Where Cultures Collide: Hispanic Family Involvement in Education Among Different Socioeconomic Groups

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WHERE CULTURES COLLIDE: HISPANIC FAMILY INVOLVEMENT IN EDUCATION AMONG DIFFERENT SOCIOECONOMIC GROUPS

A Dissertation
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy
International Family and Community Studies

by
Holly M. Grover
December 2016

Accepted by:
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This dissertation explores from a cultural perspective how socioeconomic status influences Hispanic family involvement in a student’s education. Specifically, the study examined types of family involvement practices common to Hispanic families in high and low socioeconomic groups, how much these practices influence student outcomes, and the mechanisms through which involvement is related to student outcomes.

Information for a nationally representative stratified probability sample of more than 1600 Hispanic students and their families was obtained from the Education Longitudinal Study of 2002, utilizing information from waves in 2002, 2004, and 2006. A Structural Equation Model evaluated the relationship between family involvement practices in 2002 (including rules, communication, spending general time together, spending school- and sports-related time together, and at-school involvement) and student outcomes from 2004 and 2006 (including GPA, math test scores, college enrollment, school dropout, and community involvement) for Hispanic parents as a whole, and also for both high and low socioeconomic groups within the Hispanic parent population. Mediators of student attitudes and behavior from 2002 (including student effort and persistence, aspirations, and behavior at school) were investigated to assess the process through which parent involvement influenced student outcomes.

Multiple Groups Analysis of the family involvement measurement model indicated differences in meanings of family involvement between high and low SES Hispanic families, which meant that comparisons across SES groups would be invalid. As a result, characteristics of high and low SES groups were presented separately. Basic
descriptive statistics showed that Hispanic families from both SES groups engaged in informal involvement more frequently than formal involvement. The most frequent practices for high SES families included spending general time together and communication. Results from the Structural Equation Model (SEM) indicated that spending general time together and involvement at school were the family practices with the strongest relationship to outcomes for high SES students. High SES student outcomes most influenced by family involvement were GPA, college enrollment, and test scores. Among low SES families, the most frequent practices in which families engaged included spending time together and communication, while practices with the strongest relationship to outcomes were spending general time together and spending school- and sports-related time together. Family involvement had the most influence on GPA and college enrollment for low SES families.

Analyses from the SEM also revealed that student effort and persistence, student aspirations, and student behavior at school mediated the relationship between family involvement and the student outcomes of GPA, math test scores, college enrollment, student dropout, and community involvement for both SES groups. The relationships between these 3 mediators and the 5 outcomes were all statistically significant.

Differences in the perceived meaning of some family involvement practices for low and high SES Hispanic parents suggest that parent expectations of their role in education are different based on the culture inherent in different economic statuses. Recommendations for practitioners include utilizing the information in this study to establish a shared understanding of educational involvement, show respect for current
involvement, and provide support for future involvement. This study can also help Hispanic families understand the practices most applicable and effective in their situation.

For high SES families, this might mean spending general time together and being involved at their child’s school to help improve student GPA or college enrollment, while low SES families would focus more on spending general time together and school- and sports-related time in order to influence these same outcomes. Future research is needed to better understand these differences and their full implications.
DEDICATION

To my family and my God. You are the reason I began, continued, and finished. For my children, may you reach for the stars and follow what God asks you to do, even when it is hard. You can do hard things! For my husband for reminding me it would all be worth it. And for my parents: my mother as a tribute to your love for education and your drive to be the first college graduate of the family and my father and mother for the sacrifices you made that allowed me to achieve and inspired me to reach high.
ACKNOWLEDGMENTS

Although my committee has changed over the years, all of the members provided insight and selflessly devoted time to helping me progress. Of particular mention is Dr. Sue Limber who has been with me through it all. Her patience, calm, caring, advice, and professionalism were invaluable to me in every aspect of this process of change. I am so very grateful for the invaluable insights and opportunities she provided. In addition, I am greatly indebted to Dr. Ginny Berman who gave me a deeper appreciation for research and provided feedback and resources that opened my eyes to new ways of understanding culture; and to Dr. Martie Thompson for her patience and expertise in answering my abundant methodology questions.

I am grateful to my student mentor, Tracy Waters, who taught me valuable lessons on how to handle graduate school, and to the many other students who opened their hearts and lives to me while I was far from home.

Lastly, I am eternally indebted to God and my family. My loving Heavenly Father inspired me to start this journey and provided strength throughout to keep me moving forward. He also led me to my husband, whose support, emotional strength, and selflessness was crucial to my success. Thank you, mi amor, for reading through long papers, deferring many personal projects to care for our boys, and encouraging me every step of the way. My daily gratitude for all that you are and do for me is inexpressible. To my extended family for their love and moral support, and to my beautiful boys: you made everything take longer, but the joy and love you bring to our family are worth all the extra time in the world.
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CHAPTER ONE
INTRODUCTION TO THE STUDY

Formal education is viewed as an essential building block in the lives of children. Although there are many forces acting on a student’s educational attitudes, behaviors, and other outcomes, Ben-Arieh, McDonell, and Attar-Schwartz (2009) noted that, “School and family are the two most central entities in a child’s life” (p. 340). Both entities play essential roles in helping children and youth learn and grow. Many argue that schools not only teach academic material, but also impact social and emotional growth and what children choose to do as adults. Likewise, families impact both nonacademic and academic outcomes for students through their efforts.

Background of the Study

In 2013, the ethnic composition of school-age children in the U.S. was 53% Caucasian, 24% Hispanic, 14% African American, 5% Asian or Pacific Islander, and 1% American Indian or Alaska Native (National Center for Education Statistics, 2014), with the number of minority students growing faster than Caucasians between 1980 and 2008. Educational data reviewed by Aud and colleagues show a wide gap in a number of student outcomes between Caucasian families and the largest and most rapidly growing of these minority groups--Hispanics.

Evidence suggests that the gap in student outcomes may increasingly be a function of socioeconomic group rather than ethnic group. Putnam (2015) observed that “the trend toward class segregation has been true within each major racial group, so affluent and impoverished black (or Latino) families are less likely to be neighbors than
they were 40 years ago” (Putnam, 2015, pp. 38-39). As neighborhood segregation by socioeconomic status increases, schools also become increasingly segregated. This has important implications for education, as “the achievement gap between children from high- and low-income families is roughly 30-40 percent larger among children born in 2001 than among those born twenty-five years earlier” (Reardon, 2011, p. 4).

Regrettably, the majority of Hispanics fall into this low socioeconomic category. Many Hispanic immigrants come to the United States with little money, little education, and an immigration category such as “temporary working visa” or “undocumented” that makes them ineligible for government assistance (Bui, 2012). Portes and Rumbaut (2006) reported that over half of Latino immigrants living in the U.S. at the time of the 2000 census had not completed high school, while only about 10% had a college education. They also reported that the average income for Latino college-educated male immigrants in 1998 was $50,215 per year, while those with less than a high school education earned just $19,481 per year.

Family involvement in education has been hailed as an important way to improve student educational outcomes. Research suggests that family involvement impacts student behaviors, attitudes, and achievement (Epstein & Sanders, 2000; Fan & Chen, 2001; Froiland, Peterson, & Davison, 2012; Henderson & Mapp, 2002; Jeynes, 2012). Unfortunately, there is little quantitative research about what aspects of family involvement influence Hispanic high school students. Indeed, in 2012, LeFevre and Shaw reported no recent studies of family involvement for Hispanic high school students when they conducted their analysis of the 1988 National Educational Longitudinal Study.
(NELS) data. Even less research analyzes outcomes for Hispanic students from different socioeconomic groups.

**Significance of the Study**

Hartlep and Ellis (2010) found that “further research is needed that addresses the complex role that SES and race/ethnicity play in parental involvement” (p. 8). Looking through the lens of Hispanic ethnic culture and socioeconomic status to analyze family involvement should provide a more complete picture of how these cultures mix to influence family involvement practices and student outcomes (Figure 1.1). The specific family practices analyzed in this study include parent-student communication, family rules, parent-child time together in general activities as well as time specific to school and sports-related activities, and at-school involvement. The student outcomes include standardized test scores, GPA, high school dropout, college enrollment, and community involvement, with a mediated relationship from student effort, persistence, and perceived

**Figure 1.1 Impact of Hispanic Family Involvement on High and Low SES Students**
control, student aspirations, and student behavior at school. Because of the limited research on family involvement among Hispanics in different socioeconomic groups, this study will add important insight to current understanding.

This research is also designed to help school personnel gain insights into general cultural practices, family involvement practices, and the impact of family involvement on educational outcomes for different Hispanic socioeconomic cultural groups. Since teacher expectations are related to family involvement levels and student outcomes, it is hoped that this study will provide a better understanding of the ways Hispanic families support educational success among their children. Enhanced understanding should in turn help teachers more readily support parent efforts as well as interact with students and families in a way that will promote understanding and achievement rather than conflict and resignation.

The positive influence of parent involvement on student outcomes found within some tenants of Hispanic culture can also help Hispanic families promote student success. As families understand which practices others within their group have used to effectively help students succeed, they can maintain their practices with confidence or alter them as needed to influence the desired outcomes.

**Definitions of Terms**

It is important to offer a few definitions and words of clarification about the definitions and constructs utilized in this study. Terms such as race and ethnicity and Hispanic and Latino/a are often used interchangeably in the literature, although there are subtle differences to each.
Race vs. Ethnicity

Official U.S. definitions established by the Office of Management and Budget (1995) for collecting and presenting federal data for race specify a person’s country of origin, while ethnicity includes a person of any Spanish culture or origin, regardless of race. Although such official definitions allow for a minimum of 5 racial group distinctions (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White), ethnicity on official U.S. forms is only utilized to denote someone who is Hispanic or Latino or Not Hispanic or Latino. In the Appendix of the Office of Management and Budget’s federal register, it clarifies that “these classifications should not be interpreted as being scientific or anthropological in nature,” (Executive Office of the President, Office of Management and Budget, 1995, para. 1), but rather were developed to help in the collection and use of data.

Ethnic and racial distinctions may be more salient in formal institutions and academia than among people from the Hispanic culture. A recent study by the Pew Research Center revealed that “for two-thirds of Hispanics, their Hispanic background is a part of their racial background – not something separate. This suggests that Hispanics have a unique view of race that doesn’t necessarily fit within the official U.S. definitions” (Gonzalez-Barrera & Lopez, 2015, para. 3). More research on this topic is needed to clarify and better understand the implications of the differences and similarities between official definitions of ethnicity and race and Hispanics’ definitions.
**Hispanic vs. Latino/a**

“**Hispanic** originally denoted a relationship to ancient Hispania, today known as Spain, its history, and culture...**Latino** refers more exclusively to persons or communities of Latin American origin” (Moore de Peralta, 2015). As with race and ethnicity, Hispanic and Latino/a groups overlap considerably. Most countries in Latin America have significant historical influence from Spanish language and culture, but a handful do not (e.g., Brazil, Jamaica, French Guyana).

The instrument used for this study, the Education Longitudinal Survey (ELS), asked participants, “Are you Hispanic or Latino/Latina”? If the individual marked yes, they were then asked to further clarify their ancestry in the following categories: Mexican/Mexican-American/Chicano, Cuban, Dominican, Puerto Rican, Central American (Guatemalan, Salvadoran, Nicaraguan, Costa Rican, Panamanian, Honduran), or South American (Columbian, Argentinian, Peruvian, etc.). Because the categories listed in the dataset utilized with this study appear to exclude non-Spanish-speaking Latinos (e.g., the non-Spanish-speaking countries of Haiti, Belize, and Brazil are not listed in any of the categories), this dissertation will use the term Hispanic most frequently to reflect the study population.

**Parent Involvement vs. Family Involvement**

Family involvement is commonly referred to in the literature as parent involvement, so these terms are used interchangeably in this dissertation. Although researchers and even national surveys use the general term parent involvement, most do not restrict their data collection to only parents. For example, the 1999 National
Household Education Parent Survey focused on “the parent or guardian in [the] household who knows the most about [the child’s] (care and) education,” allowing for grandparents, siblings, aunts, uncles, and other individuals to respond in place of a parent if they knew more about the child’s educational activities. For the sake of simplicity in this discussion, “parent” is sometimes used as a proxy term for all involved family members. Although in a number of cases children have non-parent caregivers or family members who impact their educational lives more profoundly than parents, parents are the main responsible adult and family educational influence for the vast majority of children.

**Research Questions and Hypotheses**

1. What family involvement practices are common among high SES Hispanics?
2. What family involvement practices are common among low SES Hispanics?
3. Are there significant differences in family involvement practices between these two groups?

   **Hypothesis 1:** Some, but not all, family involvement practices will be significantly different between low and high SES Hispanic families. Specifically, high SES Hispanic families will be more involved at the school building and will communicate more with their children. The other practices will be similar among the two groups.

4. Are there significant differences in the outcomes that are influenced by family involvement among Hispanic students from different socioeconomic groups?
Hypothesis 2: There will be differences in the way family involvement impacts students from different socioeconomic groups. Specifically, family involvement will have a greater impact for higher SES than lower SES students on student enrollment in college; a greater effect for lower SES than higher SES students on GPA, high school dropout, community involvement, and math test scores.

5. What are the mechanisms through which family involvement impacts Hispanic student outcomes?

Hypothesis 3: Student aspirations, student behavior at school, and student effort, persistence, and perceived control over learning will mediate the impact of family involvement on student outcomes.

6. Are the mechanisms statistically different for high and low SES groups?

Hypothesis 4: The influence that family involvement has on student outcomes is due in part to the impact it has on the mechanisms of student aspirations, student behavior, and student effort, persistence, and perceived control over learning. This difference will not be statistically different among SES groups.

Social interactions with individuals in formal, informal, or institutional settings are largely governed by cultural values and understandings, although many of the “rules” of interaction are unwritten and learned intuitively (Lasky, 2000; Payne, DeVol, & Smith, 2001). Because of the essential impact culture has on how individuals think and interact, this discussion of family involvement in education and its impact on students will begin
with a review of the literature on the cultures to be considered, namely Hispanic culture and socioeconomic culture. It will then cover family involvement practices among Hispanic families and the impact family involvement has on students. The literature on family involvement among Hispanic families from different socioeconomic groups is also reviewed. In Chapter 3, the research methodology and approach to analysis is described, focusing on how data were collected for the Education Longitudinal Study (ELS), a survey sponsored by the National Center for Education Statistics (NCES). The chapter also details the constructs to be used in this study and the intended approach to analysis. Research findings are discussed in Chapter 4, and discussion, implications, and suggestions for future research are presented in Chapter 5.
CHAPTER TWO

REVIEW OF THE LITERATURE

Theoretical Framework

This study draws upon a number of established theories. Of particular mention are Bronfenbrenner’s (1994) social and ecological model of human development, the acculturation theories of Berry (2008), and the developmental niche of Super and Harkness (1994).

Even though students ultimately make their own decisions, “their level of individual agency is also embedded in micro-, meso-, and macro-level structural contexts” (Nuñez & Kim, 2012, p. 239). These various systems were described in Bronfenbrenner’s (1994) social and ecological model of human development. According to Bronfenbrenner, an individual’s development occurs within the context of their environment rather than in isolation from it. The most immediate system with the greatest influence is the Microsystem, wherein entities such as family and school interact with a child’s individual characteristics to affect the child’s development. The way a child experiences these school and family interactions is influenced by their environment, including neighbors and social services at the Exosystem level, and the attitudes and ideologies of culture at the Macrosystem level in Bronfenbrenner’s theory. Time (the Chronosystem) also plays a role, as individuals and environments change over time.

When focusing specifically on the Macrosystem influence of culture on child development, the field of cultural psychology emphasizes that culture “can extend much deeper than just preferences. Many basic psychological processes, such as the ways we
perceive the world, value a sense of right and wrong, and the things that motivate us, can emerge in starkly different ways across cultures” (Heine, 2012, p. 6). Because culture is hard to measure, researchers seek simpler proxies that may combine several cultures into larger groups with common characteristics. Race, ethnicity, and socioeconomic status (SES) are examples of broad categories used as proxies to capture certain ways of behaving and interacting.

In addition to the influence that families have on the culture of their children, both parents and children are also influenced by the cultures of people in their micro- and mesosystems (Berry, 2008). For example, research has shown that Hispanics—the minority ethnic group that is the focus of this study—are strongly influenced by people and systems within their country of origin, resulting in individual- and family-level differences among Hispanics who immigrated to the United States from different countries (Carranza, You, Chhuon, & Hudley, 2009; Fuller & García Coll, 2010; Nuñez & Kim, 2012).

According to the acculturation theories of Berry (2008), there is large variation in the degree to which these cultures blend, which is a direct result of the acculturation strategies employed by individuals and societies. These strategies are illustrated in Figure 2.1.
Individuals from various ethnocultural groups differ in the degree to which they want and are able to maintain their native culture and to interact with the new culture (Berry, 2008). When individuals maintain aspects of their native culture and also become part of the new culture, integrating aspects of both cultures together and operating in a relatively seamless way between the two, this is termed Integration. On the other end of the spectrum, marginalized individuals are not able to maintain their native culture (usually due to outside forces) and do not want to take on the new culture. Those who are Separated seek to maintain their native culture while staying relatively aloof from the new culture, and individuals who Assimilate replace most aspects of their native culture with the new culture.

In the early part of the 20th century, total assimilation was seen as a necessity for success in the United States, and assimilation signified leaving the old culture and language behind to the greatest extent possible (Berry, 2008; Bui, 2012). Over time,
researchers began to discover the benefits of retaining various native cultural values and practices. Now, “scholars suggest that a bicultural orientation that allows individuals to comfortably integrate aspects of multiple cultures is the healthiest form of acculturation and relates to the most positive adaptation” (Carranza et al., 2009, p. 315).

Berry’s (2008) theory also shows that individual strategies for acculturation are influenced and partly determined by societal strategies. When societies seek Multiculturalism, their attitudes and policies allow for individuals to maintain their native culture and also integrate with the dominant culture. Conversely, Exclusion is the societal equivalent of marginalization, meaning that society employs policies and practices that make it difficult for individuals both to become part of the host culture and to maintain their native culture. Assimilation on a societal level is the “Melting Pot” category of leaving the native culture behind, while societal policies and norms that encourage Separation are characterized as Segregation by Berry. For Hispanic families specifically, the neighborhoods and schools across the U.S. in which they spend their time likely have differing policies and norms that have been influenced by socioeconomic conditions. The socioeconomic culture of those who reside in the neighborhood then blend with Hispanic cultural beliefs and behaviors to varying degrees to create new cultures based on integrating both cultures or leaving behind one culture or the other.

Another factor in the process of Hispanic culture blending with U.S. socioeconomic culture is epitomized in the developmental niche of Super and Harkness (1994). They theorized that a child “inhabit(s) a different cultural ‘world’ than the worlds inhabited by other members of his family—and further, the child’s world will also change
as the child grows and changes” (pp. 96-97). In other words, although general cultural beliefs and practices are observed among groups like Hispanic families or low SES families, there will always be individual variation in the degree to which each person blends heritage beliefs and practices with new beliefs and practices. A child’s cultural world is most influenced by physical and social settings of daily life, customs of child care and child rearing, and the psychology of the caretakers, making it essential to consider the cultural practices and interactions of multiple entities, including both family and school personnel as prominent influences in how the child grows and develops.

These theories frame the cultural context of individual student experiences as family and school interact to support student educational outcomes. With these foundational theories in mind, this review now turns to some basic customs, attitudes, and ideologies of the cultures of interest to this study—Hispanic and socioeconomic cultures. As evidenced by the theories discussed, the cultural principles hereafter reviewed are intended to be general guidelines because of the way that culture is transmitted and internalized, not universal assertions to be strictly applied in every circumstance.

When considering cultural influences on the relationship between family involvement and student educational outcomes, research shows differences among racial and ethnic groups (Fan & Chen, 2001; Keith et al., 1998; Steinberg, Laborn, Dornbusch, & Darling, 1992; Toldson & Lemmons, 2013; Wong & Hughes, 2006; for an exception to this trend see Kohl, Lengua, & McMahon, 2000), as well as groups from different socioeconomic statuses (Lee & Bowen, 2006; Little-Harrison, 2011; Malecki &
Demaray, 2006; Ra, 2011). Thus, research implies that race/ethnicity and SES are relevant proxies for some cultural differences in the absence of better measures.

**Hispanic Culture**

This section first reviews group orientation and the role of social networks in Hispanic culture. Principles that govern interpersonal interactions and parenting are then discussed.

**Cultural Orientation**

Hispanic culture is considered collective rather than individualistic, meaning “Hispanic families…traditionally emphasize interdependence over independence, and cooperation over competition” (National Alliance for Hispanic Health, 2001, p. 28; see also Carteret, 2011; Heine, 2012; Murphey, Guzman, & Torres, 2014). This interdependence and cooperation is applicable first and foremost to family, which is viewed as “the major source of one’s identity and protection against the hardships of life” (Carteret, 2011, Collectivistic Culture section, para. 1).

**Social Networks**

The intense loyalty to family within Hispanic culture extends beyond a parent-child-sibling relationship to grandparents, aunts, uncles, cousins, and even close friends (compadres) and godparents (padrinos; see National Alliance for Hispanic Health, 2001). These are the individuals with whom a nuclear family most frequently interacts and relies on for friendship and support. Thus, extended families often live close to one another, sometimes within the same household.
The centrality of family also leads Hispanic individuals to consult family members in all major decisions. In many cases children are expected to defer to the decisions of older family members, especially the father, when opinions differ. Heine (2012) provides some insight for researchers from individualistic cultures to better understand this collectivistic practice. He notes that individuals in collectivistic cultures view the world as interconnected and thus view their own lives and decisions as intertwining inextricably with those around them, especially people close to them such as family members. Thus, a narrow focus on self gives way to a broader focus on family needs. While many people with individualistic orientations view their decisions and personal goals as solely their own, this is not the case for individuals with collectivistic orientations.

It is important to remember that we’re not talking about individuals surrendering their choices to a random number generator or to their arch-rival; the ones who are making the decisions care a great deal about them and know a lot about their personal needs and the family’s needs….in collectivistic societies (where parental decision making is more common) individuals tend to identify with their group’s goals. If you also want what is best for your extended family, it very well might not feel like you are being stripped of your freedom to choose, but that you are engaging in actions that were thoughtfully and wisely decided as furthering your family’s goals. (Heine, 2012, p. 270)

The patriarchal family view of males as the primary providers and decision-makers in the family is observed in many Hispanic families, but the degree to which they
do so in the United States varies as cultures intertwine (Carteret, 2011; Vega-Costas, 2012). As will be discussed in a later section, different degrees of acculturation often create conflict within Hispanic families and have important developmental implications for Hispanic youth.

**Interpersonal Interactions**

Interactions within families and with the community at large are governed by rules of *respeto* (respect), *personalismo* (personal relationships), and *confianza* (trust). Each of these principles has an important role to play in understanding Hispanic families.

The National Alliance for Hispanic Health (2001) offered this explanation of the role of *respeto*:

Respeto dictates appropriate deferential behavior towards others based on age, sex, social position, economic status, and authority. Older adults expect respect from those younger, men from women, adults from children, teachers from students, employers from employees, and so on. (p. 29)

Also, “respeto (respect) implies a mutual and reciprocal deference” (p. 30), meaning that those demonstrating deferential respect—i.e., an employee to an employer—also expect a certain amount of respect in return. Within the educational realm, teachers, counselors, and other school officials are traditionally viewed as being in authority positions that merit respect. Thus, the information and direction offered by these individuals is generally viewed as important. However, when professionals fail to demonstrate due reciprocal respect, it fosters resentment rather than the necessary *confianza*. 
Showing respect between cultures is not always straightforward. For example, traditional Hispanic culture maintains that individuals respect authority figures by avoiding eye contact or not asking questions since questions may be viewed as challenging authority or expressing negative views. In contrast, both eye contact and questions are ways to demonstrate interest or understanding in traditional U.S. culture (National Alliance for Hispanic Health, 2001). While nodding is often viewed as agreement in U.S. culture, Hispanics may nod to indicate listening and respect rather than agreement (Carteret, 2011). An awareness of such differences and the potential for other cultural differences may help individuals reduce misunderstandings as they interact across cultures.

