., 2012). One method of lessening the disparity between cultural and social

capital is to provide the families with more educational information, especially in the realm of college readiness/adjustment (Woolley, 2009). Auerbach (2004) embarked on this challenge, and demonstrated that a culturally competent program directed at working class Mexican immigrant parents can successfully result in college enrollment. In addition to educating the parents on the strategies to improve the chances their child would be successful in college, the study found that networking between likeminded families was another way to increase both social and cultural capital (Auerbach, 2004). These researchers have validated the importance of impacting academically related troubles from a systems oriented perspective. For example, the communication of two microsystems (i.e., families with other families) as well as using information from the macrosystem (i.e., school system) to inform practice within the school does indeed result in positive outcomes for the child as well as their current and future family.

The sizeable majority of Hispanic-American students are attending school not only for themselves, but for their family (Fuligni, Tseng, & Lam, 1999). In Hispanic culture, this concept of placing the families' values before individual values is one aspect of familism. Borrowing from Freeberg and Stein's (1996) definition of familism, this study views familism as "the set of attitudes which reflect the relative importance given to family membership in terms of support, sacrifice and involvement" (p. 458). The values that an adolescent integrates during their formative years are especially interesting, because these same values will likely guide their future decisions across numerous domains (Knight et al., 2008). The term Mexican-American is fitting due to the likely bi-cultural identification of adolescents in this population. These family oriented values can go against the individualistic values in the American

academic/social society, leading to difficulty in the life of an adolescent (Rumbaut, 1994). This deeply ingrained sense of obligation and orientation to the family is common amongst Mexican immigrants in particular (Gil, Vega, & Dimas, 1994) and has been shown to be present in both genders (Hernandez, 2000).

Values such as familism are intertwined with Hispanic culture and passed down throughout the generations (Bronfenbrenner, 1979). These values can include: receiving social support from the family, interdependence in daily tasks and overall goals, extended family members living in close proximity to one another and overall positive family relationships (Romero & Ruiz, 2007). Close family ties and the act of placing the family values above individual values can be a protective factor for Hispanic adolescents risky behaviors (Gil, Wagner, & Vega, 2000). The younger generation respecting their older generation, and especially their older relatives, is another common core value in the Hispanic culture (Knight et al., 2008; Woolley, 2009). The idea of respecting your elders and respecting hierarchical relationships within the family can be a challenge for Hispanic adolescents (Zayas, Lester, Cabassa, & Fortuna, 2005). When compared to their Caucasian counterparts, Hispanic adolescents are more likely to believe that they should not disagree with their parent's decisions and desires for them (Fuligni, 1998).

While the number of potential factors that influence academic motivation is great, factors common within the Hispanic culture are especially relevant with the population in question. Bailey and Stoltenberg (2013) found that higher levels of family obligation accounted for higher rates of self-reported intrinsic motivation in a sample of Hispanic high school students. In a sample of one thousand 10th and 12th grade students

with diverse ethnic backgrounds (i.e., Filipino, Chinese, Mexican, Central/South America and European) it was found that adolescents who placed more importance on family obligations were more academically motivated, spent more time studying and doing homework at home and were not any less involved in peer relationships (Fuligni et al., 1999).

The cultural value of *educación* refers to both formal education and the overall education to life experiences deemed important to pass down to younger generations through the family system (Henderson, 1997; Woolley, 2009). This concept is truly emphasized by phrases such as “estudia y sea alguien” or “study and be somebody” (M. M. Suarez-Orozco, 1989). Hispanic parents are also likely to introduce their children to the importance of hard work and the learning of cultural values from an early age (Altschul, 2011). When a sample of Hispanic students perceived this involvement as being focused on the realm of school, more parental involvement was demonstrated to be significantly correlated with school expectations and perceiving school as important (Ibañez, Kuperminc, Jurkovic, & Perilla, 2004).

On the receiving end of these messages, students could be left feeling a sense of responsibility and honor if they are to uphold the desires of their parents. These messages of being urged to do well in school can be powerful, but not necessarily associated with direct engagement in the educational system from the parents (Altschul, 2011). Similarly, parents could be pushing for a goal of an academic degree but without backing up this goal by assisting their children with the completion of homework (Hurtado-Ortiz & Gauvain, 2007). This lack of support could come from any number of static (e.g., lack of parental education) or variable (e.g., irregular work hours) factors,

but are still important to consider. Depending on how the child chooses to perceive common messages of obtaining an education in order to gain a higher paying job than his or her parent currently holds, a sense of obligation could accompany these wishes (Henderson, 1997).

The influence of the family on the student is important to consider due to the great impact, both supportive and detrimental, of the family on the student (Hernandez, 2000; Ojeda, Navarro, & Morales, 2011; Schwarz, Barton-Henry, & Pruzinsky, 1985). One's responsibility to the family has been shown to be higher in first and second-generation Mexican adolescents than in Caucasian adolescents (Buriel, 1993). Another interesting finding is that emotional support and higher expectations for good behavior is prevalent within Mexican-American families (Buriel, 1993).

In summary, Hispanic-American students attend school both for themselves as well as to honor and respect the desires from their family. Cultural values, such as educación, have been passed down through many generations and add to the rich cultural capital that the three largest Hispanic groups (i.e., Mexicans, Cubans and Puerto Ricans) possess. Familial influences the student is exposed to are important to study due to the demonstrated impact they have on the student.

Home and socioeconomic factors. Considering the dilemma from the home environment is equally important. Influences from the home environment can be broken down into static and variable factors. Static factors are more stable over time, but still have the capability of being changed. Kao (2004) discussed how the immigrant status of parents was correlated with higher academic expectations for their children. Additionally, factors such as educational attainment of the father have been shown to be

correlated with academic achievement (Cornelius-White, Garza, & Hoey, 2004).

Overall educational attainment from the parents as well as SES is lower in families where parents were born in Mexico and immigrated to the United States (Buriel, 1993).

At the same time, a first generation student of immigrant parents is likely to receive values such as a “desire for change and upward mobility” (Buriel, 1993, p. 988).

Another interesting interaction between parental educational attainment and the way education is discussed at home is in the way behaviors are presented to the child. Laosa (1982) found that higher educational attainment in the mother was correlated with less modeling of behaviors and more praise and inquiry, which are behaviors more similar to the teachers and administration in the school. These mixed findings certainly demonstrate that the microsystem of the home, and the exosystem of the parent’s educational attainment impact the child.

Familial involvement. To best understand how parents are likely to communicate the topic of educación to their children, it would be helpful to hear directly from parents. Parents of young children, ages 5-9, helped researchers understand their perspectives. When asked about the topic of educación, one parent stated, “If they aren’t educated (i.e., well brought up) at home, they are a disaster at school” (Reese et al., 1995, p. 64). Another mother was asked what she would like for her son's future occupation, she stated "I'd like him to study, and above all to be upright, to have good behavior, to become (literally: to arrive at being) a person of respect and to be respectful of others too" (Reese et al., 1995, p. 64).

While parents play large roles in their child’s stance on education throughout life, they play an especially large role in their adolescents’ lives. Influence can come

from parents own educational attainment (Laosa, 1991) their style of motivating their children to attain academically (Henderson, 1997) and discussion of school based matters at home (Trusty, Plata, & Salazar, 2003). These influences come at a pivotal time in the academic life of a high school adolescent. Potentially, the student is facing the decision about embarking upon an educational journey that no one else in his or her family has started upon or seen through to fruition. The bidirectional influences between the exosystem (e.g., parental level of education) the microsystem (e.g., family system) and the individual are displayed here.

Communication Between the School System and the Family

The finger pointing game appears to be taking place in the context of Hispanic-American students academic concerns. The parents are likely to fault the schools for lack of standards or resources, and the teachers and schools might fault the students and their families for low motivation caused by lack of involvement and interest (Henderson, 1997). It is no wonder that this framework leads to problems in the classroom and students potentially being passed on to the next grade level. Even though some schools and even whole districts are immune to this finger pointing game, the alarming rate of only 6% of Hispanic-Americans being predicted to obtain a bachelor degrees means more systematic change is needed (Alfaro, Umana-Taylor, & Bamaca, 2006).

Qualitative research with middle school parents of Hispanic-American adolescents demonstrated that they “seem starved for school-related information on matters such as how to get into college” and that “their children needed opportunities to talk with role models such as the Latino graduate students” (Henderson, 1997, p. 110).

Other researchers have found ethnic differences in regards to where structure is expected to come from. For example, Hispanic parents might be more reliant on the school system to provide structure, whereas Caucasian parents might be more involved in this area (Ancis, 2004). Findings such as these point to the need for more collaboration between the parents and the school system to promote current and longitudinal academic motivation and success. This is easier said than done though. Depending on the acculturation level of the parents, external factors (i.e. being unable to access affordable child care during meeting times) and language differences could get in the way of effective communication between parties.

While academic and value driven education can be viewed as analogous at home, this is likely not always the case in the schools. This could be, in part, due to the school system lacking the connection between cultural and educational factors. This possibility increases the importance of students receiving social support and/or mentoring from students of similar ethnic backgrounds and who hold positive ideals towards academic attainment. Another way to assess the impact of the students' views on the Americanized educational system would be to assess how the level of acculturation impacts their academic motivation and success. Information regarding the student's acculturation style would allow for a more complete understanding of the mixed interactions on intrinsic motivation and college-going self-efficacy.

Acculturation

Acculturation is a relevant construct due to the power it has to impact all four systems. It can be defined as “the measurement of the degree to which someone has integrated new cultural patterns into his or her original cultural patterns” (Paniagua,

2005, p. 9). Acculturation can be both internal (e.g., thinking in two languages) and external (e.g., choosing a friend group comprised of only members from the host culture). Someone's level of acculturation can be categorized into one of four dimensions. Berry (1997) describes the categories as assimilation (taking in the receiving culture and shedding the heritage culture), separation (rejecting the host culture and retaining the heritage culture), integration (combining the receiving and heritage cultural values), and marginalization (rejecting the receiving culture and discarding the heritage culture).

There is little consensus on how acculturation level impacts Hispanic students. There is evidence that more integrated and bicultural identities are positively correlated with academic achievement (C. R. Martinez et al., 2004; Ramos & Sanchez, 1995), and evidence that generation status and level of acculturation did not significantly impact academic achievement (Fuligni, Witkow, & Garcia, 2005). With the limitation of a small sample size, (López, Ehly, & García-Vázquez, 2002) reported that Hispanic high school students who were more integrated in their acculturation levels displayed higher academic success. Ibañez et al., (2004) demonstrated that parental involvement in highly acculturated Hispanic students was significantly and positively correlated with valuing school, but not with students with low levels of acculturation. It was found that ninth graders with a more integrated acculturation style were associated with higher reports of valuing school and a more academic motivation (Fuligni et al., 2005).

Within the microsystem of the home, the parents' level of acculturation also matters. Gutierrez and Sameroff (1990) found that bi-cultural, or integrated, mothers were better able to understand their child's behaviors when compared to monocultural

parents. This speaks to the importance of understanding the influence of acculturation from both bottom-up and top-down approaches.

Within the microsystem of the family, differing levels of acculturation can mediate the ways in which the parents and children communicate within the school system. More globally, acculturation can serve as a proxy indicator of the student's adaptation to the host culture while retaining values from their parents' country of origin. Oftentimes, the children acculturate at quicker rates than their parents (Lee & Liu, 2001; Portes, 1997). Although the acculturation rates might differ, the parents often expect their children to adhere to traditional culture (Lee & Liu, 2001). The level of acculturation, as it can be seen as being adaptive to the adolescent, does not always occur in a linear fashion (Buriel, 1993). Therefore, acculturation can vary depending on the developmental level of the adolescent and/or the current needs they are seeking to meet.

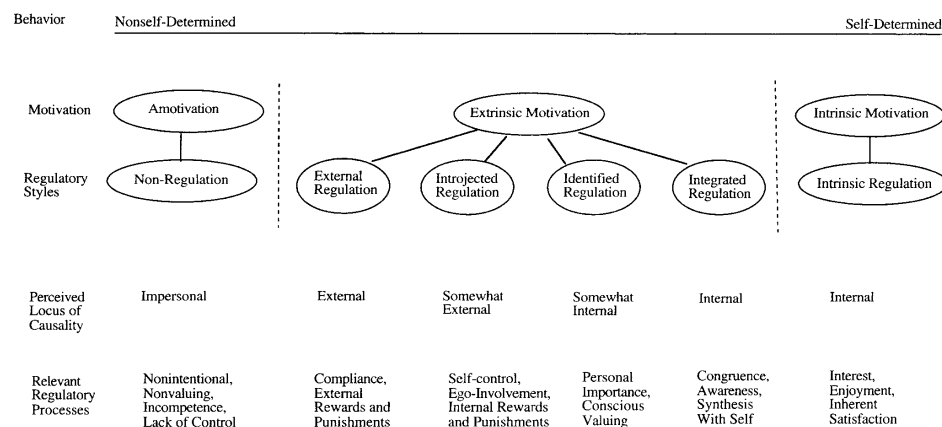
Motivation

The general construct of motivation is widely used across disciplines because it continues to be identified as a core factor of regulation within humans. As Ryan and Deci (2000) so succinctly state "motivation is highly valued because of its consequence: Motivation produces" (p.69). This productive motivation can be elicited by a number of factors. An employee could be motivated to produce in order to receive high performance marks. A student could be motivated to please their favorite teacher. A family could be motivated to send a student to college due to cultural and environmental factors. Motivation is influenced by both internal and external factors.

It has been identified that individuals who report being motivated by internal, rather than external means, display more interest and excitement and have increased performance and persistence (Deci & Ryan, 1991). Even more interesting is that these findings remain significant “even when people have the same level of perceived competence or self-efficacy for the activity” (Ryan & Deci, 2000, p. 69).

The motivational continuum. Behaviors, motivation/regulatory styles, locus of causality, and relevant processes have been integrated so that we can conceptualize motivation as occurring on a continuum, with awareness of contextual factors that impact the person’s motivational style (Ryan & Deci, 2000). Please see Figure 2 for a visual example of the motivational continuum (Ryan & Deci, 2000, p. 72).

Figure 2 The Motivational Continuum



A student on the far left of the figure could be described as someone mindlessly engaging in a task without any thought or intent whatsoever, or a student who simply does not engage in behaviors at all. A student on the far right of the figure could be described as someone who gains pleasure from the act of learning and truly values the acquisition of knowledge. Moving back to the left, an externally regulated student

would likely view educational attainment as instrumental to an expected future goal (e.g., a job), but without any personal ownership of causality of actions (e.g., the all too common “the teacher failed me, so I can’t graduate”). A student with introjected regulation would be driven to attain a high grade in order to maintain their self-esteem within a peer group (Ryan & Deci, 2000). Identified regulation is similar to a student valuing school to attain a future job, with the addition that this value is of personal importance. Integrated regulation would occur after a student has been cognizant of their future goals and linked them with current values in a more complex manner.

This model provides a sound conceptual framework of the various motivational styles. It should be noted that a student doesn’t necessarily have to pass through the styles in the sequential order (Ryan & Deci, 2000), but there is evidence that the student becomes more self-regulated as they naturally develop (Chandler & Connell, 1987). The construct of most interest and utility is intrinsic motivation and ways to foster the development of intrinsic motivation in students.

Intrinsic motivation. An individual who is intrinsically motivated can be described as one who seeks out novelty, challenge and has a desire to explore (Ryan & Deci, 2000). The authors state that although individuals are inherently gifted with propensities towards intrinsic motivation, the initial value a student sees in academics influences the extent to which intrinsic motivation can occur (Ryan & Deci, 2000). Likewise, a supportive environment must be in place to maintain and enhance these attitudes.

The intrinsic motivation literature has focused on three individual subtypes of intrinsic motivation (i.e., to know, to accomplish and to experience stimulation; R. J. Vallerand et al., 1992). Intrinsic motivation to know can be understood as “the fact of performing an activity for the pleasure and the satisfaction that one experiences while learning, exploring or trying to understand something new” (R. J. Vallerand et al., 1992, p. 1005). Intrinsic motivation toward accomplishments is understood as “engaging in an activity for the pleasure and satisfaction one experiences when one attempts to accomplish or create something” (R. J. Vallerand et al., 1992, p. 1005). Intrinsic motivation to experience stimulation is similar to the construct of flow as discussed by Csikszentmihalyi and Nakamura (1989) and could be evidenced by student experiencing great excitement from a classroom lecture or receiving pleasure from reading an interesting novel.

Intrinsic motivation as a whole is multifaceted and can be applied to any situation, not just academics. Ryan (1995) discussed how the internalization of regulations can be benefitted by both situational factors and from past learning and experiences. What this means, is that students with higher levels of any of the three subtypes of intrinsic motivation are increasing the types of experiences to pull from, and provide a structure for integrating future behaviors.

