IMMIGRATION, ACCULTURATION, AND ACADEMIC ATTITUDES AND PERFORMANCE AMONG LATINO ADOLESCENTS

By

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A dissertation submitted in partial fulfillment

of the requirements for the degree of
Doctor of Philosophy
(Psychology)
in The University of Michigan
2011

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To my husband, Alex, my children, Lily, Grace, and James, and my parents, Demetrios and Cornelia Tsitsis, for their endless love and support.

Acknowledgments

It is overwhelming to consider the tremendous support that I have received in completing this dissertation and in pursuing the studies which have culminated in this work. I am first and foremost grateful to my husband, Alex. Your fervent encouragement and dedicated support gave me the courage to take a detour from my legal pursuits to focus on my passion for clinical psychology. Your undying support and excitement for my work inspires me. I am truly blessed to have a partner in life that is as wonderful as you! Lily, Grace, and James, my extraordinary children, I am so grateful for your encouragement (including those wonderful "hooray for mom" power points) and understanding throughout this process. We are building our family education stories *together*!

To my parents, Demetrios and Cornelia Tsitsis, the stories you have passed along to my siblings and me, and now to my children, have inspired my interest in this work. Your zealous belief in the American Dream made me believe that it was possible to achieve, and your fierce work ethic made me appreciate the sacrifice that it takes to achieve it. My hope is that that all of the children of this country can someday enjoy the same tremendous support and opportunities that I have been given so that they too can reap the benefits of their motivation and effort.

The members of my dissertation committee have been a great source of support both with my dissertation and throughout my graduate work. Rosie, without your

tremendous support and encouragement this work would not have been possible. Your dedication as a mentor and friend has been nothing short of incredible. I have learned so much from you in all areas of my graduate work, as a researcher, an instructor, a clinician, and I appreciate the confidence that you have fostered in me in all of these areas. I am honored to have worked with you over the past 10 years and I thank you for chairing my dissertation committee.

Donna and Sherri, I have had the great privilege of learning from you both early in my graduate career and now through the insightful input you have each contributed toward this dissertation. I am truly honored to have you on my committee, and I appreciate the time you have taken over the years to mentor me and support my pursuits of balancing career and family. Your understanding and support have meant a great deal to me.

Lorraine, I truly admire your work and am privileged to learn from your incredible insights through this dissertation process. Thank you for agreeing to contribute to this important work and to my education. It is an honor to work with you.

A tremendous debt of gratitude is also reserved for Laura Klem. Laura, your statistical insights as well as your kind support throughout this past year are truly appreciated.

This work would not have been possible without the collective efforts of the graduate and undergraduate students of the Latino Family Study. I am grateful to you all not only for your efforts, but also for making this work even more enjoyable.

I would like to thank my family, both immediate (my sister, Dina, and my brother, Dino) and extended, and while I mentioned some very important members earlier, I would be remiss not to explicitly acknowledge and thank my parents-in-law, John and Suzanne Aretakis, who, like my parents, took care of Lily, Grace and James for the past 9 years, allowing me to pursue my studies with the knowledge that the most precious people in my life were in excellent care. I would also like to thank my great friends for their tremendous support, which came in so many forms – encouragement, child care, and so much more. I truly value your friendship and I feel blessed to have you in my life.

Finally, I would like to thank the students who took the time to share their stories and their lives with us through this study. I wish them and their families every opportunity for their pursuit of the American Dream, and continue to hope that they too will be blessed with the great support I have received in my life.

Table of Contents

List of Tables

List of Figures

Figure

List of Appendices

Appendix

Abstract

This dissertation investigates the impact of immigrant status, acculturation, and ethnic identity on Latino adolescents' academic attitudes and performance. It explores the phenomenon known as the "immigrant paradox," whereby early generation adolescents exhibit more positive academic outcomes than their later generation peers, and tests whether the immigrant paradox can be explained via the processes of acculturation, ethnic identity, family obligation, cultural values like *familismo*, and belief in the American Dream. Using a mixed methods design, the study also investigates how family immigration and education stories impact the belief in the American Dream and educational beliefs and values. The quantitative study uses self-report survey data from 223 Latino 9th graders (and a subset of 135 Dominican 9th graders) to investigate the presence of the "immigrant paradox" and the underlying processes which may explain the impact of acculturation on academic outcomes. Findings from this study provide evidence for the "immigrant paradox" in both the full sample as well as the Dominican subset. Furthermore, family obligation was found to have a significant positive effect on academic attitudes, and both *familismo* and belief in the American Dream were found to moderate the impact of acculturation on academic outcomes. These findings point to the importance of family processes and cultural values in motivating children of immigrants and later generation peers to succeed academically. The qualitative study continues to explore these relations by reviewing the family immigration and education stories of a

subset of the 223 students. Students who reported family members immigrating to the U.S. to improve the lives of the next generation were more likely to believe in the American Dream. Family stories of positive educational experiences were positively related to adolescents' beliefs about the value of education, while family stories of education-related struggles with negative peer interactions were negatively related to adolescents' beliefs about the value of education. Family stories of family-related school struggles were significantly related to greater academic efficacy. Findings from the qualitative study illustrate the potential motivational role of family stories on Latino adolescent educational beliefs and values and support the important influence of family factors on academic attitudes found in the quantitative study.

CHAPTER I

Introduction

The demographic data relating to Latinos in the United States paints a stark picture of the obstacles faced by Latino youth and highlights why it is important to focus on the educational experience and attainment of Latinos in this country. First, according to a recent publication of the U.S. Census Bureau (2010), estimates indicate that there were nearly 48.4 million Latinos living in the United States, which represents nearly 16% of the nation's total population, making Latinos the nation's largest ethnic or racial minority. This estimate did not take into account the approximately 4 million residents of Puerto Rico, a U.S. Territory. Moreover, more than one of every two people added to the U.S. population was Latino, constituting a 3.1% increase from July1, 2008 to July 1, 2009, making the Latino population the fastest growing minority group in the U.S. (U.S. Census Bureau, 2010). Alarmingly, the poverty rate among Latinos in 2008 was 23.2%, up from 21.5% in 2007 (U.S. Census Bureau, 2010), and even more disturbing, according to the National Center for Children in Poverty, in 2009, nearly 63% of all Latino children live in low-income households (Chau, Thampi, & Wight, 2010).

Of the over 46 million Latinos living in the United States, two-thirds are immigrants or the children of immigrants (U.S. Census Bureau, 2008). Consequently, immigration defines the experience of the majority of Latinos in the United States (Suarez-Orozco & Suarez-Orozco, 2009). Despite the increased risks of growing up in

an immigrant family (an increased risk of having lower SES, having parents with less U.S. education, limited English and knowledge about schools), some research has indicated more positive academic outcomes (including more positive attitudes toward school and higher academic achievement) in early generation (foreign-born and children of foreign-born parents) adolescents than in their later generation peers (Fuligni, 1997; Perreira, Fuligni & Potochnick, 2010; Portes & Rumbaut, 2001; Rumbaut & Portes, 2001) This phenomenon has been termed the "immigration paradox." The present study seeks to investigate whether this paradox is present in a group of Latino adolescents, as well as in a subset of Dominican adolescents, and to explore how acculturation, cultural values, ethnic identity, family obligation, and belief in the American Dream impact Latino students' academic attitudes and performance, using both quantitative and qualitative methodologies.

The focus on adolescence permits the present study to investigate these influences on academic outcomes at a time of important developmental changes, when identity formation becomes a central task (Erikson, 1968). Identity formation includes questions about one's place within one's culture (both culture of origin and current culture). Adolescence is also a time when the focus on higher education becomes more salient and questions about the value and possibility of attaining higher education arise. As the literature suggests, these questions can be difficult for some racial minority youth to answer, given the academic struggles many face.

Academic Outcomes of Latino Students

While Latinos comprise approximately 20% of students in U.S. schools (U.S. Census Bureau, 2008), the educational achievement of this growing minority group is

alarmingly low. Although some Latino students have been able to navigate their way to academic success (Cabrera & Padilla, 2004; Ceballo, 2004), the majority struggle academically (Gandara & Contreras, 2009; Suarez-Orozco & Suarez-Orozco, 2009). Latino students seem to lag behind their peers at all levels of education, even as early as kindergarten (Chernoff, Flanagan, McPhee, & Park, 2007; Planty et al., 2008;). In the twelfth grade, Latino students average only an eighth grade reading level (Fry, 2003; Gandara & Contreras, 2009) and have the highest school dropout rates and lowest college attendance rates of all ethnic and racial groups (Perez-Huber, Huidor, Malagon, Sanchez, & Solorzano, 2006).

Research on ethnic minority underachievement has historically been guided by a "deficit approach," attributing underachievement to "deficits" in families' approaches to their children's education (for example, low expectations, little parent-school involvement, the absence of academically enriching home environments) or cognitive and linguistic deficits (Alva, 1991; Moreno, 2002; Stevenson, Chen & Uttal, 1990). However, a growing literature focusing on the factors that promote academic success and resiliency of Latino students has begun to emerge (Ceballo, 2004; Ceballo, Huerta & Epstein-Ngo, 2010; Suarez-Orozco & Suarez-Orozco, 1995). This study seeks to continue the current movement of focusing not on alleged "deficits" of Latino immigrant families, but rather on the cultural strengths that allow Latino adolescents to succeed despite the challenges they face as ethnic minorities and the challenges their parents and/or they face as newcomers to a new culture.

Dominican and Puerto Rican Immigration/Migration History

The context in which families enter a new country and engage with a new culture is an important consideration in understanding how families cope with the challenges they face as ethnic minorities. As the greater majority of participants in this study identify as Dominican or Puerto Rican, it is important to consider the sociohistorical context of immigration/migration of these two ethnicities in particular.

According to Garcia Coll and Marks (2009), "the character of the Dominican immigrant population has changed dramatically over the years, from the 1960s with a primarily educated population of young adults originating from urban middle class communities, to a much more economically, educationally, and regionally diverse population in the following decades" (Garcia Coll & Marks, 2009, p. 108). Economic unrest in the Dominican Republic in the 1980s and 1990s led many from the Dominican Republic, both skilled and unskilled workers, from both rural and urban areas, to immigrate to the United States in hopes of better economic opportunities (Garcia Coll & Marks, 2009). An important factor in facilitating Dominican migration to the United States has been the 1965 Family Reunification Act, which has allowed many Dominicans to enter the United States through strong family networks, making this a distinct characteristic of the Dominican immigration context from the beginning (Garcia Coll & Marks, 2009). In addition to the strong family networks that Dominicans enjoy, they also often join well-established Latino communities (Garcia Coll et al, 2002), which include Spanish-language businesses, churches, clubs and newspapers (Garcia Coll & Marks, 2009). Despite the community support and the motivation to seek better opportunities, many Dominicans are relegated to the lowest paying jobs in American society.

According to Garcia Coll & Marks (2009), "factory work, child care, cleaning positions, and maintenance jobs provide the entry level job to the U.S. job market for many Dominicans (Garcia Coll & Marks, 2009, p. 109) Interestingly, the Dominican community is considered a transnational community, where members maintain strong ties to both the United States and the Dominican Republic (Rodriguez, 2009). Families keep in touch through telephone communication and often travel back and forth for summers, for holidays, and even for schooling (Garcia Coll & Marks, 2009; Rodriguez, 2009). This transnationalism is an important consideration in understanding how Dominicans cope with their minority status in the United States.

Puerto Ricans are not officially considered "immigrants." The status of Puerto Rico vis a vis the United States began in 1898 when U.S. troops invaded Puerto Rico during the Spanish-Cuban-American War. The U.S. has retained a strong presence there ever since. Today, since 1901, Puerto Rico is considered an "unincorporated territory" that "belongs to but is not a part of" the United States (Duany, 2010). Within the United States, Puerto Ricans are U.S. citizens by birth, but they are often treated as "legal aliens" and have been dubbed "colonial immigrants" (Duany, 2010). "Colonial immigrants move abroad primarily for economic reasons, tend to live in segregated quarters, work in low-status jobs, and attend inferior schools in their metropolitan countries" (Rodriguez, 1997, cited in Duany, 2010, p. 226). In particular, Puerto Ricans in the United States occupy subordinate positions within metropolitan societies, largely as a consequence of colonial racism, despite conditions of legal equality. "In sum, Puerto Ricans illustrate one of the main dilemmas of colonial subjects in their metropolitan countries: although legally domestic, they are often viewed as culturally foreign" (Duany, 2010, p. 248). In

terms of reception upon entry into the U.S., in contrast to the warm reception given to

Cubans, and even the encouragement given Dominicans (as evidenced by the 1965

Family Reunification Act), Puerto Ricans have been "grudgingly tolerated" (Bohon,

Johnson, & Gorman, 2006).   Moreover, Puerto Ricans are disproportionately poor,

despite having the advantages of citizenship and early English language exposure

(Bohon, et al., 2006; Ogbu, 1991).

Theoretical Framework

      Theories of Acculturation. The concept of acculturation has a long history in

the social sciences, particularly in anthropology (stemming from work with indigenous

peoples) and sociology (as research on immigrants began to develop), and has become an

important part of psychology since the early 1980s, particularly in the area of cross-

cultural psychology (Berry, 2003). Despite a wide consensus that acculturation is an

important psychological phenomenon, there is disagreement about how to conceptualize

and measure it (Berry, 2003). According to Berry (2003), much of the literature on

acculturation has relied on the following definition:

> Acculturation comprehends those phenomena which result when groups of
> individuals having different cultures come into continuous first-hand
> contact, with subsequent changes in the original culture patterns of either
> or both groups . . . under this definition, acculturation is to be
> distinguished from cultural change, of which it is but one aspect, and
> assimilation, which is at times a phase of acculturation (Redfield, Linton,
> & Herskovits, 1936, pp. 149).

According to this definition, acculturation is an aspect of cultural change that results from

contact between two (or more) groups, it is considered to create change in one or both

groups that come into contact with each other, and is distinguished from assimilation,

whereby an individual has given up their culture of origin identity in order to identify

with the dominant culture. Later, the Social Science Research Council (1954) contributed another formulation of the construct of acculturation which included the following additional features: Acculturation can be the result of "ecological" change (non-cultural causes such as environmental or demographic modifications induced by an impinging culture) as well as direct cultural transmission (for example, through language).   Moreover, acculturation can be delayed (because internal adjustments of cultural and psychological character take time), and it can be a reactive adaptation toward a more traditional way of life (rather than inevitably toward greater acceptance of the dominant culture) (Berry, 2003; Social Science Research Council, 1954).

The definitions from the Social Science Research Council (1954) differentiated between the process of acculturation at the individual and group level and highlighted that acculturative change must come from internal individual changes stemming from cultural adaptation. Using this differentiation, researchers have conceptualized group level changes as ecological or cultural acculturation and individual changes as psychological acculturation (per Berry, 2003). Psychological acculturation therefore encompasses changes in behaviors, attitudes, knowledge, identity, language and values that occur in an individual as a result of long-term contact with another culture (Berry, 1980; Berry & Sam, 1997; Cuellar, Arnold, & Maldonado, 1995; Rogler, Cortes, & Malgady, 1991). This study refers to this process of psychological acculturation when using the term "acculturation."

For European immigrants entering the U.S. during the latter part of the 19th and early 20th century, *acculturation* was akin to "Americanization," or accommodating to a dominant culture, also referred to as the "melting pot" theory (Caplan, 2007; Escobar &

Vega, 2000). After World War II, as waves of refugees entered the U.S., sociologists began to focus on the process of assimilation and viewed this as synonymous with *acculturation* (Caplan, 2007; Escobar & Vega, 2000). Anthropologists, however, viewed assimilation as only one possible outcome of acculturation and developed a host of other terms to describe this process, including "biculturalism," "multiculturalism," "integration," "re-socialization," and "ethnic identity" (Sam, 2006, p. 12). These conceptual frameworks led to two distinct theories on acculturation: the unidimensional model and the bidimensional or multidimensional model of acculturation (Cabassa, 2003; Caplan, 2007). The unidimensional model holds that acculturation is unidirectional and unidimensional, proceeding in a linear fashion from unacculturated to acculturated. This theory is akin to the notion of assimilation through which immigrants replace their original culture with a new cultural identity (e.g., Cuellar, Harris, & Jaso, 1980; Gordon, 1964). A major limitation of this model is that its "zero-sum" assumption "leaves no room for the existence of two cultures within an individual and provides an incomplete and fragmented measure of this complex cultural process" (Cabassa, 2003, p. 133). Cabassa likens this conceptualization to being allowed to carry only one piece of "cultural luggage" at a time (2003).

Proponents of the bidimensional model argue that acculturation is bidirectional and bidimensional, inducing reciprocal changes in both cultures, and incorporating the maintenance of aspects of the original culture into one's ethnic identity (e.g., Berry, 1997; Berry & Sam, 1996; Marin & Gamba, 1996; Rogler, et al., 1991; Ryder, Alden, & Paulhus, 2000). The two dimensions that this theoretical perspective encompasses (maintenance of the culture of origin and adherence to the dominant or host culture),

when measured separately, allow individuals to "carry two pieces of cultural luggage at the same time" (Cabassa, 2003, p. 134). This perspective also allows individuals to reside along different places along each of the two different continuums.

Under the bidimensional framework, Berry and Sam (1996) further identify four acculturation strategies (assimilation, separation, integration, and marginalization) that are useful in understanding how individuals adapt to a new culture. According to this framework, the *assimilation* strategy is characterized by individuals who do not wish to maintain (or are forced to abandon) their cultural identity and seek a high level of interaction and participation in the dominant culture. *Separation*, on the other hand, is characterized by individuals having a strong orientation toward their culture of origin and rejecting and avoiding interaction with the dominant culture. *Integration* is characterized by individuals who value and interact with both their culture of origin and the dominant culture. And, finally, *marginalization* is characterized by individuals who are excluded from their culture of origin and the dominant culture. These trajectories in acculturation have been conceptualized primarily with reference to adults (Berry & Sam, 1997; Berry, 1997). For adolescents in immigrant families, their acculturation attitudes are shaped in large part by their families and communities. Attitudes about their own and other cultures are influenced by their family, their peers, their school and others with whom they interact (Phinney, Berry, Vedder, & Liebkind, 2006). It is therefore important to consider theories of development in understanding how the acculturation process can impact adolescent immigrants and adolescent children of immigrants.

Theories of Development for Adolescent Immigrants and Adolescent Children of Immigrants. This study incorporates theoretical perspectives that take into

account the complexity of the developmental process and in particular the importance of numerous contextual influences that impact an adolescent's development. Bronfenbrenner (1977, 1979, 1986) argued that children's development is influenced not only by the family system but also by the other important institutions with which the child and family interact (e.g. schools, neighborhoods). Bronfenbrenner's ecological model points out the importance of the interconnection between nested contexts: how circumstances in one context can moderate the impact of another context on developmental processes. For example, the ecological model would consider how growing up in immigrant families could possibly ameliorate the potentially negative impact of going to a poorly resourced urban school on children's academic outcomes.

Garcia Coll and colleagues (1996) expand Bronfenbrenner's ecological model to consider the larger societal contexts in which minority children develop, considering, for instance, race, gender, ethnicity, socioeconomic background, family values, and acculturation. Their integrative model for the study of developmental competencies in minority children was developed in response to the lack of attention to issues of race, ethnicity and culture in developmental science that "has resulted in a literature on minority children and their families that concentrates on explaining developmental deviations in comparison to White middle class populations rather than examining normative developmental processes and outcomes" (Garcia Coll et al., 1996, p. 1894). This integrative framework was developed to be a heuristic guide to research on minority child development, and it guides this study by putting at the forefront the consideration of adaptive culture (which includes acculturation and cultural values such as *familismo*), child characteristics (in which we include ethnic identity and belief in the American

Dream) and family (including adolescents' endorsement of the family value of family obligation) as important influences on the developmental outcomes of Latino adolescents. Garcia-Coll and colleagues delineate biculturalism as a developmental competency and one of the "outcome variables" of the model, however, as there is some research suggesting that biculturalism may impact Latino adolescents' academic outcomes (Coatsworth, Maldonido-Molina, Pantin, & Szapocznik, 2005; Feliciano, 2001), I will consider its impact on academic outcomes in this study as well.

In the context of Garcia Coll and colleagues' integrative model for minority child development, this study also takes into account theories which inform the study variables included herein. Portes and Zhou's segmented assimilation theory (Portes & Zhou, 1993) has influenced the approach of this study by considering how families' immigration experiences can affect adolescents' development. According to this theory, it is important to consider the characteristics of both group and individual family immigration experiences in order to understand more fully the context in which minority adolescents develop. Segmented assimilation theory asserts that the United States is a stratified and unequal society and that different "segments" of society are available to which immigrants may assimilate. The authors delineate three different paths of what they refer to as "assimilation": (1) the path predicted by classical assimilation theory, i.e., increasing acculturation and integration into the American middle class; (2) acculturation and assimilation into the urban underclass, leading to poverty and downward mobility; and (3) "selective acculturation" (Portes & Rumbaut, 2001, p.54) which is the deliberate preservation of the immigrant community's culture and values, accompanied by economic integration (Portes & Rumbaut, 2001; Portes & Rumbaut, 2005; Portes &

Zhou, 1993; Rumbaut, 1994; Zhou, 1997). Segmented assimilation theory emphasizes

that there is more than one way of "becoming American," and that "Americanization" is

not necessarily beneficial (Portes and Zhou, 1993; Zhou, 1997). Portes and colleagues'

theory allows us to consider possible explanations for the various ways in which

acculturation can impact Latino adolescents' academic attitudes. Segmented

assimilation theory suggests that economic success or failure depends on the contexts of

reception, including structural constraints that immigrants face upon arrival.

Accordingly, immigrants experiencing inhospitable contexts characterized by

discrimination and limited economic opportunities are likely to assimilate to low status

minority culture and subsequently experience downward economic mobility. Given the

diversity in Latino ethnicities' immigration experiences, it is important to consider the

sociohistorical context of these experiences in understanding how academic attitudes and

performance may differ among different generations of immigrant status and among

different Latino ethnic groups.

The work of Suarez-Orozco and Suarez-Orozco (1995, 2001) also takes into

account the decrease for some ethnic groups, including some Latino ethnicities such as

Mexican-Americans, in school performance from one generation to another (termed the

"immigrant paradox"), adding yet another layer of complexity to ecological models, and

addressing the fact that variability within ethnic groups exists. This variability within

ethnic groups is especially important to consider, as the ethnicities often collectively

referred to as "Latino" are quite diverse in many ways. Although they share a number of

characteristics, including various degrees of use of the Spanish language and such

cultural traits as the importance of family (*familismo*), it is important to emphasize that the Latino tapestry is made up of a diverse demographic and sociocultural population.

Recognizing that children of immigrants will experience not only structural barriers but also disparagement and public hostility, Suarez-Orozco and Suarez-Orozco (1995, 2001) find that an important developmental task for children of immigrants is to form an identity that enables them to develop positive adaptations while dealing with these barriers (Suarez-Orozco & Suarez-Orozco, 1995, 2001). In keeping with the findings of Portes and Rumbaut, they found that a variety of identities and adaptations are possible, all of which are fluid and dependent on context (Suarez-Orozco & Todorova, 2003). Importantly, in several of their studies of Mexican immigrant and Mexican American youth, transcultural/bicultural identities (those which adhere to aspects of both culture of origin and the dominant or host culture) were associated with more optimal developmental outcomes (Suarez-Orozco, 2004; Suarez-Orozco & Todorova, 2003). Phinney and colleagues (2006) illustrated this finding in their study exploring identification patterns in immigrant adolescents from thirteen different countries. Not only was "integration" of dominant and ethnic cultural identities the most common type of identification, but this type of identification was associated with better sociocultural and psychological adaptation (Phinney, et al., 2006). Better sociocultural and/or psychological outcomes may indeed be achieved because adolescents "are not required to choose between cultures but rather they can incorporate traits of both cultures while fusing additive elements" (Suarez-Orozco, 2004, p. 192).

Acculturation

Measuring Acculturation. The concept and measurement of acculturation is complex and continually evolving. Debates over the nature of the construct of acculturation as well as its measurement continue to occupy cross-cultural research. In light of the complexity of this construct, the findings regarding the impact of acculturation on well-being of Latinos (including physical health, mental health, academic and psychosocial outcomes) have been inconsistent and dependent on both the measurement of acculturation and the outcomes investigated.

As Escobar and Vega (2000) point out, culture is one of the most complex words in the human vocabulary, making the measurement of acculturation a very difficult process. Despite the long history of the concept of acculturation in the social sciences, a debate over the construct validity as well as the content and predictive validity of acculturation measures continues to occupy cross-cultural research. Debate over the construct validity of measures of acculturation includes questions regarding the number of dimensions (unidimensional or multidimensional), direction of movement (unidirectional or bidirectional), and definitions of culture (Zane & Mak, 2003). Debate over the content and predictive validity of measures of acculturation centers on whether proxies for acculturation (such as immigrant status, language use, or nativity) or acculturation scales provide the best measurement for this difficult construct (see Escobar & Vega, 2000; Zane & Mak, 2003).

Acculturation scales assess a variety of behavioral and attitudinal domains including language use, preference and proficiency; social affiliation; daily living habits; cultural traditions and customs; communication styles; perceived prejudice and

discrimination; family socialization, cultural knowledge and beliefs; cultural values; and cultural identification, pride and acceptance (Zane & Mak, 2003). Proponents of the use of acculturation scales argue that acculturation proxies such as immigrant status, language use and nativity do not capture the wide range of behaviors and attitudes that encompass the concept of acculturation (Cabassa, 2003; Cuellar, Arnold, & Maldonado, 1995; Szapocznik, Kurtines, & Fernandez, 1980). Moreover, acculturation proxies necessarily measure acculturation as a unidimensional construct, ignoring the possibility that one can become acculturated to U.S. culture, for instance, while still adhering to one's native culture (Cabassa, 2003).