Another principle that is important to Hispanics is personalismo (personal relationships). When educators and others show personalismo, they have an active, warm interest in the lives of family members rather than maintaining cooler, institution-like relationships (National Alliance for Hispanic Health, 2001). One manifestation of this is that Hispanics tend to spend significant time socializing with others, and active conversations are viewed as willingness to develop and maintain relationships (Heine, 2012). In Hispanic culture, when non-family individuals spend time to develop personal, sincere relationships with a family, the natural product is confianza (trust). The confianza that develops indicates that Hispanic families believe the person truly has the best interests of the family at heart. On the other hand, when U.S. educators are neutral or businesslike rather than personal, it can be perceived as negative among Hispanic families (Carteret, 2011).
An important caveat is that country of origin, reasons for immigration, and broader social and economic trends influenced educational outcomes in different ways for different Hispanic groups (Nuñez & Kim, 2012). For example, Nuñez and Kim (2012) found that students of Mexican heritage were less likely than their Central and South American counterparts to enroll in four-year post-secondary institutions. Other outcomes that are statistically different for Hispanics from various countries include infant mortality, family structure, education level, family size, and social competencies (Carranza et al., 2009; Fuller & García Coll, 2010). Thus, the cultural generalizations discussed for “Hispanics” are not applicable to every individual or subgroup because individual niches (Super & Harkness, 1994) are not the same for every Hispanic.

**Parenting**

Because of the strong emphasis on family, Hispanic parents take seriously their perceived roles to protect, discipline, and teach culture and religion to their children (Carteret, 2011; National Alliance for Hispanic Health, 2001; Vega-Costas, 2012). In fact, in one study, “being a good parent” was considered very important by over 90% of Hispanic adults (Murphey et al., 2014). Extended family regularly helps with parental roles and often provides childcare for grandchildren, nieces, and nephews when both of the child’s parents have other obligations (Vega-Costas, 2012).

Good parenting is manifested by ensuring children are *bien educado*, or well-educated. Academic education is included in the concept of *bien educado* and viewed as important; however, the deeper meaning denotes a child with good manners, proper comportment, and respect for elders and others in positions of authority (Fuller & García
Coll, 2010; Murphey et al., 2014; Ramos, 2014). This emphasis on social-emotional learning can result in important skills such as “self-control, positive interpersonal communication, and solving problems without physical conflict” (Murphey et al., 2014, p. 17), as well as complying with parental authority. This focus likely results in positive, nonacademic skills necessary in school contexts, such as getting along with others and proper classroom behavior.

This type of parenting also comes across in how children are expected to spend their time. According to one study, Latino children were more likely to have rules about things like playing with friends on school nights and watching television than their white counterparts (Lee & Bowen, 2006). Another study reported that Latino youth were much more likely than white or black peers to eat a meal with their family 6 to 7 days each week (59%, 41%, and 30% respectively; Murphey et al., 2014).

To help children succeed, parents frequently offer consejos, or “advice…that reinforces values, such as resiliency and perseverance” (Ramos, 2014, p. 4). In an analysis of the 2011-12 National Survey of Children’s Health, nearly 66% of Hispanic parents reported they could “share ideas or talk about things that really matter with their teens” (Murphey et al., 2014, p. 15). The high levels of intimacy, support, and encouragement parents show to children is even present with their adolescent children, as nearly two thirds of Hispanic teens reported almost daily parental praise for good behavior (Murphey et al., 2014; see also Ramos, 2014; Vega-Costas, 2012).
Another aspect of Hispanic parenting is *sacrificios* (sacrifices), or placing the needs of the children above personal desires (Fuller & Garcia Coll, 2010; Murphey et al., 2014; Ramos, 2014). Interviews with Hispanic mothers revealed that despite the apparent hardships associated with *sacrificios*, mothers generally discussed sacrificios with a sense of pride and conveyed a sense of hope for their children’s future. Mothers delighted in the thought of their sacrificios motivating their children to finish school and to be “somebody” in the future. (Ramos, 2014, p. 3)

Thus, parental sacrifices are frequently discussed with children in an effort to inspire positive behavior. One mother in the study by Ramos related her interactions with her five-year-old son:

> Sometimes he tells me that when he grows up he wants to be like me. I ask him why and he says because you work and give me everything. He says when I am older he will take care of me. This makes me want to work harder for him. I tell him that this is why he has to keep doing good [in school]. I tell him that I will continue to work hard so he can go to a good school. (p. 4)

This is the expected result; parents make sacrifices, and children show appreciation for these sacrifices by doing well in school or at the task the parent wants them to.

The ways in which these various parenting practices are communicated varies. For example, some research reported common Latino parenting practices as controlling and punitive, while others reported nurturing and warm parenting (Kang, 2014). However, researchers believe these inconsistencies may be the product of socioeconomic
conditions or “the heterogeneous composition of the group as well as varying background
factors of Latino families, including acculturation and education” (Kang, 2014, p. 28; see
also Livas-Dlott et al., 2010).

**Acculturation/Assimilation**

When Hispanic individuals living in various nations throughout world move to
the United States, they enter a new environment that operates in ways different than their
native culture. For many people, their native culture blends with the culture of the United
States, but how much these cultures blend and in what ways depend on individual
experiences and circumstances, such as personal attitudes toward the heritage culture,
attitudes toward the host culture, and how the host culture receives them as discussed
previously (Berry, 2008; Heine, 2012).

Research suggests that maintaining aspects of their native culture protects
Hispanic children and youth in the United States in powerful ways. For example,
immigrant children and adolescents reported stronger engagement in school when they
identified with their ethnic group (Fuller & Garcia Coll, 2010). The Hispanic cultural
value of *familismo* (close family relationships) helped immigrant Latino children and
adolescents adjust to school and social situations and protected them from getting into
delinquency, drugs, and alcohol in other studies (Bui, 2012; Kang, 2014). Bui (2012) and
Kang (2014) also reported that maintaining core principles of native Hispanic culture
reduced internal family conflict for some youth.

Integrating multiple cultures also helps people adapt because it allows a person to
use resources from the various cultures (Bui, 2012) and provides cognitive, social, and
emotional advantages (Murphey et al., 2014). Accessing only one set of resources may provide positive, but more limited advantages. For example, Marks, Ejesi, and Garcia Coll (2014) observed that

In some settings, such as schools…(adopting more traditional American customs and values) may promote more optimal study behaviors among first-generation children for one set of reasons (e.g., greater English-language proficiency as an outcome). At the same time, greater child enculturation (practicing families’ culture-of-origin customs and values) may promote more optimal study behaviors among first-generation children for other reasons, such as greater familial emphasis on the value of education and a strong work ethic. (p. 62)

Because both family and school contexts are important, becoming bicultural provides the greatest advantage through procurement of as many skills as possible. Specific student advantages for bicultural skills measured so far in research include higher GPA and academic aspirations (Carranza et al., 2009), although few studies have ventured into this domain. It is noteworthy that bilingualism is only one part of becoming bicultural; indeed, the ability to switch between cultures and contexts requires unique understanding and skills that extend beyond the ability to communicate verbally or in writing (Marks et al., 2014).

The process of blending ethnic cultures and accessing resources is complex. Researchers suggest that the specific characteristics immigrant families adopt depend largely upon the host environment in which these individuals live (Bui, 2012; Reed, 2015), so many families will take on behaviors and norms that allow them to demonstrate
competence in local settings (Livas-Dlott et al., 2010; Fuller & Garcia Coll, 2010). Thus, even though Hispanic parents in general teach principles of *respeto, personalismo*, and *confianza* while providing *consejos* and ensuring children are *bien educado*, local contexts may change the way and degree to which these principles are taught by parents and received by children. We turn next to what is arguably the most important context that influences family integration within the United States-- socioeconomic status.

**Class/Socioeconomic Culture**

Although ethnic background more readily comes to mind when people discuss culture, researchers assert that socioeconomic status (SES) in the United States or social *class* also embodies the concept of culture since the different beliefs in each SES group impact the way people view and deal with the world (Bloom, 2007; Boethel, 2003; Heine, 2012; Schutz, 2008; Vassallo, 2013). As Bloom notes, “The lived experience of social class—on financial, social, and psychological levels—shapes…perceptions, experiences, and decision-making processes in ways both conscious and unconscious” (p. 363). According to Vassallo (2013), socioeconomic status also influences “interactions, social networks, activities, knowledge, ways of speaking, and structures of the home” (p. 206) to the degree that some researchers believe class culture has a more powerful effect on perceptions and actions than ethnic culture (see Schutz, 2008).

Even though the term *class* is widely used in research and everyday discourse, there is no consensus on how to define it (Vassallo, 2013). Indeed, studies from the United States considering SES create constructs or proxies utilizing single variables or combinations of income (Catsambis, 2001; Ra, 2011; Sui-Chu & Willms, 1996),
occupation (Catsambis, 2001; Lareau, 2003; Sui-Chu & Willms, 1996), free and reduced price lunch status in school (Lee & Bowen, 2006; Malecki & Demaray, 2006; Reynolds & Gill, 1994), resources in the home (Catsambis, 2001; Ra, 2011), and parent education level (Catsambis, 2001; Liu, 2006; Sui-Chu & Willms, 1996) to name a few. As with ethnic cultures, class cultures are not “neatly packaged systems of values, beliefs, dispositions, and knowledge” (Vassallo, 2013, p. 205; see also Payne et al., 2001). Nevertheless, researchers have identified several significant differences within the categories they have created for U.S.-based research and government purposes. This discussion will focus on the differences between the two broad groups of lower SES and higher SES.

Higher SES

Higher SES families are often defined in research as middle-class, upper-middle-class, upper-class, and wealthy. These families are noted for their “preference for difference from others” (Stephens, Markus, & Townsend, 2007, p. 1). Thus, they commonly embody individualistic principles, as evidenced by their social networks, interpersonal interactions, and parenting style.

Social networks. Higher SES families tend to have relatively weak social ties (Lareau, 2003; Schutz, 2008). These ties are impacted by the frequency with which family members engage in fluid community groups, work groups, and school groups (i.e., sports teams, clubs, and team projects) that cause both children and adults to regularly form new relationships and change their established social networks. In addition, higher SES families tend to move away from established networks of extended family and
friends for work and school opportunities. The wages and benefits characteristic of
typical employment for higher SES individuals lessens their dependence on a tight social
network of people for economic security (Schutz, 2008).

An important function of social networks relates to resources. Because monetary
needs for middle and upper class individuals are generally met through their employment,
they build peer relationships that provide knowledge, skills, and social influence (Payne
et al., 2001; Schutz, 2008). Even though these professional connections with managers,
teachers, lawyers, and like individuals are generally weaker than local family ties would
be, they provide more resources than less privileged counterparts can access through their
networks. For children, these types of social networks also translate into learning
advantages and special privileges in formal institutions like school.

**Interpersonal interactions.** In upper and middle-class American culture,
individual desires and preferences are commonly emphasized (Schutz, 2008; Heine,
2012). Parents “celebrate children’s unique characteristics and capabilities, helping them
develop a sense of themselves as discrete and unique individuals” (Schutz, 2008, p. 413),
rather than emphasizing the child’s role in the immediate or extended family. Monetary
decisions are based largely on individual and immediate family preferences, and rarely
require interactions with extended family or friends.

Adults and children frequently interact in ways that teach children assertiveness,
negotiation, and decision-making skills (Lareau, 2003). Adults play with children often
and provide an audience for informal child performances and antics. Children are asked
for their opinions, and in many instances adults defer to child preferences about what the
child wants to do, eat, or wear. At the same time, parents use language with children to “inscribe a self…based on identifying and locating psychological factors, such as intentions, emotions, and beliefs, as the sources of and key elements to action” (Vassallo, 2013, p. 208). Thus children learn that language is generally preferred over physical intimidation (e.g., brains over brawn) as a means to get what they want and show others what they have to offer. Some researchers argue that these interactions also give rise to a form of entitlement as children “[internalize] the idea that it is legitimate and reasonable for others to adjust their actions to suit [the child’s] preferences” (Lareau, 2003, p. 132; see also Heine, 2012). Some evidence of this is greater challenging and rejection of parental authority as well as the extensive amount of negotiation, bargaining, and whining in which higher SES children engage daily (Lareau, 2003).

Just as interactions between adults and children are encouraged, individuals and families in higher SES groups “are said to dissolve the boundaries between home and school by actively shaping these spheres in ways that produce consistency and continuity” (Vassallo, 2013, p. 206). Children are exposed at early ages to situations that require them to interact comfortably with adults and even participate in discussions with them. Such skills provide internal and external resources that help align “home and school spheres” so that children “experience less tension, conflict, and fragmentation within schools than those [children] whose spheres are misaligned” (Vassallo, 2013, p. 207).

**Parenting.** Middle-class, upper-middle-class, and wealthy families “use every opportunity to teach their children knowledge, skills, and dispositions that are rewarded,
validated, and valued in schools” (Vassallo, 2013, p. 208). This concerted cultivation translates into structured play and myriad scheduled activities parents feel will prepare children for success in the formal world they will someday enter (Lareau, 2003; Schutz, 2008). Thus, children have little time for self-directed play but learn the language of adult-child interactions and analytic problem-solving early in life. Putnam (2015) summarized the purpose of this parenting style:

One broad class difference in parenting norms turns up in virtually all studies: well-educated parents aim to raise autonomous, independent, self-directed children with high self-esteem and the ability to make good choices, whereas less educated parents focus on discipline and obedience and conformity to pre-established rules…Parents with less than a high school education endorse obedience over self-reliance, 65 percent to 18 percent, whereas parents with a graduate education make exactly the opposite choice, 70 percent to 19 percent. (p. 119)

Children learn to value choice as an essential form of self-expression, and by adulthood, higher SES individuals “respond quite negatively when they believe that they do not have any choice in a situation” (Heine, 2012, pp. 277-78). This is perhaps a luxury based on greater economic means and connections, since higher SES families have more available choices than lower SES families (Schutz, 2008; Heine, 2012).

Language, as mentioned before, plays an important role in parenting among higher SES groups. Parents are more likely to use words and reasoning for discipline (Lareau, 2003; Putnam, 2015), and teach children to respond to the world with words.
Because parents believe in the power of words, they largely avoid potentially stressful conversations, such as ones about finances, when children are present.

Money is seen as the product of one’s formal occupation and a right to live as one pleases rather than a way to maintain group relationships and survival. “Want” as understood by children from lower socioeconomic groups is an abstract concept for higher SES children. When money is “tight,” children may be removed from an extracurricular activity or have the family vacation rescheduled, but basic needs are rarely in danger. Children’s concept of money and its purpose is thus more about the quantity of options available than survival (Bloom, 2007; Lareau, 2003).

**Lower SES**

Lower SES families are often referred to in literature as working-class, low-income, poor, and economically disadvantaged. Individuals in lower SES groups have a “normative preference for similarity to others” (Stephens et al., 2007, p. 1). In other words, they have collectivist cultural tendencies that are evident in their preferred social networks, interpersonal interactions, and parenting style.

**Social networks.** Among lower SES groups, family and close friends constitute the principal social network. Because of this, lower SES families are more likely to live where they grew up and stay closer to family and friends than higher SES individuals (Lareau, 2003; Schutz, 2008; Vassallo, 2013). They also interact with extended family and neighbors much more often than their middle-class counterparts (Lareau, 2003).
SES families and friends also stay close together because they depend on each other for survival (Heine, 2012; Schutz, 2008).

**Interpersonal interactions.** In the collective culture of low socioeconomic status families, individuals focus on maintaining relationships with family and community groups even at the expense of personal objectives and emotions (Heine, 2012; Schutz, 2008; Vasallo, 2013). As McGerr observed, “The constraints and uncertainties of working-class life...made individualism at best a wasteful indulgence and at worst a mortal threat” (as cited in Schutz, 2008, p. 411). Thus, instead of emphasizing independence, working class homes operate on principles of reciprocity and family solidarity. This means that resources like money are important but temporary assets, which are utilized for the good of the family or close friends rather than saved for future contingencies (Payne et al., 2001).

As poor and working-class families interact with people in their close family network and in more formal settings like work, they “are more likely to prefer “straight talk” and “resolving conflicts head on,” as opposed to placating and long discussions” (Schutz, 2008, p. 416). Because working-class individuals feel relatively powerless in interactions with middle-class institutions, they often resent the language and attitudes used by the middle-class (Schutz, 2008).

Family interactions tend to be more functional than playful. For example, Lareau (2003) maintains that there is a distinct separation between the leisure worlds of adults and children. Adults do not play with children; they associate with other adults while children play mainly with other children with little input from adults when they are
present. Freedom from adult direction and formal learning preparation during leisure time supports creativity and conflict-resolution skills as children interact among their peers without adult facilitation. Such skills are very valuable in their own context, although they may not prepare lower SES children for more structured environments like school where regular interaction with adults is required.

Language also has very specific, functional purposes between lower SES adults and children; it is used by adults to issue directives and by children to answer questions (Lareau, 2003). Adults have little tolerance for negotiation or back-talk from children since they believe it leads children to challenge parental authority (Vassallo, 2013). Additionally, case-studies suggest that working-class children are not given special consideration or attention when they want to speak. Rather, as one researcher reported, “working-class children…work hard to get their views across; [they] …earn and defend the right to speak” (Miller, Cho, & Bracey, 2005, p. 131, as cited by Schutz, 2008, p. 415; see also Lareau, 2003).

In lower SES families, there is also a separation between home and formal institutions like school and work. For example, working-class parents observed by Lareau (2003) never brought work home. Indeed the nature of many working class jobs does not lend itself to work at home. Likewise, these parents also maintained boundaries between home and school by “leaving documents such as papers and report cards in school…deferring schooling to professionals, reading little to and with children, valuing different kinds of knowledge, and interacting little with school personnel” (Vassallo, 2013, p. 206). One reason for this separation, according to Vassallo, is that lower SES
families perceive educators as competent to equip students with the knowledge and skills necessary for school success (see also Lareau, 2003), while parents focus on providing the necessities of life.

**Parenting.** In addition to these tendencies to separate interactions based on group status, families from poor and working classes tend to view childhood from a *natural growth* perspective, which is “a laisse-faire commitment to cognitive development” (Vassallo, 2013, p. 208; see also Lareau, 2003). In this perspective, parents feel they should provide food, shelter, and safety then allow children to play and develop in their own way without structured learning activities and interventions from adults. Children are free to interact with siblings, cousins, and other children of varying ages in their neighborhood but are rarely involved in formal teams or groups.

This does not mean children are free from teaching and discipline. Indeed, working-class and poor families focus on “the importance of tradition, personal integrity, personal responsibility, sincerity above flexibility, and the quality of interpersonal relationships” (Schutz, 2008, p. 416). Parents establish rules that they expect children to follow, and physical punishment when children disobey is preferred over reasoning (Lareau, 2003; Putnam, 2015). Children in working-class families also grow up learning that much of what you encounter in life is beyond your control, and that a good way to maintain your independence is to emphasize your integrity and resilience during tough times. This orientation leads them to accept and cope with occasions when they don’t end up with what they wanted. (Heine, 2012, pp. 277-278)
Thus, these children view their world as one of limited choices rather than the unlimited potential that higher SES children learn to prize.

Children in lower SES families are also often very aware of family finances, as they hear frequently about bills coming due or that there is not enough money to buy necessary items. They understand that the lack of money is a serious issue: in their situation, no money may mean no food, no heat on freezing winter days, or no place to live for a time. Such information shapes children’s perceptions and knowledge as they learn in sometimes perilous ways what is essential or not and how today’s decisions impact the future. This plays out in educational realms such as decisions about college. A qualitative study by Bloom (2007) reported that

Despite the clear financial benefits of a college education, [poor and working-class] students read the world around them and correctly perceive the many ifs, the tremendous risks that they must take in order to reach for the social mobility that a college education promises. So much that middle-class students take for granted, they cannot assume. (p. 363)

These ifs reflect their social environment where very few people have attempted college and even fewer completed it. For many, utilizing money to pay for college now means it is not being used for life necessities or to support their social network. Although loans theoretically make college more accessible, these students understand that loans must be repaid; if they start but do not finish, they will not have the money to repay loans. If they do finish, they know they are competing for jobs that pay good wages, not handed one by virtue of their diploma (for a more in-depth discussion of this topic, see Bloom, 2007).
Thus, the many *ifs* created by their socioeconomic situation impact the way they make decisions well into adulthood as well as the way their brain develops (Putnam, 2015).

**Intersecting Cultures: Where Ethnicity and SES Meet**

Because ethnicity and SES describe different concepts, people simultaneously belong to an ethnic group and socioeconomic group. Where do the majority of Hispanics fall on the SES spectrum? If both ethnicity and SES have distinct cultures within the U.S., what do Hispanic families from different socioeconomic groups look like? Is one culture stronger than the other in determining how individuals behave? Not all of these questions have solid empirical answers yet, but the information we do know is telling.

**Where Do the Majority of Hispanics Fall On the SES Spectrum?**

As reported in Chapter 1, the majority of Hispanics have few economic resources and little education. In 2002, the first year of data collection for the ELS dataset used in this study, the U.S. Census Bureau (Ramirez & de la Cruz, 2002) reported that 21.4% of Hispanics were living in poverty (compared to 7.8% of non-Hispanic whites, hereafter referred to only as “white(s)”), including 28.0% of Hispanic children (compared to 9.5% of white children). Among Hispanics with full-time, year-round employment, only about 26.3% of them earned $35,000 a year or more (compared to 53.8% of whites). Regarding educational attainment, another indicator of SES, only about 57% of the Hispanic population over the age of 25 had graduated from high school (compared to 88.7% of whites), with only 11.1% of those individuals possessing a bachelor’s degree (compared to 29.4% of whites). Out of the remaining 43% of the Hispanic population who had not graduated from high school, 27% had less than a ninth grade education (compared to
4.0% of whites). With regard to occupational prestige, 22.1% of Hispanics worked in service occupations in 2002 (compared to 11.6% of whites), 20.8% were operators and laborers (compared to 10.9% of whites), and only 14.2% were in managerial or professional occupations (compared to 35.1% of whites).

Because of low levels of education and money, poor neighborhoods are the context into which most Hispanic immigrants initially move (Bui, 2012). Despite the undesirable socioeconomic conditions, many Hispanic families make great sacrifices to move from poor areas to better ones. For example, researcher Sunyoung Jung told Fuller and Garcia Coll (2010) that among families in the Early Childhood Longitudinal Study “about one sixth of Latino families who fell below the federal poverty line in 2003 were residing in zip codes with median household incomes that exceeded the national average (the top two quartiles)” (p. 562). Thus, these Hispanic children likely benefit from the wealth of emotional, behavioral, and academic resources that such neighborhoods offer to all who live within their borders (Bui, 2012; Fuller & Garcia Coll, 2010; Putnam, 2015). Conversely, the remaining 83 percent of Latino families below the poverty line likely lack access to these enhanced resources.

What Do Hispanic Families From Different Socioeconomic Groups Look Like?

There is little research on cultural traits of Hispanics from different SES groups, although most studies that provide snapshots of family characteristics and behaviors probably reflect the lives of low-income families. Given that the Hispanic culture has many similarities with the culture of lower SES individuals, such as maintaining close familial ties and emphasizing principles of respect and obedience over negotiation, a
blending with lower SES culture in the U.S. may be more natural than a blending with mainstream middle-class culture. In addition, some aspects of individual character (i.e., talents and abilities) are influenced by available resources so the lack of resources among low SES individuals—Hispanic or otherwise—may result in certain cultural traits that are not passed on or fully developed.

**Does One Culture Have a Stronger Influence Than the Other on Behavior?**

The few studies specific to Hispanics in the U.S. suggest that SES does influence behavior in some ways but not in others. For example, in a 2010 study of Hispanic students, the level of social competence for kindergarten students as rated by their teachers varied by SES (Galindo & Fuller, 2010).

However, SES did not influence a number of important Hispanic family outcomes in research. The same study by Galindo and Fuller (2010) observed that social competence predicted learning growth regardless of social class. In addition, a study of White, Black, and Hispanic participants reported that happy parental relationships are quite consistently related to better outcomes for children and families across all types of subgroups. That is, this association holds not only for economically or educationally privileged families and children, but also holds across varied economic, racial, ethnic, and family structure subgroups. (Moore, Kinghorn, & Bandy, 2011, p. 5)

Thus, the influence of SES on Hispanic families depends on the outcome measured.