Intrinsic motivation can be viewed as analogous to the humanistic view of development and growth known as self-actualization. Carl Rogers (1995) developed his counseling theory, in part, off the notion that if he were to provide a certain type of relationship, the client will inherently grow and develop as a person. Rogers also generalized this relationship to parents and teachers, speaking on how a certain type of

relationship will allow the child to become more self-directed, mature and socialized (Rogers, 1995). These motivations can be characterized as occurring due to curiosity and because the learner seeks mastery and novelty despite any external rewards (Ojeda et al., 2011). As Carl Rogers believed that every human has innate drives to self-actualize, the inherent nature of intrinsic motivation in all humans is also accepted as truth in SDT (Ryan & Frederick, 1997). Working within these agreed upon truths, emphasis should be placed on which factors either foster or detract from the development of intrinsic motivation (Ryan & Deci, 2000).

Intrinsic motivation should be conceptualized from a dynamic and systems oriented perspective. Simply put, an intrinsically motivated adolescent can influence his or her environment just as easily as the environment can influence him or her. This reciprocal relationship is quite interesting. For instance, it was found that adolescents with a higher degree of internalized motivation have a positive influence on an autonomy supporting parental environment (Vansteenkiste, Soenens, Van Petegem, & Duriez, 2013). This gives credence to the idea that when adolescents are internally motivated towards academics, they also positively impact their home environment. This spillover effect speaks to the importance of the construct of motivation as well as the importance of creating environments that support it.

In a similar vein, the utilization of resources and services are greatly impacted by ones' motivational style. This has been demonstrated in the field of mental health (Ryan, Lynch, Vansteenkiste M., & Deci, 2011), and it can be inferred that this relationship is similar with academic resources.

Academic motivation. While motivation can be conceptualized in various ways, this study will examine the context specific motivation related to academics. Academic achievement (e.g., grade point average or GPA) is likely to fluctuate over time and is a construct that measures numerous factors outside the control of the student (e.g., clarity of instruction, difficulty of courses, grading criteria, etc.). However, academic motivation can be used to better understand what might be influencing the student's GPA because it is tied with curiosity, persistence, desire to learn and personal reward (Deci & Ryan, 1985). The construct of academic motivation appears extremely important and relevant when discussing the larger construct of academic concerns and systemic problems Hispanic students face.

Academic motivation looks beneath the surface of the quantitative grades students obtain, and can assess the complex reasons why students are driven to achieve in school. It is helpful to examine motivational styles because students with higher rates of intrinsic motivation have higher academic achievement and have higher self-efficacy (Deci & Ryan, 1985; Jiang, Yau, Bonner, & Chiang, 2011).

Academic Factors and Self-Efficacy

Academic achievement at the high school level can be assessed from students' grade point average (GPA) as well as scores on standardized tests (e.g., the Scholastic Assessment Test or SAT and the American College Testing or ACT). GPA is typically measured on a 4.0 scale with 4.0 signifying an A, a 3.0 signifying a B, a 2.0 signifying a C and a 1.0 signifying a D. American College Testing (ACT) scores can range from 1 to 36 and are normally distributed, meaning that 95% of students will score between two standard deviations, roughly 4.7, from the mean, being 21 (i.e., between 12 and 30).

Colleges and universities have a wide range of acceptance criteria, but both GPA and ACT scores are almost always included in their selection criteria.

The connection between high school GPA and future academic factors was validated by Cerna, Pérez and Sáenz (2009), with findings suggested that high school GPA was the strongest predictor of Mexican-American students attaining a college degree. Similar findings were observed in a longitudinal study with a Latino sample. More specifically, high school GPA was found to be the strongest predictor ($\beta = .36$, $t = 3.04$, $p < .003$) of college GPA (Bordes-Edgar, Arredondo, Kurpius, & Rund, 2011). High school GPA was also found to significantly predict which students would persist throughout college rather than dropping out (Bordes-Edgar et al., 2011).

Self-efficacy refers to one's belief that he/she is able to complete required tasks in order to achieve a specific goal (Bandura, 1997). Beliefs about going to college can be broken down into beliefs about getting to college and those related to staying in college (Warburton, Bugarin, Nunez, & Carroll, 2001). College-going beliefs and planning are also related to support from the family (Horn & Nunez, 2000), which validate the fit within the current study. Self-efficacy is viewed as important for many students. Results from a study of first-generation college students comprised of 53.1% Latino or Latina American participants found that academic self-efficacy significantly predicted college GPA after accounting for variance from optimism and self-mastery (Majer, 2009).

It is important to measure beliefs about continuing one's education past the high school level to understand how academic motivation and acculturation level might impact beliefs about education beyond the students' current level. Postsecondary

educational aspirations are usually high in first and second generation Hispanic students (Perreira, Fuligni, & Potochnick, 2010). Therefore, it appears relevant to measure how specific factors influence a student's likelihood of being accepted into a postsecondary educational institution. Research has found mixed results as to how acculturation levels and influences from the family impact college-going self-efficacy (Perreira et al., 2010; C. Suarez-Orozco, Rhodes, & Milburn, 2009). Further clarification on how relevant factors impact a student's academic success and college going beliefs can aid in the understanding of what is more truly contributing in this model.

Ryan and Deci's Self-Determination Theory

Self-determination theory (SDT) combines empirical research on motivation and an organismic approach highlighting inner resources for personality development and behavioral self-regulation (Ryan, Kuhl, & Deci, 1997). The theory focuses on inherent growth needs, personality integration, and conditions that foster positive processes (Ryan & Deci, 2000). Deci and Ryan (1991) use the metaphor of a plant to discuss how the psychological needs are essential to all humans. They can be seen as the nutrients in life just as sun, water, and soil are to a plant. Environments in which these nutrients are at least at a minimum result in plant growth and development. Environments with an abundance of these nutrients produce healthier and robust plant.

The empirical underpinnings of the theory focus on competence (Harter, 1978; White, 1963), relatedness (Baumeister & Leary, 1995), and autonomy (deCharms, 1968; Deci, 1975) as necessary components of optimal functioning, integration, and personal well-being (Ryan & Deci, 2000). Collectively, the internalization of these three

components yields a student who values connection in relationships, feels capable and values unique and individual thinking.

In addition to SDT examining what environmental factors promote the inherent growth needs, the theory considers which environmental components might serve as barriers to ones' development of motivation and integration of personality (Ryan & Deci, 2000). In addition to traditional correlational methods to validate SDT, the researchers experimentally manipulated the environmental factors to better assess the causal relationships discussed within the model (Ryan & Deci, 2000). Self-determination theory, and the three needs that combine to yield optimal functioning, has been shown to generalize to both individualistic and collectivistic cultures (Jiang et al., 2011).

Autonomy. Autonomy is understood as one's ability to act in a manner in which personal volition is felt. Acts do not feel as if they are being controlled by an outside entity. With this being said, autonomy is not equivalent to independence (Ryan & Deci, 2000). Autonomy can be understood as being fostered in relationships (parental, teacher, peer, etc.) in which the learner is given developmentally appropriate challenges and they are able to gradually increase mastery of the tasks (Blanck & Blanck, 1986). Control and/or isolation can be seen as opposites to an autonomy supportive environment because they either restrict the feeling of volition in the learner or completely deprive the learner of a stimulating environment.

Competence. The construct of competence is understood as one's cognitive belief that he or she can successfully complete a task. White (1963) explained competence as being closely tied with self-efficacy. Harter (1978) explained that this

need for competence and self-efficacy can be understood as a built in and inherent drive that is extremely adaptive to us as humans. The cycle can be understood as follows, successfully completing tasks leads to a feeling of competency and internal pleasure, which leads to more attempts at mastery (Harter, 1978).

Relatedness. Relatedness can be described as our desire to have personally meaningful communication with others, participation in shared activities, identifying with a friend/peer group, and feeling understood and appreciated (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000). Taking a step backward in time, relatedness was an adaptive need because it was related with safety and survival of genes (Baumeister & Leary, 1995). From this evolutionary perspective, it is understandable why this need continues to be of importance for optimal human functioning.

Relatedness continues to demonstrate importance across various domains. For example, cognitive psychology has examined the relationship between social connections and the ways in which memories are stored and retrieved. Researchers focused on affective understanding have found that positive emotions, mood, and vitality are associated with social connection (Baumeister & Leary, 1995; Reis et al., 2000). Relatedness is at the heart of systems theory, for it deals with interpersonal communication and participation. For these reasons and many more, the basic need of relatedness is especially important when considered in the context of the other constructs used in the current study.

Mediating Factors

Intraindividual differences interact with both the cultural and family systems to serve as a potential buffer against adversities. Regardless of the parental influences, it is

necessary to ascertain how an adolescent functions as an agent of change in his or her own world. The ability to self-regulate and function autonomously has been associated with better psychological health, greater use of meta-cognitive strategies, more effort expenditure, greater effort to persist and deeper levels of processing (Vansteenkiste, Sierens, Soenens, Luyckx, & Lens, 2009). Any one or combination of these traits will benefit students in regards to their academic life. Furthermore, an excerpt from a qualitative study demonstrates the transformative nature of these qualities in a home setting.

“Living in this cramped space, the family often became embroiled in parent-child arguments, fighting over whether the light should be left on while the daughter studied or off while the father slept. Although both parents recognized the importance of their daughter’s education, the daughter was constantly involved in a balancing act; she coordinated her own child-care responsibilities for the care of the younger siblings and school and housework activities with her parents’ home and work schedules and sleeping arrangements” (Henderson, 1997, p. 113)

In this example, the student’s academic motivation facilitated mature problem solving strategies that she then used to positively impact the microsystem of her family.

Without this active approach, the exosystem of her parents’ busy jobs would have continued to negatively impact her academic performance. Her behaviors also demonstrate one’s ability to affect the macrosystem by altering values and norms that impact the other systems. It is important to examine ways in which an intrinsically motivated style impacts individual as well as system oriented factors with Hispanic-

American students. Academic engagement has been shown to be positively correlated with behavioral acts such as the completion of homework and a more active approach to learning which are associated with academic success (C. Suarez-Orozco et al., 2009). Findings such as this contribute to the need to utilize academic motivation as a mediating variable to better understand predictors of academic success.

Levels of acculturation have been deemed important to include as mediators when assessing psychological autonomy in Hispanic adolescents (Sher-Censor, Parke, & Coltrane, 2011). Integrative acculturation styles have been linked with higher academic success, higher reports of valuing school, and more academic motivation (Fuligni et al., 2005; López et al., 2002). In addition to specific academic factors, acculturation levels have been used with high school students to predict plans to pursue higher education. In one study, no significant relationship between acculturation levels and plans to attend college was found (Hillstrom, 2009).

In summary, intraindividual differences interact with both the cultural and family systems to serve as a potential buffer against adversities. Motivational styles as well as levels of acculturation have been deemed important to include as mediators when studying adolescent Hispanic-American students. The inclusion of these mediators can aid in a deeper and more thorough understanding of what contributes to the development of a high school student with self-efficacious beliefs towards college and the academic resume to get accepted into a college of their choice.

Statement of Problem

Hispanic people living in America have faced and overcome a multitude of injustices pertaining to the attainment of education. Fifty-three million of my fellow

Hispanic-Americans comprise roughly 17 percent of the U.S. population (U.S. Department of Health & Human Services, 2014). Within this population, the number of adolescents continues to grow. High school diplomas are attained by Hispanic-American students at a rate 30% lower than Caucasian students (U.S. Department of Health & Human Services, 2014). It is obvious that research in the area of education with the Hispanic population needs to continue to evolve to provide those in various systems the information they need to continue to reform the education system these youth flow through. The current research study is informed by education literature, psychological literature and grounded in a culturally competent and systems oriented framework. This approach was selected due to the necessity of conceptualizing the various constructs bi-directionally in addition to hierarchically. Impacting academically related troubles from a system oriented perspective has been previously validated (Auerbach, 2004).

While the number of potential factors that influence academic motivation is great, factors common within the Hispanic culture are especially relevant with the population in question. Bailey and Stoltenberg (2013) found that higher levels of family obligation accounted for higher rates of self-reported intrinsic motivation in a sample of Hispanic high school students. Adolescents who placed more importance on family obligations were more academically motivated, and spent more time studying and doing homework (Fuligni et al., 1999). Assessing how familism values impact the model directly and indirectly can help to understand the nuances of how culture influences academic factors. Reasonably static factors such as subjective SES of the family, and

parental educational attainment will be measured to assess their influence in the interaction model.

The current study will also measure how acculturation styles and intrinsic motivation mediate the interaction between familial factors and cultural values on academic success and one's self-efficacious beliefs towards starting and persisting through the completion of college. Intrinsic motivation fits with the overall conceptualization of the model due to the proven utility towards impacting self-efficacy (Deci & Ryan, 1985; Jiang et al., 2011)

Reintroducing Ecological Systems Theory and Self-Determination Theory at this time will demonstrate how the current research study will fill in gaps left by previous research. At the same time, these theories serve to conceptualize the various constructs in a culturally informed and systems focused approach. Adolescents with a higher degree of internalized motivation have a positive influence on an autonomy supporting parental environment (Vansteenkiste et al., 2013). One's motivational style greatly impacts the utilization of accessible resources and services (Ryan et al., 2011). These findings are especially relevant to Hispanic-American high school students. They still have daily access to the microsystem of their family, and their potential to impact this system is high. If one is more likely to use available resources, it is assumed that their self-efficacious beliefs about persevering through difficult events (e.g., attending college) can be positively mediated. Self-determination theory, has been shown to generalize to both individualistic and collectivistic cultures (Jiang et al., 2011). Relatedness is at the heart of systems theory, for it deals with interpersonal communication and participation. For these reasons and many more, the basic need of

relatedness are embedded within the familial and cultural values used in this study. Faircloth and Hamm (2005) found that intrinsic academic motivation and experiences for success were more indicative of high performance for Caucasians than for Mexicans. This research only compared ethnicity between groups. While ethnic status can be an important factor, examining cultural values, familial factors and interactions between systems will better explain how intrinsic motivation is truly impacting the student. In a similar vein, Woolley (2009) commented that promoting connection between Hispanic students, families, educational system and resources could improve high school graduation rates and increase transfer to or enrollment in four year universities. The connections between microsystems matter (Henderson, 1997), and examining ways in which these students' academic motivation can positively impact these systems is important. Findings from the current study can serve to further validate models that advocate for a culturally sensitive and systems focused approach to academic improvement for Hispanic-American students.

Purpose

The current study aims to build on previous research by utilizing a culturally competent systems theory to explore how relatively fixed variables (i.e., parental educational attainment and the SES of the family) impact academic outcomes (i.e., GPA, ACT scores and class rank) as well as college-going beliefs. Previous research has been more focused on the direct interaction between variables. However, as the review of the literature progressed it became clear that a more in-depth exploration of the “how’s”, “why’s” and “when’s” regarding the variables of academic outcomes and college-going beliefs is needed. Therefore, students' levels of acculturation as well as

levels of intrinsic motivation were introduced to better explain the mechanisms that account for change in the outcome variables. Ecological Systems Theory was used to ground the connections between the constructs of interest by demonstrating how bi-directional influences within and across systems play out. While previous literature has used an ecologically informed model to examine academic achievement in Hispanic adolescents, it is important to integrate the constructs discussed in Self Determination Theory to better understand the complex relationship.

As discovered by Bailey and Stoltenberg (2013), the combination of SDT, cultural values and familial influences was as interesting as it was complex. The current hypotheses are aimed at more clearly understanding how these complex relationships interact, and the impact they have on the Hispanic student. The current research should be beneficial to the educational systems that Hispanic students attend by providing a clearer understanding as to how cultural and familial factors contribute to academic outcome factors and beliefs about attending an institute of higher education.