Proponents of the use of acculturation proxies argue that immigrant status is positively correlated with acculturation (Hurtado & Gauvain, 1997; Negy&Woods, 1992; Perez & Padilla, 2000; Ryder et al., 2000; Valentine, 2001) and therefore a useful proxy for the construct. While acculturation scales have been constructed for several ethnic minority groups, and used in various studies to measure physical health, health behaviors, psychological health and educational outcomes, they have been critiqued for the lack of content overlap across measures and the lack of consensus about which behavioral or attitudinal domains to explore (Escobar & Vega, 2000; Hunt, Schneider & Comer, 2004; Zane & Mak, 2003). In their content analysis study of 21 measures of acculturation, Zane and Mak (2003) point out that a measure with comprehensive sampling of all of the behavior and attitudinal domains theorized to be involved in acculturation does not exist, and it is uncertain about the extent to which these domains vary by ethnic group. Moreover, in their critique of the use of acculturation scales, Escobar and Vega (2000) assert that greater predictive validity has been found in the use of acculturation proxies

for mental health outcomes. Given the "fuzziness" of the construct of acculturation

(Escobar & Vega, 2000), some researchers have called for the suspension of the use of

acculturation measures, at least until their ambiguity and lack of predictive power can be

remedied (Escobar & Vega, 2000; Hunt, et al., 2004). This controversial proposal,

however, can serve to bring to a halt much needed advances in theory and measurement.

An alternative approach is a "single-element" approach by which the

measurement of acculturation is deconstructed to individually study specific

psychological elements that are theorized to be important to the construct (e.g., identity,

cultural values) (Bentacourt & Lopez, 1993; Zane & Mak, 2003). Zane and Mak (2003)

describe three particular advantages of this approach: First, by studying a finite number

of elements that are related to acculturation, researchers can actually determine the extent

to which individuals have become acculturated on those dimensions. Second, this

approach allows researchers to test what specifically about acculturation accounts for a

certain effect. Third, this "single-element" approach provides opportunities to study the

interactive effects of different aspects of acculturation. Colon and Sanchez (2010)

provide an example of such an approach in their study of 143 Latino 12th graders. In

studying the impact of acculturation on academic outcomes such as GPA and

absenteeism, they use ten subscales of The Cultural Identity Scale for Latino Adolescents

(CIS; Felix-Ortiz, Newcomb, & Myers, 1994) to measure acculturation. While the

acculturation scale in its entirety did not yield significant results, several of the subscales

were found to significantly impact GPA and absenteeism. Using stepwise regressions,

Colon and Sanchez found that (1) students' preference for Spanish and (2) preference to

relate to Whites more than other Latinos significantly predicted GPA. They also found

that an increase in (1) students' preference for Spanish language use, (2) preference to relate to Whites, and (3) *respeto* significantly predicted a decrease in absences.

Given the debate over the measurement of acculturation, this study seeks to measure acculturation using both proxies and an acculturation scale as well as the Latino cultural value of *familismo* (to address the "single element" approach) in an effort determine how, if at all, such measurement impacts the effect of acculturation on Latino students' academic attitudes and performance.

Acculturation and Academic Outcomes. Reviews of studies exploring the impact of U.S. acculturation of Latino students on academic outcomes point to inconsistent results (Colon & Sanchez, 2010; Valencia & Johnson, 2006). Colon and Sanchez (2010) found support for three patterns relating to acculturation and academic outcomes. First, some studies have found that those students who are more acculturated to U.S. culture tend to fare better academically, as measured by lower drop-out rates, higher academic motivation and educational aspirations, increased college attendance, and lower likelihood of grade retention (Garcia Coll & Marks, 2009; Hurtado & Gauvain, 1997; Manaster, Chan, & Safady, 1992; Martinez, DeGarmo, & Eddy, 2004; Plunkett & Bamaca-Gomez, 2003). These studies measure acculturation in various ways, including as a latent construct of U.S. nativity, English proficiency and English use at home (Martinez, DeGarmo, & Eddy, 2004); as English language use (Garcia Coll & Marks, 2009; Plunkett & Bamaca-Gomez, 2003); using the ARSMA-II scale (Hurtado & Gauvain, 1997); and using sociological and psychological indicators of acculturation (Manaster, Chan, & Safady, 1992).

Second, others suggest that for some groups, biculturalism predicts the best academic outcomes, as measured by higher achievement orientation, better school adjustment and fewer behavior problems, and higher GPA (Lopez, Ehly & Garcia-Vazquez, 2002; Phinney et al., 2006; Suarez-Orozco & Suarez-Orozco, 1995). Again, these studies measured acculturation using different measures including generational status (Suarez-Orozco & Suarez-Orozco, 1995), "acculturation profiles" using standardized scores on 13 intercultural variables (Phinney et al., 2006), and the ARSMA-II scale (Lopez, et al., 2002).

A third pattern in the literature suggests that being less oriented toward the U.S. mainstream culture is associated with positive educational outcomes. Specifically, using immigrant status as a measure of acculturation, second generation children (children of immigrants) have been found to complete more years of schooling, complete college and have better math and English grades than subsequent generations (Fuligni, 1997; Portes & Rumbaut, 2001; Rumbaut & Portes, 2001; Suarez-Orozco & Suarez-Orozco, 1995; Zsembik & Llanes, 1996). These latter findings are the basis of the "immigrant paradox."

However, these patterns must be considered not only with respect to the outcomes measured, but also with respect to how acculturation was measured. For instance, while Plunkett and Bamaca-Gomez (2003) found that acculturation measured by greater use of the English language by adolescents predicted higher academic motivation and educational aspirations, acculturation measured by generational status was not related to either academic motivation or educational aspirations, even though generational status and English language use were related to each other. This finding suggests that not only

18

must we clearly articulate how acculturation is measured, but we must also be careful when generalizing from one measurement of acculturation to another in comparing findings from various studies (Plunkett & Bamaca-Gomez, 2003).

Findings that some Latino youth in earlier generations of immigration perform better academically than those of later generations are not intuitive given that children of immigrants experience many challenges that might get in the way of academic success and prevent them from succeeding in school (Kao, 1999). Children of immigrants tend to have many siblings and large families, often live in poverty, and their parents might have little education or awareness of the educational system and/or knowledge of English (Hernandez & Darke, 1999). Many children of immigrants themselves are also English-language learners, so learning English in order to learn academic content (math, science, history, etc.) becomes yet another challenge to overcome (Garcia Coll & Marks, 2009). In addition, parents' lack of fluency in English makes it difficult to be of help to their children in this regard (Garcia Coll & Marks, 2009). Moreover, children of immigrants tend to go to large urban schools where, according to parents, teachers cannot maintain discipline in the classroom and parental involvement is not encouraged (Nord & Griffin, 1999).

Nonetheless, several studies have found that the more adolescents (including Latino adolescents) become acculturated to mainstream American culture, the more they exhibit negative attitudes toward school and lower academic achievement (Fuligni, 1997; Garcia Coll & Marks, 2009; Portes & Rumbaut, 2001; Rumbaut & Portes, 2001; Suarez-Orozco & Suarez-Orozco, 1995) This "immigrant paradox" is even more difficult to explain because as children and families acculturate to the United States, they typically

acquire greater wealth, English proficiency, and social capital, which are all very important resources often associated with better academic outcomes (Garcia Coll & Marks, 2009). Understanding how the unique phenomena of immigration and acculturation, ethnic identity development and the role of family and cultural values, work to motivate children of immigrants to succeed academically can help to better understand this "paradox."

Despite research that suggests that Latino youth are at high risk of school failure (Gandara & Contreras, 2009; Perreira, Chapman & Stein, 2006) and enter and complete college at lower rates (Fry, 2004), some studies have found that Latino immigrant youth *begin* their high school careers with high academic aspirations (Bohon, Johnson, & Gorman, 2006; Kao & Tienda, 1995; Perreira et al., 2010). These studies attempt to understand how family factors, immigration experiences of different Latino ethnicities, and characteristics of immigrant youth might explain the differential in Latino educational success. In their study of 24,599 students, finding that educational attainment increases in the first and second generations (immigrants and children of immigrants, respectively) but plateaus in the third, Kao and Tienda (1995) found family factors to be an important aspect of students' motivation to succeed. This pattern is explained by the immigrant optimism hypothesis (Kao & Tienda, 1995) which states that immigrant parents transmit their values to succeed and desires for social mobility to their children. As a result, these children tend to perform well in school and obtain higher educational levels than subsequent generations (Kao & Tienda, 1995).

In their study of Latino immigrant youth's academic aspirations, Perreira, Fuligni and Potochnick (2010) compared academic aspirations of 210 Latino adolescents in a

new settlement in North Carolina against 249 Latino adolescents in an older settlement in Los Angeles to understand what, if any, characteristics of immigrant youth might account for the differential in Latino academic success. The majority (84%) of all of the participants had immigrant parents, but 67% of the North Carolina adolescents were immigrants themselves, compared to 18% of the Los Angeles adolescents. These researchers found that despite their greater fears of discrimination, the youth living in the emerging immigrant community were more academically motivated than their peers in the traditional settlement community. Moreover, the high academic motivations of youth in North Carolina reflected, in part, their immigrant status. On average, foreign-born youth, in contrast to U.S.-born youth, enjoyed going to school and working on their school work. Furthermore, they strongly believed that the things they learned in school were useful and would help them succeed in life. These findings also lend support to Kao and Tienda's (1995) immigrant optimism hypothesis and research on immigrants' "dual-frame-of-reference," which allows some to measure their struggles in the U.S. against different or even greater struggles in their home country and use that frame of reference to persevere (Suarez-Orozco & Suarez-Orozco, 1995). According to Perreira and colleagues (Perreira et al., 2010), immigrant youth and their families move to the United States to build a better future and improve upon the opportunities available to them in their home countries. Thus, unlike the youth who acculturate to the "urban underclass," (Portes & Rumbaut, 2001; Portes & Zhou, 1993), taking an "oppositional stance" to the White, middle-class school system (Ogbu, 1991), they expect to overcome, not fall victim to, their relatively low socioeconomic status in the United States and their parents' limited educational backgrounds. Being an immigrant, having a stronger sense

of ethnic identification, and having a stronger sense of family obligation were each linked to a more positive view of school environments and therefore each partially explained the immigrant advantage in academic motivation (Perreira et al., 2010).

This is not the case for all Latino ethnic groups, however. In an attempt to assess how the immigration experiences of different Latino ethnic groups might affect educational trajectories, Bohon, Johnson and Gorman (2006) compared college aspirations and expectations of Mexican, Puerto-Rican and Cuban adolescents to each other as well as to non-Latino White and non-Latino Black respondents. These researchers used data drawn from 16,545 participants of the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative study of American adolescents in grades 7 to 12 from 134 middle and high schools in 80 communities in 1994 and 1995 (Udry 2003).   The study's findings show strong aspirations for, and expectations of, college attendance across each of the five groups. However, they also noted important differences across ethnic groups: Mexicans exhibited weaker than average (and weaker than non-Latino White and Black) and Cubans exhibited stronger than average aspirations and expectations compared to all other groups. Puerto Ricans' aspirations were found to be lower than non- Latino Blacks', while Puerto Rican expectations were lower than non-Latino Blacks and Whites. Direct measures of immigrant status were *not* associated with college aspirations. However, for expectations, differences by immigrant status showed that first generation immigrants (those born outside the U.S.) differed from third and later generations, suggesting that immigrants were less likely to expect to attend college. The finding that island-born Puerto Ricans and Mexican immigrants were less likely to expect to go to college than third and later

generation Whites was theorized to be influenced by a phenomenon known as "circular migration." According to the authors, Puerto Rican and Mexican migrants are quite likely to expect that they would not remain on the U.S. mainland for their college (or even all of their high school) years. The pattern seen with Cuban adolescents was more typical of the immigrant paradox. The authors describe this generational decline as follows: "First generation immigrants typically have strong attachments to education (although not necessarily the means of achieving high educational levels); second generation immigrants tend to be very highly educated; third and later generations (those that are the most acculturated) have levels of education similar to other natives" (Bohon et al., 2006, p. 221). The findings from this study suggest that it is important to take into account the heterogeneity of the Latino population and to understand how immigrant reception and modes of incorporation into the U.S. may be very important to the socioeconomic success of different immigrant groups.

Acculturation and Academic Outcomes: Biculturalism. Children of immigrants face different obstacles from immigrants themselves which can make it difficult to succeed. While immigrants' "dual frame of reference" allows some to measure their struggles in the U.S. against different or even greater struggles in their home country and use that frame of reference to persevere, members of the second generation are typically unable to measure their current state against life in their home country and are left to use the ideals of the majority society, which may fall short of the original aspirations of their parents (Suarez-Orozco & Suarez-Orozco, 1995). Moreover, children of immigrants often become the repository of their parents' expectations, which can be motivating (Fuligni, 2001a) or paralyzing if their self-identity is less securely

anchored, particularly in situations of marginality and ethnic conflict (Suarez-Orozco & Suarez-Orozco, 1995; Vigil 1988). However, in addition to the challenges it faces, the second generation may encounter several resources as well. Ethnic enclaves, which can serve to segregate, can also serve to support immigrant families and their children, both in terms of social support and access to resources, and can serve as a buffer to the discrimination faced elsewhere (Garcia Coll & Marks, 2009). Thus, navigating between the structural and attitudinal barriers, and adapting to multiple contexts that may have competing values and goals are developmental tasks unique to second generation youth (Garcia Coll & Marks, 2009). The success with which such youth overcome these tasks can determine how they fare psychologically, socially and academically.

While in some cases second-generation youth embrace total assimilation and a wholesale identification with dominant American values (Suarez-Orozco & Suarez-Orozco, 1995), in other cases, second generation youth reject some of the institutions (including schools) that reject them (Ogbu, 1991; Portes, 1993). However, findings that second generation youth fare better academically than those in third and later generations have led researchers to consider whether those students who develop a "bicultural" identity, retaining aspects of their culture of origin while adapting in other ways to the host culture, are the students who do better academically.

In their study of 252 Latina undergraduates, Gomez and Fassinger (1994) found that the bicultural women exhibited a wider range of achievement styles in educational pursuits than their low- or high- acculturated peers. Furthermore, Coatsworth, Maldonido-Molina, Pantin and Szapocznik (2005) found that of the 315 Latino adolescents who participated in their study, those who were labeled "bicultural" reported

significantly higher levels of academic competence, peer competence, and parental monitoring. Biculturalism was measured by the Bicultural Involvement Questionnaire (Szapocznik, Kurtines, & Fernandez, 1980) and encompassed students who exhibited high Hispanicism and high Americanism on the scale. Using bilingualism as a proxy for biculturalism, Feliciano (2001) used 1990 Census data to study the relation between biculturalism and school dropout in over 16,000 Mexican youth between 18 and 21 years of age. The bicultural Mexican youth were less likely to drop out of school than either limited-English or English-only speakers.

In addition to considering the impact of biculturalism on academic outcomes, it is important to note that many immigrant students are also transnationals. Glick Schiller, Basch, and Blanc-Szanton (1992) define transnationalism as a social process, in which transmigrants develop and maintain "multiple relations"—familial, economic, social, organizational, religious, etc.—across two or more societies: the home country and the new nation of settlement. As Sanchez and Machado-Casas (2009) point out, the level of transnationalism exhibited today has greatly increased from the previous waves of immigration to the U.S. because of the several worldwide innovations that have become much more developed and readily available since the late 20th century, including rapid communication systems, such as telephones, cell phones, and email via the Internet, as well as advanced and less expensive modes of transportation (i.e. inexpensive plane fares), making communication and contact with the home country more efficient, quick, and affordable. Moreover, the infrastructure of many developing countries has also greatly improved in the last 20 years to support these systems (Sanchez & Machado-Casas, 2009).

In a qualitative study of second generation Dominican girls, Rodriguez (2009) examined the special case of teens who were being raised in both the U.S. (New York metropolitan area) and the Dominican Republic. Rodriguez's study highlighted the special challenges faced by transnational youth as well as the assets that their experiences contributed. Even more so than the children of immigrants who do *not* travel between worlds, the Dominican-American young women in the study were immersed in multiple worlds and at times embraced multiple positions depending on where they were and with whom they interacted. In terms of schooling, they noted that their fluency in Spanish and English was viewed as an asset in their Dominican schools, but not so in their American schools. In stark contrast to her experience in advanced classes in her Dominican school, one of the students was placed in remedial classes in her American school, tracked with other students who were labeled English Language Learners. Having experienced advanced classes in the Dominican Republic and returning to her New York school with more confidence, she began to question her socioeconomic status in both countries and how it was tied to the education she was receiving. All of the youth attributed their ability to analyze complex social dilemmas to their experiences as transnationals.

Ethnic/Racial Identity

Developing an adaptive identity is a task not only for the second generation, however. Elaborating on segmented assimilation theory, Altschul, Oyserman and Bybee (2008) have suggested that within the inhospitable contexts that greet at least some groups of immigrants (including discrimination and economic hardships), individual identity responses influence the likelihood of economic success or failure. In considering the importance of ethnic identity as a protective factor in the development of Latino

adolescents, it is important to note that, like acculturation, ethnic identity has been conceptualized and measured in a variety of ways.

      Measuring Ethnic/Racial Identity. As Phinney and Ong (2007) aptly recognize, "Although ethnic identity is generally recognized as a complex and multidimensional construct, the attempt to synthesize studies of ethnic identity is plagued by the variation and ambiguity in how ethnic identity is defined and measured" (Phinney & Ong, 2007, p. 52). The term *ethnic or racial identity* has been given a wide range of meanings in the literature. Some researchers have defined it as the specific label(s) one uses to refer to oneself (e.g., Mexican or Mexican-American) (Portes & Rumbaut, 2001; Zarate, Bhimji, & Reese, 2005; Fuligni, Witkow & Garcia, 2005 (using ethnic labels as well as strength of ethnic identification)) while many have defined it as the attitudes, feelings, knowledge and behaviors related to one's ethnicity (Phinney, 1990, 1992; Roberts, Phinney, Masse, Chen, Roberts, & Romero, 1999; Umana-Taylor, 2005). Ethnic/racial identity has been conceptualized in terms of specific categories and statuses (e.g., moratorium or achievement; Marcia, 1994; Phinney, 1993; Umana-Taylor, 2005), as well as in terms of process (e.g., exploration or commitment; Phinney, 1992; Phinney & Alipuria, 1990; Roberts et al., 1999). Moreover, it has been used to refer to both an enduring sense of one's ethnicity that develops over time (Phinney, 1993) as well as to the salience of one's ethnicity in different contexts (Yip & Fuligni, 2002). These conceptualizations of ethnic identity have been drawn from Erikson's (1968) identity formation theory, which posits that identity formation is developed through a process of exploration and eventually commitment to a particular identity or component thereof. Thus, through the process of exploration, individuals will come to a resolution about a

particular identity, which is a component of one's broader self-concept. This conceptualization focuses on the *process* of identity formation.

In addition, researchers have drawn from Tajfel's (1981) social identity theory to conceptualize ethnic identity as the sense of belonging to a particular group and the affective component accompanying that group membership. Thus, Tajfel's conceptualization of ethnic identity focuses more on the *affective* components of identity. Moreover, Marcia (1994) operationalized Erikson's identity formation theory to suggest four different identity statuses to classify individuals based on their degree of exploration of and commitment to an identity. These four categories are: *diffused* (those who have not explored nor committed to an identity), *moratorium* (those who have explored, but not yet committed to an identity), *foreclosed* (those who have not explored but have committed to an identity), and *achieved* (those who have explored and committed to an identity). In their review of the literature on acculturation and ethnic identity, Sodowsky and Maestas (2000) caution over the weakness in some studies of not sufficiently disentangling the constructs of acculturation and ethnic identity. Sodowsky and Maestas (2000) suggest that "for the measurement of ethnic identity, one needs to study an affective/cathectic attachment that values connecting with one's ethnic group members, believes in the importance of one's ethnicity and seeks to retain certain aspects of an ethnic cultural heritage that are relevant and functional in a given context" (Sodowsky & Maestas, 2000, p. 134).

Several instruments have been developed to measure these different conceptualizations of ethnic/racial identity. For instance, several instruments measure ethnic identity in terms of both status of identity exploration (e.g., diffuse, moratorium,

foreclosed or achieved) and sense of affirmation and belonging (see, the Multigroup

Ethnic Identity Measure (MEIM); Phinney, 1992; Roberts et al, 1999; and the Ethnic

Identity Scale (EIS); Umana-Taylor, Yazedjian, & Bamaca-Gomez, 2004). Borrowing

from the literature on African American racial identity, researchers have also used the

Multidimensional Inventory of Black Identity (MIBI), an instrument developed by Sellers

and colleagues (1997), to measure both the strength of one's ethnic identity as well as the

affective component of belonging to such ethnic group (Sellers, Rowley, Chavous,

Shelton, & Smith, 1997). Sellers and colleagues (1997) defined racial identity using a

phenomenological approach, emphasizing the individual's self-perception as opposed to

objective criteria in determining whether an individual is racially identified.

The MIBI was based on the Multidimensional Model of Racial Identity (MMRI),

which does not assume that race is the defining characteristics for all African Americans

or that there is an optimal African American identity (Sellers, Smith, Shelton, Rowley, &

Chavous, 1998). The MMRI provides a conceptual framework for determining the

significance of race (or ethnicity) in the self-concepts of African Americans (or other

ethnic groups) and the qualitative meanings they attribute to being members of the racial

(ethnic) category. The framework delineates four dimensions of racial identity in African

Americans: *centrality* of the identity, which is assumed to be stable across situations;

salience of the identity, which may be situation-specific; the *regard (private or public)*

in which the person or others hold the group associated with the identity; and the

ideology (nationalist, oppressed minority, assimilationist, or humanist) associated with

the identity. Centrality and salience determine the significance of race (or ethnicity) in

the individual's self-concept, while regard and ideology determine what it means to be a

member of the racial or ethnic group (Sellers, et al, 1998). Sellers and colleagues (1997) designed the Multidimensional Inventory of Black Identity (MIBI) to measure racial identity along the four abovementioned dimensions. Several researchers have adapted this instrument for use with other ethnic groups, including Latino adolescents (Hunyh & Fuligni, 2010; Kiang, Yip, Gonzales-Backen, Witkow, & Fuligni, 2006; Perreira et al., 2010). In particular, these researchers have used the *centrality* and *regard* scales of the MIBI to explore the direct association of ethnic identity to various outcomes, including academic outcomes (Perreira et al., 2010) as well as the indirect effects of ethnic identity as a buffer against the negative effects of discrimination, for instance, on academic, psychological, and physical well-being (Hunyh & Fuligni, 2010; Kiang et al., 2006).

Ethnic/Racial Identity and Academic Outcomes. As with the literature on acculturation and academic outcomes, findings on the impact of ethnic/racial identity on academic outcomes have been difficult to synthesize due to the various methods of measurement and conceptualization. Nonetheless, several studies have suggested that adolescents' identification with their ethnic or racial background is meaningful to their academic efforts and is associated with a higher level of motivation (Altschul, Oyserman, & Bybee, 2006, 2008; Chavous, Hilkene-Bernat, Schmeelk-Cone, Caldwell, Kohn-Wood, & Zimmerman, 2003; Fuligni, Witkow, & Garcia, 2005; Kim & Chao, 2009; Perreira et al., 2010; Sellers, Chavous, & Cooke, 1998) .

For example, in their study of the relation between racial identity and academic outcomes among 606 African-American 17-year olds, Chavous and colleagues (2003) reported a link between stronger ethnic/racial identity (measured in terms of *centrality, public regard* and *private regard*, using the MIBI) and more positive attitudes about

school and enrollment in college. They also found that a profile of high racial centrality, strong group pride (private regard) and positive beliefs about society's views of Blacks (public regard) was related to more positive academic beliefs. Moreover, the authors found that only racial centrality and private regard showed a significant relationship to later educational attainment (e.g., high school attendance, high school completion, and college attendance), suggesting that personal group attitudes may influence some educational behaviors more than adolescents' beliefs about society's views. Chavous and colleagues (2003), however, did not find a link between a stronger ethnic identity and better academic performance (GPA).

However, in their study of 248 African American college students from a predominantly Black college and a predominantly White college, Sellers, Chavous, and Cooke (1998) found that both racial centrality and racial ideology were significantly related to African American college students' cumulative GPA. Racial centrality was positively associated with academic performance, whereas both nationalist (which stresses the uniqueness of being Black) and assimilation (which stresses that Blacks have a role within mainstream society; individual attempts to enter into the mainstream as much as possible) ideologies were negatively associated with academic performance. Moreover, the authors found that the relationship between racial ideology and academic performance was moderated by racial centrality. For high race-central adolescents, nationalist and assimilation ideologies were negatively associated with GPA and minority ideologies were positively associated with GPA. Conversely, for low race-central adolescents, none of the racial ideologies was associated with GPA (Sellers, Chavous, & Cooke, 1998).

While much of the previous work on ethnic/racial identity has been conducted with African American youth, several recent studies have observed similar associations between ethnic identity and academic motivations and attitudes with Latino students as well. Altschul, Oyserman, and Bybee's (2006) longitudinal study of 98 African American and 41 Latino 8th graders conducted over a two year period offers some further insight into the potential relationship between ethnic identity and GPA. In this study, ethnic identity was measured using a tripartite model, consisting of connectedness (similar to centrality), awareness of racism (similar to public regard) and embedded achievement (the belief that achievement is an in-group identifier, that it is part of being a good in-group member). All three components were found to be relatively stable by mid-adolescence and important predictors of grades for the low-income African American and Latino youth participating in the study. Over time, the authors found that ethnic identity increased (suggesting that the move from middle school to high school may be a "consciousness raising experience), but grades in general decreased. Nonetheless, both African American and Latino youth high in both "connectedness" and "embedded achievement" attained better grades at each assessment point. Thus even though over time the strength of ethnic identity increased and grades decreased, at each point in time, a stronger ethnic identity was associated with better academic achievement and thus, the authors suggest, a stronger ethnic identity may buffer youth from even steeper declines in grades (Altschul et al., 2006).

Kim and Chao (2009) tested the relation between ethnic identity and school effort among 207 Chinese (first- and second-generation) and 354 Mexican (first-, second- and third-generation) adolescents. The authors measured ethnic identity using two subscales

of the MEIM (Phinney, 1992): *exploration* and *affirmation/belonging*. They also considered heritage language fluency to be an important component of ethnic identity, which was true for second-generation Mexican adolescents, but not for any of the Chinese adolescents. Findings from the study showed that both heritage language fluency and ethnic identity exploration predicted school effort for second generation Mexican American adolescents. In other words, how much second-generation Mexican adolescents engage in or seek out ethnic activities is more important for school engagement than ethnic pride or their feelings about their ethnic group. This finding conflicts with that of Supple and colleagues (2006), whose study of 187 Latino adolescents found that ethnic affirmation was significant, whereas exploration was not significant for explaining school grades among second-generation Latino adolescents (Supple, Ghazarian, Frabutt, Plunkett, & Sands, 2006). Kim and Chao (2009) also note that in contrast to findings for African Americans that ethnic pride or affirmation is connected to school effort and motivation (e.g., Murry, Berkel, Brody, Miller, & Chen, 2009; Sanders, 1997), for U.S.-born Mexican youth from immigrant families, ethnic activities are more reflective of their effort in school than is their ethnic pride or affirmation. "Participation in ethnic activities among these youth may reflect their motivation to achieve educational and social mobility rather than a desire to counter negative stereotypes" (Kim & Chao, 2009, p. 36).