There are areas where one aspect of culture appears to have a stronger effect than the other in this blending process. For example, a study by Lareau (2003) found that child
rearing strategies are impacted largely by SES, with little variation across race among white and black families. For example, both black and white middle-class families used language for play, discipline, and reasoning, while poor and working class families from both ethnicities used language more functionally as describe earlier. Lareau noted that the types of language strategies in which middle-class families engaged were ones seen as valuable in U.S. schools and business settings, so parents from the middle and upper classes used them to teach their children skills for economic success. The two racial groups in Lareau’s study may differ from Hispanics since the majority of black and non-Hispanic white individuals have lived in the United States for many generations and thus are more likely to understand the nature of the skills most valued by formal institutions embedded in mainstream U.S. culture.

One branch of literature cites generational status, or the generation when someone came to the United States, as a strong correlate of SES. Common generational categories utilized in research include first-generation immigrants (those born in another country), second-generation immigrants (those born in the US with at least one parent born in another country), and third-generation immigrants (those born in the U.S. with both parents born in the US; Bui, 2012; Pong & Zeiser, 2012). SES tends to increase the longer families live in the United States, so Hispanic families in higher socioeconomic categories are usually second or third generation.

Even though SES increases with generational status, other family and student characteristics tend to be more complicated. For example, one study showed that school and family SES (as measured by parents’ education, occupation, and income) strongly
predicted academic achievement for second- and third-generation Hispanics, but not first-generation Hispanics (Bui, 2012). Other characteristics that are more common among second and third generation students than their first-generation counterparts included lower family attachment and more parent-child conflict, delinquency, troubles in school, and exposure to violence.

The idea that “earlier generations of immigrants’ youth showed better academic, behavioral, emotional, and health outcomes than native youth with native parentage” (Pong & Zeiser, 2012, p. 210) despite their lower SES led to what researchers call the Immigrant Paradox. Pong and Zeiser explained that “this seems paradoxical because the superior outcomes of the earlier generations counter what would be predicted given their lower socioeconomic status and lack of English language skills” (p. 210). However, researchers such as Bui (2012) and Reed (2015) observed that second- and third-generation Hispanics did have some improved outcomes over first-generation Hispanics, such as better occupational outcomes, and they did not find generational differences in outcomes like GPA and high school graduation.

These findings point to the complex nature of blending Hispanic culture with SES culture. Fuller and Garcia Coll (2010) summarize that

The immigrant paradox, first seen as favoring first-generation children across a range of developmental and school outcomes, is proving to be more nuanced: weak or strong depending on national origin, heritage beliefs and practices, and the specific reference group with whom adolescents (and parents) come to identify. Still, these paradoxical findings emphasize the power of children’s
sociocultural histories and local contexts, moving away from the study of individual differences in how children grow or learn with little regard for particular and multiple settings. (p. 561)

Thus, many researchers today believe that the paradoxical evidence is strongly related to social contexts and ecological systems, as these likely contribute to how immigrants assimilate (Bui, 2012; Fuller & Garcia Coll, 2010; Pong & Zeiser, 2012; Reed, 2015).

Researchers also believe that some answers to this paradox lie in the power of native cultural values and practices, which they suggest act as a protective influence against the plagues of poverty-stricken neighborhoods into which most Hispanic immigrants move. Since most Hispanic immigrants come to this country voluntarily (rather than as refugees, for example), they likely demonstrate high levels of positive values from their native culture, such as “ambition, motivation, and drive for upward mobility” (Hao & Ma, 2012, p. 276). Qualitative research supports this theory, as many parents admonish their children to study hard and attend college in order to avoid the strenuous labor and low wages the parents endure, and children relate their desires to succeed to honor their parents and make a better life for themselves and their families (LeFevre & Shaw, 2012; Lopez, 2001). Such attitudes should motivate positive academic behaviors such as a willingness to spend more time on homework (Bui, 2012), as well as provide protection from harmful influences for as long as individuals hold on to the positive aspects of their culture. First-generation students were exposed to their native culture in person (the amount of direct exposure depends largely on their age of entry into the U.S.) and may be more likely to hold on to these positive aspects or use acculturation
strategies similar to their parents. Subsequent generations may be more likely blend with high or low SES cultures to varying degrees, creating inconsistent generational outcomes.

The theoretical framework and empirical findings of Berry (2008) suggest that maintaining native culture is ideal when combined with involvement in the host culture. Thus, another potential explanation for the immigrant paradox is the diverse acculturation strategies in which these families engage. However, when the host culture is largely negative, as in many poverty-stricken neighborhoods, youth are more likely to acculturate to negative mainstream norms that erode positive protective cultural assets (Bui, 2012; Fuller & Garcia-Coll, 2010).

Another important aspect of Berry’s (2008) theory is that conflict often arises when acculturation strategies differ, such as schools employing or expecting different strategies than families or children utilizing different strategies than their parents. The resulting problems, such as conflict within the family and youth seeking out negative peer groups, leave youth exposed to the devastating influences around them. The cultural, familial, and economic strains are compounded by the lack of information, resources, and opportunities in poor areas, reducing the likelihood of youth reaching for elevated goals (Fuligni, 2012) and increasing the likelihood of destructive behaviors such as delinquency (Bui, 2012). As the first generation fails, chances for subsequent generations fall as well.

**Cultural Differences and Implications**

“As is the case with any social institution, the school develops and reproduces its own specific culture and sense of community” (Lasky, 2000, p. 846). School culture in
many areas closely aligns with cultural practices of white, middle-class families (Vassallo, 2013), while cultural practices of ethnic minorities and low socioeconomic students are generally not recognized as readily. In large part, this represents a demographic issue since teacher expectations are a product of personal experience and training and only 18% of teachers were non-white in 2011-2012 (Boser, 2014). Given the educational requirements and salary of most teachers, the majority of these individuals also likely come from middle-class culture. The issue of cultural distance is further compounded for Hispanics, who have fewer Hispanic teachers relative to the numbers of Hispanic students than other demographic groups (Boser, 2014).

The distinct cultural backgrounds of schools and the minority families who attend them may be creating conflicts between families and schools. Unfortunately, “when parents do not share a common culture [with teachers], it is more difficult to establish shared understanding and to build trust” (Wong & Hughes, 2006, p. 657), both of which are essential for effective relationships. In a study of teacher and parent relationships Lasky (2000) reported that

Consistency in parents’ and teachers’ moral purposes invoked positive emotions [among teachers]. It created a sense of continuity, shared values and common goals, some of the very conditions that can lead to relationship. Alternately, when there was a lack of congruency, teachers felt their efforts were being subverted. This created a sense of powerlessness and caused teachers to distance themselves from parents…By and large, teachers expected parents to conform to the institutional norms of appropriate parent behavior. (pp. 852-853)
Lasky noted that the standard to which parents were held was often that of middle-class mothers in two-parent homes. Lee and Bowen (2006) also reported that involvement at school occurred most frequently for those parents whose culture and lifestyle were most likely to be congruent with the school’s culture: parents who were European American, whose children did not take part in the school lunch program, and whose educational attainment was higher and more similar to that of school staff. (p. 210)

As demonstrated in part by Lasky (2000), shared understanding between schools and families is also important because perceptions often influence actions. Teachers chose to distance themselves from parents when they believed they had different moral cultural foundations. Wong and Hughes (2006) further observed that the ethnicity of the parent had a statistically significant influence on teacher reports of parent involvement, resulting in conflicting teacher and parent reports. In turn, some schools with large minority populations are reported to be less likely to attempt to involve parents. Thus, it is possible that cultural differences in school involvement that lead to perceptions of low involvement negatively impact the motivation of school staff to help and reach out to specific populations, as assumptions are already in place that the families will not respond. Such perceptions may also result in teacher animosity and low expectations of both parents and children, reinforcing negative biases and perpetuating inequalities (Auerbach, 2007).

In addition to teacher perceptions, parent perceptions matter in school involvement. In a study of urban African American parents and students, parent
perceptions of teacher support predicted parent involvement at the school among low socio-economic status (SES) urban African American parents (Hayes, 2011). Parent perceptions of teacher support also predicted home involvement for higher SES urban African American parents.

As an extension of these different perceptions of involvement, a number of studies suggest that family involvement in education is not as effective at influencing academic outcomes for minority and low-income families as for white, middle-class families (Bodovski, Nahum-Shani, & Walsh, 2013; Boethel, 2003; Desimone, 1999; Lee & Bowen, 2006; McNeal, 1999). Some researchers believe this is primarily a function of the type of involvement respected among school personnel (Lareau, 2003) since “the interactions and other elements that comprise [school] culture are also embedded in relations of status and power…in the home knowledge sanctioned by the school that connects children and their family cultures, or disconnects them from the official curriculum” (Lasky, 2000, p. 847).

Jordan and colleagues (2001) also assert that the impact of lower SES and ethnic minority family practices on student outcomes has not been widely researched and common family involvement practices of ethnic minority families are not frequently measured by researchers. Jordan and colleagues believe these “invisible strategies” of ethnic minority parents are left out of common measures of parent involvement because they are misunderstood by school personnel and researchers, who often do not recognize their own biases (see also Heine, 2012). Some involvement important to diverse families may be viewed by researchers as being part of the expectations of parenting or similar
constructs rather than family involvement in education. Some constructs may simply seem too difficult to measure.

In other cases, researchers may not recognize the potential for alternative ways to assess familiar ideas. For example, Vassallo (2013) demonstrated that the elements necessary to foster self-regulated learning (SRL) included home conditions and structures that were decidedly middle-class, such as the need to use cultivated learning (changing environmental conditions such as parent actions or activities to meet learning needs), employ certain cognitive approaches (such as inviting children to reflect on their opinions or personal strengths), develop relationships with school personnel, and dissolve boundaries between home and school. Vassallo clarifies that “it is not suggested that practices and home structures of guardians from working-class and economically disadvantaged backgrounds do not or are incapable of facilitating SRL development. Rather, the representation of SRL development narrowly reflects a particular class culture” (p. 206) since practices common to families in lower SES groups simply have not been assessed.

SRL is one of many practices identified by researchers as important for children, but other practices suffer from the same dearth of culturally sensitive research. The majority of “successful” school and life practices reflect white, middle-class values and perspectives, not out of malice on the part of school personnel and researchers but perhaps from the lack of recognition that cultural differences exist in how families interact with and view the world, as well as the culturally different worlds in which they live. Thus, instead of respecting various forms of family involvement in education, some
teachers may assume that Hispanic families and low SES families are not interested in participating or do not care about their child’s education. Boethel (2003) asserts that “taken together, these findings raise complex questions regarding power, privilege, and the extent to which differences are tolerated or valued” (p. 54).

Because teachers “need to first acknowledge students’ differences and then act as a bridge between their students’ differences and the culture of the dominant society” (Boethel, 2003, p. 17), this study seeks to enhance understanding of the culture of Hispanic families from high and low SES groups in regards to family involvement. Teachers will then have the knowledge necessary to build understanding between a student or family’s cultural world and the cultural beliefs and expectations most common among school personnel.

**Education-Related Family Practices and Beliefs**

As discussed previously, culture influences the way parents view their educational roles. However, inherent beliefs do not always translate into actions, and actions do not always translate into the educational influence desired by parents. This section examines the literature on some specific ways that Hispanic families are involved in formal education and how measured involvement influences student outcomes for the constructs analyzed in this study.

A meta-analysis by Jeynes (2003) comparing parent involvement among major ethnic groups reported that “overall, one can conclude that parental involvement has a significant positive impact on children across race and across academic outcomes” (p. 213). He added that types of involvement and the effect on different ethnic groups varied
across groups, which has been established by other researchers (Fan & Chen, 2001; Hong & Ho, 2005; Lee & Bowen, 2006; Toldson & Lemmons, 2013; Wong & Hughes, 2006; for an exception see Kohl et al., 2000). LeFevre and Shaw (2012) declared that “the differences between results suggests that the educational needs of Latino secondary students may not be the same as the needs of White or African American students” (p. 718). They cite cultural factors such as valuing collectivism, family bonds, and communal goals, as probable causes.

In addition, research confirms that types of family involvement and the effect of involvement are different among socioeconomic groups (Hango, 2007; Harlep & Ellis, 2010; Hopson & Weldon, 2013; Kim, 2014; Lee & Bowen, 2006; LeFevre & Shaw, 2012; Little-Harrison, 2011; Nunez & Kim, 2012). Lower SES parents demonstrate less overall involvement than higher SES parents in ways that are measured in most research studies (Lee & Bowen, 2006; Malecki & Demaray, 2006; Putnam, 2015), however some studies suggest that involvement at home is similar across SES groups, while at-school involvement differs (Desimone, 1999). This appears to be true regardless of other background characteristics such as race or culture (Boethel, 2003); although Underwood (2011) suggested that specific differences in upper and lower class outcomes do depend on race. Because of these differences across ethnic groups, it is important to review the family involvement literature specific to Hispanics, especially with regard to SES where possible.

Although SES also influences the way family involvement impacts students, the literature on family educational involvement for Hispanic families from different
socioeconomic levels is scarce. Numerous studies utilize controls for either SES or ethnicity (Fan et al., 2012; Hopson & Weldon, 2013; Underwood, 2011), while others focus only on low-income families (Barnard, 2004; McCormick et al., 2013). Even a study analyzing both ethnicity and SES by Lee and Bowen (2006) compared each ethnic group to other ethnic groups then compared each SES group to other SES groups, but did not report on the similarities and differences of SES within each of the ethnic groups.

**Hispanic Family Involvement in Education**

The literature is clear that the overwhelming majority of Hispanic parents are very concerned about their children’s education, have high educational aspirations for their children, and want to be involved in their child’s school experience (Behnke, Piercy, & Diversi, 2004; Lee & Bowen, 2006; LeFevre & Shaw, 2012; Orozco, 2008; Quirocho & Daoud, 2006; Valencia & Black, 2002; Zarate, 2007). An analysis of the NELS by LeFevre and Shaw (2012) offered insight into the scope of Hispanic family involvement: plentiful informal involvement among Hispanic parents (76% of the base year population, 64% of the follow-up), but much lower formal involvement (21% of the base year population, 25% of the follow-up). Formal parent involvement was defined as activities at the school or parent-initiated contact with the school, while informal parent involvement was defined as home-based behaviors, activities, and emotional support such as discussing future plans, encouraging scholastic endeavors, and helping with homework at home.

**Formal involvement in education.** Toldson and Lemmons (2013) reported that Hispanic parents who participated in the National Household Education Survey (NHES)
visited the school an average of 4.8 times during the school year, considerably less often than Caucasian parents (averaging 8.91 times in a year) and slightly less often than African American parents (averaging 5.55 times a year). Hispanic parents who primarily spoke a language other than English visited the school an average of only 3.3 times during the year (see also Lee & Bowen, 2006; Terriquez, 2013; Wong & Hughes, 2006).

Some qualitative studies report that Hispanic parents have been intimately involved within the school building when necessary or when given the opportunity. For example, a study by Scribner and colleagues (1999) reported that “Many of the parents [of Hispanic students in high-achieving Texas schools] mentioned that it was their responsibility to ensure that school personnel did everything possible for their children” (p. 39), so they found ways to be involved despite numerous barriers. One mother had to persist with the school to get a formal meeting to have her son tested so he could receive additional help at school. She shared that,

years back, I met with a brick wall…I kept fighting and fighting and finally got it done. That is how I got involved. I knew that he needed all the help he could get, so it meant I had to be really involved. (p. 39)

Another poignant example comes from an observational study by Quiocho and Daoud (2006) when one school held a public meeting on improving the curriculum and student services. They expected only 30 Hispanic parents to attend and were surprised that 250 arrived to participate. Although not all schools experience a difference of that magnitude between their perceptions of involvement and actual involvement, other schools have reported significant participation by Hispanic parents when language and other
accommodations were available (Henderson, Carson, Avallone, & Whipple, 2011; Valencia & Black, 2002). This also implies that although Hispanic parents may not initially emphasize formal involvement, schools can play an important role in soliciting participation through the outreach efforts they use and willingness to provide accommodations such as interpretation services.

**Informal Involvement.** “Educación taught in the home” is non-academic, “behind-the-scenes” influences that impact learning, such as moral guidance that results in better behavior in the classroom (Zarate, 2007; Ramos, 2014). Responses from focus groups of Hispanic families in Los Angeles, Miami, and New York defined involvement in education as *life participation* (e.g., being aware of the child’s life, monitoring school attendance, discussing future plans, providing advice and general encouragement, establishing a relationship of trust with the child, disciplining the child, teaching honor and respect) more frequently than *academic involvement* (e.g., attending parent teacher conferences, asking about homework daily, listening to the child read, going to the library with the child, visiting classrooms during open houses), although both aspects were considered important. Quantitative studies clarify the extent of involvement in some of these practices, as discussed below.

Helping with student homework is a commonly measured form of involvement. Lee and Bowen (2006) reported that Hispanic elementary students received the same amount of homework help as their white and black peers. In the NHES, a national survey of children age 20 or younger, one question asked about parents helping with homework while another asked if the student received tutoring. Hartlep and Ellis (2010) used the
NHES to analyze homework help with and without the tutoring questions included, and found a significant difference in the likelihood of help. When including tutoring in the model, Hispanic mothers were the second most likely ethnic group to be involved in children’s homework. When tutoring was removed from the model, Hispanic mothers were the fourth most likely of the ethnic groups analyzed. Such data suggest that even parents who do not provide personal help may still be involved in their student’s educational life by ensuring they receive necessary help.

Another common assessment of family involvement is parent rules for and supervision of their children. Using NELS data, Sui-Chu and Willms (1996) found slightly higher levels of home supervision for Hispanic high school students than for Caucasian students. A survey of Dominican immigrant parents in New England also found that they had higher home-based rules for their children than parents from the European and Asian immigrant communities in the study (Garcia Coll et al., 2002).

Practices such as checking homework and rules for student behavior are widely acknowledged and frequently measured. However, other practices are not as widely recognized. For example, case studies of parents of high-performing Hispanic migrant students in Texas found that parents viewed one of their greatest educational contributions to be teaching children a strong work ethic (Lopez, 2001), yet research rarely mentions this important facet of involvement. Recent interviews by Ramos (2014) did identify a number of “cultural forms of engagement” discussed by Hispanic mothers, including apoyo (support), consejos (advice), and sacrificios (sacrifices), which worked
together to ensure the educación children received at home facilitated the child’s ability to learn formal material at school.

**Apoyo.** Apoyo is the essential moral support family members provide to one another. Zarate (2007) reported from focus groups that Hispanic college-bound high school students “placed significant importance on the emotional support and motivation that their parents provided” (p. 14). Students cited some specific parent practices such as telling stories of success and failure, talking about the school day, monitoring their school attendance, encouraging and trusting them, providing discipline, and offering incentives for proper behavior. Others said that their parents made extra efforts to enroll them in the best school possible, even if it was not the neighborhood school. Thus, apoyo appears to encompass most forms of home-based involvement.

Most forms of apoyo require time together, as the parent-child relationship is essential to feeling supported. Fuller and Garcia Coll (2010) asserted that regular family practices such as eating dinner together or doing household chores “serves to nurture a motivating sense of competence and belonging for the child, advanced by the emphasis placed on personalismo by many Latino parents” (p. 562). Furthermore, fulfilling expectations of family time helps children understand their role within the family, especially when other needs supersede their own. This understanding then leads to greater normative cohesion that influences children’s engagement and performance in school (Fuller & Garcia Coll, 2010).

The specific practices thought to support students within each family may vary. A study by Malecki and Demaray (2006) reported parent support for Hispanic middle
school students using the Child and Adolescent Social Support Scale (CASSS), which included questions for the children about whether their parent expresses pride in them, helps them practice and make decisions, gives them good advice, praises them, and so on (scale sample questions are from Malecki & Demaray, 2002). The CASSS seemed to embody the cultural practices of *apoyo* well and could be valuable in determining questions on future longitudinal surveys. In many cases, there were no equivalent questions on the ELS or any current longitudinal survey therefore it cannot be used in this analysis.

From the parent’s perspective, the purpose of *apoyo* is motivational since the lack of support would have very real consequences in the classroom. For example, one mother shared that:

> Emotional support comes from home. What they see at home they transmit to school, emotionally. If there is nothing at home, then this can harm them in school. For me, that is what they will transmit. There must be communication in the home. As parents, we should converse with children. My support for my daughter is that everything is good at home. Not perfect, but good and that is what she will project in school. That is what is important to me. So she doesn’t worry about what is going on. There are parents that argue in front of kids in the street and to me that is wrong. It brings them down morally and they think this is normal and it’s not. I don’t like my kids to see this. If I need to call their attention I do it properly. If they have a low emotional value this affects their education.

(Ramos, 2014, p. 5)
Such support is indeed important but can be hard to quantify in a meaningful way. Some practices are currently assessed in quantitative research, but many are not and should be considered for future evaluation.

**Consejos.** Consejos, or advice, are closely related to apoyo. When considering the role of consejos in family educational involvement, research suggests that the supportive communication offered by many Hispanic parents emphasizes educational aspirations, the importance of education, and the role of education in providing security and opportunities (LeFevre & Shaw, 2012; Lopez, 2001; Ramos, 2014). Consejos are often offered through cultural narratives, many of which warn children that low-wage, physically demanding work is the fate of those without an education. For example, Auerbach (2007) recorded the consejos of one Latino father to his son:

> Success comes according to the empeño (dedication, commitment, effort) you invest in what you are doing . . . If you are dedicated, then you can achieve whatever you want. If you don’t put ganas (will, drive) into it, you become like us. (p. 263)

As illustrated in this father’s counsel and research previously discussed, many Hispanic immigrants have little education and thus understand the economic implications first-hand.

The level of communication among parents and children is relatively high in Hispanic households. An analysis of NHES data for children in kindergarten through twelfth grade found that the average frequency for personal talks between Hispanic parents and children was 10.53 (sd = 1.7) on a scale from 4 to 12, with 12 being the most
frequent communication (Toldson & Lemmons, 2013). On a scale of 4 to 14 for
discussing future plans, Hispanic parents averaged 10.00 (sd = 2.7). Among Hispanic
elementary students and their parents in a study by Lee and Bowen (2006), educational
discussions were frequent, with an average score of 16.19 (sd = 3.27) out of 20 possible
points. The standard deviation was quite large, especially compared to other ethnic
groups (white 17.24 (sd = 1.97), black 16.80 (sd = 2.34)), indicating large variation in
parent communication behaviors. Student performance may play a role, as Toldson and
Lemmons reported that parents were more likely to talk about future planning when their
children had As in school.

While many of the large datasets capture levels of communication across select
topics, one weakness is that they fail to assess the quality of the communication. Smaller-
scale qualitative work suggests that communication may be somewhat one-sided, with
low student-to-parent feedback. For example, all the Hispanic youth interviewed for one
small study knew that their parents wanted them to go to college (Behnke et al., 2004).
However, just over half of the Hispanic parents in the same study knew their child’s
educational and specific employment aspirations. All but one of the uninformed parents
“attributed this difficulty in speaking with their youth to the language barrier and their
youth’s acculturation…Parents felt isolated from their children to an extent because they
were not as acculturated as their offspring” (p. 30).

Sacrificios. As discussed previously, parents also express strong beliefs that their
hard work will provide children with educational opportunities that will give them the
power to advance economically (Orozco, 2008; Ramos, 2014). Research suggests that
students are “keenly aware of the sacrifices their parents have made for them, and invest a great deal of energy into succeeding in educational and work activities that can help their families in both the short and long term” (Kuperminc, Darnell, & Alvarez-Jimenez, 2008, p. 472).

**Discussion.** Hispanic parents reportedly have high aspirations for their children, know education is valuable, make great sacrifices for their children, and several qualitative studies report students receive high parental support. Yet other studies report a low sense of shared responsibility with schools (Wong & Hughes, 2006) and low involvement (LeFevre & Shaw, 2012). How can these apparent contradictions be explained? Are Hispanic parents very involved in their children’s education or not very involved?