Hypotheses and Research Questions

The primary criterion variable in the first hypothesis is familism values, which is comprised of obligation, referent and support. Bailey and Stoltenberg found that familism values have been shown to be positively correlated with intrinsic motivation and time spent studying/completing homework (Fuligni et al., 1999). The Mexican American Cultural Values Scale (MACVS) was used to assess levels of familism values held by students. GPA, ACT scores and class rank were assessed both by self-report from the participants as well as reports from their teachers. Students' effort towards schoolwork relative to other obligations, such as social activities and work duties, was

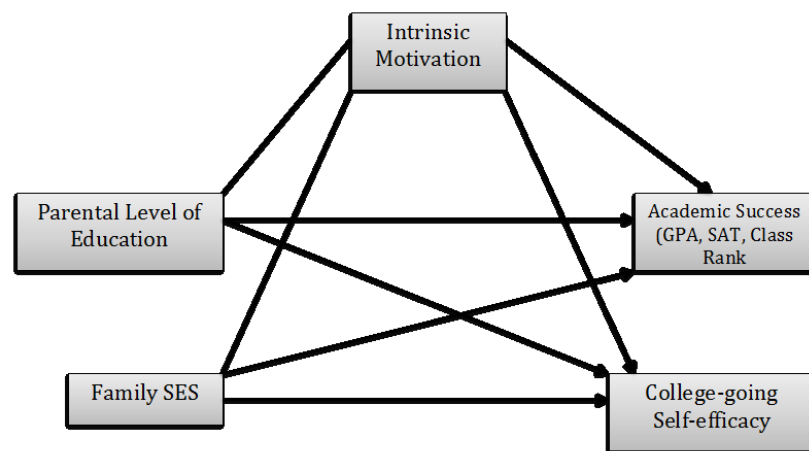
measured by students' self report. College-going beliefs were measured using the College-Going Self-Efficacy Scale (CGSES), which assessed beliefs both about getting into college and persisting through graduation. It was hypothesized (H^1) that familism values (obligation, referent and support) will be positively and significantly correlated with academic success (GPA and ACT scores) and college-going beliefs while being negatively and significantly correlated with class rank. It was also hypothesized (H^{1a}) that familism values will be positively and significantly correlated with effort towards schoolwork relative to other obligations. Furthermore, it was hypothesized that (H^{1b}) effort will strengthen the positive relationship between familism values, academic success and college-going self-efficacy.

Parental educational attainment as well as SES has been shown to be correlated with academic achievement. The highest level of education that the student's mother and father have obtained was attained through student self-report. Students were asked to rank how they perceive their family in relation to the larger American society in regards to money, schooling, and job respect. It was hypothesized (H^2) that parental educational attainment as well as SES would be positively and significantly correlated with academic success (GPA and ACT scores) and college-going beliefs while being negatively and significantly correlated with class rank.

Since this study used a culturally informed and systems oriented approach to conceptualize how the constructs interact, it was deemed necessary to assess the "how", "when" and "why" questions. There is evidence that more integrated and bicultural identities are positively correlated with academic achievement (López et al., 2002; C. R. Martinez et al., 2004; Ramos & Sanchez, 1995). Integrated acculturation was measured

using the Acculturation, Habits, and Interests Multicultural Scale for Adolescents (AHIMSA). It was hypothesized (H³) that an integrated acculturation style will strengthen the positive relationship between familism values, academic success and college-going self-efficacy. Academic motivation was used to better understand what might be influencing academic success because it is tied with curiosity, effort expenditure, persistence, desire to learn and personal reward (Deci & Ryan, 1985; Vansteenkiste et al., 2009). Intrinsic motivation was measured using the Academic Motivation Scale (AMS) – High School Version. It was hypothesized (H⁴) that intrinsic motivation will mediate the strength of the positive relationship between parental and student SES, parental education level, academic success (GPA, ACT) and college-going self-efficacy. Figure 3 demonstrates the proposed mediation model used to test hypotheses two and four.

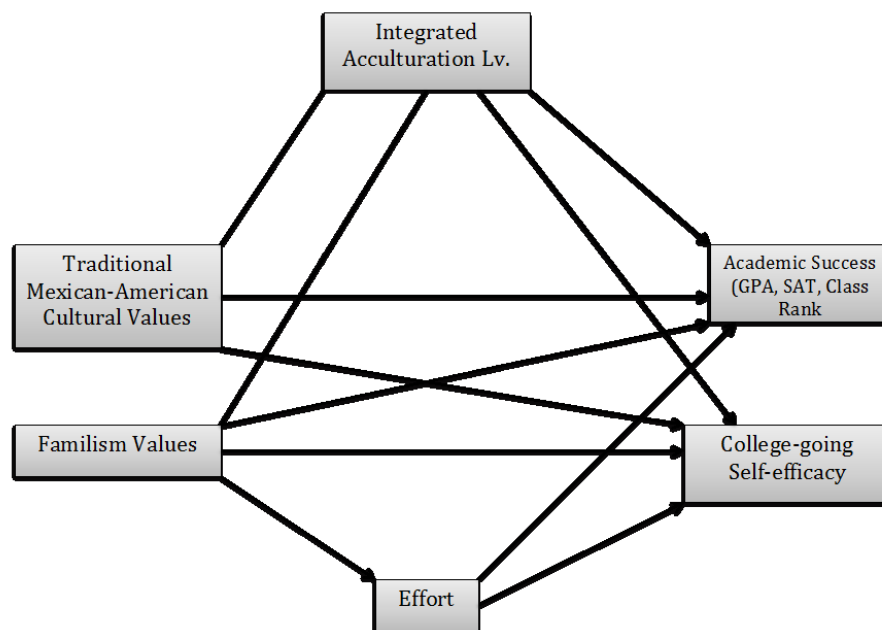
Figure 3 Mediation Model for Hypotheses Two and Four



Traditional values present in the Hispanic culture can encompass respect for parents/elders, traditional gender norms and religious beliefs. These values can serve as

both sources of support as well as hindrances for Hispanic students in the realm of educational attainment. These values were measured using the MACVS. The cultural value of *educación* refers to both formal and overall education that the older generation passes down to the younger generation through the family system. Hard work and the importance of learning about the traditional culture are oftentimes emphasized within Hispanic families. While not directly measured in the current study, it can be inferred that higher rates of traditional values could be correlated with *educación*. Since limited research has been conducted that assesses how these cultural values influence academic factors and beliefs about going to college, a research question was posed. The research question (R¹) of whether or not levels of traditional cultural values is significantly related to academic success (GPA, ACT scores and class rank) and college-going self-efficacy was posed. Figure four demonstrates the mediation model used to test the first and third hypothesis as well as the research question.

Figure 4 Mediation Model for Hypotheses One and Three



In summary, the specific hypotheses and the research question for the current study were:

H¹: Familism values (obligation, referent, support) will be positively and significantly correlated with academic success (GPA and ACT scores) and college-going beliefs while being negatively and significantly correlated with class rank. It was also hypothesized that (H^{1a}) familism values will be positively and significantly correlated with effort towards schoolwork relative to other obligations. Furthermore, it was hypothesized that (H^{1b}) effort will strengthen the positive relationship between familism values and academic success and college-going self-efficacy.

H²: Parental educational attainment as well as SES would be positively and significantly correlated with academic success (GPA and ACT scores) and college-going beliefs while being negatively and significantly correlated with class rank.

H³: An integrated acculturation style will strengthen the positive relationship between familism values, academic success and college-going self-efficacy.

H⁴: Intrinsic motivation will mediate the strength of the positive relationship between parental and student SES, parental education level, academic success (GPA, ACT) and college-going self-efficacy.

R¹: How will levels of traditional cultural values be related to academic success (GPA, ACT scores and class rank) and college-going self-efficacy?

Method

Participants

The researcher worked directly with the principal at a charter high school that has an affiliation with a Southern Plains university. The researcher explained the

purpose of the study and asked for teacher support with the dissemination of parental consent forms prior to the researcher interacting with the participants. Teachers were told that the classes with the highest percentage of returned parental consent forms (either signed in approval or denial of approval) would qualify for a pizza party at the end of the school year (all classes received a pizza party). Roughly eight classes were involved in the current study, ranging from 9th grade to 12th grade. Criteria for participation in the study required subjects to return a signed parental consent form in addition to signing an adolescent consent form if under the age of 18. If students were 18 years of age or older, they were only given an adult consent form to sign. There were no exclusion criteria in the current study. The current study was approved by the University of Oklahoma IRB (IRB number 4108).

A total of 123 individuals completed the survey following the return of the appropriate consent/assent forms. Seven cases were removed due to the fact that their reported ethnicity (African-American and Caucasian) was not consistent with the ethnicities of interest in the current study. Continued screening identified three cases that were excluded. Two cases were removed due to evidence of response bias for one or more measures. One case was excluded due to fixed responding on one measure. A total of 113 cases were used for data analysis.

Demographics. Participants were asked to check the appropriate box to indicate their gender, ethnicity, age, and grade level. Participants ranged in age from 13 to 19 years of age, mean age = 16.42 [SD = 1.55], with 40.7% identifying as male and 57.5% identifying as female (two participants did not respond). Participants represented each high school grade level, with 29.2% being in the ninth grade, 25.7% being in the 10th

grade, 2.7% being in the eleventh grade and 41.6% being in the 12th grade (one student did not respond). Participants were given seven choices to identify which ethnicity most closely resembles how they identify. The ethnic makeup of the participants is as follows: Hispanic (20.4%), Hispanic-American (17.75%), Latino (1.8%), Chicano (4.4%), Mexican (29.2%), Mexican-American (23.9%), and other (1.8%) with one participant not responding. Table 1 provides a visual breakdown of reported ethnicity.

Table 1 Reported Ethnicity

	Frequency	Percent
Hispanic	23	20.4
Hispanic-American	20	17.7
Latino	2	1.8
Chicano	5	4.4
Mexican	33	29.2
Mexican-American	27	23.9
Other	2	1.8

Participants were asked to report which generation status best applied to them. Possible choices were 1st generation “you were born in another country”, 2nd generation “you were born in the U.S., either parent was born in another country”, 3rd generation “you were born in the U.S., both parents were born in the U.S. and all grandparents were born in another country”, 4th generation “you and your parents were born in the U.S. and at least one grandparent was born in another country with the remainder being born in the U.S” and 5th generation “you and your parents were born in the US and all grandparents were born in the U.S.” The majority of the participants were either 1st generation (38.9%) or 2nd generation (52.2%), with a total of eight percent identifying as

3rd generation (4.4%), 4th generation (1.8%), and 5th generation (1.8%); one participant did not respond to this item.

Participants were asked to write in their GPA, their most recent pre ACT or ACT score, and their class rank. Teachers assisted the students in some of the classes. Ninety students, 79.6% of the sample population, responded to the GPA item and the mean GPA was 3.31 [SD = .49]. Only 53 students responded to the item asking what their most recent pre ACT or ACT score was, the mean ACT score was 18.9 [SD = 5.88]. Class rank was assessed where lower numbers correspond with higher standing in their class where higher numbers correspond with lower standing in their class. Class rank standing ranged from 99th percent to 9th percent with a mean of 69.4 [SD = 23.99]. A one-item relevant effort measure asked “how much effort do you typically put towards your school work relative to your social life and work/job.” All participants responded, with 1.8% indicating “very little”, 6.2% indicating “somewhat less than the social life and work/job”, 45.1% indicating “about the same”, 30.1% indicating “somewhat more than social life and work/job” and 16.8% indicating “very much more than social life and work/job.” Participants were asked if they planned to go to college, and if their response was yes they were instructed to check a box representing degree programs ranging from an Associate’s degree to a Doctoral degree. Three examples of degrees and career paths were provided for each category. The vast majority of students (90.3%) reported that they intend to go to college, with 19.5% planning to pursue an Associate’s degree, 36.3% planning to pursue a Bachelor’s degree, 18.6% planning to pursue a Master’s degree and 17.7% planning to pursue a Doctoral degree (nine participants did not respond).

Moving from the individual to the family system, both paternal and maternal educational levels were assessed through student self-report. The highest level of education attained by the father is as follows: Did not complete high school (75.2%), General Education Development (GED; 1.8%), high school (16.8%), Associate's degree (.9%), with six missing cases. Maternal education demonstrated a similar distribution with 63.7% not completing high school, 10.6% earning their GED, 16.8% completing formal high school, 1.8% earning their Associate's degree, .9% earning their Bachelor's degree, .9% earning their Doctoral degree and six missing cases. Table 2 shows the percentages for both paternal and maternal educational attainment.

Table 2 Highest Parental Level of Education Attained

	Father	Mother
Did not Complete High School	75.2	63.7
GED	1.8	10.6
High School	16.8	16.8
Associate's Degree	.9	1.8
Bachelor's Degree	0	.9
Doctoral Degree	0	.9

Socioeconomic Status (SES) was measured in two ways. First, participants were asked if they qualified for free or reduced student lunch. The vast majority (90.3%) of students qualified for free or reduced school lunch. To qualify for free lunch, a family of four must have an annual income of less than or equal to \$23,850 and must make less than or equal to \$44,123 annually (United States Department of Agriculture Food and Nutrition Service, 2014). Second, students were provided with picture of a ladder and told that it demonstrates how American society is set up with the top (corresponding to a 10) representing the people who are best off and the bottom representing those who

are worst off (corresponding to a 1). Students were asked to think about their family and fill in 1 of the 10 circles that correspond to a rung on the ladder to represent where they think their family would be on the ladder. Mean family SES was 5.40 [SD = 1.52] on a scale from 1 (representing the people who are worst off) to 10 (representing those who are best off). A similar SES item was used to assess the participants' perceived status within their high school. The top of the ladder was described as those students who are most respected and who have the highest grades while the bottom of the ladder described those who no one respects and who have the worst grades. Mean student SES relative to others within their school was 7.19 [SD = 1.77] on a scale from 1 (representing students who no one respects and who have the worst grades), to 10 (representing those who earn the most respect and have their highest standing). This measure of subjective perception of social status was borrowed from the MacArthur Scale of Subjective Social Status-Youth Version (Goodman et al., 2001).

Measures

Mexican American cultural values scale (MACVS). The 50 item MACVS was designed to be used with adolescents (Knight et al., 2008). The scale was developed from qualitative focus groups comprised of adolescents, mothers, and fathers from major metropolitan areas, suburban areas, a rural mining town and a Mexican border town (Knight et al., 2008). Six themes make up the traditional Mexican American values (familism support, familism obligations, familism referent, respect, religion and traditional gender roles) and three make up the mainstream values (material success, independence and self-reliance, and competition and personal achievement). The current study did not utilize the three mainstream value subscales, thus reducing the

scale to 36 items. A total of 16 items comprise the three subscales that contain items more closely related to the family (six for familism support, five for familism obligation and five for familism referent). These factors were conceptualized by Knight and his colleagues (2008) as follows. Familism support was described as emotional support from the family. Familism obligations described the caretaker role for the family. Using the family for self-definition was described as familism referent. The remaining 20 items were comprised of items from the three subscales of respect, religion and traditional gender roles). Examples of items assessing traditional values are: “Children should respect adult relatives as if they were parents”, “Children should be taught that it is their duty to care for their parents when their parents get old”, and “One’s belief in God gives inner strength and meaning to life.” The participants rated the extent to which they think or believe each item using a Likert type scale ranging from one (“Not at all”) to five (“Completely”), with higher scores indicating greater levels of reported alignment with the respective value.

The scale was validated on two large representative samples ($n = 598$ and $n = 750$; Knight et al., 2008). Cronbach’s alphas for the nine subscales ranged from .48 to .78 in the first study and from .50 to .82 in the second study (Knight et al., 2008). Internal consistency ranged from .77 – .84 (Knight et al., 2008). The Cronbach’s alpha for the 50 item scale in a previous study was .867 (Bailey & Stoltenberg, 2013). The Cronbach’s alpha in the current study was .934.

The acculturation, habits, and interests multicultural scale for adolescents (AHIMSA). This scale was developed to be applicable for an adolescent from any culture living in the United States. The scale is comprised of eight items, with possible

responses being “The United States”, “The country my family is from”, “Both”, and “Neither”, thus assessing acculturation status using the four-factor model of assimilation, separation, integration and marginalization, respectfully. The scale was validated by comparing responses to the Acculturation Rating Scale for Mexican Americans-II (ARSMA-II), a well-validated acculturation instrument (Cuellar, Arnold, & Maldonado, 1995). The United States Orientation scale on the AHIMSA (assimilation) was correlated to the ARSMA-II United States Orientation with a value of .47 ($p < .01$). The Other Country Orientation scale on the AHIMSA (separation) was correlated with the ARSMA-II Other Country Orientation with a value of .33 ($p < .01$). The Both Countries Orientation (Integration) was correlated to the ARSMA-II integration with a value of .43 ($p < .01$). The Cronbach’s alpha of the AHIMSA in the validation article was .69 and it was .78 in the current study.

Academic motivation scale (AMS). The AMS was originally developed and validated in France and then later translated to English (R.J. Vallerand, Blais, Brière, & Pelletier, 1989; R. J. Vallerand et al., 1992). The current study utilized the 28 item AMS – High School Version to assess context specific motivation in adolescents. The AMS uses a seven-factor structure to measure three types of intrinsic motivation, three types of extrinsic motivation, and amotivation.