In contrast to the measurement of ethnic identity in terms of exploration and affirmation/belonging, Fuligni, Witkow, and Garcia (2005), measured ethnic identity in terms of centrality and private regard, adapting the racial identity measure, the MIBI (Sellers, et al., 1997) to a group of 589 Mexican, Chinese and European American 9th

graders. The authors also considered the ethnic labels that the adolescents chose to describe themselves in understanding the link between ethnic identity and academic motivation and achievement. According to the study's findings, the strength of ethnic identification (centrality and private regard) was more relevant to academic motivation and achievement than the specific labels the adolescents chose to describe themselves. Contrary to the findings of Chavous and colleagues (2003), the link between ethnic regard and academic adaptation did not depend on adolescents' level of ethnic centrality. Interestingly, while centrality was not associated directly with academic achievement, after controlling for GPA, the authors found that centrality accounted for the tendency for Mexican and Chinese adolescents (who tended to be first- and second-generation) to have more positive academic attitudes than their European American peers with the same level of achievement. Fuligni (2001a) has suggested that the challenges of likely cultural differences, having parents unfamiliar with American society and schools, and having access to fewer socioeconomic resources, may require more effort and motivation for students from immigrant and ethnic minority families to do well in school. "The results from this study suggest that part of this extra motivation comes from the importance that Mexican and Chinese students place on their ethnic and cultural background. Knowing who one is and how one feels about one's ethnic and cultural background likely gives meaning to adolescents' goals and motivations" (Fuligni, Witkow, & Garcia, 2005, p. 809).

Finally, in their study of 459 Latino ninth graders, Perreira, Fuligni, and Potochnick (2010) measured ethnic identity using ethnic affirmation/belonging as derived from a subscale of the MEIM (Phinney, 1992) *and* ethnic centrality as adapted from the

MIBI (Sellers et al., 1997) to test the relation between ethnic identity and adolescents'

academic motivations. The authors found that both measures of ethnic identity

(affirmation/belonging and centrality) were related to greater academic motivation.

Moreover, they found that the Latino adolescents from North Carolina (an emerging

Latino community) exhibited significantly higher levels of ethnic affirmation/belonging

and ethnic centrality than those from Los Angeles (a more traditional settlement

community). Finally, additional analyses revealed that the relationship between ethnic

belonging and the usefulness and future value of education were fully mediated through

school climate, suggesting that students with a strong sense of ethnic

affirmation/belonging tended to endorse more positive school climates, which were

associated with stronger academic motivations. It is unclear whether the same

relationship held for ethnic centrality and measures of academic motivation, since the

high correlation between centrality and affirmation/belonging required that centrality be

removed from the study's regression model.

        This study seeks to continue the line of research focusing on ethnic centrality and

regard in measuring ethnic identity and to add to the literature by exploring whether

ethnic identity directly impacts academic attitudes and performance in a mostly

Dominican and Puerto Rican sample of Latino adolescents.

Family Obligation and Academic Outcomes

        The limited research on family obligation and academic outcomes suggests that

adolescents who endorse support of their families appear to invest more in their schooling

(Fuligni, 2001b; Fuligni, Alvarez, Bachman, & Ruble, 2005; Fuligni et al., 1999; Perreira

et al., 2010).   In particular, students with a stronger sense of obligation to support, assist,

and respect their families tend to have higher academic motivation (Fuligni, 2001b). "A sense of family obligation appears to enhance the youths' motivation to achieve by providing meaning and purpose behind their efforts to succeed in the American school system" (Fuligni, Alvarez, et al., 2005, p. 265). Interestingly, Latino adolescents have been found to place a greater importance upon family obligation than do their peers from European backgrounds across generations (Fuligni et al., 1999). As some researchers theorize, Latino students with a strong sense of obligation to the family see trying hard and doing well in school as one of their duties as members of their family, both in response to the sacrifices made by their parents as well as to obtain better jobs to help them to support their parents in the future (Fuligni, 2001b; Fuligni et al., 1999; Perreira et al., 2010). However, the relation between family obligation and academic success is not necessarily linear. Researchers have also found that a curvilinear relation exists in that moderate acceptance of family obligations had the strongest association with academic success, as compared to Latino adolescents with the strongest and weakest endorsements for family obligations (Fuligni et al., 1999). Nonetheless, this sense of family obligation can partially explain why Latino students often have higher levels of motivation than their equally achieving peers from European backgrounds (Fuligni, 2001b; Perreira et al., 2010).

Perreira, Fuligni and Potochnick's (2010) recent study of 458 Latino ninth graders in North Carolina and Los Angeles provides an illustration of how family obligation relates to various aspects of adolescents' academic motivations. The researchers measured the youth's endorsement of family obligation with 2 scales: (1) *family respect* evaluated the importance of respecting parents and older family members, doing well for

the sake of the family, and making sacrifices for the family (Fuligni et al., 1999) and (2)

family support evaluated the value students placed on supporting their families in the

future by helping their parents financially, living or going to college near their parents,

and helping to take care of their parents and other family members in the future (Fuligni,

1997). Family respect was strongly associated with all academic motivation measures:

importance, usefulness, future value, and intrinsic value of education. The authors

suggest that one important way that Latino youth recognize that they can demonstrate

respect for their parents and the sacrifices made by their parents is to succeed in school.

"Thus, family respect strongly motivates their academic endeavors along every

dimension – importance, usefulness, future value, and intrinsic value of education"

(Perreira et al., 2010, p. 150). In contrast, family support was significantly associated

only with the usefulness of education. According to the researchers, this weak

relationship may be partially explained by the high correlation (r = .66, p<.05) between

family support and family respect. Correlational analyses showed that adolescents who

believed they should support their families placed a stronger value on achieving academic

success as well as the usefulness, future value, and intrinsic value of education (Perreira

et al., 2010).

Familismo and Academic Outcomes

One important factor in understanding why family obligation may be a salient

motivating factor for Latino adolescents to succeed academically is that many Latino

adolescents adhere to *familismo*. *Familismo* is the Latino cultural value of loyalty,

commitment, and dedication to *la familia* (Marin & Marin, 1991). *Familismo* is

associated with feelings of connectedness and solidarity with one's family (immediate

and extended), the sense that individuals are extensions of their family systems and valuing family unity, closeness and family duty (Cortes, 1995 cited in Perreira et al., 2006; Ceballo, Huerta, Epstein-Ngo, 2010). It is closely related to the construct of *family obligation*, in that having feelings of connectedness and solidarity with one's family could lead one to also feel a sense of obligation to support one's family. However, *familismo* is a distinct construct and, as operationalized by Gaines and colleagues (1997), is focused primarily on affect rather than behavior. *Familismo* has also been correlated with acculturation and may affect the rate at which one acculturates (Cuellar & Glazer, in press, cited in Cuellar, Arnold, & Gonzalez, 1995). Marin (1993) found that endorsement of *familismo* varied significantly between Latinos (Mexican Americans, Cubans, and Central Americans) and non-Latino Whites, and also found differences between low-acculturated and high-acculturated Latinos. Like the role of family obligation, it may be that adherence to *familismo* plays a role in understanding why earlier generation Latino adolescents may display better academic attitudes and/or performance than later generation peers.

Little research has been done on the impact of *familismo* on academic attitudes or performance, and the research has produced mixed results (Portes, 1999; Portes & Zady, 2002; Suarez-Orozco & Suarez-Orozco, 1995). In their study of 5,264 eighth and ninth graders from 77 different nationalities and 42 schools, Portes and Zady (2002) looked at *familismo* for the 2600 students making up the Spanish-speaking group (made up of adolescents of Columbian, Cuban, Mexican, and Nicaraguan descent). The researchers found that *familismo* was linked to lower academic achievement. According to the authors, too much closeness to the family predicted lower academic motivation. Suarez-

Orozco & Suarez-Orozco (1995) offered a possible explanation for this phenomenon in their study of Mexican and Mexican-American students, suggesting that feelings of duty and responsibility to the family could take priority over education, especially if the family is struggling. In contrast, Portes (1999) found that *familismo* was one of the positive predictors (along with achievement motivation and time management) of academic achievement in his study of 4,288 second generation students from nine different ethnic categories (including Cuban, Mexican and Other Latino categories).

Still others have found that the effect of *familismo* on educational outcomes has been mediated by parental factors such as parental involvement and parental encouragement, suggesting that the parent-child dyad must work together in order for *familismo* to have an impact on academic attitudes and achievement. In their study of 163 Latino and Caucasian adolescents, Niemeyer, Wong, & Westerhaus (2009) found that the effect of *familismo* on academic performance was fully mediated by parental involvement for both groups of adolescents. This was true even in light of parental involvement being qualitatively different for the Latino adolescents (more at-home involvement) than for the Caucasian adolescents (more at-school involvement). Similarly, in their study of 186 Mexican American college males, Ojedo, Navarro, and Morales (2010) found that parental encouragement fully mediated the impact of *familismo* on college persistence. In other words, in order for *familismo* to have an indirect effect on college persistence intentions for their sample of Mexican American college males, parental encouragement to attend and persist in college had to be present as well. Thus, *familismo* on its own did not impact college persistence intentions, but rather had to be coupled with parental encouragement.

This study seeks to further the literature on the effect of *familismo* on academic attitudes and performance by testing whether *familismo*, used as a single-element approach to acculturation (Zane & Mak, 2003), has a direct effect on academic attitudes and performance for a mostly Dominican and Puerto Rican group of Latino adolescents, and whether *familismo* also lessens the potentially negative impact of acculturation on academic attitudes, a relationship which, to my knowledge, has not yet been addressed in the literature.

Academic Outcomes and Children of Immigrants: Belief in the American Dream

At the center of the "American Dream" is the belief that hard work and educational achievement are rewarded with upward mobility (Hochschild, 1995). The prospect of achieving this dream has driven immigrants to come to the United States for over a century. This belief has also been shown to be a powerful motivator for success, regardless of class background or country of origin (Bullock & Limbert, 2003; Bullock and Waugh, 2005; Hochschild, 1995). Bullock and Limbert (2003), for example, examined how 69 low-income women who were receiving public assistance and were enrolled in an educational training program perceived social class and upward mobility. The participants were mostly (48%) European American, while 29% were Latina, 6% were African American, 3% were Asian/Pacific Islander, 1% were Native American and 13% were biracial. Analyses revealed no significant ethnic differences on measures regarding beliefs about opportunity, education and mobility. Bullock and Limbert examined whether the participants subscribed to individualistic attributions for wealth and poverty (which focus on personal shortcomings or attributes, and place responsibility for poverty on the poor themselves) or to structural attributions for wealth and poverty

(which for wealth, emphasize political influence and "pull" or inheritance, and for poverty, emphasize economic and social conditions, such as low wages, ineffective schools, and discrimination). They also examined how participants perceived their class status and their beliefs in class mobility. Despite questioning the openness of the education system, 77% believed that they could achieve the "American Dream" if they worked hard. Moreover, almost half of the sample believed in both the "American Dream" and structural attributions for poverty. Thus, for these participants, "recognizing structural obstacles did not appear to diminish the belief that one could 'beat the odds' through hard work and perseverance" (Bullock & Limbert, 2003, p.706). According to Bullock and Limbert, participants' optimism regarding their own economic futures despite questioning the openness of the education system is analogous to research on "denial of personal discrimination" (Crosby, 1984), where members of a disadvantaged group recognize societal discrimination but minimize discrimination personally experienced. "The tendency to see oneself as exempt or minimally affected by societal forces may also serve an important self-protective function, allowing one to see a route out of poverty, despite recognizing the presence of significant barriers to upward mobility" (Bullock & Limbert, 2003, p. 705).

While 29% of the women in Bullock and Limbert's (2003) study were Latina, these findings may be difficult to generalize to Latino adolescents who are attending school compulsorily rather than by choice as these women were. Thus, these participants' tendency to believe in the value of education as a tool for achieving success may be overrepresented. In contrast, Bullock and Waugh (2005) conducted a study of 124 low-income Mexican immigrant farm workers to examine their attributions for

41

poverty and beliefs about upward mobility. They also analyzed the effects of gender and length of U.S. residency in this sample. The participants endorsed structural attributions more strongly than other explanations for poverty, however, they also showed relatively strong support for individualistic attributions as well, suggesting that these attributions are not polar opposites. Respondents also reported experiencing and expecting to continue to experience (for themselves and their children) considerable class mobility, and endorsed education as a better strategy for advancement than other choices such as starting a business, advancing through current work or joining a union. Length of time in the U.S. was significantly related only to perceived discrimination against farm workers (and not to any attribution measures or beliefs about opportunity). As with the Bullock and Limbert (2003) findings, Bullock and Waugh point to denial of personal discrimination (Crosby, 1984) as a partial explanation for respondents' belief in personal advancement despite acknowledgment of considerable obstacles to upward mobility. They also point to the subjective nature of class status as a possible explanation, given that the immigrant farm workers perceived their current class standing as low-wage farm workers higher than their childhood status (Bullock & Waugh, 2005). This finding gives further support to Ogbu's (1991) "dual frame of reference" hypothesis, whereby the harsh economic conditions of immigrants' countries of origin allow them to deal with the difficulties of this country with optimism and hopefulness.

While this century has seen the development of research on adults' beliefs in the American Dream, little research has been done on minority (and particularly Latino) youth's belief in the concept of the American Dream. Do parent's motivating factors for immigrating to the U.S. transmit to their children? Despite the hopefulness of Bullock's

work, the literature that does mention immigrant *youth's* beliefs in the American Dream

focuses on how discrimination and negative stereotypes faced by minority youth can

diminish this belief (Conchas, 2001; Graham, Taylor, & Hudley, 1998; Ogbu, 1991;

Perreira et.al, 2010). As Bullock and Waugh's (2005) study of Mexican immigrant farm

workers shows, many Latino immigrants arrive in the United States with a strong belief

in the American Dream, a strong work ethic, and high aspirations for their children

(Bullock and Waugh, 2005; Suarez-Orozco & Suarez-Orozco, 1995). Research has

demonstrated that Latinos value education, academic achievement, and educational

attainment (Delgado-Gaitan, 1992; Murdock, Anderman, & Hodge, 2000; Suarez-Orozco

& Suarez-Orozco, 1995; Valencia & Black, 2002). However, after a generation or more

in the United States, the possibility of achieving the American Dream and faith in the

pathway of education may become elusive. Longer time in the U.S. may leave minority

youth more vulnerable to believe that systemic racial discrimination will bar them from

access to educational and vocational opportunities (Ogbu, 1990, 2003). Researchers

have shown that high school students from various ethnic and socioeconomic groups

understand that a good education leads to good jobs (Steinberg, Dornbusch,& Brown,

1992). Nonetheless, faced with limited access to educational attainment and occupational

choice, as well as the burden of negative stereotypes, many low-income African

American and Latino students develop compensatory beliefs about the value of academic

effort and performance, believing that academic effort and achievement will not result in

a pay off in the end (Graham, et al., 1998; Ogbu, 1989). Kenny and colleagues (2003)

found that in their multi-ethnic sample of over 170 urban minority ninth graders,

adolescents who perceived higher levels of barriers reported lower aspirations for their

43

future careers. Specifically, perceived barriers contributed some unique variance to the

explanation of school engagement and career attitudes, after controlling for the effects of

gender and social support (Kenny, Blustein, Chaves, Grossman & Gallagher, 2003).

While many researchers who examine acculturation and educational outcomes

suggest that Latino adolescents' values toward education are an important factor in their

educational trajectory (Jackson, Kacanski, Rust, & Beck, 2006; Suarez-Orozco & Suarez-

Orozco, 1995), there is very little research that empirically tests the impact of beliefs

about the rewards of education on academic aspirations or outcomes. Jackson, Kacanski,

Rust & Beck (2006) examined the link between beliefs about the limitations of education

for future career rewards and educational and career aspirations for a sample of 33 low-

income, inner-city, African American, Latino, and Caribbean immigrant youth.   The

authors found that that those who had been in the U.S. longer exhibited (a) higher beliefs

in the limitations of education and (b) lower educational and career aspirations. Although

such beliefs are understandable responses to the barriers created by racism, cultural

discrimination, poverty and inadequate schooling, "these beliefs may reduce their

aspirations, undermine their effort and persistence in educational and career development,

and further constrain their future achievement" (Jackson et al., 2006, p. 212).   Their

findings suggest that beliefs about the rewards of education play an important role in

minority adolescents' academic aspirations and motivation.

Colon and Sanchez (2010) investigated the relation between beliefs about the

rewards of education and academic outcomes for Latino youth specifically. They looked

at what they termed "*economic* values toward education," specifically, how belief in the

American Dream can impact academic outcomes. According to the authors "the concept

of economic value of education is based on the protestant work ethic ideology dominant in capitalist societies (Murdock et al., 2000). This ideology proposes that one can achieve social and economic mobility through education, which is also known in the United States as the American Dream" (Colon & Sanchez, 2010, p. 255). In their study of 143 Puerto Rican, Mexican and "other" Latino 12th grade students, Colon and Sanchez found that participants' view that education will be economically rewarded in the future was associated with their academic performance. Students' economic value of education was measured by the Benefits and Limitations of Education scales (Murdock et al., 2000) and academic performance was measured by GPA and absenteeism. Correlational analyses found that as students' economic value of education increased, their GPA increased and their total number of absences decreased. Moreover, hierarchical regression analyses found that higher economic value of education significantly predicted higher GPAs and fewer absences. Consistent with past research (Mickelson, 1990; Murdock et al., 2000; Steinberg et al., 1992), the more students in this study viewed education as a means for social mobility, the better they performed in school.

The Unique Role of Family Stories as a Motivational Tool

Given the importance of "*familismo*" to Latino adolescents, it follows that stories passed on to Latino youth by their family members could have a great impact on their identity formation and development. In keeping with the research on motivating factors for immigrant youth, it is possible that stories about the family's immigration struggles and education experiences would impact Latino adolescents' academic motivation in a positive manner, inspiring them to perform well in school. According to McAdams (1993, 2001, 2004), "the central task in identity, beginning in late adolescence and young

adulthood, is to construct a life story for oneself that makes sense of who one was, is and will be within the social, economic, and ideological world in which a person lives" (McAdams, 2004). As Wang (2004), notes, "the stories we come to create are built not only on our own personal experiences but also through an integration of the stories that we have heard over many years."

Stories told by family members of family experiences, traditions, and values, convey different themes at different stages of life. Researchers have found that parents tend to emphasize affiliative themes in stories told to their infants, achievement themes in stories told to their pre-school aged children (Fiese, Hooker, Kotary, Schwagler, & Rimmer, 1995) and in telling family stories to adolescents, highly generative adults (those who display concern for and commitment to promoting the well-being of future generations (McAdams & de St. Aubin, 1992)) tended to impart the values and lessons learned from the experiences that they had growing up (Pratt, Norris, Arnold & Filyer, 1999). Pratte and Fiese (2004) identify three properties of stories that help us to understand their role in family development.

> "First, story telling is an *act,* through the process of which children learn
> to become competent narrators. Second, stories also have a *message,* such
> that children and adults may receive valuable lessons from them, often
> ones consistent with cultural mores. Finally, stories aid in the creation of a
> personal *identity* that evolves over time and integrates lived experiences
> with meaning-making processes" (Pratte & Fiese, 2004, p. 1)

Family stories are one way in which individuals connect across generations and create a sense of family history and identity (Martin, Hagestad, & Diedrick, 1988). According to Sanchez (1999), "One can say that every story transmitted to another person is an educational event in which the major goal is to share the culturally internalized and historically transformed set of knowledge and problem-solving skills needed to survive

within a particular social environment" (p. 352) (citing Moll & Greenberg, 1990; Velez-Ibanez & Greenberg, 1992; Wells, 1986). Despite the richness of family stories and the insight that the study of such stories can bring to our understanding of the experiences of immigrant youth in this country, very few studies have presented the voices of Latino adolescents through the documentation of family stories. This study addresses this gap in the literature by focusing on adolescents' family stories about immigration and education.

Dissertation Goals and Contributions

This study uses a mixed methods approach to explore the impact of immigrant status, acculturation, and ethnic identity on Latino adolescents' academic attitudes and performance. While the acculturation literature has found evidence of the "immigrant paradox," the literature is inconsistent and dependent on the measurement of acculturation and the ethnicity of the immigrant group studied. This study contributes to the acculturation literature by addressing the debate over measurement of acculturation through the inclusion of multiple measures of acculturation (proxies, acculturation scales, and a cultural value in a "single element" approach) in order to determine which measures are more predictive of Latino adolescent academic outcomes. It also expands the literature on acculturation by considering the differences among second generation adolescents who are from two-immigrant parent families and those from families where only one parent is an immigrant. Given the diversity of the Latino ethnic group, it is understandable that the acculturation literature has found inconsistent evidence of the "immigrant paradox" for different Latino ethnicities. This study adds a unique focus by conducting analyses for a subset of Dominican youth separately. Few studies have

examined the immigrant paradox in a mostly Dominican and Puerto Rican sample; still fewer have focused solely on Dominican adolescents.

An additional contribution of this study is an investigation of the underlying mechanisms influencing the "immigrant paradox." To better understand the immigrant paradox, this study seeks to understand how the unique phenomena of immigration and acculturation, ethnic identity development and the role of family and cultural values work to motivate children of immigrants to succeed. Using survey methods, I will explore the impact of immigration status, acculturation, ethnic identity, and family obligation on 9th grade Latinos' academic attitudes and performance. An important contribution of this study is that it will test whether the immigrant paradox can be explained by adherence to cultural values like *familismo*, and whether *familismo* attenuates the negative impact of acculturation on academic attitudes and performance. The role of *familismo* in lessening the potentially negative impact of acculturation on academic outcomes is a relation which, to my knowledge, has not yet been addressed in the literature. Moreover, research on minority (and particularly Latino) youth's belief in the American Dream, and particularly whether belief in the American Dream can explain, at least in part, the immigrant paradox is scarce. Another important contribution of this study is, therefore, its focus on testing the direct and indirect effects of belief in the American Dream on Latino academic attitudes and performance.

Additionally, qualitative interview data will be used to expand the current literature by using Latino students' stories about family immigration and educational experiences to explore the relation between immigration experiences and attitudes toward education and success in the U.S., as well as to understand how adolescents make

meaning of their family members' educational experiences. Despite the richness of family stories, very few studies have presented the voices of Latino adolescents in this way.

Quantitative Study Hypotheses

The quantitative study will examine the following hypotheses. These hypotheses will be tested for both the full sample of Latino students and for a subset of Dominican students:

1. Consistent with findings confirming the "immigrant paradox" with regard to education (Suarez-Orozco & Suarez-Orozco, 1995, 2001; Perreira et al., 2010), I expect that students who are first (born outside the U.S.) and second generation Latinos (born in the U.S. with at least one parent born outside the U.S.) will exhibit more positive academic attitudes and better academic performance than students who are third generation Latinos (born in the U.S. with both parents born in the U.S.).

2. I hypothesize that, controlling for sex, school and parental education, as illustrated in Figure 1, acculturation is negatively related to academic attitudes and performance such that greater acculturation will lead to poorer academic attitudes and performance. In an attempt to address some inconsistencies in the literature, I will measure acculturation four ways: through proxy measures such as (a) immigrant/generational status and (b) language preference, through acculturation scales like (c) the Brief ARSMA-II (ARSMA-II-SV), which allows for unidimensional (Linear Acculturation) and bidmensional (Latino Orientation and Anglo Orientation) measurement and through (d) endorsement of the Latino

cultural value of *familismo*, in keeping with Zane and Mak's (2003) proposed "single-element" approach.

3. I hypothesize that a curvilinear relationship will emerge such that students who endorse a more "bicultural" level of acculturation, as measured by the orthogonal categories of the ARSMA-II-SV, will exhibit more positive academic attitudes and better academic performance than either more or less acculturated students.

4. I hypothesize that, controlling for sex, school and parental education, as illustrated in Figure 1, stronger ethnic centrality and private regard will lead to better academic attitudes and performance.

5. I hypothesize that there will be a curvilinear relationship between family obligation and academic attitudes and performance, such that moderate endorsement of family obligation will lead to better academic outcomes than high or low endorsement of family obligation.

6. I hypothesize that *familismo* is a protective factor for Latino adolescents, moderating the possible negative impact of acculturation and immigrant status on academic attitudes and performance, as illustrated in Figure 1, such that endorsement of *familismo* will allow adolescents to exhibit positive academic attitudes and performance despite greater acculturation or later immigrant status.

7. I hypothesize that, controlling for sex, school and parental education, as illustrated in Figure 2, belief in the "American Dream" will lead to more positive academic attitudes and better academic performance.