Reports of overall at-home involvement as a preference to at-school involvement offer some explanation for low parent involvement. Since at-school involvement is often reported by both students and parents as less important to parents than home involvement (Lopez, 2001; Quiocho & Daoud, 2006; Steinberg et al., 1992; Zarate, 2007), it is possible that parents are simply involved in their children’s lives in different ways than school personnel believe are important. For example, the time utilized in efforts to maintain traditional practices and family bonds, such as making a home-cooked meal and eating dinner as a family frequently, may compete with time for activities viewed as important in school culture, such as how often parents should read to young children (Livas-Dlott et al., 2010). However, research suggests that there are more factors involved.
Hispanic parent reports also suggest that even though parents believe education is important and emotionally support their children, numerous life barriers such as demanding and inflexible work schedules, hourly pay, lack of transportation, low comfort with U.S. schools and personnel, and limited English skills are impediments to being more intimately involved in the ways parents want (Behnke et al., 2004; Garcia Coll et al., 2002; Jordan et al., 2001; LeFevre & Shaw, 2012; Murphey et al., 2014; Quiocho & Daoud, 2006; Terriquez, 2013; Toldson & Lemmons, 2013; Wong & Hughes, 2006; Zarate, 2007). Migrant families, which often include many Hispanic families, are characterized as having additional barriers such as “high rates of social and physical isolation, numerous health- and work-related problems, and…high mobility” (Lopez et al., 2001, p. 254). Such barriers impact both home and school involvement, although there is evidence that such factors do not limit all parents (Quiocho & Daoud, 2006; Scribner et al., 1999).

Cultural factors such as respect, trust, and personal relationships likely impact formal involvement at school, as Hispanic parents may view behaviors such as asking school personnel about the curriculum or advocating for their particular child’s needs as challenging someone in a position of authority, which would violate cultural expectations of respeto (LeFevre & Shaw, 2012; Murphey et al., 2014). Other studies reported that Hispanic families do not contact teachers because they are less comfortable with teachers and schools in the United States due to limited English language skills, unfamiliarity with the school system, perceived discrimination, or other issues (LeFevre & Shaw, 2012; Wong & Hughes, 2006).
Culture may also play a role in the expectations that children communicate to their parents about involvement at school. For example, college-bound Hispanic high school students in one study reported that parent presence at school was viewed as a sign of parental distrust and intrusion rather than support in their circumstance (Zarate, 2007).

Acculturation also plays a role in family involvement, although research has yet to paint a clear picture of its role. For example, Terriquez (2007, as cited in Toldson & Lemmons, 2013) reported high parent involvement at school for parents who had been in the United States for at least 10 years. Conversely, Keith and Lichtman (1994) found that involvement actually decreased slightly when parents became more proficient in English. Those with less proficiency reportedly discussed school activities more and had higher educational aspirations for their children. Thus, the process and outcomes of cultural blending remains somewhat mysterious.

One potential factor limiting our current picture of Hispanic parent involvement is that the qualitative research tends to have small sample sizes or focuses on high-achieving or college-bound Hispanic students in order to better understand what helps students succeed (see Auerbach, 2007; Lopez, 2001; Orozco, 2008; Scribner et al., 1999; Zarate, 2007). In this context, several parents reported that their situation is likely different from those of other Hispanic parents. For example, in the case-study by Quiocho and Daoud (2006), parents detailed how they helped their children at home, but “parents understood [and acknowledged] that not all children received support with their schoolwork at home” (p. 263). Likewise, parents of high-achieving students in Texas who had taken their children to work to help teach them about hard work and education
also acknowledged that there were other parents who took their children to work solely to
make money rather than teach them the value of education (Lopez, 2001). Thus, it is
uncertain how the experiences recorded from parent interviews and focus groups
compare to the broader Hispanic population.

In addition to small sample sizes, another major limitation to current research is
the lack of assessment of culturally-specific practices. Only a handful of the non-
academic practices reported by Hispanic parents as important “educacion” are measured
in a meaningful way in the majority of studies, including the large longitudinal studies
(Jordan et al., 2001; Scribner et al., 1999; Zarate, 2007). Some practices that are
measured in major studies like the National Household Education Survey (NHES), the
Educational Longitudinal Survey (ELS), and the National Education Longitudinal Study
(NELS) include providing advice and discussing plans, family rules, and parent
expectations. Other practices such as being aware of the child’s life and providing general
encouragement or emotional support have limited applicable questions that could be used
for analysis, while practices such as establishing trust, conveying a strong work ethic,
teaching honor and respect, and instilling cultural values do not currently have intuitive
proxies. Although such practices may be difficult to include in quantitative studies at
present, qualitative studies could help determine appropriate constructs. Qualitative
research has already established some background, such as utilizing the types and morals
of stories that Hispanic parents tell and analyzing behaviors for which parents offer
incentives.
Family and Student Constructs

Some research suggests higher student benefits for family involvement among minority groups than Caucasians (Jeynes, 2003; LeFevre & Shaw, 2012) and others report that it may be less effective for minorities (see Boethel, 2003, p. 54). What we do know is that in general, family involvement influences student outcomes. However, the level of influence depends on the type of involvement and the type of outcome (Hong & Ho, 2005). Quantitative studies assert that parent aspirations, parent-child discussions, and PTO involvement have significant strong or moderate effects on student beliefs, behavior, and achievement, while authoritative parenting, rules, and encouragement show weaker but still significant effects on these student outcomes.

Family involvement practices. Table 2.1 shows which aspects of family involvement have the largest effects (correlations, beta coefficients, and effect sizes greater than .2) among Hispanic families across several studies. Research on the family involvement practices utilized in this study will be described in more detail in this section.

Family rules. Family rules have a significant relationship with student outcomes, although these outcomes vary by ethnicity and type of rules analyzed (Desimone, 1999; Liu, 2006; Mau, 1997; McNeal, 1999; Sui-Chu & Willms, 1996). Hispanic parents tend to monitor their children closely, which past research suggests is significantly related to higher grades (Desimone, 1999), overall achievement (Jeynes, 2003), and test scores (Desimone, 1999; Sui-Chu & Willms, 1996), a greater likelihood of graduating on time (LeFevre & Shaw, 2012), and lower truancy (McNeal, 1999). The rules assessed in the
<table>
<thead>
<tr>
<th>Parent Involvement</th>
<th>Student Outcome</th>
<th>Effect Size/Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong or Moderate</td>
<td>Aspirations and communication combined</td>
<td>Grades</td>
</tr>
<tr>
<td></td>
<td>Achievement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Educational Aspirations</td>
<td>Student aspirations</td>
</tr>
<tr>
<td></td>
<td>Overall Parent Involvement</td>
<td>Standardized Test Scores</td>
</tr>
<tr>
<td></td>
<td>Overall Achievement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discussing school and future plans</td>
<td>Locus of Control</td>
</tr>
<tr>
<td></td>
<td>General PTO Involvement</td>
<td>Reading test scores</td>
</tr>
<tr>
<td></td>
<td>Attending PTO meetings</td>
<td>Reading test scores</td>
</tr>
<tr>
<td>Weak</td>
<td>Overall Parent Involvement</td>
<td>GPA</td>
</tr>
<tr>
<td></td>
<td>General PTO Involvement</td>
<td>Math test scores</td>
</tr>
<tr>
<td></td>
<td>Attending PTO meetings</td>
<td>Math test scores</td>
</tr>
<tr>
<td></td>
<td>Discussing school and future plans</td>
<td>Student aspirations</td>
</tr>
<tr>
<td></td>
<td>Authoritative parenting</td>
<td>Overall Achievement</td>
</tr>
<tr>
<td></td>
<td>Rules on school and leisure</td>
<td>Overall Achievement</td>
</tr>
<tr>
<td></td>
<td>Encourage outside reading</td>
<td>Standardized test scores</td>
</tr>
</tbody>
</table>

Note: Moderate effect sizes (ES) defined as at least .5 and weak effect sizes as at least .2 (see Rosnow & Rosenthal, 1996). Strong correlations ($r$) and beta coefficients ($\beta$ or $b$) defined as at least .40, moderate as at least .30, and weak as at least .20. These effect sizes and correlations are not meant to be compared across studies. All reported relationships are significant at the .05 level or better. Gray indicates a negative or undesirable outcome.

- Keith et al., 1998
- Keith & Lichtman, 1994
- Hong & Ho, 2005
- Jeynes, 2003
- Hispanics combined with Asian Americans due to the low number of empirical studies with only Hispanics
- Desimone, 1999
- Steinberg et al., 1992

ELS were very specific, such as asking how often parents check that homework is done and limit time on the TV or video games. They were designed in part to facilitate comparison with previous studies such as the NELS, so they may not reflect rules that are the most culturally important to or common among Hispanics.
Although there are no specific studies analyzing rules among Hispanic families from different SES groups, research on the general population indicates differences according to socioeconomic conditions. For example, Lee and Bowen (2006) reported that students receiving free and reduced price lunch had more rules than children not on the lunch program; however, in their study the rules did not have a significant relationship with achievement. McNeal (2001, as cited by Hango, 2007) found that monitoring student behavior reduced truancy and dropping out for most students regardless of SES, but it appeared to be more protective for students from higher SES levels than for lower ones.

**Communication.** Parent-child communication is viewed as a key component of good parenting in the Hispanic culture, and research supports the positive impact parent-child communication has on grades (Toldson & Lemmons, 2013), test scores (Hong & Ho 2005), on-time graduation (LeFevre & Shaw, 2012), college enrollment (Nuñez & Kim, 2012; O’Connor, 2009), locus of control (Hong & Ho, 2005), intrinsic motivation (Fan, Williams, & Wolters, 2012), student aspirations, and self-efficacy (Fan et al., 2012) for Hispanic children. In fact, in one study Hispanic students were about 75% more likely to enroll in a four-year college rather than a two-year college when parents discussed college planning more frequently (Nuñez & Kim, 2012). Since Hispanic families view involvement in a student’s life in general as essential to helping the student in school, the construct designed for this study includes both academic and general discussion variables.
When looking at Hispanic students from different socioeconomic circumstances, Malecki and Demaray (2006) found that Hispanic parent support, measured in part by parent-child communication, influenced GPA for all lower SES Hispanic students. For the higher SES student group, parent support only had a significant influence on GPA when students received high support, but no significant relationship existed in the high SES group that received low support. Some research suggests that lower SES Hispanic families have fewer discussions (Lee & Bowen, 2006; Putnam, 2015), which suggests that lower SES students would receive positive benefits less often than their counterparts who have more frequent discussions. Analyzing this aspect of involvement for different SES groups will add important support to the limited research currently available.

**Spending time together.** As detailed previously, the emotional support and motivation encompassed in *apoyo* is often developed through numerous parent-child interactions. Thus, items from the parent survey that indicated frequency of interaction in a variety of school, family, social, religious, and other activities were chosen to represent this cultural practice. For this analysis, twelve items from the ELS that were asked to parents about spending time with the tenth grader were divided into two types of time together: general time together and time spent on school and sports-related activities to better understand the potential impact of each type of activity. A final item--eating a meal together--was added to the general time together scale due to research findings that show that eating meals together is considered an important way to develop and maintain strong family relationships among Hispanic families (Murphey, Guzman, & Torres, 2014). In addition, Waldfogel (2006, as cited in Putnam, 2015) found that even while controlling
for numerous factors, adolescents from all backgrounds who ate dinner with their families at least five times a week had better academic outcomes, such as higher GPAs, less school suspensions, and more ambitious plans for college; they were also less likely to engage in an array of risky behaviors. Thus, eating meals together seemed especially important to include in *apoyo*. No studies have specifically reported on the influence of Hispanic families from different SES groups spending time together.

**Involvement at-school.** Although Hispanic families view home involvement as more important than being involved at the school, many Hispanics also view involvement at the school building as important, and many school personnel view involvement at school as the main indicator of involvement. Based on results from their analysis of elementary school students, Lee and Bowen (2006) believed that the cultural disadvantage experienced by parents who are African American, Hispanic/Latino, low income, or less educated in relation to school-based involvement appears to occur through barriers faced by these parents in regard to *being present* at school rather than through accrual of fewer benefits when they are able to be present at school. (p. 212)

However, other studies reported that Hispanic families and others did experience different benefits from involvement at the school building (Desimone, 1999; Fan et al., 2012; Jeynes, 2003).

When looking only at the effect of at-school involvement on Hispanic families without comparing them to other ethnic groups, research shows mixed effects. In some studies, certain types of involvement positively influenced student test scores (Desimone,
grades (Desimone, 1999; Toldson & Lemmons, 2013), behavior (McCormick, Cappella, O’Connor, & McClowry, 2013), and on-time graduation (LeFevre & Shaw, 2012), while other types of involvement negatively influenced test scores (Desimone, 1999) or had no effect on student self-efficacy and intrinsic motivation (Fan et al., 2012). For example, Desimone (1999) found that PTO involvement positively, significantly predicted achievement in math, reading, and GPA, but attending PTO meetings had a negative impact on math and reading achievement. One potential explanation is that PTO involvement is often something that is done where students are present, such as selling tickets at student events, while attending meetings offers little student interaction and thus may not communicate to students that parents desire involvement in their educational lives. Fan and colleagues (2012) did not find a relationship between school-based participation (such as involvement in PTO and volunteering) at the school and student self-efficacy or intrinsic motivation. Whether or not a practice influences diverse students differently may be a function of the type of practice and type of outcome measured.

In focus groups, Hispanic families referred to attending parent-teacher conferences, open houses, and school activities in their definitions of family involvement, but did not mention the Parent-Teacher Organization (Zarate, 2007). Interestingly, the questions asked by the ELS centered largely around involvement in the PTO, but did not ask about attending parent-teacher conferences and open houses. Attending school activities was assessed in the ELS as part of the numerous activities parents and children did together in the past year and had different response categories than the items in the at-
school involvement construct, so attending school activities was included with spending time together.

Hispanic families from lower SES groups and living in lower SES neighborhoods tend to be at the school building less than their higher SES counterparts (Lee & Bowen, 2006; Putnam, 2015; Toldson & Lemmons, 2013). For example, Toldson and Lemmons (2013) reported that Hispanic parents with a college degree visited their child’s school about three times as much as those without a high school diploma. A study by Malecki and Demaray (2006) reported higher parent support for Hispanic middle school students not receiving free or reduced price lunch than for those who did receive it. However, the effect of their participation as compared to higher SES families has not been evaluated in research.

**Student Mediators.** Although many of the family involvement practices have a direct impact on student outcomes such as test scores and grades, parents’ behavior does not affect the child through skill building, as has been traditionally assumed, but through its impact on children’s attitudes and motivations related to school. This theory represents the child as an active processor of information and a constructor of schemas about him- or herself. (Grolnick & Slowiaczek, 1994, p. 239)

Research by Grolnick and Slowiaczek as well as others (see Kim, 2014) confirms that the effect of some family involvement practices on academic student outcomes changes when mediators are introduced into the model. This effect differs by ethnic group as well (Hong & Ho, 2005).
Although very little research has been done on mediators of parental involvement among Hispanic students, existing research and research from general student populations suggests a number of student motivations and behaviors that may mediate the influence of family practices on student outcomes. Mediators chosen for this study based on past research include student effort, persistence, and perceived control over learning (Fan et al., 2012; Kim, 2014), educational aspirations (Hong & Ho, 2005; Liu, 2006; Ra, 2011), and in-school behavior (McCormick et al., 2013). For detailed descriptions of the items in each of these constructs, see Table A1.2 in the Appendix.

**Student effort, persistence, and perceived control.** This construct is designed to represent student characteristics that Hispanic parents report a desire to influence, such as strong work ethic, resiliency, and perseverance. This construct is also closely related to self-efficacy, which is linked to academic achievement and greater career expectations (Kim, 2014), among other outcomes. Such beliefs are “concerned not with the skills one has but with judgments of what one can do with such skills, and helps to determine a person’s choice of activity” (Kim, 2014, p. 398).

There is little research focused on family involvement that influences student effort, persistence, and perceived control among Hispanic high school students. An ELS study by Fan and colleagues (2012) showed that Hispanic parent aspirations, SES, and parent-to-school communication all influenced a construct similar to the student effort, persistence, and perceived control scale used in this study, while parent involvement at school and parent-child communication had no effect. They also reported a reciprocal relationship between the effort and persistence construct and student self-efficacy in both
English and math, which are similar in nature to the Perceived Control over Learning scale. In another ELS study (Kim, 2014), math and English self-efficacy was influenced by parent-student communication and educational expectations in a model that considered income but not ethnicity. Kim believed self-efficacy influenced student interactions with teachers and positive attitudes about school, which in turn influenced academic achievement as well as preparation for a career.

**Student educational aspirations.** Student beliefs are tied to student actions, and are an important aspect of educational progress. Previous research confirms a positive association between student educational aspirations and both initial math and reading test performance and future performance (Hong & Ho, 2005). Student aspirations also influenced college enrollment; Nuñez and Kim (2012) reported that Hispanic students were over 40% more likely to enroll in college when they had higher educational expectations.

Family involvement is linked both directly and indirectly with student aspirations. Hispanic families influenced student aspirations for educational attainment by having high educational expectations for their children (Carranza et al., 2009; Hong & Ho, 2005) and by discussing school and future plans with their children (Hong & Ho, 2005). Parent expectations also acted as a mediator for student variables such as acculturation and self-esteem to influence student aspirations.

**Student behavior.** Hispanic parents are very concerned with ensuring children behave with proper manners and respect for adults in ways consistent with their cultural norms. Research supports the importance of proper behavior at school, as student
behavior was significantly positively related to with academic achievement and social interactions, as well as classroom environment and teacher instructional efforts (McCormick et al., 2013).

Families can influence student behavior in a number of ways. For a sample of Black and Hispanic elementary students, McCormick et al. (2013) found that higher rates of school-based family involvement (measured by activities such as volunteering, attending workshops, fundraising, and picking the child up from school) were associated with lower teacher-reported behavior problems. Another study with multiple ethnic groups reported a composite measure of school-based and home-based family involvement reduced problem behaviors and increased social skills for children over time (El Nokali, Bachman, & Votruba-Drzal, 2010).

**Student Outcomes.** Outcomes were chosen based on preceding research and exploratory investigation to assess items that could increase future economic security and quality of life for students. Objective indicators such as test scores, grade point average (GPA), dropout status, and college enrollment help show potential for future economic progress, while community involvement demonstrates social capital and suggests the potential for positive societal influence in non-economic areas. For more complete descriptions of items, see Table A1.3 in the Appendix.

**Math test score.** Standardized test scores are a common measure of academic achievement that many believe allows for an objective comparison of student academic knowledge across schools and states that have different achievement measures and requirements. Numerous researchers have utilized this measure to determine that family
involvement practices such as home supervision, parent-student communication, and
PTO involvement influence achievement (Hong & Ho, 2005; Little-Harrison, 2011; Liu,
2006). Practices such as communication and parent aspirations for a child’s education
also show an indirect effect on test scores through their positive influence on student
educational aspirations (Hong & Ho, 2005). Because the reading test was not
administered in the follow-up assessment, only the follow-up math test could be used in
this analysis.

**GPA.** Student Grade Point Average (GPA) is an important component of both
high school graduation and college success (O’Connor, 2009). Hispanic family
involvement in the form of rules, emotional support, expectations and aspirations, parent-
student communication, PTO involvement, and visiting the school influenced GPA
among high school students in previous studies (Carr, 2011; Carranza et al., 2009;
Froiland et al., 2012; Jeynes, 2003; Toldson & Lemmons, 2013).

SES also influences GPA in studies for all ethnic groups. However, in a study on
Hispanic middle school students, Malecki and Demaray (2006) reported positive,
significant correlations between parent support and GPA for lower SES students, but no
significant relationship for higher SES students whose parents provided low support.

**Dropout Status.** Dropout status was chosen for this analysis because of the
importance of high school completion as a predictor of future earning power as well as an
essential step for enrollment in most colleges (O’Connor, 2009; Reed, 2015). Hispanic
students have lower high school completion and on-time graduation rates than students
from other ethnic groups, although completion rates have been improving in recent decades (Murphey et al., 2014; Reed, 2015).

Of particular concern are youth who are neither employed nor enrolled in school. While there are multiple pathways to success, the consequences of unemployment, under-employment, or not acquiring post-secondary education can be damaging and enduring. Youth neither enrolled in school nor working are less likely to achieve economic self-sufficiency, and are at risk for multiple additional poor outcomes. As of 2012, one in ten Hispanic 16-to 19-year-olds was in this category. (Murphey et al., 2014, p. 12)

Among Hispanic students, socioeconomic status (SES) has been found to influence high school completion rates in some studies (Lee & Bowen, 2006; LeFevre & Shaw, 2012). However, in the study by Reed, SES was not significantly associated with completion for Hispanic high school students once reading scores were taken into account.

Although few studies have analyzed the relationship of family involvement and dropout among Hispanic families, those studies suggest a positive connection. Family rules, parent-student communication, and attending school functions together were reported to increase the likelihood of on-time graduation for Hispanic students (Barnard, 2004; LeFevre & Shaw, 2012). No known analyses link family involvement practices and dropout status among Hispanic students from different SES groups.

**College enrollment.** “Some type of post-secondary education is rapidly becoming a requirement for entry into jobs that pay a livable wage and offer the possibility of career advancement” (Murphey et al., 2014, p. 21). Hispanic student enrollment in college has
increased in recent years, and many students are the first in their families to attend. Hispanic students also represent the largest minority group at college. However, a study by O’Connor (2009) found that the composite SES variable of parent income, education level, and occupational status influenced Hispanic student college enrollment, with higher SES students more likely to enroll in a four-year versus two-year college. O’Connor also found that “every rise in SES for Whites translate[d] into a higher probability of attending a 4-year school than it [did] for Blacks and Hispanics” (p. 132). Likewise, Nuñez and Kim (2012) reported that among Hispanic high school students, middle income ($25,000 to $75,000 family income per year) students were significantly less likely to enroll in a 4-year college than students from families making more than $75,000 per year. Interestingly, students from families making less than $25,000 per year were not statistically different than those making more than $75,000 per year. Neither parent education level nor percentage of students on free or reduced-price lunch within the school was significantly related to college enrollment in their study. Nuñez and Kim noted that their unexpected findings could “reflect the possibility that, for Latinos, coming from a higher socioeconomic status group confers less of an advantage than for members of other racial/ethnic groups in predicting four-year college enrollment” (p. 251).

There is evidence that family involvement practices can also influence college enrollment for Hispanic students. Specifically, parent-child discussions and parent expectations influenced college enrollment in two separate studies (Nuñez & Kim, 2012; O’Connor, 2009).
Community involvement. Research details the extensive benefits, such as positive social and emotional development and better educational outcomes, of community involvement, also called civic engagement, to both individuals and society (Chan, Ou, & Reynolds, 2014; Flanagan & Levine, 2010; Putnam, 2001; Stepick & Dutton Stepick, 2002). Despite the benefits of community involvement, studies on involvement among Hispanics are scarce. A longitudinal analysis by Chan et al. (2014) found that civic engagement among inner-city black and Hispanic youth was related to greater life satisfaction, civic participation, and higher educational attainment in subsequent years, although Hispanics only comprised 7% of the population. A study of Florida college students where over half the population was Hispanic reported high engagement in knowledge of political events, and community service when students were in high school (Stepick, Dutton Stepick, & Labissiere, 2008). The college students in their sample who were immigrants or children of immigrants often focused their volunteer efforts on helping other immigrants who needed language or cultural translation assistance. Although there was no research on Hispanic community involvement across SES groups, research by Flanagan and Levine (2010) reported lower civic engagement for young adults from low-income families and minority families than higher SES and majority families.

In addition to the social, emotional, and educational benefits of community involvement, it is also important to family involvement because Hispanic parents express the desire for their children to “be somebody” and make good life choices. Civic engagement is arguably a way to do this, although there was no research found on
Hispanic parent perceptions of community involvement or their support or opposition to engaging in various forms of involvement.

**Summary**

Overall, family involvement does impact Hispanic student outcomes. Based on the literature, aspects of family involvement that have the strongest relation with positive student outcomes are more subtle practices, such as having high educational aspirations and communicating with students. Such practices impact student beliefs, behaviors, and achievement, although the mechanisms through which they act are still largely unassessed.