Intrinsic motivation to know assesses motivation towards exploration and curiosity to learn (e.g. “for the pleasure I experience when I discover new things never seen before”). Intrinsic motivation toward accomplishments is driven by mastery motivation and to feel competent (e.g. “For the pleasure I experience while surpassing myself in my studies” (Deci, 1975). Intrinsic motivation to experience stimulation was

operationalized as engagement in an activity for sensory pleasure as well as fun/excitement (e.g. “Because for me, school is fun”) and can be thought of as similar to the concept of flow (Csikszentmihalyi & Nakamura, 1989). External regulation is operationalized as someone who is motivated through external means (e.g. “In order to obtain a more prestigious job later on”), and introjected regulation is a slightly more internalized motivation system (e.g. “Because of the fact that when I succeed in school I feel important”). Furthermore, identified regulation is when a motive is more driven due to personal reasons (e.g. “Because I think that a high-school education will help me better prepare for the career I have chosen”). Amotivation is the general concept used to describe an individual who does not perceive connections between his or her actions and given outcomes (e.g. “Honestly, I don’t know; I really feel like I am wasting my time in school”). Participants responded on seven point Likert type-scale from one (“Does not correspond at all”) to seven (“Corresponds exactly”), with higher scores on the domain indicating higher endorsement of that certain type of academic motivation. In the current study, the Likert-type scale was reduced to five points, with the same anchors as the original scale.

Preliminary findings demonstrated good internal consistency (Cronbach’s alpha = .80) with strong test-retest correlation of .75 (R. J. Vallerand et al., 1992).

Confirmatory factor analyses supported the 7-factor structure (Fairchild, Horst, Finney, & Barron, 2005; R. J. Vallerand et al., 1992). Fairchild et al. (2005) demonstrated the seven factor model outperformed both a five factor (amotivation, a unified intrinsic motivation factor, and three separate factors for extrinsic motivation) and a three factor model (amotivation, general extrinsic motivation, and intrinsic motivation; Robust CFI

= .967, .934, and .858 respectively). The Cronbach's alpha in a previous study was .87 (Bailey & Stoltenberg, 2013) and the Cronbach's alpha in the current study remained stable at .88.

College-going self-efficacy scale. This domain specific scale of self-efficacy assess beliefs about both getting into college and staying in college, or attendance and persistence (Gibbons & Borders, 2010). The scale developers also considered the influence of family support, decision-making skills/abilities and beliefs about academic preparation when assessing college-going self-efficacy. Fifteen items related to college attendance and 16 items related to college persistence were developed using a middle school sample. The scale was found to have a 6.1 grade reading level.

College attendance items covered three specific sub domains as well as one overall item. They are: financial issues (e.g., "I can find a way to pay for college"); issues related to ability (e.g., "I can get good grades in my high school math classes"); family-related issues (e.g., "I can have family support for going to college"); decision-making skills (e.g., "I can choose a good college"); as well as one overall item, "I can go to college after high school." College persistence items reflected financial questions (e.g., "I could pay for each year of college"); ability items (e.g., "I could do the classwork and homework assignments in college classes"); family items (e.g., "I could get my family to support my wish of finishing college"); and life skills (e.g., "I could set my own schedule while in college"). In addition, two overall items about persistence were included (e.g., "I could fit in at college"). Participants responded to the prompt "How sure are you about being able to do the following" with a 4-point Likert-type scale (1 = not at all sure, 2 = somewhat sure, 3 = sure, 4 = very sure).

Initial reliability, readability, and clarity were assessed using a small sample ($n = 22$) of 13 females and 9 males with a mean age of 11.59 years. These individuals had a high perceived likelihood ($M = 8.23$, $SD = 2.11$) of graduating from college (rated on a 10-point scale). The Cronbach's alpha for the attendance subscale was .81 while the Cronbach's alpha for the persistence subscale was .92 for an overall alpha coefficient of .92 (Gibbons & Borders, 2010). No concern was voiced about the clarity of the questions or the length of the survey. A second phase of testing used a larger and more ethnically diverse population. One hundred and nine out of the total sample of 272 7th grade students were classified as prospective first generation college students. Twenty three percent of the sample identified as Hispanic and 30% identified as African American. Factor analyses revealed that a two-factor solution was a good fit, accounting for 42.2% of the total variance. However, significant overlap was noted and interpreting total scores for the entire scale was supported. Test-retest reliability was found to be .88 in a small sample of students ($n = 18$). The Cronbach's alpha for the attendance subscale was .89 while the Cronbach's alpha for the persistence subscale was .90 for an overall alpha coefficient of .94 (Gibbons & Borders, 2010). In the current study, the Cronbach's alpha for the attendance subscale was .86, .93 for the persistence subscale, resulting in an overall alpha coefficient of .94.

Procedure

Surveys and consent/assent forms were offered in both English and Spanish. The Mexican American Culture Values Scale was originally developed in both Spanish and English. The remaining surveys were translated to Spanish by an outside party, and then checked by a Spanish-speaking person as a quality control measure.

Students were provided with a folder containing the following scales, in the language of their choice. The order of scales and brief description are as follows. A demographic sheet was developed to measure general demographic information about the student and their family. The Mexican American Cultural Values Scale (MACVS) (Knight et al., 2008) was used to measure traditional Mexican American values. The Academic Motivation Scale – High School Version (AMS-HS 28; (R.J. Vallerand et al., 1989; R. J. Vallerand et al., 1992) was used to assess motivational styles. The Acculturation, Habits, and Interests Multicultural Scale for Adolescents (AHIMSA) was used to measure acculturation. The College-going Self-efficacy scale was used to measure domain specific self-efficacy (Gibbons & Borders, 2010).

Results

Prior to analysis, the dependent variables (GPA, ACT scores, class rank, CGSE attendance and CGSE persistence), independent variables (Paternal educational attainment, maternal educational attainment, SES, familism support, familism referent, familism obligation, religion, respect and traditional gender norms) and proposed mediators (integrated acculturation level, intrinsic motivation and relative effort) were examined through various statistical tests using SPSS version 22 for accuracy of data entry, missing values, and fit between their distributions and the assumptions of multivariate analysis. Missing values were not replaced with means for other cases. One case was identified through Mahalanobis distance as a multivariate outlier with $p < .001$ and was deleted, leaving 112 cases for analysis.

Correlations

A full correlation matrix containing all of the variables of interest is presented in

Table 3. The familism variables used for hypothesis one were found to generally be weakly and negatively correlated with variables used to measure academic success, which was opposite to the hypothesized direction. Familism obligation was found to be significantly and positively correlated with CGSE attendance. Familism obligation and referent were found to be positively and significantly correlated with intrinsic motivation. The traditional values of respect and traditional gender norms were found to be nonsignificantly negatively correlated with academic success and only respect was found to be significantly and positive correlated with CGSE attendance. Integration acculturation status was not found to be significantly correlated with any variable of interest.

The more fixed factors such as parental educational attainment and SES used in hypothesis two are described next. The educational attainment from the father was found to be very weakly and negatively correlated with academic success, while the educational attainment from the mother was found to be weakly but positively correlated with academic success. The family's SES was found to be significantly and negatively correlated with class rank, where lower class rank is good (e.g., 10/100 represents a student being in the top 10% of their class). Intrinsic motivation was found to be positively and significantly correlated with CGSE attendance, CGSE persistence and class rank.

Table 3 Full Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Father Lv. Ed.	1	.325**	.295**	.048	-.028	-.210*	-.116	-.128	-.115	-.044	-.022	-.150	-.057	-.054	-.109	.003	-.092
2. Mother Lv. Ed		1	.085	-.015	-.154	-.081	-.024	-.024	-.120	-.152	.031	.093	.104	.182	.146	.225	.145
3. SES Family			1	.071	.061	-.108	.184	.084	.239*	.035	.207*	-.212*	-.052	-.171	-.288**	-.034	-.288*
4. SES School				1	.151	.277**	.079	.037	.038	.014	-.117	.304**	.285**	.296**	-.496**	.131	.384**
5. Integration					1	.021	-.056	-.146	-.146	-.106	-.137	-.087	-.049	.003	.044	.040	.182
6. Effort						1	.161	.089	.131	.133	-.052	.316**	.138	.247*	.039	-.003	-.170
7. Familism Support							1	.617**	.640**	.594**	.295**	.160	.192	.170	-.037	-.096	-.048
8. Familism Obligation								1	.694**	.708**	.349**	.210*	.278**	.195	-.026	-.192	.011
9. Familism Referent									1	.703**	.471**	.194*	.139	-.007	-.099	-.259	-.205
10. Respect										1	.427**	.178	.231*	.156	-.088	-.214	-.126
11. Tradtl Gender Norms											1	-.023	-.096	-.101	-.150	-.229	-.134
12. Intrinsic Motivation												1	.535**	.454**	-.521**	.070	.336*
13. CGSE Attendance													1	.805**	.388**	.020	.251
14. CGSE Persistence														1	.351**	.071	.394**
15. GPA															1	.121	.938**
16. ACT																1	.042
17. Class Rank																	1

** . Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Mediation tests

According to Baron and Kenny (1986), in order to demonstrate mediation of one variable's (x) influence on a dependent variable (z) by another variable (y) we must show that (1) each variable is significantly correlated with the others, and (2) that when the dependent variable z is regressed on x and y simultaneously, the variance associated with x on z should decrease and become non-significant (full mediation), while the variance associated with y on z remains strong and statistically significant. If the variance accounted for by x decreases, but remains statistically significant, partial mediation is implied. Failure to meet these conditions makes mediation implausible.

Four out of the five models needed to test the secondary hypothesis proposed in hypothesis 1^a could not be run due to these conditions not being met. The independent variables of familism values were not found to be significantly correlated with the dependent variables of GPA and SAT scores and relative effort on academics was not found to be significantly correlated with class rank and CGSE attendance. None of the five models needed to test the third hypothesis could be run due to these conditions not being met due to the independent variable and the proposed mediator variable of integrated acculturation being nonsignificantly correlated with the dependent variables. Three out of the five models needed to test the fourth hypothesis could not be run due to these conditions not being met. The independent variables of parental educational attainment and SES were not found to be significantly correlated with the dependent variables of GPA, SAT scores and CGSE attendance. Linear regression was used to test the mediating effects of intrinsic motivation with the independent variable of SES on

GPA as well as the independent variable of the mother's educational attainment on CGSE persistence.

Tests for multicollinearity, normality, linearity, and outliers were met for all regressions used to test the first and second hypotheses. However, the assumption of homoscedasticity appeared to only be met for regressions where CGSE served as the dependent variable. No mediation tests were able to be run on the third hypotheses due to violated assumptions. For the fourth and final hypothesis mediation analyses could not be run with the dependent variables of ACT scores, class rank, and CGSE attendance due to all assumptions not being met; therefore GPA and CGSE persistence were the only suitable dependent variables to be used in the mediation models.

Hypotheses and Research Question

Hypothesis one. The first hypothesis was such that the familism values of obligation, referent and support were to be positively and significantly correlated with academic success (GPA and ACT scores) and college-going beliefs while being negatively and significantly correlated with class rank. Linear regression was used to assess the full model of the three familism values on each of the dependent variables.

The null hypothesis could not be rejected with the full model of familism obligation, support and referent with the dependent variables of GPA and ACT scores. Familism referent was the only familism value that was significantly and negatively correlated with class rank [Beta = -.44, B = -3.39, t = -2.13, p = .038]. Familism obligation was the only familism value that was significantly and positively correlated with CGSE attendance [Beta = .32, B = .83, t = 2.27, p = .026]. Interestingly, the direction of the correlation between familism obligation and familism referent was

opposed when examining beliefs about persisting through college, with familism obligation being significantly and positive correlated with CGSE persistence [Beta = .32, B = 1.03, t = 2.23, p = .028] whereas familism referent was negatively and significantly correlated with CGSE persistence [Beta = -.36, B = -1.03, t = -2.44, p = .016]. Table 4 shows the regression for hypothesis one.

Table 4 Regressions with DVs of Class Rank and CGSE

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
Class Rank							
Familism Support	0.434	1.354	0.06	0.321	.75	0.533	1.877
Familism Obligation	2.429	1.754	0.276	1.385	.172	0.468	2.139
Familism Referent	-3.386	1.591	-0.435	-2.128	.038	0.446	2.244
CGSE Attendance							
Familism Support	0.167	0.283	0.079	0.589	.557	0.533	1.877
Familism Obligation	0.833	0.367	0.324	2.269	.026	0.468	2.139
Familism Referent	-0.309	0.333	-0.136	-0.929	.355	0.446	2.244
CGSE Persistence							
Familism Support	0.541	0.357	0.203	1.516	.133	0.533	1.877
Familism Obligation	1.03	0.462	0.319	2.229	.028	0.468	2.139
Familism Referent	-1.026	0.419	-0.359	-2.449	.016	0.446	2.244

The additional hypothesis (H1^a) proposed that relative effort on academics would partially mediate the relationship between familism values was not able to be tested with the dependent variables of GPA and SAT scores due to the finding that the familism values were not significantly correlated with these dependent variables. Relative effort on academics was not significantly correlated with class rank or CGSE attendance, therefore the mediation analysis could not be run due to the violation of this assumption. Relative effort on academics was not observed to partially mediate the

relationship between familism obligation and familism reference on the dependent variable of CGSE persistence due to the fact that both obligation and referent remained significant in the model.

Hypothesis two. The second hypothesis was such that parental educational attainment as well as SES would be positively and significantly correlated with academic success (GPA and ACT scores) and college-going beliefs while being negatively and significantly correlated with class rank. Linear regression was used to assess the full model of parental educational attainment and SES on each of the dependent variables.

The null hypothesis could not be rejected with the full model with the dependent variables of ACT scores, class rank and CGSE attendance. SES was found to be negatively and significantly correlated with GPA [Beta = -.28, B = -.09, $t = -2.48$, $p = .015$], while parental educational attainment was found to be non significant. The mother's educational attainment was found to be significantly and positively correlated with CGSE persistence [Beta = .22, B = 1.85, $t = 2.05$, $p = .044$], while paternal educational attainment and SES were found to be nonsignificantly and negatively correlated with CGSE persistence. Table five presents the two regressions that were run for hypothesis two.

Table 5 Regressions with DVs of GPA and CGSE Persistence

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
GPA							
EdFather	-0.055	0.071	-0.092	-0.781	.437	0.823	1.215
EdMother	0.093	0.053	0.199	1.762	.082	0.894	1.118
SESFamily	-0.089	0.036	-0.278	-2.483	.015	0.913	1.095
CGSE Persistence							
EdFather	-0.833	1.222	-0.077	-0.682	.497	0.823	1.215
EdMother	1.85	0.903	0.221	2.048	.044	0.894	1.118
SESFamily	-0.967	0.618	-0.167	-1.565	.121	0.913	1.095

Hypothesis three. Hypothesis three proposed that higher rates of an integrated acculturation style will mediate the positive relationship between familism values, academic success and college-going self-efficacy. Unfortunately no mediation analyses could be run due to all assumptions not being met.

Hypothesis four. The fourth hypothesis proposed that intrinsic motivation will mediate the positive relationship between parental SES and parental education level on academic success (GPA, ACT) and college-going self-efficacy, while mediating the negative relationship between SES and parental educational level on class rank. Mediation analyses could not be run with the dependent variables of ACT scores, class rank, and CGSE attendance due to all assumptions not being met.

As expected, intrinsic motivation mediated the effect of SES on GPA, as the variance accounted for in SES reversed from -.06 to .04 and was no longer significant [$p = .058$]. A more robust effect was observed by intrinsic motivation mediating the effect of the mother's educational attainment on CGSE persistence, as the variance accounted for in CGSE persistence dropped from 1.18 to .64 and was no longer

significant [$p = .128$]. Table 6 demonstrates the mediating effects of intrinsic motivation on both SES and CGSE.

Table 6 Intrinsic Motivation Mediating SES and Maternal Education

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
GPA							
SES Family	-0.060	0.031	-0.186	-1.924	.058	0.955	1.047
Intrinsic Motivation	0.039	0.008	0.481	4.977	.000	0.955	1.047
CGSE Persistence							
Ed Mother	1.179	0.767	0.141	1.538	.128	0.991	1.009
Intrinsic Motivation	0.639	0.133	0.441	4.816	.000	0.991	1.009

Research question. The potential impact of traditional cultural values on academic success and college-going self-efficacy was examined as final part of this study. It was found that respect and traditional gender norms were not significantly correlated with GPA, ACT scores or class rank. However, both traditional values were significantly correlated with CGSE attendance, where respect was positively correlated [$\text{Beta} = .33$, $B = .49$, $t = 3.14$, $p = .002$], and traditional gender norms were negatively correlated [$\text{Beta} = -.24$, $B = -.33$, $t = -2.251$, $p = .027$]. Respect remained significantly and positively correlated with CGSE persistence [$\text{Beta} = .24$, $B = .44$, $t = 2.22$, $p = .029$], whereas traditional norms remained negatively correlated but not at a significant level [$\text{Beta} = -.21$, $B = -.36$, $t = -1.87$, $p = .065$]. Table 7 shows these findings.