8. I hypothesize that if adolescents are able to maintain their belief in the "American Dream," it is possible that they will continue to exhibit positive academic

attitudes and performance, even as they become more acculturated to American culture. Thus, belief in the American Dream will moderate the relation between immigrant status and academic attitudes and performance, as illustrated in Figure 2.
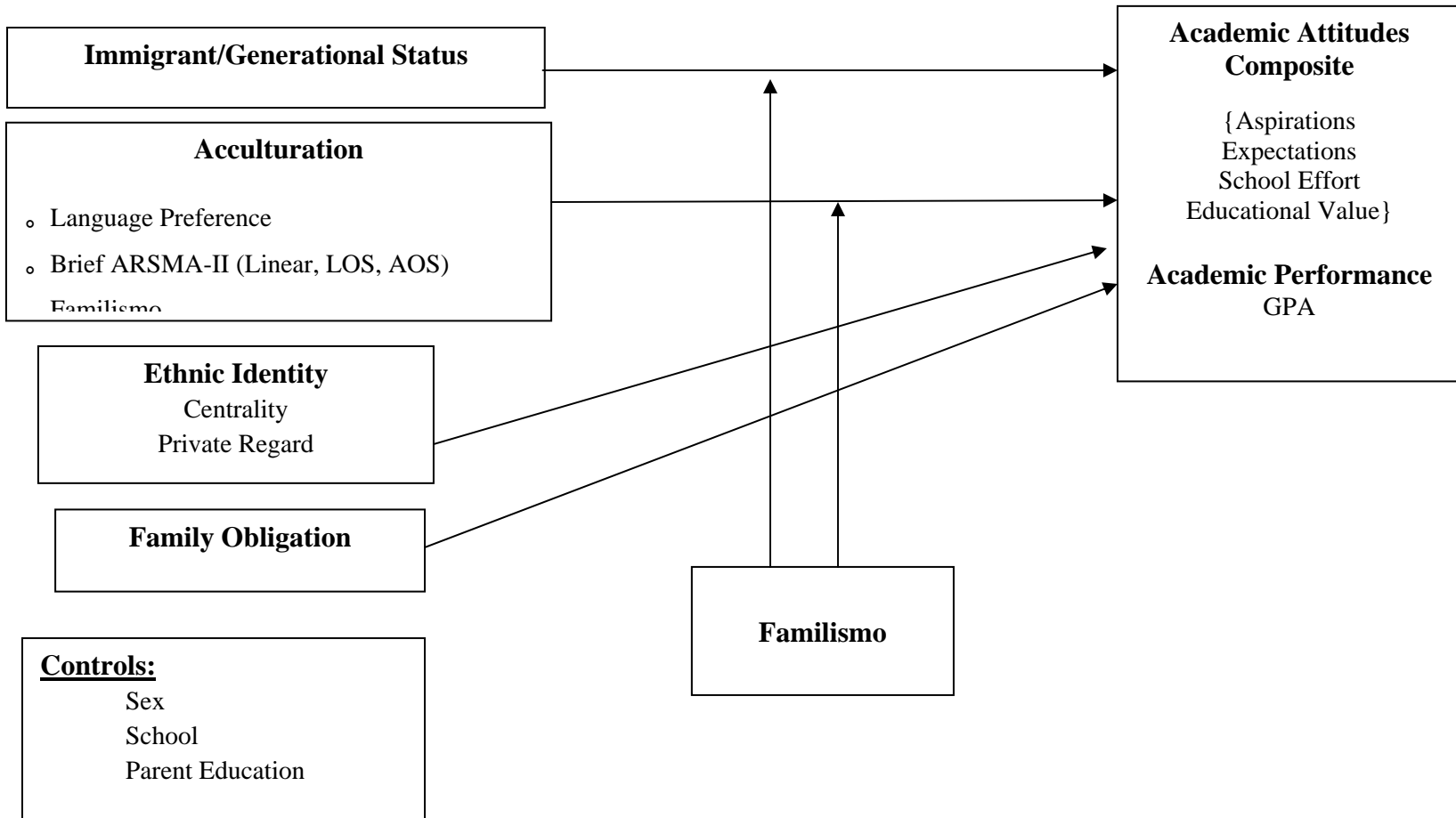
Figure 1. Familismo: Hypothesized model showing *Familismo* as a moderator of the relation between immigrant/generational

status, acculturation and academic outcomes.

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┌─────────────────────────────────────────┐                    ┌──────────────────────────┐
│  Immigrant/Generational Status           │─────────────────→  │  Academic Attitudes      │
└─────────────────────────────────────────┘                    │       Composite          │
                                                                │                          │
┌─────────────────────────────────────────┐                    │  {Aspirations            │
│           Acculturation                  │                    │   Expectations           │
│  ○ Language Preference                   │                    │   Educational Values     │
│  ○ Brief ARSMA-II (Linear, LOS, AOS)     │                    │   School Effort}         │
│    Familismo                             │                    │                          │
└─────────────────────────────────────────┘                    │  Academic Performance    │
                                                                │          GPA             │
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│       Ethnic Identity           │
│         Centrality              │
│       Private Regard            │
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│      Family Obligation          │
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                                          ┌────────────────────┐
┌─────────────────────────────────┐      │   Belief in the    │
│  Controls:                      │      │  American Dream    │
│       Gender                     │      └────────────────────┘
│       School                     │
│       Parent Education           │
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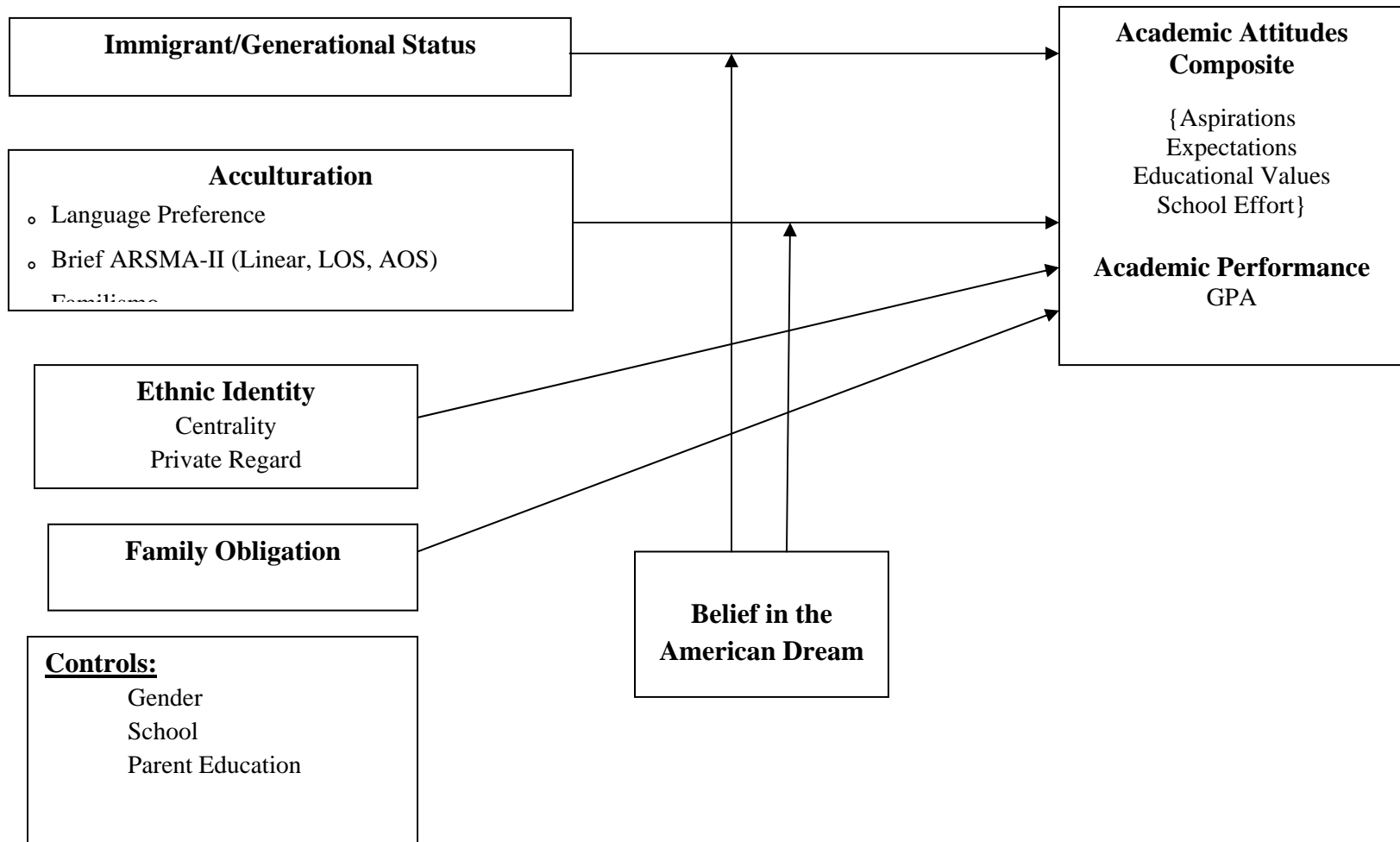
Figure 2. American Dream: Hypothesized model showing *Belief in the American Dream* as a moderator of the relation

between immigrant/generational status, acculturation and academic outcomes, and *Belief in the American Dream* as a predictor

of academic outcomes.

Qualitative Study Research Questions

   The qualitative portion of this study will attempt to address the gap in the literature regarding the impact of family stories on Latino adolescents' educational values by attending to the following research questions:

1. Are Latino adolescents' beliefs in the American Dream transmitted through family immigration stories? If so, what kinds of family immigration stories are related to adolescents' beliefs in the American dream?

2. What do Latino adolescents believe to be barriers to the "American Dream?"

3. How do family stories about education experiences relate to Latino adolescents' educational values? Do positive stories of family members' experiences in school contribute to Latino adolescents' valuing education?

4. Do Latino parents share negative educational experiences with their kids? If so, what do these negative experiences entail and how do adolescents recall or make meaning of these experiences?

CHAPTER II

Quantitative Study: Exploring the Immigrant Paradox

Method

Participants

The sample consists of 223 ninth grade Latino adolescents with a mean age of 14.54 years (SD = .69). The 137 girls and 86 boys in this sample attended one of three schools, a parochial school and two public high schools in two cities located in the northeastern United States. In the parochial school, 85% of the students qualified for free or reduced lunch, and 91% identified as Latino.

The parochial school and one of the public high schools are located in the same city. This public high school was recently divided into 6 smaller schools, each with a different academic focus, all connected together on one campus. The students participating in the current study were drawn from two of these programs: a) Health & Human Services and b) Math, Science, & Technology. In the program in Health and Human Services, 85% of the students qualified for free or reduced lunch, and 91% identified as Latino; in the Math, Science and Technology program, 85% of the students qualified for free or reduced lunch, and 85% identified as Latino.

A second public high school was located in another Northeastern city. Similar to the first two high schools, a majority of the students qualified for free or reduced lunch and 71% identified as Latino.

All three schools were located in two economically disadvantaged, high-risk neighborhoods. The Latino population in these cities consists of families that have lived in the area for several generations as well as recent immigrants and the secondary migration of Latinos from neighboring states like New York and New Jersey (Garcia Coll & Marks, 2009). The first city is home to 61,304 Latino individuals who comprise 36% of the city's total population (U.S. Census Bureau, 2007). The majority of these individuals are Dominican and Puerto Rican with more than 50% of the Dominican families living below the poverty line (Garcia Coll & Marks, 2009; U.S. Census Bureau, 2007). The second city, smaller in size, is also home to a vibrant Latino community. Roughly 48% of the city's 18,928 inhabitants identify as Latino, the majority of whom are Dominican or Puerto Rican (U.S. Census Bureau, 2000).

The adolescents who participated in this study self-identified as Latino, and they further identified their own ethnicity. The largest ethnic group in our sample is represented by Dominicans (60.5%). Other ethnic groups represented in our sample include Puerto Ricans (17%), Columbians (6.2%) and Mexicans (2.2%). The majority of the students (76.2%) were born in the United States, however the majority of their mothers and fathers were born outside of the U.S. (79.8% and 77.6%, respectively). Most (63.3%) reported speaking "only Spanish" or "mostly Spanish/some English" at home. Adolescents reported an average of 5 people living in their homes.

This study also focuses on the subset of Latino students that self-identified as Dominican (N=135). The Dominican subset consists of 84 girls and 51 boys whose mean age was 14.52 years (SD = .63) at the time of their participation.

Procedure

  The data for the present study is part of a larger study examining the lives of Latino adolescents living in poor, urban neighborhoods. Recruitment letters describing the study, along with consent forms, were sent home to parents of all 9th graders at each of the schools. All written materials regarding this study were provided to families in both English and Spanish. Questionnaires were group administered to students in classrooms, a lecture hall, or a cafeteria. Students who wished to complete the surveys in Spanish were given copies that had been translated and back-translated into Spanish by native Spanish speakers. Before beginning the questionnaires, students signed an assent form indicating their desire to participate in the study. Students completed two self-report questionnaires: a demographic survey and an adolescent survey consisting of a short-answer qualitative section and several quantitative survey measures. All students completed the first portion of the questionnaire, a written qualitative section, at the same time, with graduate students reading the directions aloud. Thereafter, students completed the quantitative survey measures at their own pace. Graduate and undergraduate students circulated throughout the study rooms to answer questions. The questionnaires took approximately 2 hours to complete, with breaks for the students as needed. As a token of appreciation, participating students received a $30 gift certificate.

Measures

  Demographic characteristics. Students completed a demographic questionnaire that included a variety of questions regarding students' background. Several items from the survey are used in the present study both as independent variables and controls. Students reported on their sex, the name of the school they attended, and whether they or their parents were born in the United States, all of which were dichotomously coded.

Students also reported on each their parent's highest grade completed in school. Responses to these questions ranged from (1) "grammar school (grades 1-8)" to (6) "graduate/professional degree."

Immigration/Generational Status. Students' immigrant status is identified as follows: (1) "first generation" includes students who were born outside of the U.S.; (2) "second generation A" includes students who were born in the U.S. and whose parents are both immigrants; (3) "second generation B" includes students who were born in the U.S. with only one parent born outside the U.S.; and (4) "third generation" includes students who were born in the U.S., whose parents were also born in the U.S. Three dummy variables were created for generational status, with the reference group being the first generation. The dummy variables were dichotomously coded "1" for students in that generation and "0" for students not in that generation. Fifty-one students (24%) were first generation (immigrant) adolescents, 107 students (51%) were in the second generation A category, 29 (14%) students were in the second generation B category, and 25 students (12%) were in the third generation.

Language Preference. Language preference was assessed by a scale consisting of three items assessing language preference (language most used at home, language most used at school and language most used with friends). Responses to these questions were measured as follows: (1) only Spanish, (2) mostly Spanish/some English, (3) mostly English/some Spanish, and (4) only English. A mean of these three items was calculated to create a "language preference" score for each participant. Cronbach's alpha was not calculated for this scale as theoretically it is not expected that each item of the scale would relate to other scale items; similar to variables indicating socioeconomic

status, these items are additive and better conceived of as cause indicators of language preference rather than effects (Bollen, 1989).

      Acculturation. Acculturation was measured by the Brief Acculturation Rating Scale for Mexican Americans (ARSMA-II-SV) (Cuellar, Arnold & Maldonado, 1995; Bauman, 2005), a multidimensional scale. The ARSMA-II-SV is a 12-item scale that measures the extent to which an individual prefers to use Spanish or English in his or her everyday life. Example items include "I think in Spanish/English" and "I enjoy Spanish movies/English music." Participants indicated their agreement with each item using 5-point Likert-type scales (1 = *not at all*; 5 = *extremely often or almost always*). The Linear Acculturation scale is made up of two 6-item subscales: the Latino Orientation Subscale (LOS, adapted from the original Mexican Orientation Subscale) and the Anglo Orientation Subscale (AOS). An overall score is computed for Linear Acculturation by subtracting the mean score for LOS from the mean score for AOS. Higher overall index scores indicate greater English preference and diminished Spanish preference. Cronbach's alpha for the Linear Acculturation scale was .72 for the full Latino sample and .69 for the Dominican subset. Cronbach's alpha for the LOS subscale was .89 for the Latino sample and .87 for the Dominican subset. Cronbach's alpha for the AOS subscale was .48 for the Latino sample and .53 for the Dominican subset. While the ARSMA-II-SV allows the measurement of adherence to both Latino and Anglo cultures through the separate subscales, it also allows measurement along a bi-dimensional range by providing cut-offs for the following categories (based on LOS and AOS scores): traditional (Latino oriented), low bi-cultural (marginalized), high bi-cultural (both Latino and Anglo oriented, assimilated (Anglo oriented), and unclassified (not in any of the above ranges).

Familismo. *Familismo* (sense of family support and commitment) was assessed using the familism values scale developed by Gaines et al. (1997) with one additional item from the familism scale of the Multiphasic Assessment of Cultural Constructs – Short Form (MACCSF) (Cuellar, et al., 1995).   Students answered eleven questions with responses ranging from (1) strongly disagree to (5) strongly agree. The mean of these items was calculated to create a total *familismo* score for each participant, with higher scores indicating greater endorsement of *familismo*. Sample items included: "I cherish the time that I spend with my relatives," "In my opinion, the family is the most important social institution of all," and "No matter what the cost, dealing with my family's problems comes first." Cronbach's alpha was .92 for the full Latino sample and .91 for the Dominican subset.

Ethnic Identity. Ethnic identity was measured using two scales of the Multidimensional Inventory of Black Identity – teen (MIBI-t), an adolescent version of the MIBI (Sellers et al., 1997), which was adapted for use with Latino adolescents in this study. The study uses the Centrality scale and the Private Regard scale. The Centrality scale consists of three items with responses ranging from (1) strongly disagree to (5) strongly agree. The mean of those items were calculated to create a Centrality score for each participant. Items included: "I feel close to other Latinos," "I have a strong sense of belonging to other Latinos," and "If I were to describe myself to someone, one of the first things that I would say is that I'm Latino/a." The Private Regard scale consists of three items with responses ranging from (1) strongly disagree to (5) strongly agree. The mean of those items were calculated to create a Private Regard score for each participant. Items included: "I am happy that I am Latino/a," "I am proud to be Latino/a," and "I feel

good about Latinos." Cronbach's alpha for the Centrality scale was .75 for the full Latino sample and .70 for the Dominican subset. Cronbach's alpha for the Private Regard scale was .87 for the Latino sample and .83 for the Dominican subset.

Family Obligation. Family obligation was assessed using the "Family Current Support" scale of a measure created by Fuligni, Tseng and Lam (1999) to tap youths' attitudes toward specific family obligations that are particularly salient in the lives of adolescents. Students answered 11 questions with responses ranging from (1) almost never to (5) almost always. The mean of these items was calculated to create a total "Family Current Support" score for each participant. Higher scores reflected greater endorsement of family support by respondents. Sample items included: "How often should you run errands that the family needs done," "How often should you help take care of your brothers and sisters," and "How often should you eat meals with your family?" Cronbach's alpha for this sample was .83 for the full Latino sample and .82 for the Dominican subset.

Belief in the American Dream. Students were asked to respond to the following open-ended question regarding their belief in the American Dream: "People who believe in the 'American Dream' say that if someone studies hard enough in school and work hard enough at their job, they can become rich and successful in this country. Do you agree? Please explain why or why not." Answers were coded "0" for those who did not agree or had reservations regarding the statement and "1" for those who agreed with the statement.

Academic Attitudes. Students' academic attitudes/motivation includes a compilation of measures of (1) educational aspirations, (2) educational expectations, (3)

educational values, and (4) school effort, as described below. The measures were standardized (M = 0, *SD* = 1.0) and the mean of the four measures was calculated to create a total academic attitudes score for each participant. The Cronbach's alpha on the standardized items was .78 for the full Latino sample and .80 for the Dominican subset. Moreover, Cronbach's alpha does not improve by removing any of the included scales.

(1) **Educational Aspirations.** Students' educational aspirations were measured by a single item, "How far would you like to go in school?"   Possible responses ranged from (1) finish some high school to (5) graduate from law, medical, or graduate school.

(2) **Educational Expectations.** Students' educational expectations were measured by a single item, "How far do you actually think you will go in school?" Possible responses ranged from (1) finish some high school to (5) graduate from law, medical, or graduate school.

(3) **Educational values.** Student reports of *educational values* were assessed using a scale developed by Fuligni, Witkow & Garcia (2005). Fuligni and colleagues termed this scale "value of academic success," which assesses the extent to which students place importance on doing well and succeeding in school.   Students responded to six items with responses ranging from (1) not at all important to (5) extremely important. The mean of these items was calculated to create a total *educational values* score for each participant, with higher scores indicating more value placed on education. Sample items included: "How important is it to you that you do well in school?" and "How important is it to you that you go to a good college after high school?"

Cronbach's alpha was .84 for the full Latino sample and .85 for the Dominican subset.

(4) **School Effort.** Student reports of *school effort* were measured by a 5-item scale adapted from Steinberg and colleagues (1992) . Students responded to five items with responses ranging from (1) never to (5) almost always. The mean of these items was calculated to create a total school effort score for each participant, with higher scores indicating greater effort exerted toward school. Sample items included "How often do you complete all assigned readings and homework before quizzes and tests?" and "How often do you really pay attention in class?" Cronbach's alpha was .75 for the full Latino sample and .76 for the Dominican subset.

Academic Performance. Students were asked to report their overall GPAs with the following question: "For your last report card, thinking about all of your classes, what were your average grades?" Grades were self-reported on a 7-point scale. Response options ranged from 1 (mostly D's) to 7 (mostly A's). Self-reported grades were converted to a traditional 4-point scale for analysis using the following formula (7: mostly A's = 4.0; 6: A's and B's = 3.5; 5: mostly B's = 3.0 and so on). Researchers have found that self-reported grades can correlate quite highly ($r=0.76$) with students' actual grades (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987), supporting the validity of the use of self-reported grades.

Results

Preliminary Analyses

Prior to conducting the regression analyses, assumptions were checked by plotting residuals. The residuals for each regression were normally distributed. Thus, no transformations were performed and the regressions were completed with the original variables.

Analyses of Variance, t-tests and correlations were then conducted to examine the influence of demographic background variables on predictor and outcome variables and to identify demographic variables to be included as controls in later regression analyses. These analyses also determined the interrelationships between variables and any potential problems with multicollinearity among predictor variables. Analyses of Variance and t-tests were used to assess the influence of categorical demographic variables on predictor and outcome variables. Correlations were used to determine the relationship between a continuous demographic variable and the predictor and outcome variables.

The first Analysis of Variance examined the influence of school on predictor and outcome variables. Due to the differences in the educational experiences and academic focus of students enrolled in the two career programs at one of the public high schools, these programs were included as separate schools in study analyses. Thus, differences among four schools were examined. This analysis revealed significant differences in predictor variables by school. Schools differed in generational status of students (specifically those in Second Generation (A) (both parents immigrants) and in the third generation (student and both parents born in U.S.)) as well as in ethnic identity (both centrality and private regard) (all ps<.05; see Table 1). Tukey's HSD post-hoc pairwise comparisons revealed that School 1 (parochial school) (*M*=.66, *SD*=.48) enrolled

significantly more students who were born in the U.S. and whose parents were both

immigrants (Second Generation (A)) than School 2 (public school) ($M=.28$, $SD=.46$).

Students attending School 1 ($M=.01$, $SD=.11$) were also less likely to be in the third

generation (born in the U.S. with both parents born in the U.S.) than students attending

School 2 ($M=.27$, $SD=.45$). In general, School 1 ($M=1.91$, $SD=.61$) enrolled fewer

students born in later generations than School 2 ($M=2.43$, $SD=1.17$). In addition,

students attending School 1 ($M=4.38$, $SD=.58$) endorsed greater ethnic centrality than

students attending School 2 ($M=4.02$, $SD=.86$), School 3 (public school) ($M=4.02$,

$SD=.65$) and School 4 (public school) ($M=3.93$, $SD=.69$). Moreover, students attending

School 1 ($M=4.65$, $SD=.45$) endorsed greater private regard for their ethnicity than

students attending School 2 ($M=4.33$, $SD=.86$) and School 3 ($M=4.30$, $SD = .64$).

Finally, fewer students in School 1 ($M=.64$, $SD=.48$) believed in the American Dream

than students in School 4 ($M=.87$, $SD=.34$). No significant differences were found in

academic outcome variables by school.

Table 1

Analysis of Variance of Study Variables by School

Predictor and Outcome Variables	df	F	p
First Generation	3	.173	.915
Second Generation (A)	3	6.349***	.000
Second Generation (B)	3	.335	.800
Third Generation	3	6.978***	.000
Immigration Status	3	3.331*	.020
Acculturation (Linear)	3	1.291	.278
Latino Orientation Scale	3	1.730	.162
Anglo Orientation Scale	3	.472	.702
Language Preference Scale	3	1.211	.307
Familismo	3	.401	.752
Family Obligation	3	.024	.995
Ethnic Identity (Centrality)	3	5.595**	.001
Ethnic Identity (Private Regard)	3	4.112**	.007
Belief in American Dream	3	3.887*	.010
Academic Attitudes Composite	3	.514	.673
Self-reported Grades	3	2.220	.087
Educational Aspirations	3	.840	.473
Educational Expectations	3	.312	.817
Educational Value	3	.557	.644
School Effort	3	1.714	.165

*$p<.05$, **$p<.01$, ***$p<.001$

T-tests investigated the relationship between sex and predictor and outcome variables. Several significant relationships were revealed between sex and predictor variables ($ps<.05$, see Table 2). Girls tended to endorse higher Latino orientation ($M=3.32$, $SD=.97$) than boys ($M=3.01$, $SD=.91$) as well as higher Anglo orientation ($M=4.15$, $SD=.50$) than boys ($M=4.01$, $SD=.45$). In addition, girls ($M=4.52$, $SD=.64$) endorsed higher private regard for their ethnicity than boys ($M=4.33$, $SD=.67$). A significant relationship was also revealed between sex and one of the outcome variables

(p<.05, see Table 2). Specifically, girls (*M*=3.02, *SD*=.74) reported significantly higher grades than boys (*M*=2.71, *SD*=.78). As a result of these analyses, sex and school attended were controlled in subsequent regressions.

Table 2

T-tests of Study Variables by Sex

Predictor and Outcome Variables	df	t	p
First Generation	166	1.33	.187
Second Generation (A)	212	-.70	.487
Second Generation (B)	211	-.23	.816
Third Generation	212	.03	.976
Immigration Status	210	-.65	.518
Acculturation (Linear)	221	1.10	.271
Latino Orientation Scale	221	-2.39*	.018
Anglo Orientation Scale	221	-2.15*	.032
Language Preference Scale	218	1.26	.209
Familismo	220	.84	.402
Family Obligation	221	-.77	.442
Ethnic Identity (Centrality)	214	-.75	.453
Ethnic Identity (Private Regard)	214	-2.19*	.030
Belief in American Dream	217	-.01	.990
Academic Attitudes Composite	218	-1.62	.107
Self-reported Grades	217	-2.95**	.003

*p<.05, **p<.01, ***p<.001

Correlational analyses outlined in Table 3(a) and Table 3(b) included mother's education, father's education, predictor, and outcomes variables. While two of the significant correlations had values above .70 (Linear Acculturation and Latino Orientation, r = .90, p<.001; Ethnic Centrality and Ethnic Private Regard, r=.76, p<.001), the tolerances for the ethnic identity measures (Centrality and Private Regard) in the following regression analyses were acceptable (tolerance ≤ .10; VIF≥ 10) (Cohen, Cohen, West & Aiken, 2003). In the case of the ARSMA-II-SV linear acculturation measure

(Linear Acculturation), as the tolerance in the initial regression analysis was below .10 (VIF>10) and the Linear Acculturation measure did not significantly predict any of the academic outcomes, the Linear Acculturation measure was eliminated from subsequent analyses.