The dearth of research on Hispanic family involvement from different socioeconomic groups leaves unanswered questions about SES and ethnic cultural interactions, but the few available studies support the hypothesis that socioeconomic differences significantly influence the impact family involvement practices have on student outcomes among Hispanic families. For example, Lee and Bowen (2006) reported that among elementary school students, “the effects of poverty and parents’ educational attainment are different from the effects of race/ethnicity on the relationship between parent involvement and children’s academic achievement” (p. 214), signifying potential differences in amount of involvement and the effect it has for each SES group. In addition, Fuller and Garcia Coll (2010) reported that “Latina mothers adapt their parenting practices…to how benign or threatening they view the environment to be, including neighborhood safety and racial discrimination,” (p. 560). It follows that the environmental differences for low and high SES Hispanic families should be evident in
the parenting behaviors that influence the child’s education. In order to address gaps in the research, this study will investigate the direct and indirect relationship between family practices and student outcomes for Hispanic families from different socioeconomic groups through Structural Equation Modeling, as detailed in Chapter 3.
CHAPTER THREE
RESEARCH DESIGN AND METHODS

Data Source

Data for this study came from the Educational Longitudinal Study (ELS) of 2002, a nationally representative stratified probability sample of tenth grade students in the United States. Data collection began in 2002, and follow-ups were conducted with the same cohort of students in 2004, 2006, and 2012, although some students were added to follow-up waves to account for attrition and maintain a nationally representative sample. The initial survey wave included students, as well as their parents, math and English teachers, and school administrators. Students took math and English assessments during the initial wave and took a math assessment in the first follow-up. Follow-up surveys were conducted only with students. The data files obtained from the National Center for Education Statistics (NCES) for ELS:2002 were a composite of information from all four waves including surveys, assessment scores, high school transcripts, and financial aid information. Part of the data was restricted, but this study utilized only those variables available for public use; no restricted data were requested or obtained.

The ELS is one of the most recent large, national, longitudinal datasets available that includes family involvement data. Researchers oversampled for Hispanics, providing a robust sample size. Few studies have utilized ELS data to look at Hispanics and socioeconomic status as center facets of the study or to assess student mediators, making these data ideal for the proposed study.
Participants

Tenth grade students from both public and private schools participated, and minority groups were oversampled. The initial sample included 15,362 students in 752 schools. For this study, only the 2,217 students who self-identified as Hispanic were eligible to be included. The sample was further narrowed to 1,684 Hispanic students by selecting those from the original sample who: 1) also answered the first year follow-up, 2) completed at least one math or reading test, and 3) had a parent complete the 2002 questionnaire. The majority of self-identified responders for the parent questionnaire were biological mothers (72.1% of the sample) and biological fathers (18.5% of the sample), while the remaining 9.4% were most likely to be a female relative not listed in the categories (1.8%), grandmother (1.6%), adoptive mother (1.4%), stepfather (1.2%), or stepmother (1.0%).

Over 75% of Hispanic students in the final sample lived with two parents (biological, adoptive, or guardians); about 57% of the total population were biological parents. Lower SES students (27%) were significantly more likely than higher SES students (19%) to live in single-parent households.

SES

Because the culture of socioeconomic status (SES) was also of interest, the sample of 1,684 students was divided into SES groups for analysis. Income seemed insufficient to indicate class culture, in large part because even when income or occupation fluctuates “many of the patterns of thought, social interaction, cognitive strategies, etc., remain with the individual” (Payne et al., 2001, p. 7). Payne and
co-workers argued that cultures were very different for people in situational poverty (meaning low income created by events like job loss, illness, and divorce) and people whose families had experienced poverty for multiple generations. Occupation type, parent education level, and resources such as books in the home were perhaps more robust than income but still problematic as single variables (see Vassallo, 2013).

To address these issues, this study utilized a composite socioeconomic variable. The original dataset obtained from NCES included two potential variables for SES and quartile divisions designed by researchers at NCES and determined using all ethnic groups combined. Both were similar in nature to SES variables used for other large national datasets and commonly utilized by researchers (i.e., Fan et al., 2012; Liu, 2006; Sui-Chu & Willms, 1996; Underwood, 2011). Both SES variables included parent-reported income, father and mother education level, and both father and mother occupational prestige scores, all standardized and equally weighted. The only difference between the two variables was that one SES variable utilized the 1961 Duncan Socioeconomic Index for the occupational prestige scores while the other utilized the 1989 General Social Survey (GSS) ratings (Inter-university Consortium for Political and Social Research, 2002). This study used the 1989 scores to reflect the most recent available assessment of occupational prestige. (For an in-depth look on how these scores were assigned, see Nakao & Treas, 1992.) Since educational level and the type of employment obtained are closely related to income but still fundamentally different, the combined scores should be a more accurate proxy for class culture than any single variable.
As reported in Table 3.1, the majority of Hispanic students were in the lowest SES quartile, with their parents making less than $25,000 from all income sources in 2001. Because of the high amount of missing data for some parent practice and student mediator and outcome variables, utilizing all four quartiles increased the likelihood that there were inadequate sample sizes among students in some quartiles. Thus, quartiles 1 and 2 were combined, as were quartiles 3 and 4 to form two groups for the final analysis: lower SES and higher SES. This division should be adequate since previous research suggests middle and upper income parents do not differ from one another substantially in the types of educational interactions they have with their children (Desimone, 1999; Lareau, 2003).

Average income and educational levels for Hispanic parents in each group are presented in Table 3.1. On average, parents in the lower SES group made $27,000 a year and did not continue education beyond high school. The standard deviation for income (2.231) in this group indicated that the majority of low SES Hispanic families earned between $15,001 and $65,000. On average, the higher SES group attended some college (sd = 2.231) and had an income of nearly $75,000 (sd = 1.783, ranging from $40,000 to $175,000). Although this measure may be oversimplified, it offered an important first look at comparing practices and effects across SES groups for Hispanics.
### Table 3.1 Descriptive Statistics of Hispanic Parents by SES Quartiles

<table>
<thead>
<tr>
<th>Quartile</th>
<th>N</th>
<th>Average Yearly Income</th>
<th>Average Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartile 1</td>
<td>752</td>
<td>$20,001-$25,000</td>
<td>Did not finish high school</td>
</tr>
<tr>
<td>Quartile 2</td>
<td>383</td>
<td>$35,001-$50,000</td>
<td>High school grad or GED</td>
</tr>
<tr>
<td>Q1 &amp; 2 Combined</td>
<td>1135</td>
<td>$25,001-$35,000</td>
<td>Did not finish high school</td>
</tr>
<tr>
<td>Quartile 3</td>
<td>315</td>
<td>$50,001-$75,000</td>
<td>Attended 2-year school, no degree</td>
</tr>
<tr>
<td>Quartile 4</td>
<td>234</td>
<td>$75,001-$100,000</td>
<td>Graduated from a 2-year school</td>
</tr>
<tr>
<td>Q3 &amp; 4 Combined</td>
<td>549</td>
<td>$50,001-$75,000</td>
<td>Attended 2-year school, no degree</td>
</tr>
<tr>
<td>Total</td>
<td>1684</td>
<td>$35,001-$50,000</td>
<td>High school grad or GED</td>
</tr>
</tbody>
</table>

### Instruments and Procedures

#### Student Questionnaire

The 2002 student questionnaire was a 45-minute self-administered instrument completed in classrooms at the student’s school. About 3.5% of the sample was surveyed outside of school after missing the initial survey day and the make-up day. After students completed the questionnaire, it was checked by the survey administrator for completeness on questions deemed to be critical. The administrator asked the student to complete any missing critical questions. The full questionnaire was only available in English, although an abbreviated version was available in Spanish (Ingels, Pratt, Rogers, Siegel, & Stutts, 2004; Little-Harrison, 2011). Only 3 students from the sample took an abbreviated survey so they are included in the analysis.

Reading and math tests were administered on the same school day as the student questionnaire. Initial timed tests in math and reading were given. While the tests were graded, students completed the student questionnaire. Once the 45-minutes allotted for the student questionnaire was complete, students got a break before receiving low, medium, or high ability second-stage tests for math and reading based on their
performance on the initial test. All test questions were taken from previous assessments such as the NELS and Program for International Student Assessment (PISA) then field tested the year prior to general administration to determine which items would be selected or modified based on comprehensive coverage of the targeted cognitive processes and content knowledge.

For the first follow-up in 2004, most students were given the survey during in-school sessions. However, computer-administered phone interviews and paper-and-pencil or in-person interviews were given for students who had dropped out of school, graduated early, transferred, or were homeschooled. The follow-up math test was administered only to students in school. In the 2004 follow-up test, students were only given one math assessment of low, middle, or high ability. The level was assigned based on the student’s base year ability estimate (Ingels et al., 2007). Although the initial test questions were both multiple-choice and essay, test questions for the follow-up were all multiple-choice.

**Parent Questionnaire**

The parent questionnaire was conducted only in the base year and was done with hard copy surveys as well as computer-assisted telephone interviews. The parent or guardian “most familiar with the tenth grader’s current school situation and educational plans” was asked to complete the survey. The questionnaire was available in English and Spanish. No variable was included in the dataset to determine how many parents completed the questionnaire in Spanish rather than English.
**Constructs and Measures of Interest**

Based on the literature reviewed and available variables in the ELS dataset, a number of constructs for family involvement, student mediators, and student outcomes were designed and tested in SPSS for reliability and validity. Each construct in the model was briefly described, and detailed descriptions of the items used in the constructs are included in Appendix A. Measures assessing the different constructs are orthogonal, as reflected by the bivariate associations in Table 4.6 of the Results section.

**Family Involvement**

The majority of practices chosen for this analysis demonstrated support that parents offered in the home, which was consistent with research that Hispanic families believe their role should be more focused on home-based involvement than involvement at the school building. The measures included family rules, parent-student communication, parent-child time together in regular activities, and parent-child time together in school and sports-related activities (see the Appendix, Table A1.1). One variable about involvement at the school building was also included. Descriptive statistics and alphas for each construct were recorded in Table 3.2.

**Table 3.2 Descriptive Statistics for Family Involvement Constructs**

<table>
<thead>
<tr>
<th>Family Practice</th>
<th>N*</th>
<th>Range</th>
<th>Mean (SD)</th>
<th># of Items</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Rules</td>
<td>1289</td>
<td>1-4</td>
<td>2.73 (.67)</td>
<td>7</td>
<td>α = .771</td>
</tr>
<tr>
<td>Parent-Student Communication</td>
<td>1545</td>
<td>1-3</td>
<td>2.26 (.49)</td>
<td>7</td>
<td>α = .766</td>
</tr>
<tr>
<td>Spending Time Together</td>
<td>1592</td>
<td>1-4</td>
<td>3.33 (.01)</td>
<td>7</td>
<td>α = .680</td>
</tr>
<tr>
<td>School &amp; Sports-related Time Together</td>
<td>1587</td>
<td>1-4</td>
<td>2.67 (.79)</td>
<td>5</td>
<td>α = .763</td>
</tr>
<tr>
<td>Involvement at School</td>
<td>1567</td>
<td>0-5</td>
<td>1.16 (1.34)</td>
<td>5</td>
<td>α = .679</td>
</tr>
</tbody>
</table>

* Excludes missing values
Family rules. The scale for family rules was the mean of seven items from the student questionnaire regarding the frequency with which their parents established limits for certain behaviors at home. Means were computed in SPSS, with the stipulation that at least 6 of the 7 possible items be present to calculate the new variable. Students were asked how often (never, rarely, sometimes, or often) their parents established rules such as limiting TV time, checking homework, and requiring work or household chores. Potential item responses for each variable were 1 to 4 with 4 representing more frequent rules. The scale reliability was within acceptable limits ($\alpha = .771$).

Parent-student communication. This scale included 7 items from the parent survey ($\alpha = .766$). Parents were asked how often (never, sometimes, or often) they provided advice or information to their 10th grader on topics such as selecting courses or programs at school, applying to college, applying to jobs, and things troubling the student in the first semester of the school year. The scale range was 1-3, with higher numbers indicating more frequent conversations. One item, how frequently parents spent time just talking with their 10th grader, was taken from a different series of questions on the parent questionnaire. The original 4 categories of never, rarely, sometimes, and frequently were collapsed to match the never (never), sometimes (rarely and sometimes), and often (frequently) categories of the remaining items. The mean was computed in SPSS if at least 6 of 7 variables were present.

Spending time together. The mean for the Time Together scale was computed and required that at least 5 of the 7 items were present to calculate. These items from the parent questionnaire asked parents how frequently (never, rarely, sometimes, or
frequently) in the past year they participated with their 10th grader in a number of activities, such as going to family social functions, attending religious services, and taking day trips or vacations. The final item, how many days in a typical week they ate at least one meal together, was collapsed to match the four responses of the rest of the scale: never (ate together 0 times that week), rarely (1-2 times), sometimes (3-4 times), and frequently (5-7 times). Reliability was slightly below .7 (α = .680) and increased slightly without the item, meals together. Although reliability rose to above .8 when combining the two time together scales, the scales were left separate in order to avoid confounding the potential effects of general time together with the effects of school and sports-related time.

**Spending school- and sports-related time together.** The school and sports-related time together scale utilized the mean command, requiring at least 4 of the 5 items to calculate. These items from the parent questionnaire asked parents how frequently (never, rarely, sometimes, or frequently) in the past year they participated with their 10th grader in a number of activities, such as attending school activities (sports, plays, concerts, etc.), attending sporting events outside of school, and working on a hobby or playing sports. The scale reliability was within acceptable limits (α = .763).

**Parental involvement at school.** This measure of involvement at school was designed to assess how much parents participate at the school building. Parents were asked if they did any of the activities that year: participation in PTO (3 questions), volunteering at the school, or belonging to another organization with parents from school. The scale range was from 1 to 5, constructed by adding the total number of at-school
activities in which the parents participated. Higher numbers indicated more parent involvement at school. The sum was calculated if at least 4 of the 5 questions were answered. As indicated in Table 3, the alpha for this scale was only .679 for Hispanic families, although the alpha for all other major ethnic groups in the ELS was above .70. This suggested that the items in this measure may not be as appropriate for the Hispanic population as they were for other groups.

**Mediating Variables**

Mediators chosen for this study based on past research included student effort, persistence, and perceived control over learning (Fan et al., 2012; Kim, 2014), educational aspirations (Hong & Ho, 2005; Liu, 2006; Ra, 2011), and in-school behavior (McCormick et al., 2013). Descriptive statistics for each construct and alpha scores where applicable appeared in Table 3.3, and a list of complete items in each scale was presented in Appendix A. All responses for student mediators were from the base year (2002) student survey. Items were coded as missing if the question was not answered, a student gave multiple responses, or the question was not administered due to an abbreviated survey. The only student mediator that appeared on the abbreviated student survey was student aspirations.

<table>
<thead>
<tr>
<th>Mediators</th>
<th>Valid N*</th>
<th>Range</th>
<th>Mean (SD)</th>
<th># of items</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Effort &amp; Persistence</td>
<td>1156</td>
<td>1-4</td>
<td>2.82 (.69)</td>
<td>9</td>
<td>.916</td>
</tr>
<tr>
<td>Student Aspirations</td>
<td>1467</td>
<td>1-5</td>
<td>4.01 (1.02)</td>
<td>1</td>
<td>n/a</td>
</tr>
<tr>
<td>Student Behavior</td>
<td>1664</td>
<td>1-5</td>
<td>4.31 (.54)</td>
<td>7</td>
<td>.710</td>
</tr>
</tbody>
</table>

* Excludes missing values

**Student effort, persistence, and perceived control.** The scale designed for this study was a combination of two scales designed by the National Center for Education
Statistics (NCES). One scale designed by NCES, the General Effort and Persistence Scale, included 5 items, while the other, Perceived Control over Learning, included 4 items. Because reliability was adequate in the original smaller scales even when excluding any single variable, the standard for computing the mean was to have at least 3 of the 9 variables present to calculate. Values ranged from 1 to 4, with higher values representing greater ratings of student effort, persistence, and perceived control over learning.

**Student aspirations.** Students were asked how far in school they expected to get. This variable was collapsed from seven categories into the five categories of 1) Less than high school graduation, 2) High school graduation or GED only, 3) Some college or vocational training, 4) 4-year degree, and 5) Professional or graduate degree. Instead of using the raw variable, this analysis utilized the variable for which NCES imputed missing values through a complex hot deck procedure. The procedure used by NCES was described in detail in Section 3.3 of the Base Year Data File User’s Manual (Ingels et al., 2004).

**Student behavior.** On the ELS, students were asked to provide a categorical estimate of the number of times they engaged various problem behaviors at school, such as getting in trouble for not following school rules, arriving late to school, and being suspended. Categories for the seven questions ranged from 1, never, to 5, engaged in the behavior 10 or more times. The responses were reverse scored so that higher numbers indicated more desirable behavior at school. At least 5 of 7 variables had to be present for SPSS to calculate the mean, and the scale reliability was acceptable ($\alpha = .710$).
Student Outcomes

The five outcomes were chosen to assess items that could increase future economic security and quality of life for students. Table 3.4 provides an overview of the descriptive statistics for outcomes utilized in this study. The five outcome variables are described below, with additional information in Table A1.3 in the Appendix. Some items were taken from the first follow-up survey, while others were from the second follow-up. As with the student mediators, items were coded as missing if the question was not answered, a student gave multiple responses, or the question was not administered.

Table 3.4 Descriptive Statistics for Student Outcome Constructs

<table>
<thead>
<tr>
<th>Student Outcome</th>
<th>N*</th>
<th>Range</th>
<th>Mean (SD)</th>
<th># of items</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School GPA</td>
<td>1556</td>
<td>0.0-4.0</td>
<td>3.47 (1.52)</td>
<td>1</td>
<td>n/a</td>
</tr>
<tr>
<td>Math Test Score</td>
<td>1486</td>
<td>22.49 - 74.97</td>
<td>46.29 (9.55)</td>
<td>1</td>
<td>n/a</td>
</tr>
<tr>
<td>College Enrollment</td>
<td>1472</td>
<td>1.0-4.0</td>
<td>3.01 (1.01)</td>
<td>1</td>
<td>n/a</td>
</tr>
<tr>
<td>Dropout</td>
<td>1684</td>
<td>0-1</td>
<td>0.91 (.28)</td>
<td>1</td>
<td>n/a</td>
</tr>
<tr>
<td>Community Involvement</td>
<td>1461</td>
<td>0-1</td>
<td>0.36 (.48)</td>
<td>1</td>
<td>n/a</td>
</tr>
</tbody>
</table>

* Excludes missing values

**High school GPA.** Student Grade Point Averages were provided by the student’s school. The dataset contained 7 potential categories ranging from 0.00-1.00 to 3.51-4.00, with 4.00 being the highest possible value. The GPA was recorded from the last year a student attended high school.

**Math test score.** Math test scores used in this study were from the follow-up test. Test scores were standardized as T scores with a mean of 50 and a standard deviation of 10 for a weighted subset of 12th graders in the overall ELS sample. The ELS of 2002 EDAT Extract Codebook from 2012 that accompanied the dataset clarifies that this is
a norm-referenced measurement of achievement, that is, an estimate of achievement relative to the population (spring 2004 12th graders) as a whole. It provides information on status compared with peers (as distinguished from the IRT-estimated number-right score which represents status with respect to achievement on a particular criterion set of test items). (Description under variable F1TXMSTD)

Students who dropped out of school (n=120, 7.1%) or graduated early (n=78, 4.7%) were not given the follow-up test, and students who transferred schools between their sophomore and senior years (n=171, 10.2%) had their scores imputed.

**Dropout status.** This variable was obtained in 2004 during the 2nd wave of data collection and was a combination of student and school reported information. NCES designed a composite variable consisting of 4 categories that were then collapsed into 2 categories for this analysis. Students who did not dropout or who finished school early via GED completion were characterized as not dropping out. Students who were out of school as of Spring 2004 (the last semester of their senior year) or reported that they had dropped out of school at some point even if they had enrolled again were characterized as having dropped out.

**College enrollment.** The variable used to create this construct was a composite of answers to questions asked about postsecondary education enrollment during the 3rd wave of data collection. The original 8 categories were collapsed into 4 categories for this analysis, including 4) Attended postsecondary mostly full-time, 3) Attended
postsecondary mostly part-time, 2) Did not attend postsecondary education in the first year after high school, and 1) Still in high school in 2005.

Community involvement. In 2006, students were asked if they had performed unpaid volunteer or community service in the previous 2 years. The majority of the students, 934 or 55.5%, said no and 223 more students were listed as missing leaving only 31.3% of the students to answer follow-up questions on the types of organizations for which students had volunteered. Thus, follow-up questions had a large amount of missing data (legitimate skips and not applicable were listed with missing data), so the single yes or no item about volunteer or community service in 2006 was used. In addition, 2006 data was utilized in place of 2004 data to determine community involvement that a student chose to engage in voluntarily without a mandate from a high school since many high schools require that students provide service in order to graduate.

Missing Data

The variables comprising the Student Effort, Persistence, and Control scale and the Family Rules scale had a large amount of missing data (see Table 3.6). All these variables were taken from the student survey, and the ELS Base Year Data File User’s Manual clarified that “item nonresponse is primarily a function of questionnaire position” (Ingels et al., 2004). Students had only 45 minutes to complete the questionnaire, and the questions used for the variables with large amounts of missing data were among the last items on the survey. An analysis done by NCES and included in the User’s Manual reported a summary of item bias figures for 78 high nonresponse variables, finding that
sophomores in the lowest math or lowest reading quartile were the groups most likely to be item nonrespondents. This pattern suggests that poor readers, in particular, and students with low tested achievement in reading or mathematics, generally, were the least likely to respond to high nonresponse items, presumably in part because they were unable to complete the student questionnaire within the set time limits. (p. 77)

The full student questionnaire was available only in English which may have impacted minority responses, although students were excluded from survey eligibility if they did not have at least 3 years of instruction primarily in English unless the school said the student could meaningfully respond. Items were counted as missing in this analysis if the dataset labeled them as missing, survey component legitimate skip, not administered/abbreviated, multiple response, or nonrespondent.

**Table 3.5 Missing Values for Analysis Items**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Missing (n)</th>
<th>Missing (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Rules (ss)*</td>
<td>395</td>
<td>23.5%</td>
</tr>
<tr>
<td>Parent-Student Communication (ps)</td>
<td>139</td>
<td>8.3%</td>
</tr>
<tr>
<td>Time Together (ps)</td>
<td>92</td>
<td>5.5%</td>
</tr>
<tr>
<td>School- and Sports-related Time Together</td>
<td>97</td>
<td>5.8%</td>
</tr>
<tr>
<td>Involvement at School (ps)</td>
<td>117</td>
<td>6.9%</td>
</tr>
<tr>
<td>Student Effort, Persistence, &amp; Perceived Control (ss)</td>
<td>528</td>
<td>31.4%</td>
</tr>
<tr>
<td>Student Aspirations (ss)</td>
<td>217</td>
<td>12.9%</td>
</tr>
<tr>
<td>Student Behavior (ss)</td>
<td>20</td>
<td>1.2%</td>
</tr>
<tr>
<td>GPA</td>
<td>128</td>
<td>7.6%</td>
</tr>
<tr>
<td>Math Test Score</td>
<td>198</td>
<td>11.8%</td>
</tr>
<tr>
<td>Dropout Status (ss)</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>College Enrollment (ss)</td>
<td>212</td>
<td>12.6%</td>
</tr>
<tr>
<td>Community Involvement (ss)</td>
<td>223</td>
<td>13.2%</td>
</tr>
</tbody>
</table>

*ss= items from the student survey; ps= items from the parent survey
To address the issue of missing data, this study utilized Full Information Maximum Likelihood (FIML). Hong and Ho (2005) reported that both listwise deletion and pairwise deletion “can result in biased parameter estimates due to nonrandom attrition,” but FIML “has been found to be very efficient for incomplete data” (p. 35).

**Approach to Analysis**

This study utilized a Structural Equation Model (SEM) to extend the work of past researchers (Fan et al., 2012; Kim, 2014; LeFevre & Shaw, 2012) and used SPSS 23.0 to assess variables, run correlations, compute scales, and collapse variables, and used Analysis of Moment Structures (AMOS) for the Structural Equation Model. A Structural Equation Model was chosen because it allows for the study of both indirect and direct effects within one model (Carranza et al., 2009).

**Research Questions 1, 2, and 3**

Basic descriptive statistics and frequencies were used in SPSS to determine what family involvement practices were most common among high SES Hispanic families (RQ1) and low SES Hispanic families (RQ2). ANOVAs were used to determine if low and high SES groups differed significantly in their mean level of family involvement (RQ3).