Table 7 Traditional Cultural Values and College-Going Self-Efficacy

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
	CGSE Attendance						
Respect	0.493	0.157	0.333	3.144	0.002	0.818	1.223
Traditional Gender Norms	-0.329	0.146	-0.239	-2.251	0.027	0.818	1.223
	CGSE Persistence						
Respect	0.453	0.204	0.244	2.216	0.029	0.818	1.223
Traditional Gender Norms	-0.355	0.191	-0.205	-1.863	0.065	0.818	1.223

Discussion

The purpose of the current study was to explore how the constructs of relatively fixed variables (parental educational attainment and SES), as well as familial and cultural values impact academic success and college-going beliefs. Previous research has been more focused on the direct interaction between constructs. To deepen our understanding of these interactions, students' levels of acculturation as well as levels of intrinsic motivation were examined. Ecological Systems Theory was used to ground the connections between the constructs of interest by demonstrating how influences within and across systems play out. The primary goal of this project was to provide school systems serving Hispanic-American students a deeper understanding of ways to better include cultural and familial factors to improve short-term and long-term academic success.

Hypothesis One

As previously noted, familism obligation, support and referent were not significantly correlated with either GPA or ACT scores. It was felt that this

nonsignificant interaction could have been partially accounted for by the lack of variability in the dependent variables. This line of thinking is partially supported by the finding that familism referent was found to be significantly correlated with class rank, which contained more variability. Another potential contributing factor was that the familial values were not tailored towards academic related matters in any way. For instance familism support questions pertained to general support of the family, close relations with extended family and the expression of love and affection rather than the family supporting the student in a specific domain such as academics. It was also found that a sizeable portion of students were unaware of or chose not to report their GPA, ACT scores and class rank. While it is difficult to determine what was most likely contributing factor to this lack of self-report, it could have partially been related to students being less involved in the tracking of academic standing. Taking a step back from the current study we are reminded that Hispanic-American students obtain high school diplomas at a rate 30% less than their Caucasian cohort.

When interpreting how familism values impact college-going beliefs it is important to conceptualize the individual factors from a systems approach. Referring back to the idea that many of these students are likely attending school for themselves as well as their family, it is understandable why familism obligation was the only value that was significantly correlated with self-efficacious beliefs about attending college. While familism obligation remained positively and significantly correlated with beliefs about persisting in college through graduation, familism referent was significantly and negatively correlated. Referring back to how familism referent was measured (i.e., children doing things to make their parents happy and the child should think about the

family when making important decisions) it is clearer why this negative correlation was found. Due to the limitation of the current study not obtaining information from the participant's parents, it is difficult to understand if the student pursuing a college degree is in line with the values within the family. Since the systems theory proposes that interactions occur bi-directionally, familism obligation supports academic beliefs about starting college whereas the student can experience a pull to include their family in important decisions during the two to four years during their time at an institute of higher education. This ingrained sense of familism referent could make it more difficult for the student to complete their degree. For example, a student could be asked to return home to assist their family with financial obligations or with the caretaking of an elderly grandparent.

The second part of the first hypothesis (H^{1a}) proposed that relative effort towards academics would partially mediate the relationship between familism values, academic success and college-going beliefs. As mentioned in the results section violations of assumptions limited which mediation analyses could be completed. When analyses could be run, results indicated that relative effort did not contribute to the variance between familism obligation and referent on beliefs about persisting through college in a significant way. Other than beliefs about persisting through college, relative effort was only found to be significantly correlated with intrinsic motivation. Therefore, it is hypothesized that intrinsic motivation is the variable that is more truly serving as a mediator between the familial factors and academic factors, which will be discussed at a later time.

While limited, the findings from the first hypothesis demonstrate that familial factors can indeed contribute to students' beliefs about both attending and completing college. Unfortunately, many of the regressions being nonsignificant led to limited mediation tests, which were planned to better understand these complex interactions. Altogether the findings partially support the notion that the family system, with underlying values of *educación*, can positively influence the student when in the system of the school.

Hypothesis Two

The second hypothesis was posed to examine how the relatively fixed factors from the students' family would impact academic success and college-going beliefs. Nonsignificant results were found with the dependent variables of ACT scores, class rank and self-efficacious beliefs about attending college. One explanation for this could be the limited variance among the parents' educational attainment, especially from the father. The measurement was also a potential source of error due to the item not allowing students to report on parental education below the high school level. Overall measurement difficulties were noted with the variables of ACT scores and class rank due to slightly less than 50% of participants not responding to these items. Self-reported GPA had a higher rate of response, roughly 80%, and a significant relationship in support of the hypothesis was found. Despite social capital being viewed as a supportive factor for these students, difficulties related to reduced financial capital cannot be avoided. It is unfortunate that this study confirmed that students from families with low SES are significantly more likely to have lower grades than their higher SES peers. Reading into this situation further and assessing it from a systems approach one could

propose that parents with lower educational backgrounds and multiple part time jobs could have less time to spend assisting their children with homework or simply value homework less than other responsibilities around the home. Similarly, the exosystem (interaction between the microsystems) is seen as potentially influencing the students' academic success. For instance, parents from a lower SES could have fewer options for health insurance, possibly leading to more sick days for their children and them being pulled away from school.

The current study did not assess the acculturation level of the parents, however previous research has found that Hispanic-American parents who are less acculturated are more likely to rely on the school system to provide academic structure (Ancis, 2004). This reliance on the school system could distance the parents from their child's academic progress and limit their impact on factors such as GPA.

Some interesting findings came out of the relationship between parental educational attainment and students' beliefs about persisting through college. Higher educational attainment by the student's mother significantly and positively predicted higher rates of beliefs about persisting through college, whereas paternal educational attainment was correlated in a negative direction albeit nonsignificantly. One explanation for this variance is due to the fact that traditional gender norms are common within Hispanic-American families. Given this, the mother is likely to spend more time with the children thereby having more of an influence on the child's perception of persisting through college and modeling the educational attainment of their mother.

Findings from the results proposed by the second hypothesis, while not conclusive, again demonstrate how the exosystem of parents' level of education and

SES indirectly influence the individual. This impact was seen in both the factors that could impact a student being admitted to college (e.g., their GPA) as well as the students' internal beliefs towards completing college.

Hypothesis Three

The third hypothesis was such that higher rates of integrated acculturation will mediate the positive relationship between familism values, academic success and college-going self-efficacy. Violations of assumptions prevented this from being studied. Integration status in itself was not significantly correlated with any other variable in the present study. This could have been due to the study solely measuring the acculturation level of the student, rather than assessing the parental level of acculturation as well. While there was sound rationale behind using the validated brief measure of acculturation, it could have been beneficial to use a longer measure that could have provided more subtly to the observed variance. The location of the study could have also contributed to acculturation not being significantly correlated with other variables. The vast majority of the students that attended the school where the study took place were of Hispanic origin. This means that their referent group was of a similar ethnicity and nuanced between participant differences were likely not discussed leading to the participants not being cognizant of any said differences.

Hypothesis Four

More assumptions could be met in the second set of mediation analyses. The results were in support of the hypothesized mediation effect of intrinsic motivation on SES and GPA. Similarly, intrinsic motivation was also observed to mediate the effect of maternal educational attainment on participants' beliefs about completing college.

Intrinsic academic motivation is linked with academic engagement required for a student to be autonomous in their learning and completion of tasks required to do well in school. When students possess high levels of internally regulated academic motivation they are able to offset deleterious impacts from the microsystem, exosystem and even the macrosystem. These results demonstrate how the bi-directional influence proposed by systems theory comes to fruition. Another promising implication from these results is generalizing the idea that intrinsic academic motivation can indeed buffer from real difficulties, such as parents having busy schedules, that the student has little power over changing in the moment (Henderson, 1997). Again conceptualizing these factors from a systems theory, the intrinsically motivated student is likely to serve as a positive role model for their siblings. Intrinsic motivation could have an even greater impact on academic factors when the student embarks on their college career where they have more autonomy in regards to class selection. Findings from the current study can help to generalize the utility of intrinsic motivation. For example, Ryan et al., (2011) demonstrated that intrinsically motivated individuals have greater resource utilization in the domain of mental health. It was previously inferred that this relationship is similar in the domain of academics. The finding that intrinsic motivation mediated the relationship between maternal educational attainment and beliefs about persisting in college support this inference.

Research Question

The research question was posed in light of limited research being available that measured traditional cultural values in the way the current study did and with the specific outcome variables. Since limited research is available it is difficult to determine

what likely contributed to the correlations between the two traditional values (e.g., respect and traditional norms) not being significantly correlated with GPA, ACT scores or class rank. Conceptualizing this interaction from a systems approach, the macrosystem is the furthest system from the individual and only impacts the individual indirectly through the exosystem and microsystem. This allows for a multitude of factors, both measured and not measured, which could have been more significant contributors.

Significant correlations, although in different directions, were found between both traditional cultural values on self-efficacious beliefs towards attending college. Respect was positively correlated whereas traditional gender norms were negatively correlated. After reviewing some items from the MACVS respect subscale (e.g., “children should never question their parents’ decisions” and “children should follow their parents’ rules...” it is understandable that higher scores on this subscale would be correlated with beliefs towards attending college. Students respecting the wishes from their family is likely to run parallel with the concept that they are attending school for both themselves as well as their family, referred to as familism (Fuligni et al., 1999). While not measured in the current study, previous research has shown that first generation students likely receive messages regarding upward educational advancement from their family (Buriel, 1993). Given the fact that roughly 39% of the participants identified as first generation and roughly 52% identified as second generation, this was likely a contributing factor in the current study.

As previously noted, traditional gender norms were negatively correlated with self-efficacious beliefs about attending college. Referring back to the specific items

within this subscale can shed some light on this finding. Items typically spoke to males serving as the primary breadwinner and females being viewed as fragile, and most suited for work within the home (e.g., “men should earn most of the money for the family so women can stay home and take care of the children and the home” and “it is important for the man to have more power in the family than the woman”). Considering past findings from Hernandez (2000) that a child’s sense of familial obligation to advance their families by performing well academically is present regardless of gender, it is understandable why this subscale was negatively correlated with beliefs about attending college.

The results from the research question have shown that, while not necessarily reliably, cultural values present in the macrosystem do indeed significantly contribute to the students’ individual system. Another interesting finding was that higher endorsement of the value of respect, and lower endorsement on traditional gender roles contributed to self-efficacious beliefs about attending college.

Limitations, Implications, and Future Research

Several limitations were present in this study. Some of these limitations are conceptualized as oversights during the development and initiation of the project while others are viewed as limitations that are common in social science research. A critical analysis of what contributed to these limitations can serve to improve future projects with a similar objective.

Methodologically, the researcher chose to only utilize student self-report, rather than obtaining information from multiple sources such as parents, teachers and the school’s record system. This led to a number of limitations, with the most notable

being missing data on the dependent variables. These missing cases contributed to less power from the statistical analyses, which in turn make generalizability more difficult. Furthermore, this missing data likely contributed to many of the proposed statistical models not being able to be completed due to a violation of assumptions.

Error was also introduced because the research was reliant on honest and accurate self-report from the participants without the ability to cross check their responses with an alternate data source. Given the fact that students completed the survey packets when they were amongst their peers, it could be hypothesized that potential response bias could have contributed to how the participants chose to respond to some items.

The construction of and decision as to which measures were used was also another limitation. For example, item number eight on the demographic survey asked “how much effort do you typically put toward your schoolwork relative to your social life and work/job?” The finding that relative effort to school work was not significantly correlated with any of the dependent variables was troubling at first. However, reassessing how the item was worded could show that students who put forth equally high effort into the domains of academics, work and their social life are those who achieve higher academic success. The number of items within each measure was also seen as a limitation. One-item questions such as those used to assess GPA, class rank and ACT score as well as the brief acculturation scale were typically found to contribute to weak or nonsignificant results when compared to lengthier measures.

Another limitation of the study was the unique sample in which the participants were selected from. The observed ethnicity of students within the study site was almost

entirely Hispanic. While this specific school was selected due to this fact, it is also understood to be somewhat of an anomaly within the larger educational system. The implications from this study, which will be discussed in the next section, could be limited given this. Simply acknowledging that this study site was unique in nature could help school administrators wishing to utilize the results of this study to conceptualize what might have contributed to said findings and tailor them to their own institution.

Implications. As previously found by Bailey and Stoltenberg (2013), cultural and familial values continue to contribute to academic outcomes in a Hispanic population. This study also hoped to further generalize how intrinsic academic motivation can be integrated in multicultural studies. It is felt that the findings from this study do indeed reinforce the utility of Ryan and Deci's (2000) Self Determination Theory for Hispanic-American students. The implications of the finding that intrinsic academic motivation was found to mediate the relationship between fixed factors such as SES and maternal education on GPA and self-efficacious beliefs about completing college are quite promising. Since teachers and school administrators have much more influence on the motivation of students when compared to their parent's income and education, system change at this level is still a very real possibility. Systems change is typically slow going and continuously ongoing. However, if school personnel are willing and able to find ways to increase the intrinsic academic motivation of students then they have the opportunity to positively change the entire system from the individual outward. Another possibility is for schools to utilize a mentor model for students who have been identified as being at risk of dropping out of high school. Henderson (1997) learned that Hispanic-American parents have already identified this

mentor model as something they would like to see utilized for their children. It is clear that communication between systems is an integral component of helping any student, especially those who graduate high school and matriculate in higher education institutions at lower rates.

Future Research. If adequate time and resources permit, the multicultural literature could greatly benefit from a more comprehensive study that gathers information from multiple sources (e.g., student self-report, academic records, teacher report and family report). This approach to research would be more in line with the systems focused nature of the present study. Previous research has utilized a mixed methods approach to understanding how family factors influence academic success. Including a qualitative component to future research would help deepen our understanding of the numerous factors that contribute to both academic success and beliefs about higher education. Since research is continuously evolving, mixed methods research could also help to either answer or pose questions that have yet to be addressed within this subfield of multiculturally driven research.

To help clarify how familial support is more truly influencing the student, it could be beneficial to assess levels of domain specific support from the family in regards to academic achievement. Ideally this would be studied from both student self-report and parental report. The addition of this measure of support could help clarify how more traditional familial support combine with academic support within the context of the system.

The current study was focused on college-going self-efficacy and specific measures were used to measure these beliefs. This was not interpreted as a specific

limitation due to the study contributing to a gap in the literature in this area. However, a parallel study could be developed to assess how cultural and familial values from a working class population might contribute to academic success and beliefs about attending and completing vocational training programs. These specialized programs, while still viewed as higher education, are not associated with the same financial and social costs as completing a college degree. It would be interesting to study if vocational training might be viewed as more relevant and beneficial to the family system when compared to college.

Finally, future research should continue to utilize the experts within the educational system (e.g., superintendents, principals and teachers) to guide research. Not only will this likely lead to more informed studies, but it will also serve to develop lasting relationships with educational systems that could benefit from the partnership with researchers. Without a strong connection between innovative research and staff members on the front line of educating Hispanic-American students, the next generation of students could face the same struggles previous generations have encountered.