Table 3(a)

Correlations among Background, Predictor, and Outcome Variables (Full Latino Sample (N=223))

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	Mother education	-	.49***	.09	.04	.00	-.18***	.08	.04	-.04	.01	.05	-.10	-.10	-.01	-.08	.12	.06
2.	Father education		--	-.003	.07	-.07	-.06	.13	.17*	-.16*	.08	-.02	-.09	-.11	-.06	-.10	-.01	-.03
3.	First Generation			--	-.56***	-.22**	-.20**	-.22***	-.25***	.21**	-.15*	.07	.06	-.01	.11	.01	.07	.16
4.	Second Generation (A)				--	-.40***	-.37***	-.02	.05	-.03	.07	-.04	.07	.08	-.06	-.07	.19**	.10
5.	Second Generation (B)					--	-.15*	.14*	.14*	-.12	.08	-.07	-.09	-.01	-.05	.14*	-.18*	-.21**
6.	Third Generation						--	.17*	.07	-.08	.00	.05	-.08	-.07	-.01	-.05	-.20**	-.15*
7.	Language Preference							--	.53***	-.52***	.20**	-.01	-.25***	-.26***	-.07	-.09	-.00	-.06
8.	Acculturation (Linear)								--	-.90***	.51***	-.08	-.28***	-.25***	-.21***	-.03	-.01	.05
9.	Latino Orientation									--	-.08	.16*	.27***	.26***	.26***	.06	.09	-.11
10.	Anglo Orientation										--	.12	-.11	-.05	.03	.04	.16*	.07
11.	Familismo											--	.26***	.25***	.56***	.03	.28***	.02
12.	Centrality												--	.76***	.13	.04	.15*	.04
13.	Private Regard													--	.17*	.04	.12	.07
14.	Family Obligation														--	-.02	.32***	.05
15.	American Dream															--	-.02	.07
16.	Academic Attitudes Composite																--	.49***
17.	Self Reported Grades																	--

*p<.05, **p<.01, ***p<.001

Table 3(b)

Correlations among Background, Predictor, and Outcome Variables (Dominican subset (N=135))

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Mother education	-	.53***	.07	.02	-.09	-.06	.04	.04	-.05	-.004	.04	-.11	-.11	.05	-.03	.12	.04
2. Father education		--	.07	.04	-.21*	.05	.10	.12	-.16	-.03	.03	-.14	-.14	-.01	.003	.09	.01
3. First Generation			--	-.69***	-.26**	-.08	-.16	-.28***	.20*	-.23**	.04	.07	-.03	.07	.07	.03	.12
4. Second Generation (A)				--	-.46***	-.14	-.04	.13	-.07	.16	.07	.04	.12	.03	-.04	.20*	.12
5. Second Generation (B)					--	-.05	.13	.07	-.06	.03	-.13	-.03	-.01	-.13	-.06	-.21*	-.24*
6. Third Generation						--	.25**	-.24**	-.22*	.11	-.09	-.22*	-.29*	-.08	.08	-.31***	-.14
7. Language Preference							--	.59***	-.50***	.37***	.002	-.27***	-.23**	-.13	.12	.01	.00
8. Acculturation (Linear)								--	-.89***	.56***	-.13	-.34***	-.23**	-.30***	.10	-.01	.10
9. Latino Orientation									--	-.11	.24**	.34***	.28***	.35***	-.08	.09	-.12
10. Anglo Orientation										--	.15	-.12	.001	-.02	.07	.13	-.01
11. Familismo											--	.17	.22*	.58***	.26**	.35***	-.04
12. Centrality												--	.71***	.15	-.06	.19*	.10
13. Private Regard													--	.24**	-.03	.20*	.08
14. Family Obligation														--	.12	.39***	.02
15. American Dream															--	.14	.08
16. Academic Attitudes Composite																--	.47***
17. Self Reported Grades																	--

*p<.05, **p<.01, ***p<.001

Primary Analyses

  Hypothesis 1. In order to test the hypothesis that students who are first and

second generation Latinos will exhibit more positive academic attitudes and higher GPAs

than students who are third generation Latinos, Analyses of Variance were performed on

the full sample of Latino students to test the difference in mean scores on Academic

Attitudes and GPA for each generation. Tukey HSD pairwise comparisons were

performed to further analyze the differences in means between generations. Students in

the second generation were further divided into second generation (A) (students born in

the U.S. whose parents are both immigrants) and second generation (B) (students born in

the U.S. with one U.S. born and one immigrant parent). This was done in order to

explore differences among students in the second generation. While there is a lack of

literature on the heterogeneity of the second generation, given the differences that exist in

academic outcomes between the first and third generations, this study seeks to explore

whether the proportion of immigrant parents a student has makes a difference in

academic outcomes as well. Several significant relationships were revealed between

generational status and the academic outcome variables (ps <.05) as outlined in Table 4.

As predicted, first generation Latino students (immigrants) exhibited more positive

academic attitudes than third generation Latino students. Moreover, students in the

second generation whose parents were both immigrants (second generation (A)) exhibited

more positive academic attitudes than third generation students. Furthermore, a

significant difference in mean scores on academic attitudes was revealed among second

generation Latino students, such that second generation Latino students whose parents

were both immigrants (second generation (A)) exhibited more positive academic attitudes than second generation Latino students who had one immigrant parent and one parent born in the U.S. (second generation (B)).

Similar results were found between generational status and student-reported GPA. As predicted, first generation Latino students reported significantly higher GPAs than their third generation peers. While second generation students did not report significantly higher GPAs than their third generation peers as predicted, significant relationships were found between second generation (B) students and both first generation students and second generation (A) students. Specifically, first generation students reported significantly higher GPAs than second generation (B) students. Moreover, a significant difference was revealed among the second generation students such that second generation (A) students reported significantly higher GPAs than second generation (B) students.

Analyses of Variance were also performed on the subset of Dominican students to test the difference in mean scores on academic attitudes and GPA for each generation of Dominican students. Significant relationships were not revealed between generational status and academic attitudes. For the Dominican-only sample, since Levene's test for homogeneity of variance was found to be violated ($F_{(3, 125)} = 3.183$, p<.05), the Welch statistic was computed to determine whether a significant difference in mean scores on academic attitudes by generation existed. This statistic revealed no significant differences and therefore post hoc tests were not performed.

Several significant relationships were revealed between generational status and GPA (p's <,05) for the subset of Dominican students, the univariate tests and descriptive

statistics for which are set forth in Table 4. Tukey HSD pairwise comparisons were

performed to further analyze differences among different generations of Dominican

students. While first generation students did not report significantly higher GPAs than

their third generation peers as predicted, similar to the full Latino sample, significant

relationships were found between second generation (B) students and both first

generation students and second generation (A) students. Specifically, first generation

students reported significantly higher GPAs than second generation (B) students.

Moreover, a significant difference was revealed among the second generation students

such that second generation (A) students reported significantly higher GPAs than second

generation (B) students. The third generation consisted of only two students, which may

contribute to the lack of significant differences found for this generation of Dominican

students.

Table 4

Analysis of Variance of Academic Outcomes by Generational Status

Outcome Variables (Sample)	First Generation M (SD)	Second Generation A M (SD)	Second Generation B M (SD)	Third Generation M (SD)	Statistic (F) (W)
Academic Attitudes					
(Latinos)	.11 (.71)^a	.17 (.63)^c	-.31 (.89)^d	-.40 (.93)^{b,d}	$F_{(3, 206)} = 6.48$***
(Dominicans)	--	--	--	--	$W_{(3, 4.75)} = 2.74$
GPA					
(Latinos)	3.12 (.67)^a	2.99 (.72)^c	2.50 (.91)^{b,d}	2.58 (.81)^b	$F_{(3, 205)} = 6.14$**
(Dominicans)	3.03 (.69)^a	2.98 (.77)^c	2.44 (.89)^{b,d}	2.00 (.00)	$F_{(3, 124)} = 3.66$*

Note: Superscripts of a and b and of c and d indicate pairs of means that significantly differ from each other. $n = 210$ for reports of academic attitudes for the Latino sample, $n = 129$ for reports of academic attitudes for the Dominican sample, $n = 209$ for reports of GPA for the Latino sample and $n = 128$ for reports of GPA for the Dominican sample.
*p<.05, **p<.01, ***p<.001

Hypothesis 2. In order to test the hypothesis that greater acculturation to U.S.

culture would lead to poorer academic attitudes and lower reported GPA, the first set of

hierarchical multiple regression analyses was conducted, each controlling for sex, school and parent education, to test the model depicted in Figure 1 on (1) academic attitudes and (2) GPA. These regression analyses were conducted for the full Latino sample (N=223) and for the Dominican subset (N=135) and the results are displayed in Table 5. The demographic background variables, sex, school attended, mother education, and father education were included in the first step of regression analyses for the Latino sample in order to control for their effects. A separate variable was created for each of the four schools in the study, and these variables were dummy-coded in order to control for school in the regression analyses. The parochial school was the referent for this set of dummy variables. As parent education and school did not significantly impact the outcome variables in these regression analyses (see Table 5), these control variables were dropped from regression analyses for the Dominican sample in order to maintain adequate power for the smaller sample. The second step added the following variables: immigrant/generational status and language preference (both proxy measures for acculturation), Linear Acculturation (a unidimensional scale of the ARMSA-II-SV), the Latino Orientation Scale (LOS) and Anglo Orientation Scale (AOS) of the ARSMA-II-SV (both bidimensional scales), a measure of the Latino cultural value, *familismo*, Centrality and Private Regard (both ethnic identity measures), and Family Obligation. Due to the high correlation between Linear Acculturation and LOS scales ($r(223) = .90$, $p<.001$) and the multicollinearity tolerance limit being reached (tolerance = .000), the Linear Acculturation scale was dropped from the analysis (Cohen, Cohen, West, & Aiken, 2003).

As predicted, the regression analyses for both the Latino sample and the Dominican-only sample show some evidence of poorer academic outcomes with greater acculturation. These results are outlined in Table 5. As Table 5 indicates, the model examining the association between generational status, acculturation, ethnic identity, family obligation and academic attitudes for the Latino sample was significant and predicted 28% of the variance in students' academic attitudes. Specifically, with regard to acculturation, generational status was significantly related to academic attitudes in the predicted direction, such that students in later generations (second generation (B) (β=-.24, p$\leq$.01) and third generation (β=-.27, p$\leq$.001)) were significantly more likely to endorse poorer academic attitudes compared to first generation, immigrant, students. No other measures of acculturation, however, significantly predicted academic attitudes.

The model examining the association between generational status, acculturation, ethnic identity, family obligation and academic attitudes for the Dominican-only sample was significant and predicted 37% of the variance in students' academic attitudes. Generational status variables were the only acculturation measures that significantly predicted academic attitudes. Generational status was significantly related to academic attitudes in the predicted direction, such that students in later generations (second generation (B) (β=-.22, p$\leq$.05) and third generation (β=-.35, p$\leq$.001)) were significantly more likely to endorse poorer academic attitudes compared to first generation, immigrant, students. No other measures of acculturation, however, significantly predicted academic attitudes of the Dominican students.

The model predicting GPA for the entire sample was also significant and predicted 18% of the variance in Latino students' GPA. Again, second generation (B)

75

(β=-.34, p≤.001) and third generation students (β=-.29, p≤.001) were significantly more likely to report lower grades compared to immigrant students. As with academic attitudes, no other measures of acculturation significantly predicted Latino students' GPA.

The model examining the association between acculturation, ethnic identity, family obligation and GPA for the Dominican sample was also significant and predicted 20% of the variance in Dominican students' GPA. Second (B) (β=-.31, p≤.01) and third generation students (β=-.23, p≤.05) were significantly more likely to report lower grades compared to immigrant students. Moreover, contrary to the hypothesis that greater acculturation will lead to poorer academic outcomes, Latino Orientation (β=-.28, p<.05) significantly predicted GPA, such that less acculturation (greater endorsement of Latino Orientation) predicted lower grades for Dominican students. As with the Latino sample, no other measures of acculturation significantly predicted Dominican students' GPA.

Correlational analyses for the full sample reveal that several of these measures of acculturation are significantly related to each other, as depicted in Table 2. Specifically, first generation immigrant status was significantly related to all measures of acculturation but *familismo*. Language preference was also significantly related to all measures of acculturation but the second generation (A) and *familismo*. However, not all of the acculturation measures were significantly related. For instance, *familismo* was significantly related only to Latino Orientation, suggesting that this variable may be measuring a different construct from the other acculturation measures. Furthermore, being in the second generation (A) or in the third generation was significantly related only to other generation status variables and to language preference.

Table 5

Regression of Immigrant Status, Acculturation, Ethnic Identity, and Family Obligation on Academic Outcomes

Predictor Variables	Latino Sample				Dominican Sample			
	Academic Attitudes Composite (N=198)		Self-Reported GPA (N=197)		Academic Attitudes Composite (N=122)		Self-Reported GPA (N=121)	
	β	SE B	β	SE B	β	SE B	β	SE B
Step 1								
Student's Sex	.11	.18	.20**	.12	.12	.15	.20*	.15
Student's School 1 (ref: parochial)	−.06	.15	.02	.15	--	--	--	--
Student's School 2	.01	.16	−.07	.16	--	--	--	--
Student's School 3	−.02	.15	.03	.15	--	--	--	--
Mother's Education	.15	.03	.07	.03	--	--	--	--
Father's Education	−.10	.03	−.02	.03	--	--	--	--
F	1.04		1.99		1.66		4.88*	
R^2	.03		.06		.01		.04	
df	6		6		1		1	
Step 2								
Student's Sex	.10	.11	.23**	.12	.14	.14	.26**	.15
Student's School 1 (ref: parochial)	.04	.15	.12	.16	--	--	--	--
Student's School 2	.07	.15	−.02	.16	--	--	--	--
Student's School 3	.08	.14	.08	.16	--	--	--	--
Mother's Education	.10	.03	.05	.03	--	--	--	--
Father's Education	−.11	.03	−.06	.03	--	--	--	--
Generational Status 2a (ref: 1st generation)	−.03	.13	−.13	.14	-.03	.15	-.07	.17
Generational Status 2b	−.24**	.17	−.34***	.19	-.22*	.20	-.31**	.23
Generational Status 3	−.27***	.18	−.29***	.20	-.35***	.53	-.23*	.59
Language Preference	.14	.13	.06	.14	.13	.19	.10	.21
Latino Orientation Scale	−.06	.07	−.15	.07	-.16	.09	-.28*	.10
Anglo Orientation Scale	.13	.11	.05	.12	.11	.14	-.04	.16
Familismo	.14	.10	−.03	.11	.17	.13	-.06	.14
Ethnic Identity (Centrality)	.15	.11	−.01	.12	.18	.14	.12	.16
Ethnic Identity (Private Regard)	.03	.12	.12	.13	-.08	.16	-.03	.17
Family Obligation	.20*	.10	.02	.11	.28**	.13	.07	.15
F	4.47***		2.41**		5.75***		2.54**	
R^2	.28		.18		.37		.20	
df	16		16		11		11	

*$p \leq .05$, **$p \leq .01$, ***$p \leq .001$

Hypothesis 3. To test the hypothesis that a curvilinear relationship exists between biculturalism and academic outcomes, such that students who endorse a "bicultural" style of acculturation will exhibit more positive academic attitudes and higher GPAs than those who endorse low or high acculturation, analyses of variance (ANOVAs) were performed using the five categories of orthogonal acculturation type (traditional, marginalized, bicultural, assimilated and unclassified) delineated by Bauman (2005) for the ARSMA-II-SV (Cuellar, Arnold & Maldonado, 1995). The distribution for acculturation categories for both the full Latino sample and the Dominican subset is found in Table 6. Results of the ANOVAs for the full Latino sample comparing the means of academic attitudes ($F_{(4, 215)} = 1.73$, $p = .14$) and GPA ($F_{(4, 214)} = .30$, $p = .88$) across acculturation category suggest no significant differences by acculturation category for this sample of mostly Dominican and Puerto Rican adolescents. Similarly, results of the ANOVAs comparing the means of academic attitudes ($F_{(4, 128)} = 1.34$, $p = .26$) and GPA ($F_{(4,127)} = 1.11$, $p = .35$) across acculturation category for the Dominican-only subset suggest no significant differences by acculturation category.

In addition, the five orthogonal acculturation categories were transformed into a dichotomous variable (bicultural vs. not bicultural) to test whether a difference in mean academic outcomes exists between biculturals and those who were not. This transformation was conducted in order to address the large number of students who fell into the "unclassified" category and the very small number who fell in the "traditional" category (see Table 6). Results of t-tests comparing means of academic attitudes and GPA between Latino biculturals and those who were not were not significant ($t_{(217)} = .66$, $p = .51$). However, t-tests comparing the mean of academic attitudes ($t_{(218)} = -1.86$, $p =$

.06) approached significance. Specifically, Latino biculturals (M=.17, SD=.66) had more positive academic attitudes (albeit not significantly more positive) than those who were not bicultural (M=-.04, SD = .78). In contrast to the Latino sample, t-tests comparing means of academic attitudes between Dominican students who fit into the bicultural category and Dominican students who did not were not significant ($t_{(131)}$=-1.40, p=.17). However, t-tests comparing the mean of GPA ($t_{(130)}$ = 1.86, p = .07) approached significance. Specifically, Dominican biculturals (M=2.95, SD=.76) on average had higher GPAs (albeit not significantly higher) than Dominican students who were not bicultural (M=2.67, SD = .83).

Table 6

Distribution of Participants using Orthogonal Scoring Procedures for the Brief Acculturation Rating Scale for Mexican Americans – II (ARSMA-II-SV)

Orthogonal Category	Latino sample (N=223)		Dominican sample (N=135)	
	N	%	N	%
Traditional	3	1.3	1	.7
Marginalized	23	10.3	18	13.3
Bicultural	60	26.9	33	24.4
Assimilated	34	15.2	20	14.8
Unclassified	103	46.2	63	46.7
Total	223	100	135	100

Hypothesis 4. As illustrated in Table 5, measures of ethnic identity were not significantly predictive of academic attitudes or GPA for either the full sample or the subset of Dominican students.

Hypothesis 5. To test the hypothesis that a curvilinear relationship exists between family obligation and academic outcomes, such that moderate endorsement of family obligations will lead to better academic outcomes than high or low endorsement of family obligations, family obligation was centered and a quadratic term for the centered family obligation variable was created to test the significance of the hypothesized curvilinear relationship in a third set of regression analyses. Summarized in Table 7, while family obligation significantly predicted academic attitudes (β=.20, p<.01) for the Latino full sample and for the Dominican subset (β=.29, p<.01), the quadratic term for family obligation was not significantly predictive of academic outcomes for either group, suggesting that for both the full sample of Latino adolescents and the smaller sample of Dominican adolescents, a positive linear relationship exists between family obligation and academic attitudes, such that greater endorsement of family obligation leads to better academic attitudes, however a curvilinear relationship does not exist between family obligation and academic outcomes.

Table 7
Regression of Acculturation, Ethnic Identity and Family Obligation, Testing Curvilinear Relationship of
Family Obligation, on Academic Outcomes

	Latino Sample				Dominican Sample			
	Academic Attitudes Composite (N=198)		Self-Reported GPA (N=197)		Academic Attitudes Composite (N=122)		Self-Reported GPA (N=121)	
Predictor Variables	β	SE B	β	SE B	β	SE B	β	SE B
Step 1								
Student's Sex	.11	.12	.20**	.12	.12	.15	.20*	.15
Student's School 1 (ref: parochial)	−.06	.15	.02	.15	--	--	--	--
Student's School 2	.01	.16	−.07	.16	--	--	--	--
Student's School 3	−.02	.15	.03	.15	--	--	--	--
Mother's Education	.15	.03	.07	.03	--	--	--	--
Father's Education	−.09	.03	−.02	.03	--	--	--	--
F	1.04		1.99		1.66		4.88*	
R^2	.03		.06		.01		.04	
df	6		6		1		1	
Step 2								
Student's Sex	.10	.11	.23**	.12	.14	.14	.26**	.15
Student's School 1 (ref: parochial)	.04	.15	.12	.16	--	--	--	--
Student's School 2	.07	.15	−.02	.16	--	--	--	--
Student's School 3	.08	.14	.07	.16	--	--	--	--
Mother's Education	.10	.03	.05	.03	--	--	--	--
Father's Education	−.11	.03	−.06	.03	--	--	--	--
Generational Status 2a (ref: 1st generation)	−.03	.13	−.13	.14	-.03	.15	-.07	.17
Generational Status 2b	−.24**	.17	−.34***	.19	-.23*	.20	-.31**	.23
Generational Status 3	−.27***	.18	−.29***	.21	-.35***	.53	-.23*	.59
Language Preference	.14	.13	.06	.14	.13	.19	.10	.21
Latino Orientation Scale	−.06	.07	−.16	.07	-.16	.09	-.29*	.10
Anglo Orientation Scale	.13	.11	.04	.12	.10	.14	-.05	.16
Familismo	.14	.10	−.03	.11	.17	.13	-.07	.14
Ethnic Identity (Centrality)	.15	.11	−.01	.12	.18	.14	.12	.16
Ethnic Identity (Private Regard)	.03	.12	.12	.13	-.08	.16	-.04	.17
Family Obligation (centered)	.20*	.10	.04	.11	.29**	.13	.10	.15
Family Obligation X Family Obligation	−.02	.10	.07	.11	.04	.12	.11	.14
F	4.20***		2.32**		5.25***		2.46**	
R^2	.28		.18		.37		.22	
df	17		17		12		12	

*p≤ .05, **p≤ .01, ***p≤.001

Hypothesis 6. A fourth set of regression analyses examined the role of *familismo* as a moderator of the relationship between acculturation and academic outcomes. Before conducting the regressions, variables were centered and interaction terms for *Familismo* X Generation 2a, *Familismo* X Generation 2b, *Familismo* X Generation 3, *Familismo* X LOS, *Familismo* X AOS, and *Familismo* X Language Preference were computed. The centered variables and interaction terms were then entered into a regression with sex, school attended, and parent education as controls. Results are displayed in Table 8. The first model examining the association with academic attitudes for the full Latino sample was statistically significant and explained 33% of the variance. Second generation (B) status (β=-.24, p<.01), Third generation status (β=-.27, p$\leq$.001), Anglo orientation (β=.18, p<.01), family obligation (β=.20, p<.05), and the interaction between *familismo* and second generation (B) status (β=.19, p<.05) were each significantly related to academic attitudes. *Familismo* moderated the relationship between second generation (B) status and academic attitudes in the predicted direction, with high levels of *familismo* dampening the negative effect on academic attitudes of being a second generation (B) Latino student. For Latino adolescents low on *familismo*, the effect on academic attitudes of not being in the second generation (B) is sharply negative. For Latino students high on *familismo*, the effect of generation is even less negative. These interactions are illustrated in Figure 3.

The second model examining the association with GPA for the full Latino sample was also statistically significant, explaining 22 % of the variance. However, while sex (β=.21, p<.01), second generation (A) status (β=-.32, p<.001) and second generation (B)

status (β=-.26, p<.01) significantly predicted GPA, *familismo* did not moderate the relationship between any of the acculturation variables and GPA, as illustrated in Table 8.

As parent education and school did not significantly impact the outcome variables in the regression analyses for the Latino sample, these control variables were removed from regression analyses for the Dominican sample in order to maintain adequate power for the smaller sample. Since Language Preference and *familismo* X Language Preference did not have a significant effect on outcome variables in regression analyses for the Latino sample, these variables were also removed from this set of regression analyses for the Dominican sample in order to maintain adequate power. Thus, the third model examined the association of acculturation, ethnic identity, family obligation, and the interaction of *familismo* with the various measures of acculturation (excluding language preference) with academic attitudes for the Dominican subset. While the sample size for these regression analyses (N = 123; N = 122) is less than a common rule of thumb (ten subjects for every predictor), according to Green (1991), with medium and large effects, as we found in these analyses, one could still detect significant effects with a smaller sample size. In addition, a linear relationship exists between sample size and number of predictors such that the number of additional subjects needed per additional predictor decreases as you add more predictors (Green, 1991). This model was statistically significant and explained 41% of the variance. Latino orientation (β = -.18, p<.05) and family obligation (β=.23, p<.05) significantly predicted academic attitudes. Second generation (B) status (b = -.21, p<.05) and third generation status (b = -.33, p<.001) significantly predicted academic attitudes prior to the addition of the interaction terms and only second generation (B) status approached significance (b = .17, p=.07)

when the interaction terms were entered. A cause of this loss of significance is the large

standard error for third generation (SE b = 1.28) and the high correlation between third

generation status and *Familismo* X third generation status ($r_{(123)}$ = -.89, p<.001). The

interaction between *familismo* and second generation (B) status (β=.28, p<.05) was

significantly related to academic attitudes. *Familismo* moderated the relationship

between second generation (B) status and academic attitudes in the predicted direction,

with high levels of *familismo* dampening the negative effect on academic attitudes of

being a second generation (B) Dominican student, as shown in Table 8. This finding

requires further investigation, however, to parse out the effects of those in "other

generations" as this group includes first, second (A), and third generations.

The fourth model examining the association of acculturation, ethnic identity,

family obligation and the interaction of *familismo* with acculturation (excluding language

preference) with GPA for the Dominican sample was also statistically significant,

explaining 25 % of the variance. Sex (β=.26, p<.01), second generation (B) status (β=-

.31, p<.01) and Latino Orientation (β=-.30, p<.01) significantly predicted GPA.

Familismo moderated the relationship between Anglo Orientation and GPA, however, as

the results set forth in Table 8 show, the interaction was not in the predicted direction

(β=-.24, p<.05).   The interaction of *familismo* and AOS created a stronger negative

relationship between Anglo orientation and GPA. Figure 5 illustrates these interactions.

For Dominican students low on *familismo*, the effect of Anglo orientation on GPA was

slightly positive, such that the more students were acculturated the better they performed

in school. For Dominican students endorsing a high level of *familismo*, the effect of

Anglo orientation on GPA was slightly negative, such that more acculturated students

from this group had lower grades.