**Research Question 4**

Research question 4 addressed the outcomes that were influenced by family involvement among Hispanic students from different socioeconomic groups, and whether any differences were statistically significant. A Structural Equation Model (SEM) was constructed in AMOS to test the association between family involvement practices as a
latent construct and student outcomes for the entire Hispanic sample. The measurement model tested the association of family rules, parent-student communication, family time together, family time for school and sports activities, and involvement at school to an overall latent factor of family involvement as illustrated in Figure 3.1. Model fit statistics were assessed and altered for best fit, meaning a Tucker Lewis Index (TLI) greater than .9, a Root Mean Square Error of Approximation (RMSEA) less than .05 and a Confirmatory Fit Index (CFI) greater than .9 based on the large sample size (Byrne, 2010; Hu & Bentler, 1999). Model fit for the high and low SES groups was then evaluated and necessary adjustments made to improve model fit.

**Figure 3.1 Measurement Model**

![Figure 3.1 Measurement Model](image)

To test the association between family involvement and the student outcomes, the structural model then added five student outcomes through a latent student outcomes variable as illustrated in Figure 3.2. Adjustments were then made for best fit. Multiple
groups analysis was used to test the path coefficient differences between the high and low SES groups.

**Figure 3.2 Structural Model**

In order to test the association between family involvement and each outcome for the population as a whole, Amos was used to estimate the effect of the latent family involvement construct on each student outcome, with 95% confidence intervals.
determined through Bayesian estimation. A second and third model assessed the associations for the high and low SES groups.

**Research Questions 5 and 6**

Research question 5 addressed the mechanisms through which family involvement impacted Hispanic student outcomes. Research question 6 addressed whether the mechanisms were statistically different for high and low SES groups.

The final structural models for each group added three student characteristics (student effort, persistence, and perceived control, student aspirations, and student behavior) as mediators to determine their level of influence on the relationship between family involvement and student outcomes. Figure 3.3 illustrated this model. Amos was used to determine the indirect effects, with 95% confidence intervals determined through Bayesian estimation. Multiple groups analysis was again used to test the path coefficient differences between the high and low SES groups.
Figure 3.3 Structural Model with Mediators

- **Rules**
- **Communication**
- **Time Together**
- **Time for School & Sports**
- **At School**

**Family Involvement**

**Mediators**
- **Effort & Persistence**
- **Behavior**
- **Expectations**

**Student Outcomes**
- **GPA**
- **Math Test**
- **College Enrollment**
- **Dropout**
- **Community Involvement**

**Dynamic Factors**
- **d1**
- **d2**
- **e1**
- **e2**
- **e3**
- **e4**
- **e5**
- **e6**
- **e7**
- **e8**
- **e9**
- **e10**
- **e11**
- **e12**
- **e13**
CHAPTER FOUR
RESULTS

Levels of Hispanic Family Involvement for High and Low SES Families

Descriptive statistics for high SES Hispanic families are presented in Table 4.1 (RQ1). The average parent of a high SES student sometimes to frequently (3.44 on a scale of 1 to 4) spent time with their child on non-school-related activities, while they sometimes (2.97 on a scale of 1 to 4) spent time together in school- and sports-related activities. The majority of high SES parents often (2.41 on a scale of 1 to 3) communicated with their child on the subjects assessed, and rarely to sometimes (2.84 on a scale of 1 to 4) established family rules. These statistics revealed that high SES parents most frequently engaged in the practice of spending time with their children, followed by communication and spending time together in school- and sports-related activities. Participation at the school was the least frequent family involvement practice.

Table 4.1 Family Involvement Practices among High SES Families

<table>
<thead>
<tr>
<th>Family Practice</th>
<th>Range</th>
<th>n</th>
<th>Missing</th>
<th>Group Mean (SE)</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Rules</td>
<td>1-4</td>
<td>461</td>
<td>88</td>
<td>2.84 (.03)</td>
<td>.61</td>
</tr>
<tr>
<td>Parent-Student Communication</td>
<td>1-3</td>
<td>516</td>
<td>33</td>
<td>2.41 (.02)</td>
<td>.44</td>
</tr>
<tr>
<td>Spending Time Together</td>
<td>1-4</td>
<td>522</td>
<td>27</td>
<td>3.44 (.02)</td>
<td>.42</td>
</tr>
<tr>
<td>School &amp; Sports Time Together</td>
<td>1-4</td>
<td>522</td>
<td>27</td>
<td>2.97 (.03)</td>
<td>.68</td>
</tr>
<tr>
<td>Involvement at School</td>
<td>0-5</td>
<td>512</td>
<td>37</td>
<td>1.48 (.07)</td>
<td>1.58</td>
</tr>
</tbody>
</table>

The average parent of a low SES student (RQ2) sometimes to frequently (3.28 on a scale of 1 to 4) spent time with their child on non-school-related activities, while they rarely to sometimes (2.52 on a scale of 1 to 4) spent time together in school- and sports-related activities (Table 4.2). The majority of low SES parents sometimes (2.18 on a scale
of 1 to 3) communicated with their child on the subjects assessed. As with the higher SES group, lower SES Hispanic families were most likely to spend time with their children and least likely to be involved in school-based activities when comparing the involvement practices measured. Unlike the higher SES group, lower SES families were more likely to have more family rules than to spend time together in school- and sports-related activities.

Table 4.2 Family Involvement Practices among Low SES Families

<table>
<thead>
<tr>
<th>Family Practice</th>
<th>Range</th>
<th>n</th>
<th>Missing</th>
<th>Group Mean (SE)</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Rules</td>
<td>1-4</td>
<td>828</td>
<td>307</td>
<td>2.67 (.02)</td>
<td>.69</td>
</tr>
<tr>
<td>Parent-Student Communication</td>
<td>1-3</td>
<td>1029</td>
<td>106</td>
<td>2.18 (.02)</td>
<td>.50</td>
</tr>
<tr>
<td>Spending Time Together</td>
<td>1-4</td>
<td>1070</td>
<td>65</td>
<td>3.28 (.02)</td>
<td>.50</td>
</tr>
<tr>
<td>School &amp; Sports Time Together</td>
<td>1-4</td>
<td>1065</td>
<td>70</td>
<td>2.52 (.02)</td>
<td>.80</td>
</tr>
<tr>
<td>Involvement at School</td>
<td>0-5</td>
<td>1055</td>
<td>80</td>
<td>1.01 (.04)</td>
<td>1.18</td>
</tr>
</tbody>
</table>

Although similar patterns of involvement were observed in the high and low SES groups, the low SES group had lower average levels of involvement than the high SES group for all measured practices (RQ3). Statistically significant ANOVAs (Table 4.3) for each of the practices revealed that socioeconomic status contributed to these mean differences.

Table 4.3 ANOVA Results for SES Differences in Family Involvement

<table>
<thead>
<tr>
<th>Family Practice</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Rules</td>
<td>1, 1287</td>
<td>19.9</td>
<td>.000</td>
</tr>
<tr>
<td>Parent-Student Communication</td>
<td>1, 1544</td>
<td>77.3</td>
<td>.000</td>
</tr>
<tr>
<td>Spending Time Together</td>
<td>1, 1592</td>
<td>42.0</td>
<td>.000</td>
</tr>
<tr>
<td>School &amp; Sport Time Together</td>
<td>1, 1586</td>
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Measurement Model

When the measurement model (Figure 4.1) was tested with the Hispanic population as a whole, the RMSEA, CFI, and TLI showed a good fit (see Table 4.4). The model was then tested for the high and low SES groups individually with a good fit for each group as shown in Table 4.4.

**Figure 4.1 Family Involvement Measurement Model for All Hispanics**

![Diagram of Family Involvement Measurement Model for All Hispanics]

Note: Figures next to arrows are factor loadings (see Table 4.5); figures outside the upper right corner of boxes (in bold) are squared multiple correlations.

**Table 4.4 Measurement Model Fit Statistics**

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
<th>CFI</th>
<th>RMSEA</th>
<th>TLI</th>
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<td>.111</td>
<td>.995</td>
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<td>.98</td>
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</tbody>
</table>

Factor loadings for the high SES group (Table 4.5) ranged from .21 (rules) to .74 (school and sports time together). In the low SES group, the range of values was slightly

97
larger, with the lowest estimate at .21 (rules) and the highest at .86 (time in school and
sport activities). Communication, time together, and at school involvement had higher
factor loadings in the model for the high SES group than the low SES group model. All
factor loadings for the 3 models were significant at the p < .001 level.

Table 4.5 Factor Loadings for Family Involvement

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized coefficient estimates</th>
<th>Unstandardized coefficient estimates</th>
<th>SE</th>
<th>CR</th>
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<td>A H L</td>
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<td>.51 .35 .61</td>
<td>.04 .05 .07</td>
<td>12.60 7.01 9.38</td>
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<td>.59 .42 .74</td>
<td>.04 .06 .07</td>
<td>13.39 7.64 10.02</td>
</tr>
<tr>
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<td>1.23 .74 1.60</td>
<td>.09 .10 .16</td>
<td>13.44 7.66 9.88</td>
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<td>At School</td>
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<td>1.00 1.00 1.00</td>
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</tbody>
</table>

Note: A=All (Hispanics from both SES groups), H=High SES model, L=Low SES model, SE=Standard Error, CR=Critical Ratio. All coefficients are significant at the .001 level. The At School variable does not have unstandardized coefficient statistics due to its status as the fixed unstandardized regression weight needed for SEM function.

The high SES and low SES group models were then compared using Multiple
Groups Analysis (RQ3) in Amos to determine if respondents across the two groups
attributed the same meaning to the latent family involvement construct. When all factor
loadings were constrained to be equal between the two models, the model fit was
statistically significant (Chi-square = 18.14 with 4 DF, p < .01) signaling a lack of model
invariance and indicating that high and low SES groups attributed different meanings to
the latent family involvement construct. When factor loadings were constrained
individually, the family rules variable and the at-school involvement variables returned
non-significant model comparison results. The remaining 3 variables of communication,
spending time together, and spending school- and sports-related time together were
significant, indicating that high and low SES families ascribed different meanings to these 3 variables but the same meaning to rules and at-school involvement. Because high and low SES families attributed different meanings to some of the family involvement practices, research questions seeking to determine significant differences between the high and low SES groups (RQ3, RQ4, and RQ6) were not able to be fully tested.

**Correlations**

Correlations as reported in Table 4.6 revealed statistically significant relationships between almost all indicators for the overall Hispanic population. The exceptions were that: (a) family rules were not related to GPA or math test scores, and (b) the student effort and persistence variable was not related to family time together or at school involvement. The nine strongest significant correlations were between the mediators and outcomes (.21 to .41). Significant correlations among family involvement variables and outcomes ranged from .06 (rules with community involvement) to .21 (for school and sports time with college enrollment).

When analyzing relations between family involvement and outcome variables by SES group (RQ4), correlations revealed a different pattern between groups as shown in Tables 4.7 and 4.8. Family involvement practices with the strongest correlations to outcomes for high SES students included at-school involvement (with community involvement, r= .19, college enrollment, r= .18, and GPA, r= .12) and general time together (with college enrollment, r= .14, GPA, r= .12, and Dropout, r= .12). Rules were not correlated with any outcomes and only one mediator. Although the mediators were strongly and significantly related to outcomes (ranging from .12 to .37), only 3 of the
Table 4.6 Correlations for Constructs for the Entire Population

<table>
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*p < .05. **p < .01. Bold print indicates significant at the .05 level or better for improved readability.
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*p < .05. **p < .01. Bold print indicates significant at the .05 level or better for improved readability.
Table 4.8 Correlations of Constructs for Low SES Students

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*p < .05. **p < .01. Bold print indicates significant at the .05 level or better for improved readability.
potential 15 relationships between family involvement and the mediators were statistically significant. No family involvement practices were significantly related to the mediator of student aspirations for the high SES group.

For low SES students (Table 4.8), three of the five strongest correlations for family involvement to student outcomes were related to spending time together in school and sports-related activities (related to college enrollment, \( r = .16 \), dropout status, \( r = .14 \), and community involvement, \( r = .13 \)). Spending general time together was significantly related to 4 of the 5 outcomes and none of the mediators. Out of the five family involvement variables, rules in low SES families had the strongest correlations with the chosen mediators (.20, .19, and .14).

**Structural Model**

The structural model added outcomes to test model fit. The model with the best possible fit for the low SES group did not produce acceptable fit statistics for the high SES group. The model that resulted in an adequate fit for both SES groups (Table 4.9) included GPA, math test scores, college enrollment, dropout status, and community involvement. For the high SES group, the standardized regression coefficient between the latent family involvement construct and the latent student outcomes construct was .19, \( p < .01 \), with a squared multiple correlation of .04. For the low SES group, the standardized regression coefficient was .25, \( p < .001 \) with a squared multiple correlation of .06. For the population as a whole, the statistics were .33, \( p < .001 \), and .11 respectively.
Table 4.9 Model Statistics for Structural Equation Model

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<th>p</th>
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<th>RMSEA</th>
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</table>

Factor loadings were constrained for all outcome indicators in order to compare the high and low SES group models using Multiple Groups Analysis. The family involvement factor loadings remained unconstrained to avoid confounding the outcomes comparison with the factor loadings in the family involvement measurement model. With all factor loadings for student outcome indicators constrained, the model fit was statistically significant (Chi-square = 52.89 with 4 DF, p = .000) signaling a lack of model invariance. When factor loadings were constrained individually in model comparison, GPA, math test scores, and community involvement were not statistically significant while the remaining two outcomes (college enrollment and dropout) were significant at the p < .05 level or better. Thus, high and low SES students assigned different meanings to college enrollment and dropout as measured in this study, but viewed GPA, math test scores, and community involvement similarly.

Factor loadings for the student outcomes in the high SES group (Table 4.10) ranged from .30 (dropout) to .86 (GPA). In the low SES group, the range was .19 (community involvement) to .71 (GPA). All outcomes had higher regression weights in the model for the high SES group than the low SES group model.
### Table 4.10 Standardized and Unstandardized Factor Loadings for Student Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Standardized coefficient estimates</th>
<th>Unstandardized coefficient estimates</th>
<th>SE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>H</td>
<td>L</td>
<td>A</td>
</tr>
<tr>
<td>GPA</td>
<td>.76</td>
<td>.86</td>
<td>.71</td>
<td>.17</td>
</tr>
<tr>
<td>College</td>
<td>.69</td>
<td>.67</td>
<td>.65</td>
<td>.10</td>
</tr>
<tr>
<td>Dropout</td>
<td>.43</td>
<td>.30</td>
<td>.28</td>
<td>.02</td>
</tr>
<tr>
<td>Com Invol</td>
<td>.34</td>
<td>.31</td>
<td>.19</td>
<td>.02</td>
</tr>
<tr>
<td>Math Test</td>
<td>.68</td>
<td>.69</td>
<td>.59</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note: A=All Hispanics, H=High SES model, L=Low SES model, SE=Standard Error, CR=Critical Ratio. The math test variable does not have unstandardized coefficient statistics due to its status as the fixed unstandardized regression weight needed for SEM function. All estimates significant at the p < .01 level or better.

### Table 4.11 Effect of Latent Family Involvement Construct on Individual Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Standardized Effect</th>
<th>Unstandardized Effect</th>
<th>SE</th>
<th>95% CI-Lower Bound</th>
<th>95% CI-Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>H</td>
<td>L</td>
<td>A</td>
<td>H</td>
</tr>
<tr>
<td>GPA</td>
<td>.25</td>
<td>.17</td>
<td>.18</td>
<td>.70</td>
<td>.39</td>
</tr>
<tr>
<td>Math Test</td>
<td>.22</td>
<td>.13</td>
<td>.15</td>
<td>4.08</td>
<td>1.99</td>
</tr>
<tr>
<td>College</td>
<td>.23</td>
<td>.13</td>
<td>.16</td>
<td>.43</td>
<td>.18</td>
</tr>
<tr>
<td>Dropout</td>
<td>.14</td>
<td>.06</td>
<td>.12</td>
<td>.07</td>
<td>.02</td>
</tr>
<tr>
<td>Com Invol</td>
<td>.11</td>
<td>.06</td>
<td>.07</td>
<td>.10</td>
<td>.05</td>
</tr>
</tbody>
</table>

Note: SE = Standard Error, CI = Credible Interval. Credible intervals in the table are for the unstandardized effects.
Bayesian estimations for the effect of the family involvement latent construct on each of the outcome indicators are reported in Table 4.11. Confidence intervals for all standardized and unstandardized effects in all groups indicated statistical significance. Due to high and low SES families assigning different meanings to the family involvement latent construct, the two models were not compared statistically to determine if there were significant differences in the way family involvement impacted students from high and low SES families (RQ4).

Three variables were added as mediators (Figure 4.2) to examine their role in accounting for the association between family involvement and student outcomes. The CFI and RMSEA showed a good fit for all groups (Table 4.12), although the TLI was slightly below .9 for the low SES model.

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
<th>CFI</th>
<th>RMSEA</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Hispanic SES</td>
<td>274.31</td>
<td>62</td>
<td>.000</td>
<td>.94</td>
<td>.045</td>
<td>.91</td>
</tr>
<tr>
<td>High SES Group</td>
<td>134.87</td>
<td>62</td>
<td>.000</td>
<td>.94</td>
<td>.046</td>
<td>.91</td>
</tr>
<tr>
<td>Low SES Group</td>
<td>205.89</td>
<td>62</td>
<td>.000</td>
<td>.92</td>
<td>.045</td>
<td>.89</td>
</tr>
</tbody>
</table>

The regression coefficient from the family involvement latent construct to the student outcome latent construct was no longer significant in the high and low models (see Table 4.13) once the mediators were added. For the high SES group, the standardized regression coefficient for family involvement to student outcomes changed from .19 ($p < .01$) to -0.01 ($p = .83$). In the low SES model, it changed from .25 ($p < .001$) to .09 ($p = .07$), and the composite model of both groups changed from .33 ($p < .001$) to .08 ($p < .05$). Squared multiple correlations changed for the high group
Figure 4.2 Structural Equation Model with Mediators

Note: Figures next to arrows are factor loadings and regression weights (see Tables 4.13 and 4.14).
from .04 to .59, for the low group from .06 to .84, and for the entire population from .11 to .78.

The regression coefficients for the latent family involvement construct to the latent student mediator construct and the latent student mediator construct to the latent outcomes construct were statistically significant at the $p < .01$ level or better in all 3 models. For the high SES, low SES, and all families, the standardized regression coefficients for family involvement to the latent mediator construct were .26, $p < .001$, .17, $p < .01$, and .29, $p < .001$ respectively (Table 4.13). Squared multiple correlations for mediators were .07 for the high group, .03 for the low group, and .08 for the population as a whole. The strongest regression coefficients between latent constructs were in the mediator to outcome relationship for all 3 models, as shown in Table 4.13.

For individual constructs, factor loadings (Table 4.14) were higher among high SES students than low SES students for all but one indicator, dropping out of school. Factor loadings ranged from .31 (dropout) to .86 (GPA) among high SES students and .29 (community involvement) to .74 (GPA) among low SES students. For all groups, adding mediators to the model resulted in higher standardized coefficients in the indicators of college enrollment and community involvement, and lower standardized coefficients in the math test scores indicator. GPA had opposite directional changes for high versus low SES groups, and dropout was higher for high and low SES groups but lower for the population as a whole.
### Table 4.13 Standardized and Unstandardized Regression Coefficients for Latent Constructs

<table>
<thead>
<tr>
<th></th>
<th>Standardized coefficient estimates</th>
<th>Unstandardized coefficient estimates</th>
<th>SE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>H</td>
<td>L</td>
<td>A</td>
</tr>
<tr>
<td>FamIn to Outc</td>
<td>.08*</td>
<td>-.01</td>
<td>.09</td>
<td>1.07</td>
</tr>
<tr>
<td>FamIn to Med</td>
<td>.29***</td>
<td>.26***</td>
<td>.17**</td>
<td>.16</td>
</tr>
<tr>
<td>Med to Outc</td>
<td>.86***</td>
<td>.77***</td>
<td>.89***</td>
<td>16.24</td>
</tr>
</tbody>
</table>

Note: A=All Hispanics, H=High SES model, L=Low SES model, SE=Standard Error, CR=Critical Ratio. *p< .05, **p< .01, ***p< .001

### Table 4.14 Standardized and Unstandardized Factor Loadings for Outcomes and Mediators

<table>
<thead>
<tr>
<th></th>
<th>Standardized coefficient estimates</th>
<th>Unstandardized coefficient estimates</th>
<th>SE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>H</td>
<td>L</td>
<td>A</td>
</tr>
<tr>
<td>GPA</td>
<td>.77</td>
<td>.86</td>
<td>.74</td>
<td>.19</td>
</tr>
<tr>
<td>College</td>
<td>.70</td>
<td>.68</td>
<td>.65</td>
<td>.11</td>
</tr>
<tr>
<td>Dropout</td>
<td>.42</td>
<td>.31</td>
<td>.44</td>
<td>.02</td>
</tr>
<tr>
<td>Com Invol</td>
<td>.34</td>
<td>.32</td>
<td>.29</td>
<td>.03</td>
</tr>
<tr>
<td>Math Test</td>
<td>.65</td>
<td>.68</td>
<td>.54</td>
<td>1.00</td>
</tr>
<tr>
<td>Effort &amp; Persis</td>
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<td>.54</td>
<td>.37</td>
<td>.57</td>
</tr>
<tr>
<td>Aspirations</td>
<td>.54</td>
<td>.56</td>
<td>.46</td>
<td>1.00</td>
</tr>
<tr>
<td>Behavior</td>
<td>.49</td>
<td>.53</td>
<td>.49</td>
<td>.48</td>
</tr>
</tbody>
</table>

Note: A=All Hispanics, H=High SES model, L=Low SES model, SE=Standard Error, CR=Critical Ratio. The math test and student aspirations variables do not have unstandardized coefficient statistics due to their status as the fixed unstandardized regression weight needed for SEM function. Bold print shows significance at p < .001.
Mediators were compared between high and low SES groups by setting the factor loadings among the mediators equal between the high and low SES groups. All other factor loadings in the model were allowed to vary. When all mediators were constrained to be equal, the model fit was significant (Chi-square = 7.638 with 2 DF, p = .022) showing lack of model invariance. Model comparison fit for individual mediators returned a significant model fit only for effort and persistence at the p < .05 level. Due to high and low SES families assigning different meanings to the family involvement latent construct as well as some outcomes and a mediator, the high and low SES models were not compared statistically to ascertain if significant differences existed in the mechanisms through which family involvement impacted student outcomes for high and low SES students (RQ6).