References

- Alfaro, E. C., Umana-Taylor, A. J., & Bamaca, M. Y. (2006). The influence of academic support on Latino adolescents' academic motivation. *Family Relations*, 55(3), 279-291.
- Altschul, I. (2011). Parental involvement and the academic achievement of Mexican American youths: What kinds of involvement in youths' education matter most? *Social Work Research*, 35(3), 159-170.
- Ancis, J. R. (2004). *Culturally responsive interventions [electronic resource] : innovative approaches to working with diverse populations / Julie R. Ancis, editor*: New York : Brunner-Routledge, 2004.
- Auerbach, S. (2004). Engaging Latino parents in supporting college pathways: Lessons from a college access program. *Journal of Hispanic Higher Education*, 3(2), 125-145. doi: 10.1177/1538192703262514
- Bailey, K. C., & Stoltenberg, C.D. (2013). *Hispanic-American adolescents' family and culture: The impacts on academic motivation*. Manuscript submitted for publication.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*: W H Freeman/Times Books/ Henry Holt & Co, New York, NY.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Baumeister, R., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Berry, J. O. (2009). *Lifespan perspectives on the family and disability* (2nd ed.). Austin, TX: PRO-ED.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review*, 46(1), 5-34. doi: 10.1111/j.1464-0597.1997.tb01087.x

- Blanck, R., & Blanck, G. (1986). *Beyond ego psychology : Developmental object relations theory*: New York : Columbia University Press, 1986.
- Bordes-Edgar, V., Arredondo, P., Kurpius, S. R., & Rund, J. (2011). A Longitudinal Analysis of Latina/o Students' Academic Persistence. *Journal of Hispanic Higher Education*, 10(4), 358-368.
- Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design.
- Bronfenbrenner, U. (1994). Ecological models of human development *International Encyclopedia of Education* (2nd ed., Vol. 3, pp. 1643-1647). New York, NY: Elsevier.
- Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen, G. Elder & K. Luscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development*. Washington, DC: American Psychological Association.
- Brown v. Board of Education, No. 347 U.S. 483 (1954).
- Buriel, R. (1993). Childrearing orientations in Mexican American families: The influence of generation and sociocultural factors. *Journal of Marriage and the Family*, 55(4), 987-1000. doi: 10.2307/352778
- Cerna, O. S., Perez, P. A., & Saenz, V. (2009). Examining the Precollege Attributes and Values of Latina/o Bachelor's Degree Attainers. *Journal of Hispanic Higher Education*, 8(2), 130-157.
- Chandler, C. L., & Connell, J. P. (1987). Children's intrinsic, extrinsic and internalized motivation: A developmental study of children's reasons for liked and disliked behaviours. *British Journal of Developmental Psychology*, 5(4), 357-365. doi: 10.1111/j.2044-835X.1987.tb01072.x
- Chao, R. K. (1995). Chinese and European American cultural models of the self reflected in mothers' childrearing beliefs. *Ethos*, 23(3), 328-354. doi: 10.1525/eth.1995.23.3.02a00030

- Chun, H., & Dickson, G. (2011). A psychoecological model of academic performance among Hispanic adolescents. *Journal of Youth and Adolescence*, 40(12), 1581-1594.
- Cornelius-White, J. H. D., Garza, A. C., & Hoey, A. T. (2004). Personality, family satisfaction, and demographic factors that help Mexican American students succeed academically. *Journal of Hispanic Higher Education*, 3(3), 270-283. doi: 10.1177/1538192704265600
- Cruz, R. A., King, K. M., Widaman, K. F., Leu, J., Cauce, A. M., & Conger, R. D. (2011). Cultural influences on positive father involvement in two-parent Mexican-origin families. *Journal of Family Psychology*, 25(5), 731-740. doi: 10.1037/a0025128
- Csikszentmihalyi, M., & Nakamura, J. (1989). *The dynamics of intrinsic motivation: A study of adolescents* (Vol. 3). New York: Academic Press.
- deCharms, R. (1968). *Personal causation*. New York: Academic Press.
- Deci, E. L. (1975). *Intrinsic Motivation*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum Press.
- Deci, E. L., & Ryan, R. M. (1991). A motivational approach to self: Integration in personality. In R. A. Dienstbier (Ed.), *Nebraska Symposium on Motivation, 1990: Perspectives on motivation*. (pp. 237-288). Lincoln, NE US: University of Nebraska Press.
- Ennis, S. R., Rios-Vargas, M., & Albert, N. G. (2011). *The Hispanic population: 2010*. U.S. Census Bureau Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf>.
- Fairchild, A. J., Horst, S. J., Finney, S. J., & Barron, K. E. (2005). Evaluating existing and new validity evidence for the academic motivation scale. *Contemporary Educational Psychology*, 30, 331-358. doi: 10.1016/j.cedpsych.2004.11.001

- Faircloth, B. S., & Hamm, J. V. (2005). Sense of belonging among high school students representing four ethnic groups. *Journal of Youth and Adolescence*, 34(4), 293-309. doi: 10.1007/s10964-005-5752-7
- Freeberg, A. L., & Stein, C. H. (1996). Felt obligations towards parents in Mexican-American and Anglo-American young adults. *Journal of Social and Personal Relationships*, 13(3), 457-471. doi: 10.1177/0265407596133009
- Fuligni, A. J. (1998). Authority, autonomy, and parent-adolescent conflict and cohesion: A study of adolescents from Mexican, Chinese, Filipino, and European backgrounds. *Developmental Psychology*, 34(4), 782-792. doi: 10.1037/0012-1649.34.4.782
- Fuligni, A. J., Tseng, V., & Lam, M. (1999). Attitudes toward family obligations among American adolescents with Asian, Latin American, and European backgrounds. *Child Development*, 70(4), 1030-1044. doi: 10.1111/1467-8624.00075
- Fuligni, A. J., Witkow, M., & Garcia, C. (2005). Ethnic Identity and the Academic Adjustment of Adolescents From Mexican, Chinese, and European Backgrounds. *Developmental Psychology*, 41(5), 799-811. doi: 10.1037/0012-1649.41.5.799
- Gibbons, M. M., & Borders, L. D. (2010). A Measure of College-Going Self-Efficacy for Middle School Students. *Professional School Counseling*, 13(4), 234-243.
- Gil, A. G., Vega, W. A., & Dimas, J. M. (1994). Acculturative stress and personal adjustment among Hispanic adolescent boys. *Journal of Community Psychology*, 22(1), 43-54.
- Gil, A. G., Wagner, E. F., & Vega, W. A. (2000). Acculturation, familism, and alcohol use among Latino adolescent males: Longitudinal relations. *Journal of Community Psychology*, 28(4), 443-458.
- Goldenberg, C. (1996). Latin American immigration and U.S. schools. *Society for Research in Child Development*, 10(1), 1-31.
- Goodman, E., Adler, N. E., Kawachi, I., Frazier, A. L., Huang, B., & Colditz, G. A. (2001). Adolescents' Perceptions of Social Status: Development and Evaluation of a New Indicator.(Abstract). *Pediatrics*, 108(2), 459.

- Gutierrez, J., & Sameroff, A. (1990). Determinants of complexity in Mexican-American and Anglo-American mothers' conceptions of child development. *Child Development*, 61(2), 384-394. doi: 10.2307/1131099
- Harter, S. (1978). Effectance motivation reconsidered: Towards a developmental model. *Human Development*, 1, 661-669.
- Henderson, R. W. (1997). Educational and occupational aspirations and expectations among parents of middle school students of Mexican descent: Family resources for academic development and mathematics learning. In R. D. Taylor & M. C. Wang (Eds.), *Social and emotional adjustment and family relations in ethnic minority families*. (pp. 99-131). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.
- Hernandez, J. C. (2000). Understanding the retention of Latino college students. *Journal of College Student Development*, 41, 69-84.
- Hillstrom, K. A. (2009). *Are acculturation and parenting styles related to academic achievement among Latino students?* (AAI3355420). Retrieved from <http://search.proquest.com/docview/622088228?accountid=12964>
- <http://libraries.ou.edu/eresources/resolver.aspx?atitle=Are+acculturation+and+parenting+styles+related+to+academic+achievement+among+Latino+students%3F&author=Hillstrom%2C+Kathryn+Amanda&volume=&issue=&spage=&date=2009&title=Are+acculturation+and+parenting+styles+related+to+academic+achievement+among+Latino+students%3F&issn=> PsycINFO database.
- Horn, L., & Nunez, A. (2000). Mapping the road to college: First-generation students' math track, planning strategies, and context of support (NCES Report 2000-153). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Hurtado-Ortiz, M. T., & Gauvain, M. (2007). Postsecondary education among Mexican American youth: Contributions of parents, siblings, acculturation, and generational status. *Hispanic Journal of Behavioral Sciences*, 29(2), 181-191. doi: 10.1177/0739986307299584
- Ibañez, G. E., Kuperminc, G. P., Jurkovic, G., & Perilla, J. (2004). Cultural attributes and adaptations linked to achievement motivation among Latino adolescents. *Journal of Youth and Adolescence*, 33(6), 559-568. doi: 10.1023/B:JOYO.0000048069.22681.2c

- Jiang, Y., Yau, J., Bonner, P., & Chiang, L. (2011). The role of perceived parental autonomy support in academic achievement of Asian and Latin American adolescents. *Electronic Journal Of Research In Educational Psychology*, 9(2), 497-522.
- Jose Cisneros v. Corpus Christi Independent School District, No. 467 142 (1972).
- Kao, G. (2004). Parental influences on the educational outcomes of immigrant youth. *International Migration Review*(2), 427. doi: 10.2307/27645384
- Kaplan, C. P., Turner, S. G., & Badger, L. W. (2007). Hispanic adolescent girls' attitudes toward school. *Child & Adolescent Social Work Journal*, 24(2), 173-193.
- Knight, G. P., Gonzales, N. A., Saenz, D. S., Bonds, D. D., German, M., Deardorff, J., . . . Updegraff, K. A. (2008). The Mexican American cultural values scale for adolescents and adults. *Journal of Early Adolescence*, 30(3), 444-481. doi: 10.1177/0272431609338178
- LaFromboise, T., & Coleman, H. L. K. (1993). Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin*, 114(3), 395.
- Laosa, L. M. (1982). School, occupation, culture, and family: The impact of parental schooling on the parent-child relationship. *Journal of Educational Psychology*, 74(6), 791-827. doi: 10.1037/0022-0663.74.6.791
- Laosa, L. M. (1991). *Cognitive socialization and competence : the academic development of Chicanos*.
- Lee, R. M., & Liu, H. (2001). Coping with intergenerational family conflict: Comparison of Asian American, Hispanic, And European American college students. *Journal of Counseling Psychology*, 48(4), 410-419.
- López, E. J., Ehly, S., & García-Vázquez, E. (2002). Acculturation, social support and academic achievement of Mexican and Mexican American high school students: An exploratory study. *Psychology in the Schools*, 39(3), 245-257. doi: <http://dx.doi.org/10.1002/pits.10009>

- Lui, P., & Rollock, D. (2012). Acculturation and psychosocial adjustment among Southeast Asian and Chinese immigrants: The effects of domain-specific goals. *Asian American Journal of Psychology*, 3(2), 79-90. doi: 10.1037/a0025411
- Majer, J. M. (2009). Self-efficacy and academic success among ethnically diverse first-generation community college students. *Journal of Diversity in Higher Education*, 2(4), 243-250. doi: 10.1037/a0017852
- Marchant, G. J., Paulson, S. E., & Rothlisberg, B. A. (2001). Relations of middle school students' perceptions of family and school contexts with academic achievement. *Psychology in the Schools*, 38(6), 505.
- Martinez, C. R., DeGarmo, D. S., & Eddy, J. M. (2004). Promoting academic success among Latino youths. *Hispanic Journal of Behavioral Sciences*, 26(2), 128-151. doi: 10.1177/0739986304264573
- Martinez, G. (1977, Fall). The legal construction of race: Mexican-Americans and whiteness. *Harvard Latino Law Review*, 2(321).
- Monkman, K., Ronald, M., & Thérampène, F. D. (2005). Social and cultural capital in an urban Latino school community. *Urban Education*, 40(1), 4-33. doi: 10.1177/0042085904270416
- Montejano, D. (1987). *Anglos and Mexicans in the making of Texas*. Austin, TX: University of Texas Press.
- North, D. (1966). *The economic growth of the United States, 1790-1860*. New York: W.W. Norton.
- Ojeda, L., Navarro, R. L., & Morales, A. (2011). The Role of La Familia on Mexican American Men's College Persistence Intentions. *Psychology of Men and Masculinity*, 12(3), 216-229.
- Ortiz, C. J., Valerio, M. A., & Lopez, K. (2012). Trends in Hispanic academic achievement: Where do we go from here? *Journal of Hispanic Higher Education*, 11(2), 136-148.

- Paniagua, F. A. (2005). *Assessing and treating culturally diverse clients : a practical guide / Freddy A. Paniagua* (3rd ed.): Thousand Oaks, Calif. : Sage Publications, c2005.
- Perreira, K. M., Fuligni, A., & Potochnick, S. (2010). Fitting In: The Roles of Social Acceptance and Discrimination in Shaping the Academic Motivations of Latino Youth in the U.S. Southeast. *Journal of Social Issues*, 66(1), 131-153. doi: 10.1111/j.1540-4560.2009.01637.x
- Plyler v. Doe, No. 457 U.S. 202 (Supreme Court of the United States 1982).
- Portes, A. (1997). Immigration theory for a new century: Some problems and opportunities. *International Migration Review*, 31, 799-825.
- Ramírez, M. (1983). *Psychology of the Americas*. New York: Pergamon Press.
- Ramos, L., & Sanchez, A. R. (1995). Mexican-American high school students: Educational aspirations. *Journal of Multicultural Counseling & Development*, 23(4), 212-221.
- Reese, L., Balzano, S., Gallimore, R., & Goldenberg, C. (1995). The concept of educación: Latino family values and American schooling. *International Journal of Educational Research*, 23(1), 57-81.
- Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000). Daily well-being: The role of autonomy, competence, and relatedness. *Personality and Social Psychology Bulletin*, 26(4), 419-435. doi: 10.1177/0146167200266002
- Roeser, R. W., Midgley, C., & Urdan, T. C. (1996). Perceptions of the school psychological environment and early adolescents' psychological and behavioral functioning in school: The mediating role of goals and belonging. *Journal of Educational Psychology*, 88(3), 408-422. doi: 10.1037/0022-0663.88.3.408
- Rogers, C. (1995). *On becoming a person: A therapist's view on psychotherapy* (1 ed.). New York, NY: Mariner Books.
- Romero, A. J., & Ruiz, M. (2007). Does familism lead to increased parental monitoring?: Protective factors for coping with risky behaviors. *Journal of Child and Family Studies*, 16(2), 143-154. doi: 10.1007/s10826-006-9074-5

- Rumbaut, R. G. (1994). The crucible within: Ethnic identity, self-esteem, and segmented assimilation among children of immigrants. *International Migration Review*, 28(4), 748-794.
- Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality*, 63(3), 397-427. doi: 10.1111/1467-6494.ep9510042298
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- Ryan, R. M., & Frederick, C. (1997). On energy, personality, and health: Subjective vitality as a dynamic reflection of well-being. *Journal of Personality*, 65(3), 529-565. doi: 10.1111/1467-6494.ep9710314567
- Ryan, R. M., Kuhl, J., & Deci, E. L. (1997). Nature and autonomy: Organizational view of social and neurobiological aspects of self regulation behavior and development. *Developmental and Psychopathology*, 9, 701-728.
- Ryan, R. M., Lynch, M. F., Vansteenkiste M., & Deci, E. L. (2011). Motivation and autonomy in counseling, psychotherapy, and behavior change: A look at theory and practice. *The Counseling Psychologist*, 39(2), 193-260.
- Santamaria v. Dallas Independent School District (U.S. District Court for the Northern District of Texas 2006).
- Schwarz, J., Barton-Henry, M., & Pruzinsky, T. (1985). Assessing child-rearing behaviors: A comparison of ratings made by mother, father, child, and sibling on the CRPBI. *Child Development*, 56, 462-479.
- Sher-Censor, E., Parke, R. D., & Coltrane, S. (2011). Parents' promotion of psychological autonomy, psychological control, and Mexican-American adolescents' adjustment. *Journal of Youth Adolescence*, 40, 620-632.
- Suarez-Orozco, C., Rhodes, J., & Milburn, M. (2009). Unraveling the Immigrant Paradox: Academic Engagement and Disengagement among Recently Arrived Immigrant Youth. *Youth & Society*, 41(2), 151-185.