Table 8. Hierarchical Regression Analyses Predicting Academic Outcomes from Immigrant Status, Acculturation, Ethnic Identity, and Family Obligation, and Testing Moderating Effects of Familismo

	Latino Sample				Dominican Sample			
	Academic Attitudes (N = 198)		Self-Reported GPA (N = 197)		Academic Attitudes (N = 123)		Self-Reported GPA (N = 121)	
Predictor Variables	β	SE B	β	SE B	β	SE B	β	SE B
Step 1								
Control Variables[a]								
Step 2								
Student's Sex	.10	.11	.23**	.12	.12	.13	.25**	.15
Student's School 1	.04	.15	.12	.16	--	--	--	--
(ref: parochial)								
Student's School 2	.07	.15	-.02	.16	--	--	--	--
Student's School 3	.08	.14	.08	.16	--	--	--	--
Mother's Education	.10	.03	.05	.03	--	--	--	--
Father's Education	-.11	.03	-.06	.03	--	--	--	--
Generational Status 2a	-.03	.13	-.13	.14	.-.03	.15	-.07	.17
(ref: 1st generation)								
Generational Status 2b	−.24**	.17	−.34***	.19	−.21*	.20	−.30**	.22
Generational Status 3	−.27***	.18	−.29***	.20	−.33***	.52	−.22*	.58
Language Preference	.14	.13	.06	.14	—	—	—	—
Latino Orientation Scale	−.06	.07	−.15	.07	−.20*	.08	−.32**	.09
Anglo Orientation Scale	.13	.11	.05	.12	.15	.13	−.01	.15
Familismo	.14	.10	−.03	.11	.18	.13	−.06	.14
Ethnic Identity (Centrality)	.15	.11	−.01	.12	.17	.14	.12	.15
Ethnic Identity (Private Regard)	.03	.12	.12	.13	−.08	.15	−.04	.17
Family Obligation	.20*	.10	.02	.11	.28**	.12	.07	.14
F	4.47***		2.41**		6.17***		2.73**	
R²	.28		.18		.36		.20	
df	16		16		10		10	
Step 3								
Student's Sex	.08	.11	.21**	.12	.10	.13	.26*	.15
Student's School 1	.01	.15	.10	.17	--	--	--	--
Student's School 2	.07	.15	-.03	.16	--	--	--	--
Student's School 3	.09	.14	.08	.16	--	--	--	--
Mother's Education	.08	.03	.04	.03	--	--	--	--
Father's Education	-.10	.03	-.05	.03	--	--	--	--
Generational Status 2a	-.02	.13	-.10	.14	.-.02	.15	-.05	.16
Generational Status 2b	-.22**	.17	-.32***	.19	-.17	.20	-.31**	.23
Generational Status 3	-.29***	.19	-.26**	.21	-.14	1.06	-.30	1.20
Language Preference	.09	.13	.06	.15	--	--	--	--
Latino Orientation Scale	-.06	.07	-.13	.07	-.18*	.08	-.30**	.09
Anglo Orientation Scale	.18**	.11	.07	.12	.15	.13	.01	.15
Familismo	.06	.19	-.004	.21	-.05	.22	-.24	.24
Ethnic Identity (Centrality)	.17	.11	-.01	.12	.18	.14	.09	.16
Ethnic Identity (Private Regard)	.00	.12	.16	.13	-.09	.16	.06	.18
Family Obligation	.20*	.10	.02	.11	.23*	.12	.06	.14
Familismo X GenStatus 2a	-.03	.20	-.09	.23	.18	.25	.15	.29
Familismo X GenStatus 2b	.19*	.28	.09	.32	.28*	.35	.12	.39
Familismo X GenStatus 3	.13	.38	-.07	.43	.66	2.20	-.08	2.47
Familismo X LanguagePref.	-.03	.19	-.10	.21	--	--	--	--
Familismo X LOS	-.05	.09	-.03	.10	.12	.12	.01	.13
Familismo X AOS	-.08	.18	-.13	.20	-.07	.23	-.24*	.26
F	3.99***		2.24**		4.91***		2.37**	
R²	.33		.22		.41		.25	
df	22		22		15		15	

*p≤ .05, **p≤ .01, ***p≤.001

[a]Control variables for Latino sample: sex, school attended, mother's education, father's education
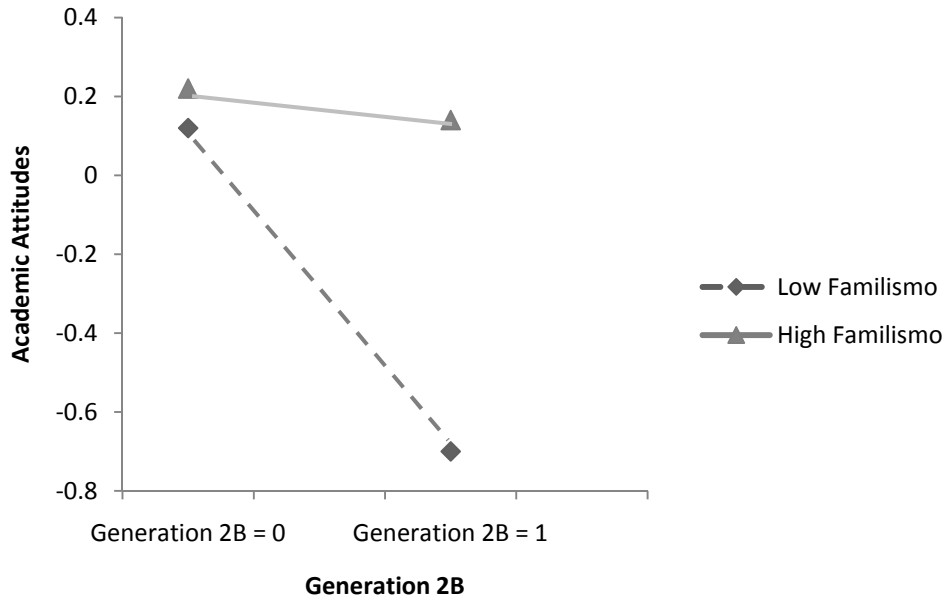
Control variable for Dominican sample: sex

Figure 3. Summary of Generation 2B X Familismo interaction predicting Academic Attitudes for Latino sample.
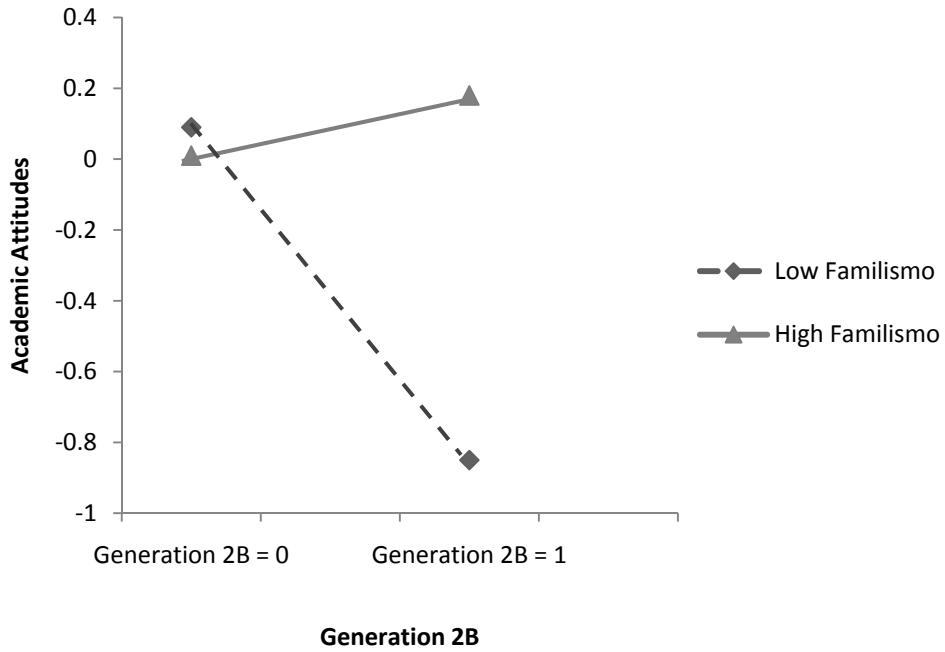

Figure 4. Summary of Generation 2B X Familismo interaction predicting Academic Attitudes for Dominican sample.
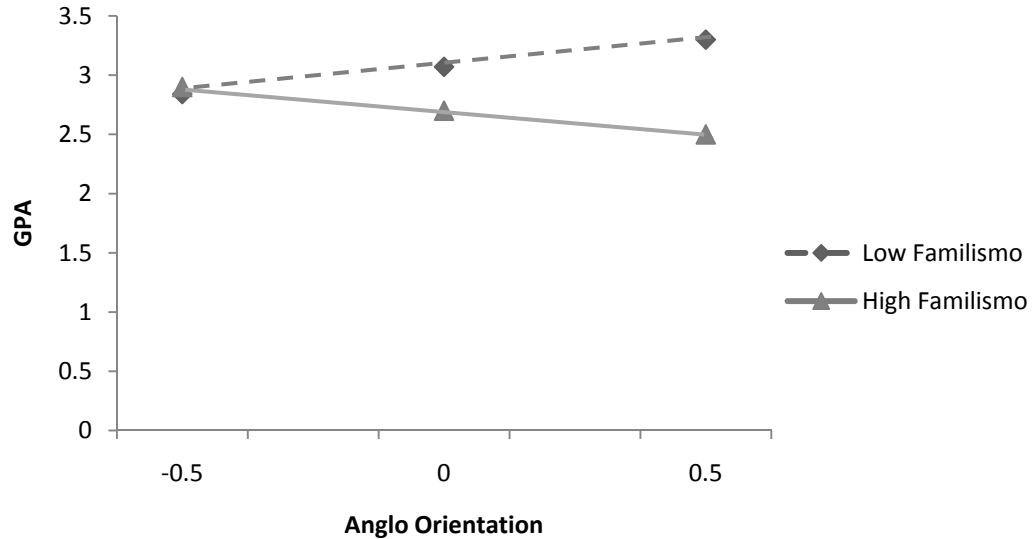
Figure 5. Summary of Anglo Orientation X Familismo interaction predicting GPA for Dominican sample.

Hypotheses 7 and 8. A fifth set of hierarchical regression analyses was

performed to test the hypotheses that belief in the American Dream leads to better

academic outcomes, and that belief in the American Dream will moderate the impact of

acculturation on academic outcomes. Results of these analyses are presented in Table 9.

Prior to conducting the regressions, continuous variables were centered for both the

Latino and Dominican samples and interaction terms for American Dream X Generation

2a, American Dream X Generation 2b, American Dream X Generation 3, American

Dream X LOS, American Dream X AOS, and American Dream X *Familismo* were

computed. Language preference was dropped from the analysis in an effort to decrease

degrees of freedom, as it did not yield significant results in previous analyses. Moreover,

American Dream X Generation 3 was excluded from the Dominican regression analyses

because it reached the tolerance limit (tolerance = .000) for multicollinearity. The

centered variables and interaction terms were then entered into a regression with sex,

school attended, and parent education as controls for the Latino sample and sex as the

only control for the Dominican sample. While the model was trimmed of irrelevant

variables for the Dominican sample, as with the models testing moderation effects of *familismo*, the inclusion of relevant variables violated the common rule of thumb requiring ten subjects for each predictor. These predictors were included nonetheless so as not to create specification errors by omitting relevant variables (Pedhazur, 1982) and because, as discussed previously, the number of additional subjects needed for each additional predictor decreases as you add more predictors (Green, 1991).

The first model, presented in Table 9, examining the association with academic attitudes for the full Latino sample was statistically significant and explained 31% of the variance. Several measures of acculturation, including *familismo* ($\beta =.29$, p<.05), significantly predicted academic attitudes, as did ethnic centrality ($\beta =.20$, p<.05) and family obligation ($\beta =.19$, p<.05). Contrary to this study's hypothesis that believing in the American Dream would lead to better academic attitudes, belief in the American Dream did not significantly predict academic attitudes. Belief in the American Dream moderated the relationship between *familismo* and academic attitudes ($\beta =-.23$, p<.05). Figure 6 illustrates this interaction. For Latino adolescents who believe in the American Dream, the degree of *familismo* had no effect on academic attitudes. However, for Latino adolescents who do not believe in the American Dream, there was a positive relationship between *familismo* and academic attitudes, such that greater endorsement of *familismo* predicted more positive academic attitudes. This interaction was not in the predicted direction.

The second model, presented in Table 9, examining the association with GPA for the full Latino sample was also statistically significant, explaining 20 % of the variance. However, while sex ($\beta=.23$, p<.01), second generation (B) status ($\beta=-.32$, p<.001), third

generation status (β=-.44, p<.05), and Latino orientation (β=-.30, p<.05) significantly predicted GPA, belief in the American Dream did not moderate the relationship between any of the acculturation variables and GPA. Furthermore, belief in the American Dream did not significantly predict GPA for the full Latino sample.

The third model examining the association with academic attitudes for the Dominican subset was statistically significant and explained 38% of the variance. Results are also presented in Table 9. While third generation status (β=-.33, p≤.001), *familismo* (β=.33, p≤.05), and family obligation (β=.26, p<.05) significantly predicted academic attitudes, and *familismo's* relation to academic attitudes approached significance (β= -.32, p = .065), belief in the American Dream did not significantly predict academic attitudes.   Further, contrary to this study's hypothesis, belief in the American Dream did not moderate the relationship between any of the acculturation measures and academic attitudes for the Dominican sample.

The fourth model examining the association with GPA for the Dominican subset was also statistically significant, explaining 22 % of the variance. Results of this model are presented in Table 9. Sex (β=.21, p<.05) and third generation status (β=-.21, p<.05) significantly predicted GPA, however, as with academic attitudes for the Dominican sample, belief in the American Dream did not. Moreover, contrary to this study's hypothesis, belief in the American Dream did not moderate the relationship between any of the acculturation measures and GPA for the Dominican sample.

Table 9. Hierarchical Regression Analyses Predicting Academic Outcomes from Immigrant Status, Acculturation, Ethnic Identity, Family Obligation, and Belief in American Dream and Testing Moderating Effects of Belief in American Dream

| | Latino Full Sample | | | | Dominican Subset | | | |
| | Academic Attitudes (N = 195) | | Self-Reported GPA (N = 195) | | Academic Attitudes (N = 121) | | Self-Reported GPA (N = 121) | |
Predictor Variables	β	SE B	β	SE B	β	SE B	β	SE B
Step 1								
Control Variables[a]								
Step 2								
Student's Sex	.09	.11	.23**	.12	.12	.14	.24*	.15
Student's School 1	-.002	.15	.09	.17	--		--	
(ref: parochial)								
Student's School 2	.04	.15	-.03	.17	--		--	
Student's School 3	.05	.14	.06	.16	--		--	
Mother's Education	.11	.03	.05	.03	--		--	
Father's Education	-.12	.03	-.06	.03	--		--	
Generational Status 2a	-.02	.13	-.11	.14	-.03	.15	-.06	.17
(ref: 1st generation)								
Generational Status 2b	−.20*	.17	−.32***	.19	−.18	.20	−.29**	.23
Generational Status 3	−.24**	.18	−.27**	.20	−.34***	.52	−.22*	.59
Latino Orientation Scale	−.11	.06	−.18*	.07	−.19*	.08	−.31**	.09
Anglo Orientation Scale	.17*	.11	.05	.12	.17*	.13	−.01	.15
Familismo	.13	.10	−.03	.11	.16	.13	−.08	.15
Ethnic Identity (Centrality)	.17	.11	−.02	.12	.20	.14	.07	.16
Ethnic Identity (Private Regard)	.02	.12	.12	.13	−.08	.15	−.04	.17
Family Obligation	.19*	.10	.02	.11	.25*	.13	.07	.15
Amer Dream	.08	.12	.02	.13	.09	.15	.05	.17
F	4.27***		2.37**		5.48***		2.47**	
R^2	.28		.18		.36		.20	
df	16		16		11		11	
Step 3								
Student's Sex	.08	.11	.22**	.13	.12	.14	.23*	.16
Student's School 1	-.01	.15	.10	.17	--		--	
Student's School 2	.03	.15	-.05	.17	--		--	
Student's School 3	.06	.14	.05	.16	--		--	
Mother's Education	.12	.03	.07	.03	--		--	
Father's Education	-.14	.03	-.06	.03	--		--	
Generational Status 2a	-.07	.27	-.30	.30	-.05	.29	-.18	.33
Generational Status 2b	-.18	.32	-.29	.36	-.12	.40	-.29	.46
Generational Status 3	-.28	.42	-.44*	.46	-.33***	.55	-.21*	.62
Latino Orientation Scale	-.28*	.11	-.30*	.12	-.32	.15	-.27	.17
Anglo Orientation Scale	.31	.29	.39	.32	.24	.36	.30	.40
Familismo	.29*	.14	-.14	.15	.32*	.17	-.14	.19
Ethnic Identity (Centrality)	.20*	.11	.01	.12	.21	.14	.14	.16
Ethnic Identity (Private Regard)	.01	.12	.09	.13	-.07	.16	-.04	.18
Family Obligation	.19*	.10	.01	.11	.27*	.14	.07	.15
Amer Dream	.01	.26	-.13	.29	.03	.28	-.03	.32
Amer Dream X Gen 2a	.09	.30	.25	.34	.06	.34	.16	.39
Amer Dream X Gen 2b	-.01	.39	-.02	.43	-.04	.48	.02	.54
Amer Dream X Gen 3	.06	.46	.19	.51	--		--	
Amer Dream X LOS	.21	.13	.13	.14	.16	.18	-.07	.20
Amer Dream X AOS	-.13	.31	-.34	.34	-.06	.38	-.34	.43
Amer Dream X Familismo	-.23*	.17	.11	.18	-.23	.22	.09	.25
F	3.47***		2.00**		3.96***		1.83*	
R^2	.31		.20		.38		.22	
df	22		22		16		16	

*p≤ .05, **p≤ .01, ***p≤.001
[a]Control variables for Latino sample: sex, mother's education, father's education, school
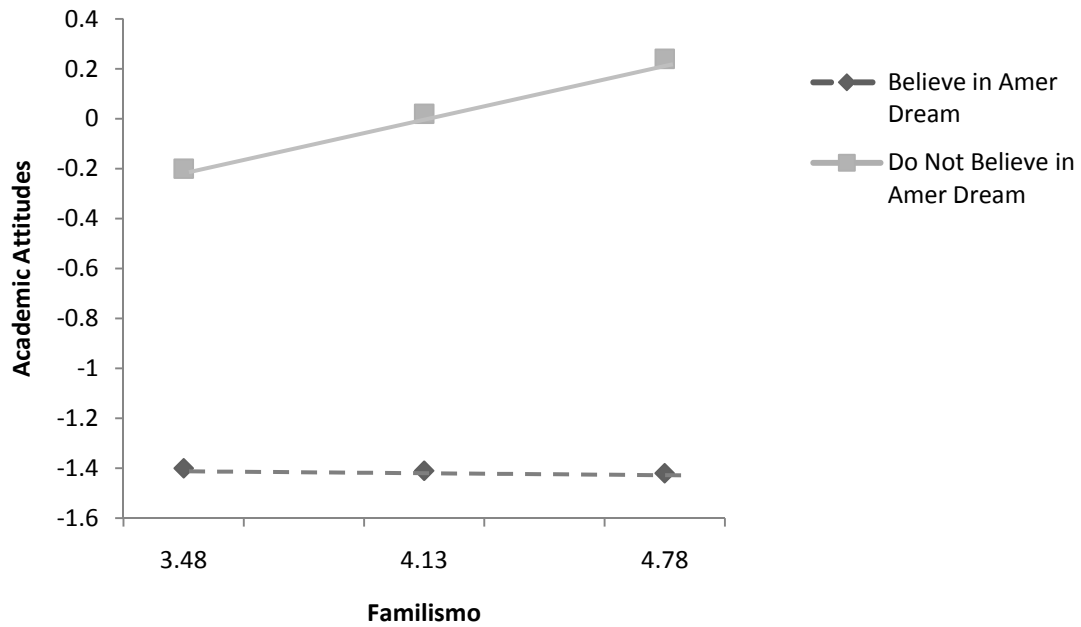 Control variable for Dominican sample: sex

Figure 6. Summary of Familismo X American Dream interaction predicting Academic Attitudes.

Gender as a moderator. Further hierarchical regression analyses were conducted to determine whether gender moderated the effects of acculturation on academic attitudes or GPA. Analyses were conducted on the full Latino sample, using sex, parent education and school as controls. Continuous variables were centered and interaction terms were created for sex X generation 2(A) status, sex X generation 2(B) status, sex X generation 3 status, sex X LOS, sex X AOS and sex X *familismo*. The analyses revealed no significant interaction effects for either academic attitudes or GPA. Thus, being male or female did not significantly impact the effect of acculturation on academic outcomes.

Discussion

Findings from the quantitative study suggest that generational status plays a significant role in Latino students' academic attitudes and performance. Importantly, evidence of the "immigrant paradox" was found for both the Latino sample and the Dominican subset of adolescents in this study. Significant differences in academic attitudes were found between first and third generation adolescents in the Latino sample, corroborating evidence of the immigrant paradox found in other studies (Fuligni, 1997; Portes & Rumbaut, 2001; Suarez-Orozco & Suarez-Orozco, 1995). In addition, significant differences were also found among second generation students in both the Latino sample and the Dominican subset, a finding that, to my knowledge, has not yet been explored in the literature. Specifically, students who were born in the U.S. whose parents were both immigrants (second generation (A)) endorsed more positive academic attitudes and performed better in school than students who were born in the U.S. and had a U.S. born parent (second generation (B)). Moreover, in the Latino sample, second generation (A) students endorsed better academic attitudes than third generation students, and first generation students endorsed better academic attitudes than second generation (B) students, suggesting that second generation (A) students may be more like immigrant students and second generation (B) students may be more like third generation students.

The Dominican sample unfortunately had only two students in the third generation, which affected the analyses of variance of academic outcomes by generational status. Despite limitations of the analyses of variance, regression analyses showed that the immigrant paradox was evidenced in the Dominican group of adolescents, both with respect to academic attitudes and GPA. Dominican students in

93

later generations (second generation (B) and third generation), tended to endorse poorer academic attitudes and have lower grades than their first generation peers. While analyses of variance did not yield significant differences among Dominicans in terms of academic attitudes, evidence of the "immigrant paradox" was further suggested in terms of GPA, whereas first generation students and second generation (A) students had significantly higher GPAs than second generation (B) students.

Again the difference among the second generation students brings to light some interesting comparisons not previously addressed in the literature. In families where both parents are immigrants, it is possible that traditions from the culture of origin will be kept alive and native language will be used more than in families where one parent is an immigrant and the other parent is not. This "mixed parent" family may include a parent who is less familiar with the Spanish language, making it even less likely that this language is spoken in the home. Thus for Latino adolescents, and Dominican adolescents specifically, whose parents do not share the same generational status, acculturation to U.S. culture in the second generation may occur more quickly, and the cultural values that have been found to promote academic motivation (Fuligni, 2001b; Garcia Coll et al., 1996; Portes, 1999) may be adhered to less, than for those whose parents are both immigrants. These findings extend the findings of Kao and Tienda (1995) who found that educational attainment increases in the first and second generations, but plateaus in the third, by evidencing that this plateau may actually occur within the second generation. Kao and Tienda (1995) attribute this phenomenon to the immigrant optimism hypothesis, where immigrant parents transmit their values to succeed and desires for social mobility to their children, resulting in their children obtaining higher educational levels than

subsequent generations.   The present study's findings suggest that this hypothesis may not be true for all families of immigrant parents. It would be important to understand further the differences between these two types of immigrant families to understand the mechanisms by which two-immigrant-parent families may motivate Latino adolescents more effectively than one-immigrant-parent families.

Generational status has been used as a proxy measure for acculturation (Hurtado & Gauvain, 1997; Perez & Padilla, 2000; Ryder, et al, 2000) owing to the significant correlations to other measures of acculturation. Proponents of the use of acculturation scales have argued that proxy measures do not capture the wide range of behaviors and attitudes that encompass the concept of acculturation (Cabassa, 2003; Cuellar, et al., 1995). In light of this debate, this study sought to test the effect of different measures of acculturation on academic attitudes and performance. Regression analyses revealed only generational status as having significant effects on academic attitudes or GPA in the Latino sample. Specifically, second generation (B) status and third generation status affected academic attitudes and GPA in the predicted direction, such that these students had poorer academic attitudes and lower GPAs than their first generation peers.   For the Latino sample, Latino Orientation and Anglo Orientation (the bidimensional scales of the ARSMA-II-SV), language preference (another proxy measure), and *familismo* (a Latino cultural value used in the "single-element" approach) did not yield significant results. These findings suggest, as Plunkett and Bamaca-Gomez (2003) caution, that we must be clear about which measurements are used in comparing findings relating to acculturation.

Correlational analyses for the Latino sample revealed that not all acculturation measures were significantly related. For instance *familismo* was significantly related

only to Latino orientation, suggesting that this variable may be measuring a different and perhaps unrelated construct from the other acculturation measures. It may be possible to adhere to the value of *familismo* without this adherence relating to one's acculturation in other respects. Conversely, first generation status was significantly related to all other measures of acculturation but *familismo;* and language preference was significantly related to all other measures of acculturation but *familismo* and second generation (A) status. This corroborates research arguing for the use of language and generational status as proxies for acculturation (Hurtado & Gauvain, 1997; Negy & Woods, 1992; Perez & Padilla, 2000). The acculturation scales used in this study were significantly correlated to language preference, as some of the items making up the ARSMA-II-SV are language-focused. Due to the multicollinearity of the unidimensional linear acculturation scale and the bidimensional scales, it was impossible to compare the impact of these acculturation scales on academic outcomes. The findings of this study suggest that we should not discount the importance of proxies in measuring the effect of acculturation on academic outcomes for Latino adolescents. Moreover, the fact that not all measures of acculturation were associated in the same way or predicted academic outcomes in the same way for the same group of adolescents suggests that the "single-element" approach of measuring acculturation would be helpful in furthering our understanding about which aspects of acculturation indeed account for different effects in academic or other outcomes.