Indirect effects were assessed for the mediation model (Table 4.15). The influence of the latent family involvement construct on student outcome indicators ranged from .11 to .25 for the entire population, .06 to .16 for high SES students, and .07 to .18 for the low SES students. GPA had the strongest indirect relationship with family involvement for each of the 3 groups and community involvement had the weakest relationship. Confidence intervals for all indirect effects showed statistical significance.
### Table 4.15 Indirect Effects of Family Involvement on Student Outcomes

<table>
<thead>
<tr>
<th>Latent to Latent</th>
<th>Standardized Indirect Effect</th>
<th>Indirect Effect</th>
<th>SE</th>
<th>95% CI-Lower Bound</th>
<th>95% CI-Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement to Outcomes</td>
<td>A .25 H .20 L .16</td>
<td>A 2.96 H 2.08 L 1.80</td>
<td>A .03 H .02 L .03</td>
<td>A 1.97 H .90 L .63</td>
<td>A 4.12 H 3.48 L 3.16</td>
</tr>
<tr>
<td>Latent Family Involvement to Outcome Indicators</td>
<td>GPA .25 H .16 L .18</td>
<td>GPA .71 H .38 L .67</td>
<td>GPA .00 H .00 L .01</td>
<td>GPA .56 H .15 L .43</td>
<td>GPA .13 H .64 L .94</td>
</tr>
<tr>
<td></td>
<td>Math Test .21 H .13 L .13</td>
<td>Math Test 3.86 H 1.95 L 2.85</td>
<td>Math Test .02 H .02 L .02</td>
<td>Math Test 2.98 H .74 L 1.80</td>
<td>Math Test .89 H 3.34 L 4.12</td>
</tr>
<tr>
<td></td>
<td>College .23 H .13 L .16</td>
<td>College .43 H .18 L .40</td>
<td>College .00 H .00 L .00</td>
<td>College .33 H .07 L .25</td>
<td>College 4.86 H .31 L .57</td>
</tr>
<tr>
<td></td>
<td>Dropout .13 H .06 L .12</td>
<td>Dropout .07 H .02 L .08</td>
<td>Dropout .00 H .00 L .00</td>
<td>Dropout .05 H .01 L .05</td>
<td>Dropout .54 H .03 L .12</td>
</tr>
<tr>
<td></td>
<td>Com Invol .11 H .06 L .07</td>
<td>Com Invol .10 H .05 L .08</td>
<td>Com Invol .00 H .00 L .00</td>
<td>Com Invol .07 H .02 L .05</td>
<td>Com Invol .09 H .09 L .12</td>
</tr>
</tbody>
</table>

### Table 4.16 SEM Latent Construct Effects on Indicators

<table>
<thead>
<tr>
<th>GPA</th>
<th>Standardized Effect</th>
<th>Unstandardized Effect</th>
<th>SE</th>
<th>95% CI-Lower Bound</th>
<th>95% CI-Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>A .66</td>
<td>H .66</td>
<td>L .67</td>
<td>A 1.84</td>
<td>H 2.17</td>
<td>L 2.07</td>
</tr>
<tr>
<td>Math Test</td>
<td>.55</td>
<td>H .53</td>
<td>L .47</td>
<td>A 9.95</td>
<td>H 11.10</td>
</tr>
<tr>
<td>College</td>
<td>.60</td>
<td>H .53</td>
<td>L .58</td>
<td>A 1.11</td>
<td>H 1.03</td>
</tr>
<tr>
<td>Dropout</td>
<td>.36</td>
<td>H .24</td>
<td>L .39</td>
<td>A .18</td>
<td>H .11</td>
</tr>
<tr>
<td>Com Invol</td>
<td>.29</td>
<td>H .24</td>
<td>L .26</td>
<td>A .26</td>
<td>H .27</td>
</tr>
</tbody>
</table>

| Effort & Persis | .13 | H .14 | L .06 | A .17 | H .15 | L .10 | A .00 | H .00 | L .00 | A .10 | H .07 | L .04 | A .23 | H .25 | L .18 |
| Aspirations | .16 | H .14 | L .08 | A .30 | H .19 | L .21 | A .00 | H .00 | L .00 | A .11 | H .09 | L .07 | A .41 | H .31 | L .35 |
| Behavior | .14 | H .13 | L .08 | A .14 | H .11 | L .12 | A .00 | H .00 | L .00 | A .20 | H .05 | L .04 | A .19 | H .18 | L .20 |

Note: Effects are reported for the relationship of the latent variable for mediators to individual outcomes and the latent variable for family involvement to individual mediators. CI = Confidence Interval, reported for the unstandardized effects.
The impact of latent constructs on individual indicators was assessed for the final SEM model and is shown in Table 4.16. For the population as a whole, standardized effects for the latent mediator construct to individual student outcomes ranged from .29 (community involvement) to .66 (GPA). Latent family involvement effects on individual mediators ranged from .13 (effort and persistence) to .16 (aspirations). All effects were significant per 95% confidence intervals.

Among high SES students, standardized effects of the latent mediator construct on student outcome indicators ranged from .24 (dropout and community involvement) to .66 (GPA) and were all statistically significant per 95% confidence intervals. The latent family involvement construct was also significant with each of the mediating indicators, with standardized effects ranging from .13 (behavior) to .14 (aspirations and effort and persistence).

For the low SES group, standardized effects of the latent mediator indicator to individual student outcomes ranged from .26 (community involvement) to .67 (GPA), while family involvement to individual mediator indicators ranged from .06 (effort and persistence) to .08 (behavior and aspirations). Confidence intervals indicated statistical significance for all effects.
CHAPTER 5
DISCUSSION

Common Family Involvement for High SES Families

The findings of the current study support past research that there is more informal than formal involvement in education among Hispanic families (LeFevre & Shaw, 2012). As with past studies on other groups, the majority of high SES families often talked with their children and sometimes had rules on activities like doing homework, spending time out with friends on weekdays, and doing work or chores (RQ1). Adding to current literature is the finding that spending family time together in general activities and in school- and sports-related activities is a frequent practice in which high SES families engage. Standard deviations were smaller for more frequent practices such as spending time together and communication than for less frequent practices like involvement at the school, showing greater variation across families for infrequent practices than for the practices in which more families engage regularly.

Common Family Involvement for Low SES Families

As with high SES families, informal family involvement among low SES families was much more common than formal involvement. More often than not, the average low SES family communicated with their high school student, had family rules, and spent time together in general activities as well as school- and sports-related activities, suggesting some level of importance for all of these practices among the low SES group (RQ2). PTO involvement and volunteering at school were infrequent. The same pattern among high SES families of smaller standard deviations for more frequent practices such
as spending time together than for less frequent practices like involvement at the school was also found among low SES families.

**Importance of Apoyo**

Interestingly, spending general time together was the most frequent family involvement practice measured among both SES groups. The practices comprising this scale, such as attending family social functions, eating meals as a family, and doing fun things together, had not been previously utilized by researchers or viewed as educationally important among school personnel. The related variable, spending school- and sports-related time together, included some items that had been used in scales for previous studies (such as attending school activities together and working on homework or school projects). Although the time together constructs have not previously been utilized in research, the frequency of these practices implies they are important to Hispanic families.

The relation of this time with student outcomes for both groups is also noteworthy, with significant correlations between each type of time together and the majority of student outcomes. In fact, these two practices accounted for the six strongest correlations between individual family practices and individual student outcomes for low SES students, 5 of the 6 strongest relationships for the entire population, and 3 of the top 6 relationships for high SES students. The single scale of general time together was not as influential on student attitudes and behavior at school (i.e., the mediators in this study) as spending school- and sports-related time together, especially for low SES students. However, the latent family involvement construct, which gained its strongest factor
loadings from the 2 types of time together, did significantly influence all student attitudes measured as well as behavior at school. The influence of spending time together in all the ways measured shows that this *apoyo* given by Hispanic parents is important to the child’s educational success and should be considered in future research and current practice.

**Differences in Involvement between SES Groups**

Multiple Groups Analysis for the family involvement measurement model revealed that families from different economic backgrounds ascribed different meanings to the constructs of communication, spending time together, and spending school- and sports-related time together. Research suggests that invariance, or ensuring the groups perceive constructs in the same way, is an essential prerequisite to comparing results across groups. Thus, hypothesis 1, which predicted that some, but not all, family involvement practices would be significantly different between low and high SES Hispanic families was not able to be fully tested. The shifting meanings of these base variables also meant that subsequent models analyzing the impact of family involvement on student outcomes and the mediating effect of student attitudes and behaviors could only be used to assess SES groups separately and not compare the two SES groups. Thus, research questions 4 and 6 and their related hypotheses (numbers 2 and 4) were also not answered.

It is important to note that, even without directly analyzing group differences in the degree of involvement or its effects (RQ #3), there were important differences in the statistical significance between high and low SES groups’ perceptions of parent-child
communication, spending time together, and spending school- and sports-related time together in relation to family involvement, in addition to student outcomes and attitudes of college enrollment, dropping out of school, and student effort and persistence. The finding that high and low SES families have unique perceptions of communication and the time they spend together, including the purpose of each practice, is supported by past research that is largely qualitative in nature and based on samples of Caucasian and Black families (Lareau, 2003; Putnam, 2015). Identifying this trend of varying definitions with a large sample of Hispanic families and quantitative analysis expands that literature. Replicating these findings with quantitative analysis and learning with qualitative methods how to define constructs in a way that is applicable to all families should be high priorities in future research.

Interestingly, the two family involvement variables (rules and at-school involvement) that were not significantly different between the high and low SES family involvement measurement models had the lowest factor loadings with the latent family involvement construct. Thus, the remaining practices of parent-child communication, spending general time together, and spending school- and sports-related time together that were most strongly identified with family involvement may, in a sense, personify the unique identities of high and low SES Hispanic families and identify an important starting point for deeper analysis. The findings again support the previous research on differences in the ways that parents and guardians in different socioeconomic conditions spend their time and communicate with children and expand it by using a large sample of Hispanic families.
Because involvement at school and family rules did not have significantly different meanings between SES groups, the practices were compared. In contrast to research by Lee and Bowen (2006) showing more rules for lower SES students, this study found significantly fewer family rules among low SES families than high SES families. It is possible that the difference is a function of the rules assessed on the ELS (checking and helping with homework, giving privileges for good grades, limiting privileges for poor grades, requiring work or household chores, limiting time on the TV or video games, and limiting going out with friends on school nights). Because low SES families tend to have a more distinct separation of home and school than high SES families, in addition to providing more freedom from adult direction, valuing different kinds of knowledge, and subscribing to a natural growth perspective (Lareau, 2003), the rules listed on the may not be as common among low SES families as high SES families.

In terms of involvement at school, high SES families participated in an average of 1.5 activities per family each year, while low SES families averaged only 1 activity per family each year. The statistical significance of this difference supports past research that involvement at the school building is more frequent, and likely viewed as more important, for high SES families than low SES families (Lee & Bowen, 2006; Malecki & Demaray, 2006; Putnam, 2015; Toldson & Lemmons, 2013). This study expands previous literature by identifying this pattern among Hispanic families, who have traditionally been identified as less involved than other ethnic groups without regard to their socioeconomic status.
Since lower SES students in this study were more likely than higher SES students to live in single-parent households, family composition was a potential explanation for these differences. For the high SES group, ANOVAS revealed that family composition was significantly related to family rules \([F(8) = 2.35, p = .02]\) and general time together \([F(8) = 2.53, p = .01]\). Interestingly, ANOVAS for the low SES group showed no significant relations between family involvement and family composition. Other potential explanations such as work-related practices (number of hours per week, work schedule, commute time), English-language skills, educational background, family relationships, and length of residence in the United States should be explored in future research.

**Impact of Family Involvement on Outcomes**

When looking at SES groups separately, family involvement as conceptualized by rules, parent-student communication, spending general time together, spending school and sports-related time together, and PTO involvement, significantly impacted individual student outcomes as well as a composite student outcomes variable for high and low SES students. Although family involvement as a whole had a statistically significant effect on all outcomes measured, the outcomes most influenced were academic in nature for both SES groups. The strongest effect of family involvement for both high and low SES students was on GPA, followed by effects on college enrollment and math test scores then dropout and finally, community involvement.

**High SES**

The strongest influence that high SES parents in this study had on the child’s academic outcomes came through spending time together in everyday family activities
and through volunteering in groups like PTO or at the school. This came across in the
strength of the correlations between specific family involvement practices and specific
outcomes. Although most of the family practices were correlated with student outcomes,
some were more consistently related to a range of outcomes among high SES students.
At-school involvement was significantly correlated with 4 of the 5 outcomes, while
communication and general time together were significantly correlated with 3 outcomes
each, and school- and sports-related time was significantly related to only 2 of the
outcomes. Such knowledge may help parents with limited time maximize their influence
by focusing on the practices that influence many outcomes rather than few.

For high SES parents wanting to influence specific outcomes for their child,
correlations also revealed, to some degree, which specific student outcomes were
influenced by which types of involvement. For example, GPA was influenced by almost
all types of the family’s involvement, while a student’s community involvement was
significantly impacted only by the parent participating in groups with other parents and
volunteering at the school (at school involvement).

Low SES

For low SES families in the study, the practices with the strongest influence on
student outcomes included the two types of spending time together (general time and
school- and sports-related time). When looking at the breadth of the impact for specific
family practices, spending school- and sports-time together correlated significantly with
all 5 student outcomes, while time together correlated with 4 of the 5. The remaining
practices correlated with 2 or fewer outcomes. Although low SES parents often have
work and other obligations that take time away from being with family, that time spent
doing everyday activities such eating together, doing something fun together, going to
family social events, and attending events is more beneficial to their child’s educational
attainment than establishment or enforcement of rules on homework and TV, talking to
their child about school, and volunteering at the school or attending PTO.

For specific outcomes that low SES parents influence, GPA and student dropout
were significantly related to the same 3 involvement activities—time together, school-
and sports-related time together, and at-school involvement, while college enrollment
was significantly influenced by both forms of time together and rules at home rather than
involvement at school. Math test scores was the only outcome significantly related to
communication.

Rules

Notably, although family rules have various benefits to students and have been
related with academic outcomes in past research, this study found no correlation between
family rules and student academic outcomes or behavior such as community involvement
or behavior at school for the high SES group. Removing this variable from the initial
measurement model did improve model statistics for high SES families. Because
removing rules also increased the RMSEA above .05 for the low SES group, rules
remained in the model to facilitate comparison between groups. In addition, family rules
had stronger factor loadings with the latent family involvement variable in the low SES
group than the high SES group. Thus, it may be that the significance of rules on Hispanic
student achievement found in past studies was largely a result of their influence on low
SES students. Although there are fewer rules among low SES families than high SES families in this study, low SES students seem to be more impacted by them as evidenced by stronger and more abundant correlations with the outcomes and mediators analyzed.

Rules may also work through their impact on student attitudes and behaviors. Among low SES students, rules were correlated with student behavior at school most strongly, followed by student aspirations and the student’s effort and persistence in academic tasks. For high SES students, rules were significantly related only to a student’s academic efforts and persistence. Because these student attitudes and behaviors were significantly correlated with the majority of student outcomes in both SES groups, it shows that the benefit of rules on student outcomes was achieved largely by influencing student attitudes and behaviors, especially for low SES students.

Community Involvement

The scarce connection of community involvement to the various forms of parent involvement is intriguing. It appears that among high SES students the influence of example--parents themselves involved in the school or in other community groups with parents from the school—was the main driver of the measured practices for a student to become involved themselves. In fact, this involvement was more influential than spending time together or talking about school and community events for high SES students. By contrast, among low SES students, spending time with family members in general ways or school- and sports-related events had a significant connection with students’ community involvement, but parental involvement at school was unrelated to students’ involvement in the community. This may be a result of lower at school
involvement among lower SES parents than high SES parents and thus lower connection of parents’ school involvement with students’ community volunteering. Furthermore, spending time together in religious services, day trips, school activities, and other events may be times when lower SES families discuss helping or engage in their community directly, thus inspiring involvement among the younger generation. The exact reasons for these different relations between parent involvement and community involvement are currently unknown, and further research is needed.

**Traditional School Definitions of Involvement**

Involvement at the school building was the least frequent practice in both SES groups. Given that 3 of the 5 items comprising this scale specifically refer to PTO involvement, low participation at the school building from this national sample supports past research that PTO involvement is not a high priority among Hispanic families. In addition, the factor loading for this type of involvement to the latent family involvement construct was among the weakest links; rules was the only family involvement construct that had a weaker loading. Involvement at school did have strong correlations with student outcomes for the high SES group (3 of top 4 strongest, relating it to community involvement, college enrollment, and GPA), but it had much less impact among low SES students (only 2 significant outcome relationships that were weaker than the influence of other involvement).

The implications of low involvement at the school may be subtle and go unnoticed by many. Kuperminc and colleagues (2008) suggested that “low rates of participation in school-based activities can restrict Latino parents’ opportunities to advocate for their
children and may reinforce perceptions by school officials that the parents do not care
about their children’s education” (p. 472). Thus, less involvement at the school may
result in lower capital, meaning less help for their children and fewer connections that
could benefit low SES families in ways not measured here.

**Mechanisms through Which Family Involvement Impacts Student Outcomes**

Once mediators were added to the model, the composite acts of family
involvement were no longer significant for the high and low SES groups. In fact, the high
SES regression changed from significantly positive to slightly negative and not
significant. The significant and much stronger effect of the composite mediators construct
on the composite outcomes and individual outcomes in both models implies that the
relationship of family involvement with these outcomes is largely through its impact on
student attitudes and behaviors, such as effort and persistence, aspirations, and behavior
at school (RQ5, Hypothesis 3).

**High SES**

For high SES students, effort and persistence, aspirations, and behavior at school
appeared to influence GPA, math test scores, and college enrollment the most. The
relationship of family involvement to these mediators is more complex. Although the
mediators as a group and individually were significantly influenced by the latent family
involvement construct, there were only 3 significant correlations of individual high SES
family involvement indicators with high SES student mediating indicators (rules with
effort and persistence, time together with behavior at school, and school- and sports-
related time together with behavior at school) out of a possible 15 relationships. Two of
the 3 relationships were related to student behavior at school despite behavior having the weakest effect of the latent family involvement indicator on behavior.

**Low SES**

Once the mediators were added, fit statistics for the low SES group were good overall, but not ideal due to a low TLI. It is interesting to note that when testing different variables in the model, the model with the best possible fit for the low SES group did not produce acceptable fit statistics for the high group. This may be one cause for the low TLI and reinforces the idea that what high SES students need from their families to feel supported in educational endeavors may be different from the needs of low SES students.

For low SES students, effort and persistence, aspirations, and behavior at school appeared to influence GPA and college enrollment the most, with strong effect sizes above .5 when utilizing the composite mediator. This is supported by the fact that the strongest individual correlations for the 3 mediators were all with GPA and college enrollment. As discussed previously, the family involvement practice of rules had the strongest influence on these mediators that influenced student outcomes.

**The Role of Parent Aspirations and Expectations**

Past quantitative research asserts that parent aspirations and educational expectations have the strongest impact on student outcomes of any measured involvement on student aspirations (Carranza et al., 2009; Hong & Ho, 2005). These variables have also been found to influence student behavior, although Hopson and Weldon (2013) clarify that the association with behavior is interactional, meaning “expectations influence behavior, and the child’s behavior influences parents’
expectations” (p. 46). One aspect of behavior--college enrollment--was strongly influenced by expectations in a study by Nuñez and Kim (2012), who reported that Hispanic students were almost 50% more likely to enroll in a four year college when their parents had high educational expectations for them (see also O’Connor, 2009). In the study by Carranza and colleagues, Hispanic student grades were significantly impacted by expectations both directly and indirectly through student variables such as self-esteem and acculturation (see also Toldson & Lemmons, 2013).

Because of the reported importance of parent expectations and aspirations, variables that assessed expectations (how far in school a parent thinks the child will go) and aspirations (how far in school a parent wants the child to go) were originally included in the family involvement model. Descriptive statistics for high SES Hispanic families revealed that parent aspirations and expectations were high, with average expectations between a four year degree and a professional degree. Among lower SES Hispanic families, the average parents wanted and believed their children would obtain a four-year degree.

Measurement model fit statistics were good when including parent expectations and parent aspirations. However, when adding the structural model, fit statistics were no longer acceptable for the overall population and the high SES group, despite numerous iterations. One model did fit the overall population, showing a stronger regression between the latent family involvement and the latent student outcomes than the current model but much lower squared multiple correlations. Parent expectations and parent aspirations had low factor loadings compared with the other items in the group, so they
were removed from the model which resulted in a marked improvement in model fit and squared multiple correlations for all groups.

Although parent expectations and aspirations are touted as important influences on student behavior, aspirations, and academic achievement, the results of this study conflict with past research. The principal difference between this study and others is the inclusion of family time together. The relationship developed during the time that children spend with their family “is likely to affect the way parental expectations are communicated to children and interpreted by them” (Hopson & Weldon, 2013, p. 46). Thus, it may be that spending time together is a practice through which children come to understand and internalize the parent’s aspirations and expectations, which would be an important topic to explore in future research.

Another possibility is that expectations and aspirations may have a greater impact on low SES students since there was a good fit for several models when only low SES students were included. Bloom (2007) asserted that the desires of poor and working-class parents “carry an extra weight for children: for they are tinged with parental hopes for children to achieve something that they could not, and freighted with their own tremendous, daily sacrifices on their children’s behalf” (p. 360). Although her research was not focused solely on Hispanic families, qualitative research among Hispanics confirms similar sentiments. No recent studies included analyses on different SES groups for Hispanics, but in non-Hispanic research, Hango (2007) reported that a mother’s aspirations for her child’s education likely diffuse a portion of the negative effect that poverty has on the child’s academic performance. Lee and Bowen (2006) suggested that
even though the impact on poor and working-class students is powerful, lower SES parents may have slightly lower educational expectations for their children.

This final explanation is especially intriguing given that some effects in this study that were significant for all Hispanics together were no longer significant once the students were separated by SES groups. This happened for several correlations between family involvement indicators, as well as the effect of the latent family involvement construct on the latent student outcomes construct. It is possible that sample size is the cause of the differences since effects are found more easily with larger samples. However, given that over 500 high SES students were included in the sample and over 1100 low SES students were included, sample size seems an unlikely culprit although future research may help to rule out this possibility. If these differences are truly significant, they have important implications for past, current, and future research. Because much of the literature considers Hispanics as one population rather than in separate SES groups, the reported effects may be deceiving and not applicable to either high or low SES Hispanic students. These socioeconomic differences should be explored with Hispanic families in more depth.

In addition, if SES culture truly does transcend ethnic culture in some aspects of family involvement for Hispanics, the same pattern may exist among other ethnic groups. Different trends identified among the more commonly researched black or white SES groups could then be explored with groups of Hispanics, Asians, American Indians, and others within the U.S.
Implications for Practice

Differences in the perceived meaning of some family involvement in this analysis suggest that parent expectations of their role in education are different based on the culture and other circumstances of their economic status, which has important implications for practitioners. Thus, this study provides culture-specific information for school personnel and families that can establish shared understanding, help practitioners show respect for current involvement and provide support for future involvement, and help families engage in the practices most applicable to their situation.

Establish Shared Understanding

One of the stated purposes of this research is to enhance shared understanding between school personnel and Hispanic families, which can be done in part through disseminating this research to practitioners and families. The literature review provided important information on cultural practices and expectations for different SES groups and for Hispanic families who emphasize a holistic role of supporting the total well-being of the child for true educational success. Past literature was then confirmed in this study through results such as more frequent parent-child involvement in spending time together and communicating about school and general topics than involvement at the school building.

Since culture profoundly influences the way people view and interact with the world around them, the information in this study may be of most use in helping school personnel explore their personal beliefs and behaviors then the beliefs and behaviors of the students and families they serve. For example, knowing that SES groups tend to share
common traits such as strong family connections among low SES families, teachers and administrators can identify common ground with students and families regardless of ethnic culture.

Information about the SES group with which teachers are less familiar can begin the process of shared understanding that is essential for cooperation and trust. When the majority of students are from a different economic group, more effort will be needed to establish an effective level of knowledge and understanding. Practitioners and families who come from different cultural backgrounds must recognize that deeply held beliefs and life circumstances that conflict will make some interactions difficult or uncomfortable. In order to rise above difficult conditions and allow the best interest of the student to prevail, all parties should attempt cultural humility, which “involves an awareness of the limitations in our ability to understand the worldview and cultural background of [others],” as well as “respect and openness to the [other person’s] worldview” (Hook, 2014, p. 278).

It is hoped that sharing this information with school personnel, in conjunction with the frequency with which families engage in the various practices, may narrow the cultural gap between school personnel and the Hispanic students they serve. For example, as teachers who enjoy spending time with their own families understand the importance Hispanic families place on spending time with family, they can utilize this common belief to begin sincere conversations about family and suggest ways that this time together can further enhance student success. As the cultural gap narrows, hopefully it will reduce frustration and feelings of powerlessness for all people involved.
Show Respect for Current Involvement and Support for Future Involvement

Understanding that parents are engaged in supporting the child’s educational success is an important step to improving teacher expectations and fostering respect for families. This study shows that parents who do not show up at the school building are often still engaged with their children in unseen ways that are culturally important and have a compelling influence on student success. Recognizing and encouraging cultural practices as legitimate and important forms of involvement builds positive relationships of trust and fosters a cooperative environment. Acknowledging this involvement, especially practices such as *apoyo*, could be an important starting point in discussions about family educational support (Ramos, 2014).

When seeking knowledge on Hispanic family practices, it is important to note that research that does not consider socioeconomic status should be used with caution. Because much of the literature considers Hispanics as one population rather than as distinct cultural groups, the effects may be a deceiving composite that is not necessarily applicable to both high and low SES Hispanics.