- Suarez-Orozco, M. M. (1989). *Central American Refugees and U.S. High Schools. A Psychosocial Study of Motivation and Achievement*.
- Trusty, J., Plata, M., & Salazar, C. F. (2003). Modeling Mexican Americans' educational expectations: Longitudinal effects of variables across adolescence. *Journal of Adolescent Research, 18*(2), 131-153. doi: 10.1177/0743558402250345
- Tyler, K. M., Dillihunt, M. L., Boykin, A. W., Coleman, S. T., Scott, D. M., Tyler, C. M. B., & Hurley, E. A. (2008). Examining cultural socialization within African American and European American households. *Cultural Diversity and Ethnic Minority Psychology, 14*(3), 201-204. doi: 10.1037/1099-9809.14.3.201
- U.S. Department of Health & Human Services. (2014). *Hispanic/Latino Profile*. Retrieved from <http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlID=54>.
- United States Department of Agriculture Food and Nutrition Service. (2014). Income Eligibility Guidelines, July 1, 2014 to June 30, 2015. Retrieved October 5th, 2014, from <http://www.fns.usda.gov/sites/default/files/2014-04788.pdf>
- Valdes, G. (1996). *Con Respeto. Bridging the Distances between Culturally Diverse Families and Schools. An Ethnographic Portrait*.
- Valencia, R. (2008). *Chicano students and the courts*. New York: New York University Press.
- Vallerand, R. J., Blais, M. R., Brière, N. M., & Pelletier, L. G. (1989). Construction et validation de l'Échelle de Motivation en Éducation (EME). *Revue canadienne des sciences du comportement, 21*, 323-349.
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1992). The academic motivation scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement, 52*, 1003-1017. doi: 10.1177/0013164492052004025
- Vansteenkiste, M., Sierens, E., Soenens, B., Luyckx, K., & Lens, W. (2009). Motivational profiles from a self-determination perspective: The quality of motivation matters. *Journal of Educational Psychology, 101*(3), 671-688. doi: 10.1037/a0015083

- Vansteenkiste, M., Soenens, B., Van Petegem, S., & Duriez, B. (2013). Longitudinal Associations Between Adolescent Perceived Degree and Style of Parental Prohibition and Internalization and Defiance. *Developmental Psychology*. doi: 10.1037/a0032972
- Vela, J. E. (2012). The education of the Mexican American: The new emerging underclass. *International Journal of Humanities and Social Science*, 2(14), 166-178.
- Warburton, E. C., Bugarin, R., Nunez, A., & Carroll, C. D. (2001). Bridging the gap: Academic preparation and postsecondary success of first-generation students (NCES Report 2001-153). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- White, R. W. (1963). *Ego and reality in psychoanalytic theory*. New York: International Universities Press.
- Wilson, S. (2003, Spring). Brown over “other white”: Mexican Americans’ legal arguments and litigation strategy in school desegregation lawsuits. *Law and History Review*, 21(1), 145-194.
- Woolley, M. E. (2009). Supporting School Completion among Latino Youth: The Role of Adult Relationships. *Prevention Researcher*, 16(3), 9-12.
- Zayas, L. H., Lester, R. J., Cabassa, L. J., & Fortuna, L. R. (2005). Why do so many Latina teens attempt suicide? A conceptual model for research. *American Journal of Orthopsychiatry*, 75(2), 275-287. doi: 10.1037/0002-9432.75.2.275
- Zell, M. C. (2010). Achieving a college education: The psychological experiences of Latina/o community college students. *Journal of Hispanic Higher Education*, 9(2), 167-186. doi: 10.1177/1538192709343102

Appendix A: Measures

Demographic Survey

1. What is your gender? ☐ Male ☐ Female
2. What is your ethnicity? (Choose the one you most identify with)
☐ African American ☐ Caucasian ☐ Hispanic ☐ Hispanic-American ☐ Latino/a
☐ Chicano/a ☐ Mexican ☐ Mexican/American ☐ Native American ☐ Other
3. How old are you? _____
4. What grade are you in?
☐ Ninth
☐ Tenth
☐ Eleventh
☐ Twelfth
5. What is your average GPA? (It's alright to take you best guess) _____
6. What is your most recent Pre ACT or ACT score? (It's alright to take you best guess)
Pre ACT _____ ACT _____
7. What is your class rank (It's alright to take your best guess, or leave blank) _____
8. How much effort do you typically put toward your school work relative to your social life and/ work/job?
☐ Very little
☐ Somewhat less than the social life and/ work/job
☐ About the same
☐ Somewhat more than social life and/ work/job
☐ Very much more than social life and/ work/job
9. Do you intend to go to college? ☐ yes ☐ no
If you answered yes, what type of college degree do you plan on pursuing?
☐ Associate's degree (2 years) (ex: junior college, nursing, or dental hygiene)
☐ Bachelor's degree (4 years) (ex: education, engineering, business, or technology)
☐ Master's degree (6 years) (ex: counselor, accounting, chemistry, or social work)
☐ Doctoral degree (7-9 years) (ex: Ph.D., lawyer, or medical doctor)
10. Do you qualify for free or reduced school lunch? ☐ Yes ☐ No
11. Please indicate the generation that best applies to YOU.
☐ **1st generation** = You were born in another country
☐ **2nd generation** = You were born in the US; either parent born in another country
☐ **3rd generation** = You were born in the US, both parents born in the US and all grandparents born in another country
☐ **4th generation** = You and your parents were born in the US and at least one grandparent born in another country with remainder born in the US
☐ **5th generation** = You and your parents were born in the US and all grandparents born in the US

Continued on back



IRB NUMBER: 4108
IRB APPROVAL DATE: 03/25/2014

12. What is the highest grade of education completed by your father?

- ☐ Did not complete high school
- ☐ GED
- ☐ High school diploma
- ☐ Associate's degree
- ☐ Bachelor's Degree
- ☐ Master's degree
- ☐ Doctorate Degree (MD, JD, PhD, etc.)

13. What is the highest grade of education completed by your mother?

- ☐ Did not complete high school
- ☐ GED
- ☐ High school diploma
- ☐ Associate's degree
- ☐ Bachelor's Degree
- ☐ Master's degree
- ☐ Doctorate Degree (MD, JD, PhD, etc.)

14. Imagine that this ladder pictures how American society is set up.

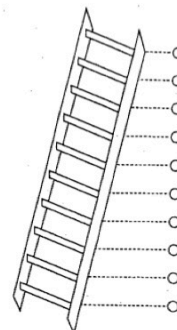
- At the top of the ladder are the people who are the best off – they have the most money, the highest amount of schooling, and the jobs that bring the most respect.
- At the bottom are people who are the worst off – they have the least money, little or no education, no job or jobs that no one wants or respects.



Now think about your family. Please tell us where you think your family would be on this ladder. **Fill in the circle that best represents where your family would be on this ladder.**

15. Now assume that the ladder is a way of picturing Santa Fe South.

- At the top of the ladder are the people in Santa Fe South with the most respect, the highest grades, and the highest standing.
- At the bottom are the people who no one respects, no one wants to hang around with, and have the worst grades.



Where would you place yourself on this ladder? **Fill in the circle that best represents where you would be on this ladder.**



IRB NUMBER: 4108
IRB APPROVAL DATE: 03/25/2014

Encuesta de información demográfica

1. ¿Cuál es tu sexo? ☐ Masculino ☐ Femenino
2. ¿Cuál es tu origen étnico? (Elige la opción con la que más te identifiques)
☐ Afroamericano ☐ Caucásico ☐ Hispano ☐ Hispano-estadounidense ☐ Latino
☐ Chicano ☐ Mexicano ☐ Mexicano-estadounidense ☐ Nativo americano ☐ Otro
3. ¿Cuántos años tienes? _____
4. ¿En qué grado estás actualmente?
☐ Noveno
☐ Décimo
☐ Undécimo
☐ Duodécimo
5. ¿Cuál es tu promedio de calificaciones (GPA)? (Puedes indicar un valor aproximado) _____
6. ¿Cuál es tu calificación más reciente en el examen de preparación universitaria (ACT) o la evaluación previa a dicho examen? (Puedes indicar un valor aproximado)
Evaluación previa al ACT _____ Examen ACT _____ No he sido evaluado aún _____
7. ¿Cuál es tu posición en la clasificación escolar? (Puedes indicar un valor aproximado o dejar el espacio en blanco) _____
8. ¿Cuánto esfuerzo sueles hacer para completar sus tareas escolares en comparación con las de tu vida social y actividad laboral?
☐ Muy poco
☐ Un poco menos que para mi vida social y actividad laboral
☐ Más o menos el mismo
☐ Un poco más que para mi vida social y actividad laboral
☐ Mucho más que para mi vida social y actividad laboral
9. ¿Vas a ir a la universidad? ☐ sí ☐ no
Si tu respuesta es afirmativa, ¿qué tipo de título universitario deseas obtener?
☐ Asociado (2 años) (ejemplo: junior college, enfermería o higiene dental)
☐ Licenciatura (4 años) (ejemplo: educación, ingeniería, administración de empresas o tecnología)
☐ Maestría (6 años) (ejemplo: abogacía, contabilidad, química o trabajo social)
☐ Doctorado (7-9 años) (ejemplo: Ph.D., abogado o médico)
10. ¿Tienes derecho a recibir almuerzos escolares gratuitos o a un precio reducido? ☐ Sí ☐ No
11. Indica a qué generación perteneces.
☐ **1ª generación** = naciste en otro país
☐ **2ª generación** = naciste en Estados Unidos; alguno de los padres nació en otro país
☐ **3ª generación** = naciste en Estados Unidos; ambos padres nacieron en Estados Unidos y todos los abuelos nacieron en otro país
☐ **4ª generación** = Tú y tus padres nacieron en Estados Unidos y por lo menos uno de tus abuelos nació en otro país, y el resto en Estados Unidos
☐ **5ª generación** = Tú y tus padres nacieron en Estados Unidos y todos tus abuelos nacieron en Estados Unidos

Continúa en la parte posterior



IRB NUMBER: 4108
IRB APPROVAL DATE: 4/9/2014

12. ¿Cuál es el nivel de escolaridad más alto de tu padre?

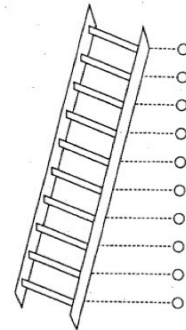
- ☐ No terminó la escuela secundaria (high school)
- ☐ GED
- ☐ Diploma de secundaria (high school)
- ☐ Asociado
- ☐ Licenciatura
- ☐ Maestría
- ☐ Doctorado (médico, abogado, Ph.D., etc.)

13. ¿Cuál es el nivel de escolaridad más alto de tu madre?

- ☐ No terminó la escuela secundaria (high school)
- ☐ GED
- ☐ Diploma de secundaria (high school)
- ☐ Asociado
- ☐ Licenciatura
- ☐ Maestría
- ☐ Doctorado (médico, abogado, Ph.D., etc.)

14. Imagina que esta escalera representa la composición de la sociedad estadounidense.

- En la parte superior de la escalera están las personas más favorecidas - tienen la mayor cantidad de dinero, el grado de escolaridad más alto y los empleos más respetados.
- En la parte inferior están las personas con la peor situación - casi no tienen dinero, poca o ninguna educación, no tienen trabajo o trabajan en ocupaciones que nadie más desea realizar o que nadie respeta.

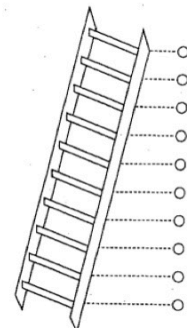


Ahora piensa en tu familia. Dinos dónde piensas que tu familia estaría en esta escalera. **Rellena el círculo que represente mejor la posición de tu familia en la escalera.**

15. Supón ahora que la escalera es una manera de describir a Santa Fe South.

- En la parte superior de la escalera están las personas de Santa Fe South más respetadas, con más educación y el más alto nivel social.
- En la parte inferior están las personas que nadie respeta, con las que nadie quiere tener nada que ver y con los niveles de educación más bajos.

¿Dónde te colocarías en esta escalera? **Rellena el círculo que represente mejor tu posición en la escalera.**



IRB NUMBER: 4108
IRB APPROVAL DATE: 4/9/2014

Many people in the United States have ancestors who came from another country. Families come to the United States at different times. Maybe you and your parents moved to the United States. Maybe your parents came to the United States when they were kids. Maybe your grandparents' grandparents were the ones who came to the United States.

Write the name(s) of the country (or countries) that your family came from:

When you think about this country...

I am most comfortable being with people from	The United States <input type="checkbox"/>	The country my family is from <input type="checkbox"/>	Both <input type="checkbox"/>	Neither/Other <input type="checkbox"/>
My best friends are from	The United States <input type="checkbox"/>	The country my family is from <input type="checkbox"/>	Both <input type="checkbox"/>	Neither/Other <input type="checkbox"/>
The people I fit in best with are from	The United States <input type="checkbox"/>	The country my family is from <input type="checkbox"/>	Both <input type="checkbox"/>	Neither/Other <input type="checkbox"/>
My favorite music is from	The United States <input type="checkbox"/>	The country my family is from <input type="checkbox"/>	Both <input type="checkbox"/>	Neither/Other <input type="checkbox"/>
My favorite TV shows are from	The United States <input type="checkbox"/>	The country my family is from <input type="checkbox"/>	Both <input type="checkbox"/>	Neither/Other <input type="checkbox"/>
The holidays I celebrate are from	The United States <input type="checkbox"/>	The country my family is from <input type="checkbox"/>	Both <input type="checkbox"/>	Neither/Other <input type="checkbox"/>
The food I eat at home is from	The United States <input type="checkbox"/>	The country my family is from <input type="checkbox"/>	Both <input type="checkbox"/>	Neither/Other <input type="checkbox"/>
The way I do things and the way I think about things are from	The United States <input type="checkbox"/>	The country my family is from <input type="checkbox"/>	Both <input type="checkbox"/>	Neither/Other <input type="checkbox"/>



IRB NUMBER: 4108
IRB APPROVAL DATE: 03/25/2014

Muchas personas en Estados Unidos tienen antepasados que vinieron de otro país. Las familias vienen a Estados Unidos en diferentes momentos. Tal vez tú y tus padres se vinieron a vivir a Estados Unidos. Es posible que tus padres vinieran a Estados Unidos cuando eran pequeños. Tal vez los abuelos de tus abuelos fueron los que vinieron a vivir a Estados Unidos.

Escribe el nombre del país o países de donde vino tu familia:

Cuando piensas en este país...

Me siento más cómodo al estar con gente de	Estados Unidos <input type="checkbox"/>	El país de donde es mi familia <input type="checkbox"/>	Ambos <input type="checkbox"/>	Ninguno de ellos/Otros <input type="checkbox"/>
Mis mejores amigos son de	Estados Unidos <input type="checkbox"/>	El país de donde es mi familia <input type="checkbox"/>	Ambos <input type="checkbox"/>	Ninguno de ellos/Otros <input type="checkbox"/>
Las personas con las que siento que pertenezco son de	Estados Unidos <input type="checkbox"/>	El país de donde es mi familia <input type="checkbox"/>	Ambos <input type="checkbox"/>	Ninguno de ellos/Otros <input type="checkbox"/>
Mi música favorita es de	Estados Unidos <input type="checkbox"/>	El país de donde es mi familia <input type="checkbox"/>	Ambos <input type="checkbox"/>	Ninguno de ellos/Otros <input type="checkbox"/>
Mis programas de televisión o películas favoritos son de	Estados Unidos <input type="checkbox"/>	El país de donde es mi familia <input type="checkbox"/>	Ambos <input type="checkbox"/>	Ninguno de ellos/Otros <input type="checkbox"/>
Los días de fiesta que celebro son de	Estados Unidos <input type="checkbox"/>	El país de donde es mi familia <input type="checkbox"/>	Ambos <input type="checkbox"/>	Ninguno de ellos/Otros <input type="checkbox"/>
La comida que como en casa es de	Estados Unidos <input type="checkbox"/>	El país de donde es mi familia <input type="checkbox"/>	Ambos <input type="checkbox"/>	Ninguno de ellos/Otros <input type="checkbox"/>
La manera en que hago las cosas y la forma en que pienso sobre las cosas son de	Estados Unidos <input type="checkbox"/>	El país de donde es mi familia <input type="checkbox"/>	Ambos <input type="checkbox"/>	Ninguno de ellos/Otros <input type="checkbox"/>



IRB NUMBER: 4108
IRB APPROVAL DATE: 4/9/2014

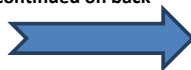
The next statements are about what people may think or believe. Remember, there are no right or wrong answers. Circle the number that fits best with you.

1 = Not at all 2 = A little 3 = Somewhat 4 = Very much 5 = Completely

Tell me how much you believe that . . .

1. One's belief in God gives inner strength and meaning to life.	1	2	3	4	5
2. Parents should teach their children that the family always comes first.	1	2	3	4	5
3. Children should be taught that it is their duty to care for their parents when their parents get old.	1	2	3	4	5
4. Children should always do things to make their parents happy.	1	2	3	4	5
5. No matter what, children should always treat their parents with respect.	1	2	3	4	5
6. God is first; family is second.	1	2	3	4	5
7. Family provides a sense of security because they will always be there for you.	1	2	3	4	5
8. Children should respect adult relatives as if they were parents.	1	2	3	4	5
9. If a relative is having a hard time financially, one should help them out if possible.	1	2	3	4	5
10. When it comes to important decisions, the family should ask for advice from close relatives.	1	2	3	4	5
11. Men should earn most of the money for the family so women can stay home and take care of the children and the home.	1	2	3	4	5
12. Children should never question their parents' decisions.	1	2	3	4	5
13. Parents should teach their children to pray.	1	2	3	4	5
14. Families need to watch over and protect teenage girls more than teenage boys.	1	2	3	4	5
15. It is always important to be united as a family.	1	2	3	4	5
16. A person should share their home with relatives if they need a place to stay.	1	2	3	4	5
17. Children should be on their best behavior when visiting the homes of friends or relatives.	1	2	3	4	5
18. Children should always honor their parents and never say bad things about them.	1	2	3	4	5
19. If everything is taken away, one still has their faith in God.	1	2	3	4	5
20. It is important to have close relationships with aunts/uncles, grandparents, and cousins.	1	2	3	4	5
21. Older kids should take care of and be role models for their younger brothers and sisters.	1	2	3	4	5
22. Children should be taught to always be good because they represent the family.	1	2	3	4	5
23. Children should follow their parents' rules, even if they think the rules are unfair.	1	2	3	4	5
24. It is important for the man to have more power in the family than the woman.	1	2	3	4	5
25. It is important to thank God every day for all one has.	1	2	3	4	5
26. Holidays and celebrations are important because the whole family comes together.	1	2	3	4	5

Continued on back



IRB NUMBER: 4108
IRB APPROVAL DATE: 03/25/2014

27. Parents should be willing to make great sacrifices to make sure their children have a better life.	1	2	3	4	5
28. A person should always think about their family when making important decisions.	1	2	3	4	5
29. It is important for children to understand that their parents should have the final say when decisions are made in the family.	1	2	3	4	5
30. Mothers are the main people responsible for raising children.	1	2	3	4	5
31. It is important to follow the Word of God.	1	2	3	4	5
32. It is important for family members to show their love and affection to one another.	1	2	3	4	5
33. It is important to work hard and do one's best because this work reflects on the family.	1	2	3	4	5
34. Religion should be an important part of one's life.	1	2	3	4	5
35. Children should always be polite when speaking to any adult.	1	2	3	4	5
36. A wife should always support her husband's decisions, even if she does not agree with him.	1	2	3	4	5



IRB NUMBER: 4108
IRB APPROVAL DATE: 03/25/2014

Las siguientes frases son acerca de lo que la gente puede pensar o creer. Recuerda, no hay respuestas correctas o incorrectas.