Interestingly, the results of regression analyses exploring the effect of acculturation on GPA for the Dominican adolescents suggest that Latino orientation negatively predicts GPA, such that greater orientation toward Latino culture leads

Dominican adolescents to report lower GPAs. Garcia-Coll and Marks (2009) found in their study of Dominican school-aged children (ages 6-12 years) that for children who went to schools with large white student populations, preferring to speak English was three times as strongly associated with positive academic attitudes. They went on to suggest (equating English language preference with acculturation) that for Dominican youth, greater acculturation led to better academic attitudes and academic achievement. Contrary to the Dominican youth in Garcia-Coll's and Marks' (2009) study, the Dominican adolescents in the present study come from schools with large Latino populations and thus would not necessarily equate an Anglo identity with a "school identity," as Garcia Coll and Marks suggest for their students (Garcia Coll & Marks, 2009). Nonetheless, the finding that Latino orientation for the Dominican sample predicts lower GPA runs contrary to this study's hypothesis, suggesting that Spanish language orientation can interfere with school performance. Since the Latino orientation subscale of the ARSMA-II-SV is somewhat language-based, this finding may be capturing the struggle that Latino students who speak and think mostly in Spanish face when learning content in English, especially at this developmental stage when learning content is based mostly on reading. This finding also suggests, taken together with this study's findings of the presence of the immigrant paradox, that the Latino orientation subscale and generational measures of acculturation may be measuring different constructs, and again, that we must be careful in clarifying which measurements are used in comparing findings relating to acculturation.

Studies have suggested that biculturalism leads to better academic outcomes (Gomez & Fassinger, 2004; Suarez-Orozco & Suarez-Orozco, 1995). While results from

this study did not reveal significant differences in academic outcomes based on endorsement of biculturalism, some differences were found to approach significance. Specifically, for the Latino sample, results of the present study suggest that bicultural students may tend to have more positive academic attitudes than those who are not bicultural, and for the Dominican sample, bicultural students may tend to have higher GPAs than those who are not bicultural.

Some studies define biculturalism in terms of acculturation (Bauman, 2005; Cuellar et al., 1995; Feliciano, 2001) while others define biculturalism in terms of ethnic identity (Garcia Coll & Marks, 2009; Phinney et al., 2006). The present study considered the impact of ethnic identity on academic outcomes as well. In the present study, private regard for one's ethnicity did not have a significant effect on academic outcomes for either the Latino sample or the Dominican subset. Ethnic centrality, however, significantly predicted academic attitudes in the model testing the moderating effects of belief in the American Dream for the Latino sample; this relation approached significance for the Dominican sample. This finding lends further support to the proposal that adolescents' adherence to their ethnic background is meaningful to their academic efforts.

The hypothesis that Latino adolescents who endorsed a moderate level of family obligation did better academically and had more positive academic attitudes than those who endorsed either low or high family obligation was not supported in this study. Rather, a linear relation was found such that stronger family obligation, that is, a greater level of current support for the family, led to better academic attitudes. This linear relation, although in a positive direction, was not significant for GPA, suggesting that while students who behave in a way that is supportive of their families (e.g., helping

siblings with homework, helping parents around the house) display that same

conscientiousness in terms of educational attitudes (greater aspirations, expectations,

effort and educational values), this may not necessarily translate into better grades. As

other studies suggest (Fuligni et al., 1999), it may be that time spent supporting the

family takes time away from doing the work necessary to achieve academic success.

Understanding, therefore, how to fill in this gap, by identifying these academically

motivated students and providing more support in school or at home would be an

important step in addressing the achievement gap for Latino students and for providing

culturally sensitive interventions to Latino adolescents and their families.

Interested in the ways in which the negative effects of acculturation could be

buffered by beliefs and cultural values, the present study examined the interaction

between *familismo* and acculturation and between belief in the American Dream and

acculturation. *Familismo* moderated the effects of generational status on academic

attitudes for both the Latino and Dominican adolescents, buffering the negative effects of

being in the "mixed" parent group of the second generation (second generation (B))

compared to "other generations." These findings need further investigation, however to

parse out the effects of those in "other generations" as this group included first, second

(A) and third generations. Nonetheless, this finding suggests that academic performance

may be moderated by *familismo*.

Moreover, *familismo* moderated the effects of Anglo orientation on GPA for the

Dominican adolescents. For Dominican students endorsing higher *familismo*, there was a

slightly negative relation between Anglo orientation and GPA, such that as students were

more Anglo oriented, their GPA was lower. This fits with findings that greater

99

acculturation can lead to poorer academic performance (Fuligni, 1997; Portes &

Rumbaut, 2001). For Dominicans endorsing lower *familismo*, there was a slightly

positive relation between Anglo orientation and GPA, such that as students were more

Anglo oriented, they reported slightly higher GPAs, similar to findings in Garcia Coll and

Marks' (2009) study of Dominican school-aged children. Thus, whether Anglo

orientation positively or negatively predicted grades depended on Dominican's

endorsement of *familismo*. This finding suggests that perhaps the inconsistent findings

relating to acculturation in the literature can be addressed by investigating other factors

which may moderate the influence of acculturation on academic outcomes.

Contrary to this study's hypothesis, belief in the American Dream did not have a

significant direct effect on either academic attitudes or GPA for either the Latino

adolescents or the Dominican subset of adolescents in this study. However, belief in the

American Dream moderated the effect of *familismo* on academic attitudes for the full

sample in this study. For those who believe in the American Dream, *familismo* had no

effect on academic attitudes, however for those who do not believe in the American

Dream, there was a positive relation between *familismo* and academic attitudes such that

greater endorsement of *familismo* predicted more positive academic attitudes. Thus, for

those who do not believe in the American dream, adhering to cultural values like

familismo can still lead to positive attitudes.

While no hypotheses were proposed regarding the effect of gender for this study,

it is important nonetheless to investigate the effects of gender, as it had a significant

direct effect on GPA for both the Latino sample and the Dominican subset of adolescents,

and because gender differences have been found on the effect of acculturation on

academic outcomes (Colon & Sanchez, 2010). While gender had a significant direct effect on GPA, such that girls performed better than boys, it did not moderate the relation between acculturation and either academic attitudes or GPA in the present study, suggesting that for this sample of Latino adolescents, being male or female did not affect how acculturation affected either academic attitudes or GPA.

      Implications. The results of the quantitative study have several implications for the ways in which individuals interested in addressing the achievement gap that Latino adolescents face can intervene. First, this study highlights that for Latino, and specifically Dominican, adolescents, adherence to Latino cultural values can have a positive effect on academic attitudes and achievement. Adherence to cultural values like *familismo* can buffer the negative effects of acculturation and lessen the effect of the "immigrant paradox." Thus, reinforcing the practices of some schools that include Latino heritage and history in their curriculum can bolster ethnic pride and provide a buffer to combat acculturative pressures and stress as well as discrimination.

      Second, that Latino, and specifically Dominican, adolescents in earlier generations of immigration tend to do better than their later generation peers academically, suggests the possibility that these families are able to motivate their children in ways that may be lost in later generations. Rather than focusing on the losses of the later generations, understanding how to make these motivational messages in earlier generations relevant and inspiring to later generations will be a useful tool in maintaining the positive and hopeful academic attitudes of earlier generation students. Providing later generation students with a "dual frame of reference" through opportunities to attend to the less fortunate, or keeping alive the family stories of their

ancestors, can be some ways to maintain these positive academic attitudes. Moreover, understanding how family stories can promote and maintain the "immigrant optimism" discussed by Kao and Tienda (1995) can be useful in intervening at the family level.

Finally, the present study suggests that there is a disconnect between positive academic attitudes and school performance, where factors contributing to positive academic attitudes do not necessarily contribute to or translate into better grades. Thus, finding ways to implement assistance for those students who are motivated but unable to perform as well as they could is imperative to closing the achievement gap. In light of the importance to Latino adolescents of family support and obligation, support for students who are unable to perform well in school may be best addressed at the family level, by engaging parents as well as extended family in the process.

Limitations and Future Directions. While the present study makes important contributions to the literature on acculturation and academic outcomes for Latino adolescents and specifically for Dominican adolescents, further research needs to be conducted in order to gain a better understanding of how acculturation affects different groups of Latinos. Latinos are a diverse ethnic group with different immigration histories impacting their reception into the U.S. and their treatment as minorities. Thus, continuing the recent trend of focusing studies on one Latino ethnic group or a comparison of different Latino ethnicities is imperative in understanding the impact of immigrant status, acculturation, cultural values and ethnic identity on Latino adolescents' academic outcomes.

An important next step in the investigation of the effects of immigrant status, acculturation, ethnic identity, and family obligation on academic outcomes would be the

use of longitudinal designs in order to test for causal relationships. The present study uses a cross-sectional design and without longitudinal data it is impossible to determine causality. Longitudinal studies would help to understand the trajectories of Latino students' academic attitudes, thus determining whether they are able to maintain their positive attitudes throughout high school, despite barriers or discrimination that they may face. In addition, longitudinal studies investigating whether or how these positive attitudes translate into better grades, would lead to better insight in helping Latino students to perform better in school.

The present study focused on the impact of immigrant status, acculturation, ethnic identity, family obligation and belief in the American Dream on academic attitudes and GPA. Future research should also focus on the gap between academic attitudes and performance. In the present study, factors that predicted academic attitudes did not necessarily predict GPA. Understanding how academically motivated students can translate this motivation to better performance is an important step in closing the achievement gap for Latino adolescents.

One important finding of this study is that Latino students who were born in the U.S. and whose parents were both immigrants endorsed more positive academic attitudes and performed better in school than students who were born in the U.S. and had a U.S. born parent. This suggests that parental immigration status may have some bearing on the academic attitudes and school performance of Latino adolescents. When both parents are immigrants, it may be that these students receive more messages from their parents about believing in the American Dream or about the struggles of their country of origin than those whose parents were both born in the U.S. and thus one more generation

removed from the immigrant "dual frame of reference." Studies have suggested that biculturalism leads to better academic outcomes (Gomez & Fassinger, 2004; Suarez-Orozco & Suarez-Orozco, 1995), and while the present study did not present robust findings for this hypothesis, future studies should consider this as a possible difference between second generation adolescents in two-immigrant-parent families and second generation adolescents in one-immigrant-parent families.

Latino parents' relationships with their children have been characterized by high levels of communication and warmth (Guilamo-Ramos et al., 2007). This communication and warmth creates an environment that can foster discussions of family history and educational values and aspirations. The findings from the present study suggest that family factors such as the adherence to *familismo* and family obligation play an important role in providing motivation for Latino students to do well academically. Future studies focusing on other factors that distinguish among the second generation may consider comparing second generation (A) and (B) adolescents' parents' communication styles or messages about school. For instance one could wonder whether the most potent messages for motivating Latino adolescents to do well in school are messages that involve the "dual frame of reference" or those that instill cultural pride or those that create a sense of appreciation for the sacrifices made by parents.

Chapter III

Qualitative Study: Family Stories as Academic Motivation

Method

Participants

The qualitative sample is part of the larger sample of 223 Latino ninth graders who participated in the quantitative study. When asked to write about their family's background, history or culture, 43% of the 223 students (N = 96) wrote about their family's immigration to the United States. The qualitative study consequently focuses in part on the 96 students who shared immigration stories.

Students from the larger sample of 223 were also asked to share a family story about someone's experiences in school. Sixty-nine percent of the students (N = 154) provided stories involving a family member's experiences in school. The present study also focuses on this larger sample of 154 students to explore the relation between family stories about education experiences and students' attitudes toward education and success.

Of the group who shared immigration stories (N = 96), 38.5% were male and 61.5% were female. Most (70.8%) were born in the U.S., while most of their parents (83% of mothers and 86.5% of fathers) were born outside of the U.S. Their ethnicities mirrored those of the larger sample with 66.7% Dominican, 14.6% Puerto Rican, 4.2% Columbian and 14.5% representing other Latino ethnicities. Puerto Rican students who shared family stories of immigration from Puerto Rico were included in this study even though Puerto Rico is a U.S. Territory and their parents did not technically "emigrate" to

the U.S. Their experiences of coming from the island of Puerto Rico to the mainland U.S. are still very similar to those of other Latino immigrants and are clearly considered immigration stories by the adolescents reporting them. Sixty-seven percent of the students in this sample qualified for reduced or free lunch.

Of the group who shared family education stories (N = 154), 33.8% were male and 66.2% were female. Most (71.2%) were born in the U.S., while most of their parents (82.5% of mothers and 81.2% of fathers) were born outside of the U.S. Similar to the other samples, their ethnicities were 64.9% Dominican, 16.9% Puerto Rican, 5.8% Columbian and 12.4% representing other Latino ethnicities. Sixty-four percent of the students in this sample qualified for reduced or free lunch.

Procedure

As described in the Quantitative Study procedure, all students completed the first portion of the questionnaire, a written qualitative section, at the same time. The qualitative section of the questionnaire was provided in English and in Spanish, and students were given a choice of which language to use.

Family education stories were obtained using question (a) in Appendix A. Family immigration stories were obtained using question (b) in Appendix A. Students were also asked about their belief in the American Dream using question (c) in Appendix A.

Data Analysis Strategy

Principles of grounded theory methodology were used to conduct a systematic analysis of the responses to the above-mentioned questions in Appendix A (Strauss & Corbin, 1998). Recurrent themes were extracted from multiple readings of the responses by the author. The responses were then re-read and coded by the author and an undergraduate research assistant according to the extracted themes as described below:

Family education stories were coded for the presence of (1) any mention of success or positive experiences in school, (2) any mention of struggle or negative experiences in school, and whether those struggles or negative experiences were (2a) peer-related, (2b) school-related, (2c) family-related, (2d) related to finances, (2e) related to individual circumstances and (3) whether the story imparted a lesson (see Appendix B for a description of each code). These categories were not mutually exclusive or independent of each other, and were coded dichotomously as being present (1) or not present (0).

Adolescents' immigration stories were coded for (a) the presence of a successful immigration outcome (e.g., acquiring a new language, having stable work, obtaining citizenship) and (b) the belief that immigration would improve the future of the next generation (see Appendix B for a description of each code). Similar to the family education stories, these categories were not mutually exclusive or independent of each other and were coded dichotomously as being present (1) or not present (0).

For the qualitative study, adolescents' responses to the question asking whether they believed in the American Dream were coded "0" for those who did not agree with the statement, "1" for those whose answers were "mixed," and "2" for those who agreed with the statement.

The author and undergraduate research assistant independently coded each of the questions using the codes described above. Inter-rater reliability ranged from 79% to 91% for the above-mentioned codes; discrepancies were discussed at length and final coding was agreed upon by both raters.

These themes began to delineate the research questions previously presented for this study:

1. Are Latino adolescents' beliefs in the American Dream transmitted through family immigration stories? If so, what kinds of family immigration stories are related to adolescents' beliefs in the American dream?

2. What do Latino adolescents believe to be barriers to the "American Dream?"

3. How do family stories about education experiences relate to Latino adolescents' educational values? Do positive stories of family members' experiences in school contribute to Latino adolescents' valuing education?

4. Do Latino parents share negative educational experiences with their kids? If so, what do these negative experiences entail and how do adolescents recall or make meaning of these experiences?

To address some of the above research questions, immigration and family education stories were also compared to the following outcome measures:

Academic Self-Efficacy. Student reports of *academic self-efficacy* were obtained using items from the academic efficacy subscale of the Classroom Environment Scale (Moss & Trickett, 1987) ($\alpha = .80$). Students responded to seven items with responses ranging from (1) strongly disagree to (5) strongly agree. The mean of these items was calculated to create a total academic efficacy score for each participant, with higher scores indicating greater academic self-efficacy. Sample items included: "I'm certain I can master the skills taught in school this year," and "Even if the work is hard, I can learn it."

Educational values. Student reports of *educational values* were assessed using a scale developed by Fuligni, Witkow & Garcia (2005) ($\alpha = .84$). Fuligni and colleagues termed this scale "value of academic success," which assesses the extent to which students place importance on doing well and succeeding in school. Students responded to six items with responses ranging from (1) not at all important to (5) extremely important. The mean of these items was calculated to create a total *educational values* score for each participant, with higher scores indicating more value placed on education. Sample items included: "How important is it to you that you do well in school?" and "How important is it to you that you go to a good college after high school?"

School Effort. Student reports of *school effort* were measured by a 5-item scale adapted from Steinberg and colleagues (1992) ($\alpha = .75$). Students responded to five items with responses ranging from (1) never to (5) almost always. The mean of these items was calculated to create a total school effort score for each participant, with higher scores indicating greater effort exerted toward school. Sample items included "How often do you complete all assigned readings and homework before quizzes and tests?" and "How often do you really pay attention in class?"

<div align="center">

Findings

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Excerpts from responses to the qualitative questions in Appendix A are used to illustrate the themes and findings in the following sections. Fictional names are used for the students quoted in this study to preserve confidentiality.

Immigration Stories and Belief in American Dream. As described above, immigration stories were coded for (a) presence of immigration success and (b) presence of the theme of immigration for the benefit of the next generation,

Fifty-seven (59%) of the adolescents offering immigration stories shared stories that noted the presence of some success. For example, Jose wrote, "When my father first came here, he worked in a factory with his brother. My father didn't know any English and he had to learn all by himself. It was hard to learn a new language by himself and now he can write, read and talk English good." Julian's story exemplified those of several other students who described success as the result of family and friends working together. He noted, "My dad came here first, then my mom. When he came here it was easy for him to get a job because his friend owned a paper company and he got him a job over there. And he came with his mom so he had a place to live. My grandmother took care of kids for a living." Successful immigration also meant that families were able to bring the rest of the family to the U.S. For example, Lily wrote, "My mother told me this story about her oldest brother. He was the first one to come to the U.S. He was only seventeen. She didn't even get to meet him until he was like 25 years old. She told me when he first came he went to New York and then moved to [name of city]. That's when he started to work in a factory and paid for my grandparents to come to the U.S." But families were also often separated for a long time before reunions were possible. Alessandra illustrated this with her account, "When my parents first came to the U.S., as soon as I was born my mom had to leave me in the Dominican Republic with my family because that was the only chance for my mom to come to the U.S. and I didn't have my papers yet. Then when I turned three I was able to come to the U.S. So I was away from my parents for 3 years." While this was a successful reunion in the end, this account demonstrates that successful immigration often included difficult struggles.

Thirty-nine (41%) of students shared immigration stories that mentioned no evidence of success, but rather emphasized the struggles of coming to a new country. For instance, Michael responded, "When my grandmother first came to this country, she had a hard time. She had a hard time because she couldn't speak English. So if she didn't speak English she couldn't get a job." Aisha's account reminds us of the loneliness that many face in leaving family to come to a new country. She noted, "When we moved to the U.S. A. my mother tells me how she was so lonely because she had no family or friends. My father would work late and the days she would look forward to were during the summer when they would have the Latino festivals, especially the Dominican parade in August. It reminded her of our country and how beautiful it was. It was the only thing that comforted her." Conversely, some families who were able to bring family with them struggled to provide for everyone. Juanita described her family's struggle as follows: "When my grandparents first came to this country they had it hard. My mom's a child of 6, including herself. And my grandparents didn't have room for all of them so they all had to sleep with other relatives for a year so they can be all set with everything." Some stories focused on the struggle and risks of actually crossing borders to immigrate. For example, Carlos explained, "Our family story that my Dad told me was that [it was] very hard and that it took a long time to come over here. He needed to go to Mexico by boat, then he went to California. After he was in California he needed to be in the back of a truck cramped with 20 or more people to go from California to New York. If it wasn't for a Puerto Rican guy that told him what to do, he probably would have gotten deported."

Many of the stories of immigration struggles were framed in terms of sacrifices for the next generation. Twenty-nine (30%) of the 96 students sharing immigration stories shared stories that suggested that family members immigrated to the U.S. to improve the lives of the next generation. One such example came from Ben who responded, "When my mother came to the USA so we could have a better life. She left everything behind so we could have a better education and a better life." Dina also offered, "When my mother came to the United States, she suffered a lot. She worked construction even though women weren't supposed to work that. She told me she sneaked into the van and when they got there she came out. During that time she was pregnant [with] me. She still worked knocking down walls to give me a better life. She didn't want me to pass though everything she passed through." Some students' stories suggested that parents motivated them by reminding them to be respectful of the sacrifices they made. For instance, Dean wrote, "When my parents first came to the United States everything was very difficult for them, to get around and to do stuff. But finally they were successful in life and they always told me to do good 'cause they went through a lot." These sacrifices were a recurrent theme in these stories. Elisia shared, "When I was eight, I came here and the reason why I came was because my mom thought that I would have a better future here than in my home country so she made a sacrifice and came leaving everything she knew behind." Some stories showed that this hope to provide a better life for the next generation continued as grandparents transmitted this motivation to their children (now parents) who came here at a young age. James' account illustrated this: "When my mother first came here she was six and learning English. She dropped out at 16 and had a child a year later. She was the only one working and a single

112

mother. She worked hard. Now things are different. We have a better life. If she didn't make the sacrifices we wouldn't be where we are today." The appreciation that James demonstrated for his mother's sacrifices also came through in many of these stories. Sofia also shared, "My mother came to the United States from the Dominican Republic when she was 9 years old. She worked hard to learn English and had good grades and perfect attendance. . . . She worked hard to give us a good education by herself and then she married my step father. We are living together even though we are having financial situations. I love being Latina. It's so great."

Chi square tests were performed to examine the relation between Latino adolescents' belief in the American Dream and their family immigration experiences. While Latino adolescents' belief in the American Dream was not significantly related to successful immigration stories or immigration stories that did not evidence success, Latino adolescents who reported that their family members came to the U.S. to improve the lives of the next generation were more likely to believe in the American Dream ($\chi^2 = 6.76$, p<.01).

Barriers to the American Dream. Thirty-four adolescents in the present study reported not believing in the American Dream. Seven of these Latino adolescents cited discrimination as a barrier. For example, Miguel wrote, "No, I don't agree. The reason is because some people in America don't give Hispanics or other cultures a chance to be successful." Citing racism as a barrier, Simone responded, "I do not agree with that. You can study hard and work well but in some places you will not [succeed]. Some people are still racist in America." Echoing that belief, Lisa stated, "No. I think that if you're a certain race such as white [you can succeed]." Four of the seven adolescents

who cited discrimination as a barrier specifically cited discrimination against immigrants. For instance, Marco wrote, "No, I don't agree because some immigrants work harder than any rich person in America and they still have much, much less than rich people." Finally, Anna shared her opinion: "No. Because my mother worked hard for 15 years and she is still not successful because she's an immigrant."

Nearly half (N=16) of the Latino adolescents who reported not believing in the American Dream cited examples of how hard work does not "pay off." Most (N=10) raised this theme in general terms. For example Sonya responded, "I don't agree because there are some people who work hard but they do not get rich, even though they still work hard at it." Six of the adolescents specifically cited their own experience or the experience of their parents or others they knew as examples of how hard work does not necessarily "pay off." Experiencing the frustration first hand of working hard with limited success, Michael wrote, "No, because I'm working hard and trying my best but I still get C's, D's, and B's. In other words, I don't get the grades I deserve." Moreover, seeing the difficulties her parents endure as they work hard to succeed, Rosa stated, "I disagree, because my parents have worked really hard all their lives and we are not living the American Dream of being rich and stuff."

Finally, four of the adolescents who reported not believing in the American Dream simply described how difficult it was to escape the barriers faced by many. For instance, Anna Lisa shared, "No, if you have a bad job, no matter how hard you work you won't get anywhere. Like if you're an adult working at McDonald's." The difficulty of escaping poverty was addressed by Juan, who responded, "No, I don't agree. If you are poor and cannot get an education then it may just be impossible for you."

Positive Family Education Stories and Academic Outcomes. Family education stories were coded for the presence of (a) any mention of success or positive experiences in school and (b) any mention of struggle or negative experiences in school. These negative experiences were further coded as described in the "Methods" section and in the following section.

Sixty-eight (44%) of the 154 Latino adolescents providing family educational stories mentioned that a family member experienced some success or positive experiences in school. Examples of such success include completing school, getting good grades, and enjoying school. Many of the adolescents providing these stories seemed to take pride in their parents' school success. For example, Nick reported, "My mom once told me that she was the best student in her class. She always did her homework and paid attention in class. She even did first and second grade in one year." Marisela wrote, "My mom tells me that she always got good grades, always loved by teachers and she used to hold the Guatemala flags in parades. That was a good thing in my country. Her teachers got her a scholarship to come here to America and graduate from college in California. She was the 'smart lady.'"

Family school stories were not limited to parents' experiences. For instance, Elena reported, "When I was little my mom told me a story about my aunt. When she was in 5th grade she was very bad and always had a 'C' average. At the beginning of 5th grade my aunt wanted to start fresh and be a good girl. That's when she got her first 'A.' My grandmother was so excited that she had a party to celebrate her 'A.'"

Many stories of school success also focused on rule-following. For example, Cynthia shared, "My mom would always tell me that her teacher would make them

memorize almost everything and if they didn't get it right then they would get punished. My mom always memorized it because she would always pay attention and study. She always tells me to study."

Other stories of school success focused on the sacrifice and help from family members to help a struggling student. Katherine noted, "My father was horrible at algebra in his school. He used to fool around, slack and not take that class seriously. Until his mother (my grandma) had enough of his receiving his failing grades in algebra and she decided to react. He would have to read from his algebra book and re-study the examples given over and over again. In the end my dad turned out to be a whiz in algebra."

A few stories focused on the fun family members had in school, which included pranks and fun with friends. For example, Grace reported, "My mom used to tell me that when she was younger her and her best friend used to pay attention in class but they also wanted to have fun so her and her friend would start playing tricks on their classmates and on the teacher. They won't do bad pranks only funny safe pranks."

T-tests were performed to determine whether positive family education stories were related to academic outcomes. Students who reported family school success (M = 4.47, SD = .49) reported valuing education more than those who did not report family school success (M = 4.17, SD = .65) ($t_{(149)}$ =-3.191, p$\leq$.01).

Sadly, several stories of success also entailed struggles that interfered with success, as demonstrated by Tomas' story of his father's school experience: "My dad tells [me] about how good he was in math and he will tell me 'if I had stayed in school I would have been an engineer.' What happened was my family was poor so, my dad had

to work to help out the family." The following section describes some of the accounts of students whose family members encountered school struggles or negative school-related experiences.

Stories of Educational Struggles. Family education stories that were coded for any mention of struggle or negative experiences in school were further coded for the presence of struggles or negative experiences that were (a) peer-related, (b) school-related, (c) family-related, (d) related to finances, (e) related to individual circumstances and (f) whether the story imparted a lesson. Appendix B provides a description of each code. These categories were not mutually exclusive or independent of each other, and were coded dichotomously as being present (1) or not present (0).