Providing information to school personnel on the impact family practices have among low and high SES families also has the potential to equip school personnel with the knowledge they need to value parent contributions and support parent efforts as well as interact with students and families in a way that will promote understanding and achievement rather than conflict and resignation. For example, a counselor serving a low SES student who is considering dropping out of school could talk with parents about engaging in school- and sports-based practices with their child as a way to support the
child staying in school. For a teacher dealing with high SES parents who are eager to ensure the child’s success and request information from school personnel, the teacher could emphasize the powerful influence of PTO involvement and spending time together in regular family activities on student academic achievement and college enrollment. Such interactions must be done with concern and empathy rather than superiority, in order to have the intended impact. As school personnel understand which family practices among Hispanic families have the greatest impact on which student outcomes, they can emphasize the practices that will have the greatest influence on Hispanic students according to their SES group, which may be different for low SES versus high SES students and families. It is important to note that the process of changing practices and perspectives for both school personnel and families may not be a quick or simple process, so patience will be important. The methods for engaging parents may also differ by SES group, although such advice is beyond the scope of this study and should be considered in future research.

**Family Engagement in Practices Most Applicable to Them**

This research, which shows the positive influence of different types of involvement (especially types that do not require being in the school building), should be reassuring and empowering for Hispanic families. Reassurance can come by the verification that involvement they value is truly influencing students within the different cultural environment of school. It can also empower families to know that if they are unable to leave work to attend parent night, perhaps taking a day trip or going out with their child when they are off of work can still influence the child’s academics. Obviously,
the cumulative effect of relevant involvement will be the most powerful (LeFevre & Shaw, 2012), but parents should not be discouraged from any involvement just because they cannot engage in one specific form.

Families could use these findings to focus their efforts and limited time on practices with the greatest impact. For high SES families, this includes spending time together in everyday family activities and volunteering in groups like PTO or at the school. For low SES families, this focus should be on spending time together in everyday activities as well as in school- and sports-related activities.

**Limitations**

This research is meant to determine how family involvement influences outcomes for Hispanic students. Of course, student outcomes are influenced by numerous factors that are beyond the scope of this study and not accounted for in this analysis. A few of these factors include school climate (Bryan, Moore-Thomas, Gaenzle, Kim, Lin, & Na, 2012), neighborhood characteristics (Fuller & Garcia Coll, 2010; Putnam, 2015), child characteristics (Kang, 2014), and teacher interactions with students (McCormick et al., 2013).

Although some of these constructs are included in the ELS dataset, other constructs that could impact results are not represented. For example, interviews of Hispanic youth suggest that immigration status impacts high school dropout status, academic performance, and college enrollment (Gonzales, 2011; Martinez, 2014). Information from the Pew Hispanic Center reported that in 2008, children of unauthorized immigrants comprised about 6.8% of the children enrolled in primary and
secondary schools (Passel & Cohen, 2009). Just over one fourth of these children also did not have authorized immigration documents, barring access to financial aid for higher education and permission to work in the U.S. The lack of opportunities created by such barriers often leads to low academic motivation among these youth. Because no questions on the ELS ask about immigration status, such issues could not be addressed in this analysis or future analyses with the ELS. Future research should explore the role of immigration status and country of origin with relation to family involvement, especially in the context of socioeconomic status.

Another limitation of this study is that a number of variables are proxies for intangible constructs. Thus, ethnicity will not perfectly represent Hispanic culture; high and low SES groups will not perfectly represent cultural traits for middle-class/upper-class and poor/working class families; family rules will not perfectly represent how parents monitor their children, and so on.

In addition, the group divisions may limit the scope of the study. For example, although past research suggests that educational interactions with children are not substantially different among middle and upper income parents, there may be other SES group divisions or other characteristics of different socioeconomic groups beyond the composite SES construct provided by NCES that would be meaningful. In addition, further dividing Hispanics by country of origin or specific beliefs rather than SES may be beneficial in future research since country of origin may be a factor in family educational interactions such as rules and communication.
This study was done with an age-specific group: tenth grade students who then transitioned from high school to other aspects of life. Thus, the findings here cannot be generalized to younger students in elementary or middle school grades. Research on family involvement among younger Hispanic students from different socioeconomic groups is limited and should be considered in future studies to understand what, if any, differences exist.

Unfortunately, the practices measured in the ELS are also limited in the scope of culturally appropriate proxies measured, which reflects a limitation from past studies on Hispanic family involvement. Some questions in the ELS assess or partially assess culturally important concepts such as providing advice and discussing plans, establishing family rules, and providing emotional support. However, the questions used to assess family rules, for example, may circumvent areas of concern to Hispanic or lower SES families, such as expectations on respect for authority or caring for siblings. Interviews of ethnic minority families specifically reveal a preference for practices such as providing moral guidance, instilling a strong work ethic, infusing student respect for authority, and ensuring behavioral, social, and emotional support (Auerbach, 2011; Jordan et al., 2001; Lopez, 2001; Zarate, 2007). Despite the presence of this research for over a decade, these practices continue to be rarely measured by researchers. Thus, current and future teachers and administrators do not hear that a given cultural practice from Hispanic families or from lower SES families is effective in promoting school success; they hear mainly about the effectiveness of white, middle-class practices such as attending school events and participating in Parent-Teacher Organizations (PTO).
The lack of culturally-specific constructs is likely due in part to researcher bias as non-Hispanic, “middle-class academics must grapple with the challenges of building intellectual bridges across the gulfs of social class [and ethnicity], becoming more conscious of the ways that our milieu often blinds us to non-middle-class ways of being” (Schutz, 2008, p. 407). Since the primary researcher for this study is non-Hispanic and middle-class, it is likely that “blind spots” exist in the constructs and descriptions utilized for this study.

In addition, other practices viewed by Hispanic families as influential for student education such as establishing trust, conveying a strong work ethic, teaching honor and respect, and instilling cultural values are not measured in meaningful ways in the ELS. Similar issues may exist for including practices important to lower socioeconomic groups from all ethnic backgrounds.

There is also bias associated with both the student and parent ELS surveys. The surveys were self-report, which contains inherent bias. For example, “parents with higher expectations about appropriate levels of involvement may rate themselves lower than parents whose expectations are not as high for the same level of involvement” (Lee & Bowen, 2006, p. 214). Other parents may respond in ways they want to be involved rather than their actual involvement or in ways they think researchers want to hear. Heine (2012) reports that Hispanics also tend to provide more extreme responses than Caucasians. Although some studies are able to address self-report bias by comparing student, parent, and sometimes teacher reports or observation, that was not possible in
this study since most questions on the various parent, student, and teacher surveys were not equivalent and since no observations were conducted.

Another limitation is that the ELS questionnaires are quantitative and meant to offer only limited insight into family involvement, so most of the constructs measure quantity but not quality. For example, one question asks about parents checking homework, but there is a difference between checking that homework is complete and checking for correct responses even though both methods may be properly interpreted to mean that parents check homework. Thus, lower quality of involvement or lower actual frequency (compared to reported intended frequency) of involvement may mean family help does not result in higher student achievement.

Missing data is also a limitation in this study. Previous studies suggest there are differences in student- and parent-reported levels of perceived involvement, as well as differences in the impact each has on student outcomes (Carranza et al., 2009; Desimone, 1999). When comparable variables were available in the ELS dataset, student responses generally had stronger correlations, supporting past research that suggests that the student’s perception of the parent’s involvement may have a greater impact on student outcomes than the parent’s perception of their own involvement. However, the large amount of missing data on several constructs from the student questionnaire and the fact that it was reported as not missing at random (Ingels et al., 2004) made the data difficult to utilize in statistical analyses and infer information about the entire population. In the case of family involvement constructs, information from parent surveys was utilized in
place of student-reported data. For some mediators and outcomes, potentially important constructs were excluded in favor of constructs with less missing data.

Another limitation was the number of Hispanic students excluded in the sample. Those who did not have a parent complete a survey or did not take the base year test were excluded for this analysis. Also, Hispanic students with certain individualized education program (IEP) specifications or limited English proficiency (LEP) were excluded from taking the ELS in 2002 and appear only on the restricted use files. LEP students “were deemed to be able to participate if either (a) the student had received academic instruction primarily in English for at least 3 years or (b) in the school’s judgment, it was felt that the student could meaningfully respond to the questionnaire or validly be assessed” (Ingels et al., 2004, p. 34). Although eligibility was reassessed for 2004, those students would not have been eligible to be in this analysis. The number of students from all backgrounds ineligible for the 2002 survey is included in Table 5.1.

### Table 5.1 Number of students excluded and accommodated for 2002 surveys

<table>
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<th>N</th>
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<tbody>
<tr>
<td>Total Number of students excluded</td>
</tr>
<tr>
<td>Mental or physical disability</td>
</tr>
<tr>
<td>Language barrier (LEP/NEP)</td>
</tr>
<tr>
<td>Number of students accommodated</td>
</tr>
</tbody>
</table>

* a LEP=limited English proficient; NEP=non-English proficient.


A final limitation was the differing definitions of family involvement, which impeded the comparison among SES groups. If high and low SES families view practices as simple (and important) as communication and family time together in different ways as past research and this analysis asserts, then finding constructs that provide good fit and
have the same definitions across groups may be an insurmountable challenge. Many constructs were assessed in order to obtain a good model fit among both groups; the practices that fit best for each group were not necessarily the same, further complicating comparison by socioeconomic status. Analyses of individual items or constructs may be necessary to tease out items that can be compared and better understand what practices differ among groups.

**Recommendations for Future Research**

Past research suggests that high and low SES families view and interact with the world differently. However, the existing literature does not provide evidence for these differences among Hispanic SES groups. This study provides some insight into patterns for each group individually, and for the presence of differing definitions for some constructs, but it did not provide in depth information on these differences due to the quantitative nature of the study as well as the method of analysis. Qualitative research has the structure and flexibility to probe more deeply and immediately into important concepts than quantitative analysis. Thus, further qualitative research is needed to explore the differences in high and low SES family perceptions of the constructs used in this study. Potential questions could investigate if the different perceptions are attributable to the action about which the question asked (i.e., checking if homework is done), the meaning of the frequency of the practice (i.e., how often it happened- never, rarely, sometimes or often), or the importance of the practice among the group.

The discovery that spending time together as a family was influential for student aspirations, student effort and persistence, and student behavior at school has important
implications for Hispanic families. However, in the SEM these factors explained a relatively small portion of the students’ attitudes and behaviors that were influenced by family involvement and that mediated the relationship between the family’s educational involvement and academic outcomes. Thus, the reasons that spending time together influences student outcomes are still vague. Since spending time together would influence the strength of the parent-child relationship, further investigation could focus on attitudes influenced by the parent-child relationship, including a child’s sense of security and belonging (Ruhl, Dolan, & Buhrmester, 2014) and desires to provide for future family needs. In addition, how adolescents would utilize their time if not with their family as frequently, especially in areas with abundant negative peer influences, should be explored.

Future research is also needed on the levels and types of family educational involvement in which Hispanic families from each SES group engage. This study analyzed 5 constructs, but many more practices exist that are important to families and should be considered. The meaning of these practices may differ across groups, which is important to know; those that do not differ have the potential to be compared statistically across SES groups to determine if the levels and impact are the same for all groups. As noted previously, it also will be important to try to rule out sample size as the cause of varying definitions with the constructs in this study. Discovering practices that are similarly effective across groups would be especially beneficial for practitioners who teach both high and low SES families. Teachers could then recommend family
involvement practices, provide information, and offer support more readily without the added concern of applicability based on socioeconomic status.

Research is also needed to better understand how to construct culturally appropriate forms of family engagement in education, such as *apoyo*, to include in future surveys. Quantifying *apoyo* in this study as spending time together revealed that this type of support is a frequent part of Hispanic family life and does influence students’ educational lives. However, there may be other conceptualizations of this construct, as well as others viewed as essential among Hispanic families, which should be explored and utilized in future research. Both qualitative and quantitative research should be used in the investigation. The CASSS developed by Malecki and Demaray is one relevant tool that could be utilized as an important starting point since the questions on the frequency and importance of help, advice, and praise the student receives in different aspects of life seem to appropriately embody *apoyo*. In addition, the CASSS has proven reliability and validity with a Hispanic-majority sample and can compare responses across parent, teacher, and student surveys (Malecki & Demaray, 2006). Thus, relevant questions such as those used in the CASSS should be considered for future national studies, allowing greater comparison across ethnic and SES groups. Furthermore, cultural constructs of family educational engagement may be the medium through which parents communicate their aspirations and expectations, adding to the importance of future qualitative and quantitative analyses on these topics.

As researchers come to better understand these differences, it would be valuable to utilize this information in an analysis across cultures. Are the trends for practices like
involvement at school and spending time together more similar within SES groups than within ethnic groups? Because neighborhoods and schools are becoming increasingly segregated by socioeconomic status rather than ethnic background per se (Putnam, 2015), finding commonalities by SES groups could especially benefit practitioners who interact daily with students that share a socioeconomic culture but not differ by ethnic culture.

Finally, this study only utilized student or parent perspectives, rather than comparing the two perspectives. For a stronger analysis of the constructs under study, analyses on the similarities and differences among students and parents from each SES group would be beneficial.

**Conclusion**

As supported by the theories of Bronfenbrenner (1994), Super and Harkness (1994), and Berry (2008), each student and family, as well as those who work in the school students attend, has their own ethnic and socioeconomic culture that blend together to influence attitudes and behaviors. This study sought to investigate what socioeconomic culture looked like in regards to family involvement in education among Hispanic families. A finding with profound implications for families, school personnel, and researchers was that Hispanic families from different socioeconomic groups attributed different meanings to various types of family involvement and student outcomes. These socioeconomic differences in definitions of several constructs exist despite a common ethnic background, supporting the existence of a socioeconomic divide that transcends ethnicity.
This study also provided information to help school personnel understand, respect, and support appropriate involvement and to help families maintain current practices with confidence or alter them as needed to influence the desired outcomes. All practices investigated had significant effects on one or more student outcomes and mediators, including student GPA, math test scores, college enrollment, dropping out, community involvement, aspirations for education, behavior at school, and effort and persistence. However, the Hispanic cultural practice of *apoyo*—defined in terms of time spent together in various relationship-building activities—is among the most influential practices for both SES groups. High SES Hispanic families with limited time who are seeking to promote student success with the practices investigated should invest most heavily in participating in PTO/volunteering at the school and spending time together as a family, since these practices have stronger relationships that impact more student outcomes than other practices. Lower SES Hispanic families should focus efforts on spending time together as a family in regular activities and school- and sports-related activities.

In considering these findings, it is also important to remember that each outcome analyzed has numerous other factors affecting it. Family involvement for high school sophomores is not a cure-all, as it has low to moderate overall influence on a range of student academic outcomes, behaviors, and attitudes. However, family support is one important part of the complete picture of support necessary for student success. It is hoped that this study will provide Hispanic families from all socioeconomic groups and
school personnel with knowledge that supports positive engagement in the academic lives of children.
## APPENDIX

### Items for Scales

#### Table A1.1 Family Involvement Constructs

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Content</th>
<th>Missing Rate (n)</th>
<th>Missing (%)</th>
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</table>
| Family Rules (ss)* | How often do your parents:  
1) check if your homework is done  
2) help you with your homework  
3) give privileges as a reward for good grades  
4) limit privileges because of poor grades  
5) require work or household chores  
6) limit time on the TV or video games  
7) limit going out with friends on school nights? | 395 | 23.5% |
| BYS85A | 1) check if your homework is done | 375 | 22.3% |
| BYS85B | 2) help you with your homework | 364 | 21.6% |
| BYS85C | 3) give privileges as a reward for good grades | 381 | 22.6% |
| BYS85D | 4) limit privileges because of poor grades | 376 | 22.3% |
| BYS85E | 5) require work or household chores | 428 | 25.4% |
| BYS85F | 6) limit time on the TV or video games | 375 | 22.3% |
| BYS85G | 7) limit going out with friends on school nights? | 402 | 23.9% |
| Parent-Student Communication (ps) | In the first semester or term of this school year, how often have you and/or your spouse/partner provided advice or information about the following to your tenth grader?  
1) selecting courses or programs at school  
2) plans and preparations for college entrance exams such as ACT, SAT, or ASVAB  
3) applying to college or other schools after high school  
4) specific jobs your tenth grader might apply for after high school  
5) community, national, and world events  
6) things that are troubling your tenth grader  
7) looking back over the past year, how frequently did you and your 10th grader spend time just talking together? | 139 | 8.3% |
| BYP56A | 1) selecting courses or programs at school | 99 | 5.6% |
| BYP56B | 2) plans and preparations for college entrance exams such as ACT, SAT, or ASVAB | 120 | 7.1% |
| BYP56C | 3) applying to college or other schools after high school | 116 | 6.9% |
| BYP56D | 4) specific jobs your tenth grader might apply for after high school | 115 | 6.8% |
| BYP56E | 5) community, national, and world events | 122 | 7.2% |
| BYP56F | 6) things that are troubling your tenth grader | 112 | 6.7% |
| BYP57K_r | 7) looking back over the past year, how frequently did you and your 10th grader spend time just talking together? | 486 | 28.9% |
| Time Together (ps) | Looking back over the past year, how frequently did you and your 10th grader participate in the following activities together?  
1) attending religious services  
2) attending family social functions (party, wedding)  
3) taking day trips or vacations  
4) going shopping | 92 | 5.5% |
| BYP57E | 1) attending religious services | 97 | 5.8% |
| BYP57F | 2) attending family social functions (party, wedding) | 93 | 5.7% |
| BYP57G | 3) taking day trips or vacations | 99 | 5.9% |
| BYP57I | 4) going shopping | 98 | 5.8% |
| BYP57J | 5) Going to restaurants/eating out | 98 | 5.8% |
| BYP57L | 6) Doing something else fun together | 98 | 5.8% |
| BYP70_c2 | 7) In a typical week, how many days do you eat at least one meal with your 10th grader? | 18 | 1.1% |

| | School and Sports Time Together (ps) | 97 | 5.8% |

| BYP57A | Looking back over the past year, how frequently did you and your 10th grader participate in the following activities together? | 92 | 5.5% |
| BYP57B | 1) Attending school activities (sports, plays, concerts, etc.) | 92 | 5.5% |
| BYP57C | 2) Working on homework or school projects | 93 | 5.5% |
| BYP57D | 3) Attending concerts, plays, or movies outside of school | 97 | 5.8% |
| BYP57E | 4) Attending sporting events outside of school | 105 | 6.2% |
| BYP57H | 5) Working on a hobby or playing sports | 100 | 5.9% |

| | Involvement at School (ps) | 117 | 6.9% |

| BYP54A | Did you do the following this school year? | 111 | 6.6% |
| BYP54B | 1) Belong to the school’s PTO | 111 | 6.6% |
| BYP54C | 2) Attend meetings of the PTO | 100 | 5.9% |
| BYP54D | 3) Take part in the activities of the PTO | 124 | 7.4% |
| BYP54E | 4) Act as a volunteer at the school | 123 | 7.3% |
| BYP54F | 5) Belong to any other organization with several parents from the school | 112 | 6.7% |

Note: “Missing” includes responses listed as missing, not administered/abbreviated interview or breakoff, refused, don’t know, multiple response, nonresponder, and legitimate skip/NA

*ss= items from the student survey; ps= items from the parent survey

* Response categories of: Never, Rarely, Sometimes, Often

b Never, Sometimes, Often

c Original categories of Never, Rarely, Sometimes, Frequently collapsed into Never, Sometimes, and Often to match other items in the scale

d Never, Rarely, Sometimes, Frequently

e 8 original categories allowed parents to mark 0 days through 7 days; variable was collapsed into Never (0), Rarely (1-2), Sometimes (3-4), and Frequently (5-7)

f Responses were Yes or No to each item
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Content</th>
<th>Missing Rate (n)</th>
<th>Missing Rate (%)</th>
</tr>
</thead>
</table>
| Student Effort, Persistence, & Perceived Control | When I study:  
a) I make sure that I remember the most important things  
b) I try to work as hard as possible  
c) I keep working even if the material is difficult  
d) I try to do my best to acquire the knowledge and skills taught  
e) I put forth my best effort  
f) When I sit myself down to learn something really hard, I can learn it  
g) If I want to learn something well, I can  
h) If I decide not to get any problems wrong, I can really do it  
i) If I decide not to get any bad grades, I can really do it | 528              | 31.4%            |
| BYS89G                        | 1) I make sure that I remember the most important things                  | 525              | 31.2%            |
| BYS89J                        | 2) I try to work as hard as possible                                     | 528              | 31.4%            |
| BYS89O                        | 3) I keep working even if the material is difficult                      | 562              | 33.4%            |
| BYS89S                        | 4) I try to do my best to acquire the knowledge and skills taught         | 578              | 34.3%            |
| BYS89V                        | 5) I put forth my best effort                                            | 576              | 34.2%            |
| BYS89E                        | 6) When I sit myself down to learn something really hard, I can learn it  | 526              | 31.2%            |
| BYS89T                        | 7) If I want to learn something well, I can                             | 578              | 34.3%            |
| BYS89Q                        | 8) If I decide not to get any problems wrong, I can really do it          | 571              | 33.9%            |
| BYS89N                        | 9) If I decide not to get any bad grades, I can really do it              | 549              | 32.6%            |
| Student Aspirations           | As things stand right now, how far in school do you think you will get?  | 217              | 12.9%            |
| Student Behavior              | How many times did the following things happen to you in the first semester or term of this school year?  
  a) I was late for school  
  b) I cut or skipped classes  
  c) I was absent from school  
  d) I got in trouble for not following school rules  
  e) I was put on in-school suspension  
  f) I was suspended or put on probation  
  g) I was transferred to another school for disciplinary reasons | 20               | 1.2%             |

Note: “Missing” includes responses listed as missing, not administered/abbreviated interview or breakoff, refused, don’t know, multiple response, nonrespondent, and legitimate skip/NA

a Response categories are Almost never, sometimes, often, almost always
b Collapsed into 1) Less than high school graduation, 2) High school graduation or GED only, 3) Some college or vocational training, 4) 4-year degree, 5) Professional or graduate degree.
c Never, 1-2 times, 3-6 times, 7-9 times, 10 or more times
Table A1.3 Student Outcome Constructs

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Content</th>
<th>Missing Rate (n)</th>
<th>Missing (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPA</td>
<td>High School GPA for all courses taken 9th-12th grades (^a)</td>
<td>128</td>
<td>7.6%</td>
</tr>
<tr>
<td>F1RGPP2</td>
<td>Math Test Score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F1TXMSTD</td>
<td>Standardized test taken during the 1st follow-up</td>
<td>198</td>
<td>11.8%</td>
</tr>
<tr>
<td>Dropout Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F1DOSTAT(_c)</td>
<td>Combination of student and school reported information about whether or not the student had dropped out of school as of Spring 2004 (^b)</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>College Enrollment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F2PTN3PS(_c)</td>
<td>Composite variable of student responses to questions on postsecondary enrollment during the first 12 months after leaving high school. (^c)</td>
<td>212</td>
<td>12.6%</td>
</tr>
<tr>
<td>Community Involvement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F2D09</td>
<td>During the past 2 years (2004-2006), have you done any unpaid volunteer or community service work through organizations such as youth groups, service clubs, church clubs, school groups, or social action groups? (^d)</td>
<td>223</td>
<td>13.2%</td>
</tr>
</tbody>
</table>

Note: “Missing” includes responses listed as missing, not administered/abbreviated interview or breakoff, refused, don’t know, multiple response, nonrespondent, and legitimate skip/NA

\(^a\) Categories of 0.00-1.00, 1.01-1.50, 1.51-2.00, 2.01-2.50, 2.51-3.00, 3.01-3.50, 3.51-4.00

\(^b\) Original categories of Not dropout/alternative completer and Alternative completer-early GED were combined into one category (Completing school) and the categories of Dropout as of spring term 2004 and Student/prior school report of dropout were combined into another category (Dropped out at some point)

\(^c\) Original 8 categories were collapsed into 4- Attended postsecondary mostly full-time, 3- Attended postsecondary mostly part-time, 2- Did not attend postsecondary education in the first year after high school, and 1- Still in high school

\(^d\) Yes or no
REFERENCES


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Little-Harrison, N. N. (2011). *Assessing teacher and parent support as moderators in the relationship between black high school students’ academic achievement and socioeconomic status* (Doctoral dissertation). (UMI 3464722), Retrieved from ProQuest LLC.