1 = Nada 2 = Poquito 3 = Algo 4 = Bastante 5 = Completamente

Dime que tanto crees que. . .

1. La creencia en Dios da fuerza interna y significado a la vida.	1	2	3	4	5
2. Los padres deberían enseñarle a sus hijos que la familia siempre es primero.	1	2	3	4	5
3. Se les debería enseñar a los niños que es su obligación cuidar a sus padres cuando ellos envejecan.	1	2	3	4	5
4. Los niños siempre deberían hacer las cosas que hagan a sus padres felices.	1	2	3	4	5
5. Sea lo que sea, los niños siempre deberían tratar a sus padres con respeto.	1	2	3	4	5
6. Dios está primero, la familia está segundo.	1	2	3	4	5
7. La familia provee un sentido de seguridad, porque ellos siempre estarán allí para usted.	1	2	3	4	5
8. Los niños deberían respetar a familiares adultos como si fueran sus padres.	1	2	3	4	5
9. Si un pariente está teniendo dificultades económicas, uno debería ayudarlo si puede.	1	2	3	4	5
10. La familia debería pedir consejos a sus parientes más cercanos cuando se trata de decisiones importantes.	1	2	3	4	5
11. Los hombres deberían ganar la mayoría del dinero para la familia para que las mujeres puedan quedarse en casa y cuidar a los hijos y el hogar.	1	2	3	4	5
12. Los hijos nunca deberían cuestionar las decisiones de los padres.	1	2	3	4	5
13. Los padres deberían enseñarle a sus hijos a rezar.	1	2	3	4	5
14. Las familias necesitan vigilar y proteger más a las niñas adolescentes que a los niños adolescentes.	1	2	3	4	5
15. Siempre es importante estar unidos como familia.	1	2	3	4	5
16. Uno debería compartir su casa con parientes si ellos necesitan donde quedarse.	1	2	3	4	5
17. Los niños deberían portarse de la mejor manera cuando visitan las casas de amigos o familiares.	1	2	3	4	5
18. Los niños siempre deberían honrar a sus padres y nunca decir cosas malas de ellos.	1	2	3	4	5
19. Si a uno le quitan todo, todavía le queda la fe en Dios.	1	2	3	4	5
20. Es importante mantener relaciones cercanas con tíos, abuelos y primos.	1	2	3	4	5
21. Los hermanos grandes deberían cuidar y darles el buen ejemplo a los hermanos y hermanas menores.	1	2	3	4	5
22. Se le debería enseñar a los niños a que siempre sean buenos porque ellos representan a la familia.	1	2	3	4	5
23. Los niños deberían seguir las reglas de sus padres, aún cuando piensen que no son justas.	1	2	3	4	5
24. En la familia es importante que el hombre tenga más poder que la mujer.	1	2	3	4	5
25. Es importante darle gracias a Dios todos los días por todo lo que tenemos.	1	2	3	4	5
26. Los días festivos y las celebraciones son importantes porque se reúne toda la familia.	1	2	3	4	5

Continúa en la parte posterior



IRB NUMBER: 4108
IRB APPROVAL DATE: 4/9/2014

1 = Nada 2 = Poquito 3 = Algo 4 = Bastante 5 = Completamente

27. Los padres deberían estar dispuestos a hacer grandes sacrificios para asegurarse que sus hijos tengan una vida mejor.	1	2	3	4	5
28. Uno siempre debería considerar a su familia cuando toma decisiones importantes.	1	2	3	4	5
29. Es importante que los niños entiendan que sus padres deberían tener la última palabra cuando se toman decisiones en la familia.	1	2	3	4	5
30. Las madres son la persona principal responsable por la crianza de los hijos.	1	2	3	4	5
31. Es importante seguir la palabra de Dios.	1	2	3	4	5
32. Es importante que los miembros de la familia muestren su amor y afecto unos a los otros	1	2	3	4	5
33. Es importante trabajar duro y hacer lo mejor que uno pueda porque el trabajo de uno se refleja en la familia.	1	2	3	4	5
34. La religión debería ser una parte importante de la vida.	1	2	3	4	5
35. Los niños siempre deberían ser amables cuando hablan con cualquier adulto.	1	2	3	4	5
36. Una esposa debería siempre apoyar las decisiones de su esposo, aunque no esté de acuerdo con él. Una esposa debería siempre apoyar las decisiones de su esposo, aunque no esté de acuerdo con él.	1	2	3	4	5

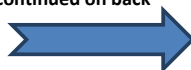


IRB NUMBER: 4108
IRB APPROVAL DATE: 4/9/2014

Using the scale below, check the box that most fits with how much you agree with each question asking about a possible reason why you go to school.

Why do you go to go to school?	Strongly Disagree	Disagree	Agree	Strongly Agree
1. Because I need at least a high-school degree in order to find a high-paying job later on.				
2. Because I experience pleasure and satisfaction while learning new things.				
3. Because I think that a high school education will help me better prepare for the life I choose				
4. Because I really like going to school				
5. Honestly, I don't know; I really feel that I am wasting my time in school.				
6. For the pleasure I experience while surpassing myself in my studies.				
7. To prove to myself that I am capable of completing my high-school degree.				
8. In order to obtain a more prestigious job later on.				
9. For the pleasure I experience when I discover new things never seen before.				
10. Because eventually it will enable me to enter the job market in a field that I like.				
11. Because for me, school is fun.				
12. I once had good reasons for going to school; however, now I wonder whether I should continue.				
13. For the pleasure that I experience while I am surpassing myself in one of my personal goals.				
14. Because of the fact that when I succeed in school I feel important.				
15. Because I want to have "the good life" later on.				
16. Because I enjoy learning new things in subjects with appeal to me.				
17. Because this will help me make a better choice regarding my career orientation.				
18. For the pleasure that I experience when I take part in interesting discussions.				
19. I can't see why I go to school and frankly, I couldn't care less.				
20. For the satisfaction I feel when I am in the process of accomplishing difficult academic activities.				
21. To show myself that I am an intelligent person.				
22. In order to have a better salary later on.				

Continued on back



IRB NUMBER: 4108
IRB APPROVAL DATE: 03/25/2014

Why do you go to go to school?	Strongly Disagree	Disagree	Agree	Strongly Agree
23. Because my studies allow me to continue to learn about many things that interest me.				
24. Because I believe that my high school education will improve my competence as a worker.				
25. For the satisfaction of doing something I like. For example, writing a story, doing a Biology experiment, or preparing a project or paper, etc.				
26. I don't know; I can't understand what I am doing in school				
27. Because high school allows me to experience a personal satisfaction in my quest for excellence in my studies.				
28. Because I want to show myself that I can succeed in my studies.				



IRB NUMBER: 4108
IRB APPROVAL DATE: 03/25/2014

Utilizando la escala que se muestra a continuación, marca la casilla que corresponda mejor con tu grado de acuerdo con cada pregunta acerca de una posible razón por la que vas a la escuela.

¿Por qué vas a la escuela?	Totalmente en desacuerdo	En desacuerdo	De acuerdo	Totalmente de acuerdo
1. Porque necesito por lo menos terminar la secundaria para encontrar un buen trabajo en el futuro.				
2. Porque me gusta y me satisface el aprender cosas nuevas.				
3. Porque creo que una educación secundaria me ayudará prepararme mejor para el tipo de vida que elija.				
4. Porque realmente me gusta ir a la escuela.				
5. La verdad es que no lo sé; creo que estoy perdiendo mi tiempo en la escuela.				
6. Por el placer que experimento al superarme en mis estudios.				
7. Para probarme a mí mismo que soy capaz de terminar la secundaria.				
8. Para conseguir después un trabajo de más prestigio.				
9. Por el placer que experimento al descubrir cosas nuevas que nunca he visto antes.				
10. Porque a fin de cuentas me permitirá entrar en el mercado de trabajo en un área que me guste.				
11. Porque para mí, la escuela es divertida.				
12. Antes tenía buenas razones para ir a la escuela, pero ahora me pregunto si debo continuar.				
13. Por el placer que experimento al superarme en uno de mis objetivos personales.				
14. Porque cuando tengo éxito en escuela, me siento importante.				
15. Porque quiero darme "una buena vida" en el futuro.				
16. Porque me gusta aprender cosas nuevas en temas que me gustan.				

Continúa en la parte posterior



IRB NUMBER: 4108
IRB APPROVAL DATE: 4/9/2014

17. Porque esto me va a ayudar tomar una mejor decisión para mi vida profesional.				
18. Por el placer que siento cuando puedo participar en discusiones interesantes.				
19. No sé por qué voy a a la escuela y, francamente, no me importa.				
20. Por la satisfacción que siento cuando estoy en el proceso de alcanzar logros académicos difíciles.				
21. Para demostrarme a mí mismo que soy una persona inteligente.				
22. Para tener un mejor salario en el futuro.				
23. Porque mis estudios me permiten seguir aprendiendo sobre muchas cosas que me interesan.				
24. Porque creo que mi educación secundaria mejorará mi capacidad como trabajador.				
25. Por la satisfacción de hacer algo que me gusta. Por ejemplo, escribir una historia, hacer un experimento de biología o preparar un proyecto o ensayo, etc.				
26. No sé; no entiendo lo que estoy haciendo en la escuela.				
27. Porque la secundaria me permite experimentar una satisfacción personal en mi búsqueda de excelencia en mis estudios.				
28. Porque quiero demostrarme a mí mismo que puedo tener éxito en mis estudios.				



IRB NUMBER: 4108
IRB APPROVAL DATE: 4/9/2014

Directions: Please read each of the following questions and answer them as honestly as possible. Circle the response that best describes how sure you feel about each question. There are no right or wrong answers. When answering these questions, remember that college means any type of schooling after high school (community college, four-year university).

How sure are you about being able to do the following:

1. I can find a way to pay for college	Not at all Sure	Somewhat Sure	Sure	Very Sure
2. I can get accepted to a college	Not at all Sure	Somewhat Sure	Sure	Very Sure
3. I can have family support for going to college	Not at all Sure	Somewhat Sure	Sure	Very Sure
4. I can choose a good college	Not at all Sure	Somewhat Sure	Sure	Very Sure
5. I can get a scholarship or grant for college	Not at all Sure	Somewhat Sure	Sure	Very Sure
6. I can make an educational plan that will prepare me for college	Not at all Sure	Somewhat Sure	Sure	Very Sure
7. I can make my family proud with my choices after high school	Not at all Sure	Somewhat Sure	Sure	Very Sure
8. I can choose college courses that best fit my interests	Not at all Sure	Somewhat Sure	Sure	Very Sure
9. I can pay for college even if my family cannot help me	Not at all Sure	Somewhat Sure	Sure	Very Sure
10. I can get good grades in my high school math classes	Not at all Sure	Somewhat Sure	Sure	Very Sure
11. I can get good grades in my high school science classes	Not at all Sure	Somewhat Sure	Sure	Very Sure
12. I can choose the high school classes needed to get into a good college	Not at all Sure	Somewhat Sure	Sure	Very Sure
13. I can know enough about computers to get into college	Not at all Sure	Somewhat Sure	Sure	Very Sure
14. I can go to college after high school	Not at all Sure	Somewhat Sure	Sure	Very Sure

If you do go to college, how sure are you about being able to do the following:

1. I could pay for each year of college	Not at all	Sure	Somewhat	Sure	Very	Sure
2. I could get A's and B's in college	Not at all	Sure	Somewhat	Sure	Very	Sure
3. I could get my family to support my wish of finishing college	Not at all	Sure	Somewhat	Sure	Very	Sure
4. I could take care of myself at college	Not at all	Sure	Somewhat	Sure	Very	Sure
5. I could fit in at college	Not at all	Sure	Somewhat	Sure	Very	Sure
6. I could get good enough grades to get or keep a scholarship	Not at all	Sure	Somewhat	Sure	Very	Sure
7. I could finish college and receive a college degree	Not at all	Sure	Somewhat	Sure	Very	Sure
8. I could care for my family responsibilities while in college	Not at all	Sure	Somewhat	Sure	Very	Sure
9. I could set my own schedule while in college	Not at all	Sure	Somewhat	Sure	Very	Sure
10. I could make friends at college	Not at all	Sure	Somewhat	Sure	Very	Sure
11. I could get the education I need for my choice of career	Not at all	Sure	Somewhat	Sure	Very	Sure
12. I could get a job after I graduate from college	Not at all	Sure	Somewhat	Sure	Very	Sure
13. I would like being in college	Not at all	Sure	Somewhat	Sure	Very	Sure
14. I could be smart enough to finish college	Not at all	Sure	Somewhat	Sure	Very	Sure
15. I could pick the right things to study in college	Not at all	Sure	Somewhat	Sure	Very	Sure
16. I could do the classwork and homework assignments in college classes	Not at all	Sure	Somewhat	Sure	Very	Sure



IRB NUMBER: 4108
IRB APPROVAL DATE: 03/25/2014

Instrucciones: Lea cada una de las siguientes preguntas y responda de la manera más honesta posible. Encierra en un círculo la respuesta que describa mejor cómo te sientes acerca de cada pregunta. No hay respuestas correctas o incorrectas. Al responder estas preguntas, recuerda que universidad significa cualquier tipo de institución de enseñanza después de la escuela secundaria o high school (por ejemplo, colegio comunitario o universidad de cuatro años).

¿Qué tan seguro estás de poder realizar lo siguiente?

1. Puedo encontrar la manera de pagar la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
2. Puedo conseguir que me acepten en una universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
3. Puedo tener apoyo de la familia para ir a la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
4. Puedo elegir una buena universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
5. Puedo obtener una beca o subvención para estudiar en la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
6. Puedo hacer un plan educativo que me prepare para la Universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
7. Puedo hacer que mi familia se sienta orgullosa de mis decisiones después de la secundaria	Nada seguro	Algo seguro	Seguro	Muy seguro
8. Puedo elegir cursos de la universidad que se adapten mejor a mis intereses	Nada seguro	Algo seguro	Seguro	Muy seguro
9. Puedo pagar la universidad incluso si mi familia no puede ayudarme	Nada seguro	Algo seguro	Seguro	Muy seguro
10. Puedo sacar buenas calificaciones en mis clases de matemáticas de secundaria	Nada seguro	Algo seguro	Seguro	Muy seguro
11. Puedo sacar buenas calificaciones en mis clases de ciencias de secundaria	Nada seguro	Algo seguro	Seguro	Muy seguro
12. Puedo elegir las clases de secundaria necesarias para ir a	Nada seguro	Algo seguro	Seguro	Muy seguro
13. Puedo saber lo suficiente acerca de computadoras para ir a la universidad una buena universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
14. Puedo ir a la universidad después de la secundaria	Nada seguro	Algo seguro	Seguro	Muy seguro

Continúa en la parte posterior



IRB NUMBER: 4108
IRB APPROVAL DATE: 4/9/2014

Si vas a la universidad, ¿Qué tan seguro estás de poder realizar lo siguiente?

1. Podría pagar todos los años de la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
2. Podría obtener calificaciones de A y B en la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
3. Podría hacer que mi familia me apoye para terminar la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
4. Podría valerme por mí mismo en la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
5. Podría integrarme bien en la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
6. Podría obtener buenas calificaciones para conseguir o mantener una beca	Nada seguro	Algo seguro	Seguro	Muy seguro
7. Podría terminar la universidad y obtener un título universitario	Nada seguro	Algo seguro	Seguro	Muy seguro
8. Podría hacerme cargo de mis responsabilidades familiares durante mis años en la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
9. Podría establecer mi propio horario en la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
10. Podría hacer amigos en la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
11. Podría recibir la educación que necesito para los estudios que he elegido	Nada seguro	Algo seguro	Seguro	Muy seguro
12. Podría conseguir un trabajo después de graduarme de la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
13. Me va a gustar la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
14. Podría ser lo suficientemente inteligente para terminar la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
15. Podría escoger las materias correctas en la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro
16. Podría hacer el trabajo en clase y las tareas de la universidad	Nada seguro	Algo seguro	Seguro	Muy seguro