Peer-related struggles. Twenty-five (16%) of the 154 Latino adolescents sharing family school stories evidenced peer-related struggles in these school stories. One adolescent, Susanna reported, "My mom had a girl who always bothered her in school, always pulled her hair and always made fun of her. My mom ignored it. One day, my mom had enough. She fought her and beat her up." Another example came from Lucy who wrote, "When my mother was in the 6th grade she had gotten in a fight with a classmate because she had taken her notebook and wrote bad things about her in it. Well they fought and my mother got suspended for three days, but the other girl got kicked out of school." For stories involving struggles with peers, bullying and teasing were recurrent themes. For instance in describing the teasing that her immigrant mother faced, Ellie shared, "My mom went to school in Puerto Rico and she loved being over there but her mom didn't let her finish school over there because they decided to move here. She was very upset. [She] got picked on over here because she didn't know too much

English." Even family stories that indicated some evidence of success also indicated evidence of peer struggles. For example, Antonia reported, "My mother had told me of the only time she got a detention. She said that she got a detention when a kid in her class called her a racist name. She always ignored him but that time she was fed up. She chased him and pinned him to the wall and got caught. But mom was always an A student."

Teacher-related struggles. Thirty-six (23%) of the students participating in the present study shared stories that indicated negative experiences associated with teachers or other school officials. Several students discussed punishments doled out by teachers in family members' home countries that included humiliation and corporal punishment. Ella's story was representative of many. She reported, "When my mom went to school in the Dominican Republic she told me that the teachers could hit the students and humiliate them. One time my mom didn't do her class work and the teacher made her get on her knees and face the wall for the rest of the class." These punishments were also sanctioned by parents, as Joseph suggested: "When my mother was little her mom always made her go to school. She told me she didn't like going because if she behaved bad the teacher would hit her. One day my mom talked back to the teacher. The teacher hit her so hard that my mother began to cry. When my grandmother found out what happened my mother go two spankings for talking back to the teacher." The Latino adolescents in the present study also recounted family members' stories about teachers' expectations in their home country. For instance Isabella recounted, "My mom once told me that she had to remember a whole chapter book and if she would forget a single word she would get whipped with a cable." Several students discussed family members having

to memorize texts or various other learning materials at the cost of being hit or otherwise punished if they were not memorized.

Negative experiences with teachers were not limited to family members' home countries, however. As Bonita illustrated, family members recounted negative experiences with teachers in the U.S. as well: "My father tells me how he came to the U.S. when he was in second grade. The teacher would punish him to stay after school because he wouldn't speak English well." Another student, Carmela, shared her aunt's experience at a U.S. parochial school where her aunt, who was in the second grade "didn't understand [a multiplication question] and answered incorrectly. The nun got aggravated, yelled at her, and made her cry."

Family-related struggles. Twenty (13%) of the students sharing family educational stories evidenced family-related struggles in their school stories. These struggles included a complete lack of family support for school as well as family obligations, such as taking care of siblings or taking care of the home, interfering with school attendance or school success. A minority of these stories included family members receiving no support for education from their family. For instance, Helena wrote, "My mother told me that when she lived in the Dominican Republic her father never gave her a ride to school. She used to walk to school which took a long time because it was about ½ mile long. My mother said that I should be grateful that I can get a ride to school and back and lucky that she didn't turn out like her father." Oscar's grandmother's lack of support for his mother's schooling was evidenced in this account: "My mom experienced a bad problem because her mom used to beat her so all she loved was school but her mom hardly let her go to school . . ."

However, most of the family-related struggles involved family obligations interfering with school attendance or success. Paul captured the essence of these stories with his parents' school experiences: "My parents . . . weren't able to go to school every day because their parents said they were old enough to stay home and help them work on the farmlands and take care of their younger siblings." Others had to abandon school altogether to help their family. Gabriela explained, "When my mom was young she was interested in being a teacher. She had to give up her dream. She had to because she had to help out her mother and her brother and two sisters."

Financial struggle. While stories of family obligation indicated that school needed to be abandoned for some family members, these stories were also coupled with themes of financial struggle. Twenty-two (14%) of the Latino adolescents sharing family education stories, shared stories of school struggles relating to finances. Some stories described the struggle to purchase supplies such as books and writing materials. Lucia wrote, "When my mother was in school her family was very poor. Her parents didn't have enough money to buy her school supplies so she would use her sisters' old notebooks and erase all of the writing. This was very difficult for her because she had seven sisters. This is why my mother always tells me to appreciate even the littlest things in life and always take advantage of good opportunities." The majority of stories evidencing financial struggle indicated the need to leave school to support the family through work. Nina recalled, "My father used to tell me that his dad took him out of the third grade to work. They needed the money to support themselves and obviously school does not pay you." Rosalita also reported, "My mother told me that when she was in college she didn't finish. The reason in which she dropped out was because she needed

to help her family with money. She told me that she didn't want that to happen to me. She wants me to finish school."

Individual factors. Being unable to finish school was also a recurrent theme within the stories sharing struggles in school due to "individual factors." These factors included difficulty concentrating, getting into fights, and becoming pregnant, all of which interfered with a family member's education. Thirty-eight (25%) of the Latino adolescents sharing family education stories indicated a family member's individual struggles interfering with their schooling. Carlos offered one such story: "My mom always tells me how school was difficult for her and how she dropped out. My dad always tells me about how he had to drop out because of a fight and regrets it. They don't want me to be like them. And that inspires me to reach my goal." Sara recalled, "My aunt told me a story about her childhood in school. My aunt never got to study because she would always end up fighting . She is now regretting that she didn't go to school."

Often, stories of pregnancy preventing school completion were conveyed. Yazmin shared, "In the Dominican Republic it is hard to get a good education. My mom has always told me to do my best and not be like her who dropped out of school to have kids. She says if she had stayed in school she would have been a trained professional in some career and wouldn't be struggling with supporting the family." However, not all stories of individual struggles ended up in school failure. As Hector pointed out, his mother persevered despite having to drop out due to her pregnancy: "My mother always told me that she always tried her best in school. She always came home and did her homework right away. She did make it through most of college but had to drop out

because she got pregnant with my sister. Having my sister did not stop her from achieving success."

     Lessons conveyed. Fifty-one (33%) of the 154 students sharing family school stories conveyed stories that included a lesson to be learned from the family member's school experience. Stories of both success and struggle conveyed important lessons, as evidenced by stories already described. Many more examples can be found among the stories shared. For instance, Lia's stories of her mother's successes and struggles translated into a lesson of perseverance: "My mother sometimes sits down with me and compares her experience in school compared to mine. She was very smart and focused a great amount in her education. An unfortunate thing was that she was mistreated by her classmates. She was made fun of because of her clothing, hair, speech, and her smartness. She always tells me to push harder because those students helped her move forward. She used their comments as a way to not quit and to do what she believed in." Often stories conveyed the message that the adolescents should be grateful for what they had, as evidenced by Edward's story: "My grandmother told me that when she was young she only passed to the 7th grade because she had to work in her dad's bar to get money for her family. And she said how lucky we are to have schools that insist that we have to attend." Iliana's story echoed this message: "My mom always tells me of how hard she had to study when she was my age. She tells me that in schools in the United States, there is no work to be done. She would tell me of how she spent hours memorizing her textbooks in the Dominican Republic. She tells me how easy I have it. When she was a kid, she had to memorize her textbooks and walk miles just to get to a bus stop." Bianca also shared, "My dad is always telling me the story of how he had to

share his school supplies with his other eight brothers and sisters. He is always telling me how they would divide a notebook into two parts, or divide the pencils and fight over who got the half with the eraser. He is always telling me how we have it so much better than he did and how he used to make the most out of what he had available."

Some stories clearly conveyed adolescents' admiration for and inspiration from their family members. For instance, Angela wrote, "My mom always tells me how good she was when she was small and that helps me to be good." Armando also writes, "I heard a story about my father. He tells me that he always got A's in school and even though life was hard in the Dominican Republic, back then he never gave up for his family. This taught me to never give up and always think about my family, to make it for them."

When these family education stories were compared to educational outcomes such as educational value, school effort and school efficacy, some significant relations emerged. Specifically, students whose family school stories indicated negative peer interactions (M = 4.04, SD = .64) reported valuing education less than those who did not report negative peer interactions (M = 4.35, SD = .59) (t$_{(149)}$ = 2.35, p≤.05). Moreover, students whose family school stories indicated family-related school struggles (M = 4.14, SD = .70) reported experiencing greater academic efficacy than those whose stories did not indicate family-related school struggles (M = 3.77, SD = .62) (t = -2.18, p<.05).

Discussion

This study illustrates the potential motivational role of family stories on adolescent educational beliefs and values. By relying on adolescents' family stories, as recounted in their own words, the present study provides insight into the interconnections

between Latino adolescents' beliefs in immigration outcomes, their structural and individual explanations for success, and the value they place on education. Family stories are one way in which individuals connect across generations and create a sense of history and identity (Martin, et al., 1988), and family stories regarding immigration and school experiences are able to create both. Students who reported that parents or grandparents came to the U.S. to improve their lives were more likely to believe that the American Dream was possible. Many of these stories reported an acknowledgment of the sacrifices made by parents and/or grandparents and the need to honor that sacrifice. Stories of immigration successes and struggles conveyed messages of inspiration and parental aspirations as well as imperatives to succeed.

Family education stories were shown to impact adolescents' school identity through educational beliefs and values. Those who reported family school success reported valuing education more than those whose family stories did not include these positive experiences. Successful or positive school experiences for family members were described by adolescents in terms of getting good grades, not getting in trouble, graduating, and enjoying school. Many of these stories mentioned parents' aspirations and expectations of success for their children. Some of these stories included the family member's expressing disappointment that dreams of ultimate success were not realized because of the interference of various obstacles (e.g., financial struggle, family obligation).

The findings of the present study also suggest, however, that family stories regarding school struggles may not necessarily have a negative impact. Rather, they may inspire adolescents to take more control, or efficacy, over their schooling. Similar to

findings in the quantitative study that family obligation can lead to better academic attitudes, stories passed on by family members that convey struggles relating to family obligations seem to inspire adolescents to take charge of their education.

These findings suggest that the themes that parents use in recounting school and immigration experiences can have a positive impact on how Latino adolescents view their own possibilities for success. This positive impact on Latino adolescents' academic outlook can help to buffer Latino adolescents from the many barriers they face in obtaining a good education and inspire them to persevere as their family members did in the face of adversity.

Given the barriers to success that Latino youth face in terms of discrimination, poverty and poorly funded schools, it is not surprising that thirty-four of the Latino adolescents participating in this study did not believe in the American Dream, that hard work will necessarily yield success. What is surprising is that this number is not higher. Despite the discrimination, poverty, poorly funded schools and other barriers they may face, of the 223 students in the present study, 166 responded that they did believe in the American Dream. The fact that these adolescents are not yet deterred in their hopes of success is encouraging.

Implications.   The findings of this study provide insights concerning ways that Latino parents can help to shape their children's educational beliefs and values. Continuing the rich tradition of warm and supportive communication (Guilamo-Ramos, et al., 2003), Latino parents can inspire their adolescents to believe in the possibility of success and aspire to school success through family stories.

Family immigration stories can create a sense of family history by providing a context for understanding parental (or other family members') messages of high aspirations, expectations and successes in school. Many of these success stories included messages about perseverance and appreciation for sacrifices made. They also included messages of sacrifices made for the adolescents themselves (immigrating for the betterment of the next generation), which messages were quite potent and resulted in inspiring adolescents to believe that success was possible. Thus, keeping these immigration stories alive even into later generations can possibly inspire adolescents to continue to persevere in the face of adversity and believe in the possibility of success in the U.S.

Findings from the present study also suggest that family school stories can inspire adolescents to achieve. Educational values and beliefs were impacted by stories of school success and positive experiences, suggesting that parents who wish to inspire their children to value education should convey their own or other family members' experiences of success and positive messages about school. Conversely, messages about negative peer interactions were negatively related to valuing education. Thus, it is also important to understand that Latino adolescents (and even younger children, as these stories have been presumably told from a young age) can be negatively impacted by negative messages in family stories. However, family stories regarding struggles do not necessarily have to have a negative impact, as family-related struggles actually inspired adolescents to take more control over their schooling. Many Latinos adhere to the cultural value of *familismo*, the belief that the family is of great importance, and it is therefore possible that stories of abandoning school to support one's family are not

necessarily considered negative experiences or messages, but rather positive messages of success (helping the family, keeping the family together). Moreover, these stories of family-related struggle still included messages valuing education (regret for not finishing school, wishes that one could go back to school), which messages may not have been as present or potent in stories of negative peer interactions.

      Limitations and future directions. The present findings generate additional research questions regarding the impact of family stories on Latino adolescents' educational beliefs and values. While the stories in the present study are rich in detail despite their brevity, one limitation of the present study is that it relied on short answer questions to gather adolescents' accounts of family stories. Future research may focus on fewer stories and longer one-on-one interviews so that the researcher can follow up with queries to produce even richer stories. These interviews could also include questions about the adolescents' current school experiences so that research questions could also focus on how adolescents' current school experiences affect their choice of stories that they recount, and whether these stories also project the struggles they are currently facing, or help them cope with their current struggles.

      While the stories presented here provide important insights concerning the potential role of family stories on Latino adolescent educational beliefs and values, the findings may not extend to adolescents from other areas of the United States or from specific Latino ethnicities. Further research is needed to determine if the present findings are specific to students attending the high schools included in this study or if they generalize to specific Latino ethnicities or to other Latino youth attending high schools in poor urban neighborhoods.

It is also important to understand how family stories impact Latino adolescents as they progress through high school, when for some adolescents, family may become less important and peers may become more important. The present study provides an illustration of the role of family stories on Latino 9th graders' educational beliefs and values at a particular point in time. Longitudinal studies tracking these youth throughout their high school years would help to gain insight into the strength of the role of family stories during this turbulent developmental period.

Chapter IV

Conclusion

This study seeks to further our understanding of Latino adolescents' immigration and acculturation experiences and how they relate to their academic attitudes and performance. As Latinos become a greater proportion of the United States' population and work force, educators and policymakers can no longer ignore the importance of understanding how to better facilitate the academic success of this diverse and culturally rich group. Understanding the underpinnings for failure, but more importantly, the path to academic success for these adolescents is vital. Moreover, it is by better understanding cultural values such as *familismo* and how family influences such as stories of immigration and education can serve to motivate youth to succeed academically that we can inspire some ways to facilitate this success.

The results of the quantitative study show evidence of the "immigrant paradox" for the Latino adolescents, and specifically the Dominican adolescents, participating in this study. Thus, adolescents in later generations tended to have poorer academic attitudes and perform more poorly in school than did adolescents in earlier generations. An important contribution of the present study is that it looked more closely at the second generation and found a difference in academic outcomes among the second generation Latino adolescents as well, such that Latino adolescents who came from families where both parents were immigrants had better academic attitudes and better grades than those

who came from families where only one parent was an immigrant. This finding was also true for the Dominican adolescents in this study in terms of GPA, such that Dominican adolescents who are second generation from two-immigrant-parent families had better grades than those who are second generation from one-immigrant-parent families. An in-depth exploration of second generation Latino students has not received much attention in the literature, to the best of my knowledge. Understanding the mechanisms by which two-immigrant parent families may motivate Latino adolescents more effectively than one-immigrant parent families may allow us to find ways to extend these methods to later generations as well. Findings from the qualitative study suggest that the inspirational themes used in stories passed on by immigrant parents may provide one such mechanism for academic motivation. The findings regarding the differences among the second generation suggest that further research focusing on this group is warranted.

Another important contribution of this study was its additional focus on the Dominican adolescents in the sample. Results for the Dominican sample did not necessarily mirror results for the full Latino sample, as demonstrated by the finding that Latino orientation for the Dominican sample predicted lower GPA, but did not do so for the Latino sample. This and other similar findings from the quantitative study also illustrate the importance of studying specific Latino ethnic groups in order to appreciate and preserve the uniqueness and complexity of each culture. Aggregating the diverse ethnic groups that encompass the Latino culture in studies may result in important group differences being lost and create "one size fits all" policies that do not address the particular needs of specific ethnic groups. Moreover, by understanding how some ethnic

groups within the Latino culture may fare better than others on various outcomes, we can perhaps apply those lessons in ways that are beneficial to other ethnic groups as well.

The importance of family factors in influencing the attitudes and performance of Latino, and specifically Dominican, adolescents is also illustrated in the present study. *Familismo* was found to have significant direct and indirect effects on academic attitudes for both the Latino and specifically Dominican adolescents in this study. Adolescents who placed greater importance on their family (as measured by *familismo*) tended to have better academic attitudes. Similarly, Latino, and specifically Dominican, adolescents who supported their families more (as measured by family obligation) tended to have more positive academic attitudes. The findings of the qualitative study complement the quantitative study's results regarding the important influence of family factors on Latino adolescents' academic attitudes. Family immigration and education stories both positively influenced Latino adolescents' educational beliefs and values. This positive influence of family orientation adds support to the literature which emphasizes the important role of family influences on Latino youth (Fuligni, 1997; Portes, 1999) and suggests a place where those interested in helping Latino youth academically can intervene to better support Latino students. Understanding that family and cultural factors have a significant impact on Latino adolescents' academic attitudes and performance reminds us also of the need to create culturally-sensitive interventions which incorporate the strengths of family and the Latino culture. Based on this study's findings, it would be important to incorporate family members in academic support as well as in clinical interventions for Latino adolescents. One method of intervention may be to

encourage parents and other family members to use family stories as a motivational tool. Adolescents, too, can be encouraged to seek out these stories from family members.

Findings from the qualitative study show the importance of family stories as a motivational tool for Latino adolescents. For instance, Latino adolescents who reported family stories of school success reported valuing education more than those who did not report such stories. The themes of these stories included a sense of pride for succeeding in school, the importance of following school rules, as well as perseverance in the face of struggles. Themes found in stories recounting family-related school struggles included regret for not having finished school, importance of supporting the family, and the imperative that the younger generation needs to appreciate the opportunities they have. The adolescents recounting these stories did not necessarily dwell on the struggle, but often gleaned a lesson that parents or other family members imparted as well. It is possibly because of these lessons that students whose family school stories indicated family-related struggles reported experiencing greater academic efficacy, or control over their schooling. Thus, family stories regarding school struggles may not necessarily have a negative impact.

An important contribution of this study is its focus on testing the direct and indirect effects of belief in the American Dream on Latino academic attitudes and performance. While belief in the American Dream did not directly affect academic outcomes, it was found to moderate the effect of *familismo* on academic attitudes for the Latino adolescents in this study such that for those who do not believe in the American Dream, adhering to cultural values like *familismo* can still lead to positive attitudes. The findings of the qualitative study complement the quantitative study's results and provide

insight into the content and nature of the messages Latino adolescents receive from their family members which in turn make it more likely for them to believe in the American Dream. Latino adolescents who reported that parents or grandparents came to the U.S. to improve their lives were more likely to believe that the American Dream was possible. These stories often focused on the sacrifices made by parents and grandparents and the need to honor those sacrifices. Coupled together with findings from the quantitative study on the influence of believing in the American Dream, this suggests that familial influence is key in Latino adolescents' belief in the possibility of success despite the many barriers they face.

One of the more surprising results of the qualitative and quantitative studies was the low number of adolescents who did not believe in the American Dream. Despite the barriers they face as evidenced by their poor, urban neighborhoods, their low socioeconomic status and the stories of struggle that their families have endured, only thirty-four of the 223 adolescents participating in the current study disagreed with the statement describing the American Dream. Those who did not believe in the American Dream cited discrimination as a barrier as well as examples of people in their lives for whom the American Dream did not come true.

In sum, the research presented here makes important contributions to our understanding of the influence of immigration, acculturation and cultural and family factors on Latino, and specifically Dominican, adolescents' academic attitudes and performance. Influenced by the integrative model for the study of developmental competences (Garcia Coll et al., 1996), this study sought to consider several important influences on Latino adolescents' academic attitudes and performance, including

acculturation, ethnic identity, cultural values (*familismo*), family factors (family obligation), and individual beliefs (American Dream). Complemented by the qualitative investigation of the use of family stories as a motivational tool, the overall study suggests several competing and complementary influences on Latino adolescents' academic outcomes. Perhaps one of the most important contributions of this study is the differences found among second generation adolescents in academic attitudes and GPA, which were influenced by whether the adolescents came from one-immigrant or two-immigrant parent families. Despite these conceptual advances, more work must be done to understand how to close the achievement gap for Latino students. The findings from the current studies highlight future directions for research. Understanding the trajectories of Latino students' academic attitudes, thus determining whether they are able to maintain their positive attitudes throughout high school, despite barriers or discrimination that they may face would be an important focus of future research.   In the present study, factors that predicted academic attitudes did not necessarily predict GPA. Understanding how academically motivated students can translate this motivation to better performance is an important step in closing the achievement gap for Latino adolescents.

Appendix A
Qualitative Questions

(a) Lots of parents tell their children stories about their families. In fact, kids may hear family stories from lots of different relatives and family friends. We're interested in learning more about family stories and what kids learn from those stories.

In this section, please tell us a story that you've heard in your family about someone's experiences in school.

An example story: My mother always tells me about what happened when she was in the second grade. She loved to read and never wanted to stop reading. One day, the second grade teacher punished my mom by making her dust out all the closets because she had read too far ahead in the class book. My mom's parents got so angry when they found out that they tried to find another school for my mom to go to.

Please remember that everyone's family will have different stories. There are no "good" or "bad" stories. Write down a family story about someone's experiences in school.

(b) **Now, please tell us another family story that helped you understand your family's background, history, and culture.** Tell us a story that is really memorable and important to you and that helps you understand your family's culture.

For example, some families share stories about food, games, or traditions connected to their family's culture. Other families tell children stories about what it was like for their parents or grandparents to immigrate to this country, what their first experiences were like, or what their dreams were for their family's future.

An example story: When my father first came to this country, everything was very hard for him. He worked on farms, following jobs from one farm to the next. He wasn't given any place to live and one time, he had to sleep with the chickens in a chicken coop. He worked really hard so that we could have a better life.

Write down a family story that tells you about your family's background, history, or culture.

(c) People who believe in the 'American Dream' say that if someone studies hard enough in school and work hard enough at their job, they can become rich and successful in this country. Do you agree? Please explain why or why not.

Appendix B
Coding for Qualitative Study

Immigration Stories (II. 2)

Immigration Success	Code Family Story (II) for the presence or absence of a successful outcome to U.S. immigration.

1 = any evidence of successful outcome to U.S. immigration
Examples of successful outcomes include:
- Raising enough money for other family members to come to the U.S.
- Mentioning that they did not encounter struggle
- Acquiring language
- Having home now
- Having stable employment
- Obtaining citizenship or permanent residency status

0 = other (absence of evidence of successful outcome)

99 = Not an immigration story

Immigration **to Improve**	Code Family Story (II) for the presence or absence of "immigration for improving the next generation" theme.

1 = any discussion of family immigration for the "improvement of the next generation"
Example:
"My parents always tell me about their struggle to come here just for me and our family because they wanted the better for us. They didn't want us to [struggle] like them & wanted what was the best & easy for us."

0 = no mention of immigration for the improvement of the next generation.

99 = Not an immigration story

Family Education Stories (II. 1)

School   Code Family Education Story (II. 1) for the presence or absence of success

Success   in school.

2 = any evidence of success or positive experience in school (even if a negative experience or struggle is also mentioned)
Examples of success in school include:
- Completing school
- Getting good grades
- Not getting in trouble
- Enjoying school

1= no evidence of success or positive experience in school (only negative experience)

0 = other (no mention of success or struggle in school, not a school story)

99 = missing data

School   Code Famiily Education Story (II.1) for the presence of struggles or

Struggle   negative experience in school.

1 = any evidence of struggle or negative experience in school (even if a positive experience or success is also mentioned)
Examples of struggles in school include:
- Being hit by teacher
- Getting poor grades
- Getting into fights
- Being unable to attend or finish school due to financial hardship, family obligations, pregnancy, etc.

0 = other (no mention of struggle, not a school story)

99 = missing data

Peer-related	Code Family Education Story (II.1.) for the presence of struggles in school due to peers or peer interaction.

1 = any evidence of struggles in school due to peers/peer interaction
   Examples of struggles due to peers include:
   - Getting into fights with peers
   - Bullying
   - Being distracted by peers

0 = other (absence of evidence of struggles in school with peers, not a school story)

99 = missing data

Teacher/School-Related	Code Family Education Story (II.1.) for the presence of negative interactions with teachers or school officials.

1 = any evidence of negative interactions with teachers or school officials
   Examples negative interactions with teachers or school officials include:
   - Punishment in school
   - Perceived injustice at the hands of teachers/administrators
   - A feeling that assignments/expectations were unfair

0 = other (absence of evidence of negative interactions with teachers/school officials, not a school story)

99 = missing data

Financial	Code Family Education Story (II.1.) for the presence of struggles in school due to financial conditions/obligations.

1 = any evidence of struggles in school due to financial conditions/obligations
   Examples of struggles due to finances include:
   - Leaving school to work
   - Being unable to study due to work obligations

0 = other (absence of evidence of struggles in school due to financial conditions/obligations, not a school story)

99 = missing data

Family-related   Code Family Education Story (II.1.) for the presence of struggles in school due to family obligations.

1 = any evidence of struggles in school due to family obligations
    Examples of struggles due to family obligations include:
- Need to care for siblings interfering with school
- Need to take care of home, etc. interfering with school

0 = other (absence of evidence of struggles in school due to family, not a school story)

99 = missing data

Individual   Code Family Education Story (II.1.) for the presence of struggles in school due to individual factors.

1 = any evidence of struggles in school due to individual factors
    Examples of struggles due to individual factors include:
- Pregnancy interfering with school
- Difficulty concentrating
- Getting into fights (not because other start these fights)

0 = other (absence of struggles in school due to individual factors, not a school story)

99 = missing data

Lesson Learned   Code Family Education Story (II.1.) for the presence of a lesson to be learned from family member's school experience

1 =   any evidence of lesson to be learned from family member's school experience.
    Examples of lessons include:
- Work hard in school
- Do not complain about school
- Respect your teachers

0 =   other (absence of lesson, not a school story)

99 = missing data

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