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LATINO ADOLESCENTS' ACCULTURATION AND ACADEMIC OUTCOMES IN NEIGHBORHOOD CONTEXTS

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Abstract

Latino student populations are increasing rapidly, in cities with an established Latino presence as well as in new destination areas where Latinos have not typically resided before. In an attempt to understand and clarify cultural experiences and academic outcomes for new-destination Latino youth, the current study examines cultural values- and language use preferences-based acculturation typologies, grades, and academic beliefs among 82 Latino youth living in a primarily African American city in the northeastern US. Neighborhood diversity and cohesion were explored as moderator variables. Using latent profile analysis, five distinct typologies of acculturation were identified. These profiles mattered uniquely for students' academic aspirations and expectations, but not for grades. Further, neither neighborhood diversity nor neighborhood cohesion were found to moderate the association between acculturation and academic beliefs. Implications are discussed for cultural processes and academic engagement among Latino youth in new destination areas. Recommendations for contextually-rooted immigration research are made.

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Introduction

Background

The Latino population in America is increasing rapidly; from 2000 to 2010, there was a 43% increase in the Latino-American population (US Census, 2010). Today, Latinos are the largest minority group (16.3%) in the United States (US Census, 2010). This increase in population may be attributed to two factors. One factor is that immigration rates are very high, with a 31% change in foreign-born Latino populations in the United States over the past decade (Brown & Patten, 2014). Another reason is that, whereas birth rates among both US-born and immigrant Latina women have decreased in recent years (by 23% among Mexican-American women; Pew Research, 2011), birth rates among Latina immigrant women are still almost twice that of US-born women (Pew, 2011). Further, the Latino population in the United States is generally young, such that over 24% of public school students are Latino (Fry & Lopez, 2012).

These Latino students are not performing as well as their peers academically. For example, the National Center for Education Statistics (NCES) reports that although Latino high school retention rates have increased over the past ten years, Latino-American adolescents have higher high school dropout rates than any other racial/ethnic group in the country (2012). Further, Latino students consistently score under the national average on college entrance exams (NCES, 2010) and compared to non-Latino students, significantly more Latino 12th-graders score below "basic" on math and reading achievement tests (NCES, 2010). Additionally, though Latino adolescents report high achievement aspirations (NCES 2012), with some studies suggesting Latino families hold higher academic aspirations than any other ethnic group (except East Asians) in the US (e.g., Immerwahr, 2000), these aspirations decrease with age (Kao & Tienda, 1998). This educational disparity has been partially explained by *acculturation*, a series

of psychological, behavioral, social, and economic changes that immigrants and their children experience as they navigate and balance their culture of origin and American culture (e.g., Berry, 1997; Aguayo, Herman, Ojeda, & Flores, 2008). For example, research suggests that adolescent academic outcomes may be affected by acculturation, with longer length of residence in the United States negatively associated with high school grade-point average (Portes & Rumbaut, 2001; Pong & Zeiser, 2012).

Though there have been recent efforts to focus more on adolescent acculturation (e.g., Garcia Coll & Marks, 2012), most research on the link between acculturation and outcomes focus on explaining the epidemiological immigrant paradox (i.e., health selectivity factors in immigration lead to generational differences in health outcomes, such that more time in the US is associated with worse outcomes) in adults (e.g., Acevedo-Garcia, Bates, Osypuk, & McArdle, 2010; Lara, Gamboa, Kahramanian, Morales, & Bautista, 2005; Riosmena, Wong, & Palloni, 2013). Yet, it is also important and informative to consider adolescents' acculturation strategies independently because during this developmental period, youth gain more autonomy from their parents (Maurizi, 2012; McElhaney & Allen, 2001). The exploration of the direct relation between adolescent acculturation and academic outcomes is an important area of research that is understudied with limited measurement strategies (e.g., demographic indicators such as length of US residence).

Further, length of residence research has primarily focused on Latino youths living in traditional immigrant settlement areas. Latino families are increasingly moving away from immigrant gateway cities and neighborhoods (e.g., Miami and San Diego) to new destination areas where they are clearly in the minority (NCES, 2012). These transitions away from ethnic majority enclaves into ethnic minority neighborhoods represent changes in context and

experience that may uniquely influence the acculturation process and the way it impacts academic outcomes. Thus, it is important to note that the process of acculturation does not occur in a vacuum. The areas where Latino adolescents live may play an important role in the way that adolescents take on or reject their native or host culture. For example, living in areas with a high proportion of co-ethnic neighbors may provide greater exposure to native cultural values, particularly when cohesion within the neighborhood is strong. Portes and Rumbaut (2001) suggest that youths' high insertion into ethnic communities may serve as a protective factor in the acculturation process, facilitating strong family and community ties and upward social mobility, as well as better academic outcomes.

Because the social characteristics of neighborhoods inform collective shared values between residents, the proportion of same-ethnic neighbors may influence the degree to which individuals perceive these collective values and adopt them as their own (e.g. Leventhal & Brooks-Gunn, 2000). Therefore, it is important to move beyond the ethnic enclaves traditionally focused on in studies of Latino acculturation and neighborhoods (e.g., Roosa, Burrell, Nair, Coxe, Tein, & Knight, 2010) and examine acculturation in new destination neighborhoods where Latino families are not the predominant ethnic group. It is particularly important to capture the links between neighborhoods, acculturation, and academic outcomes during adolescence, as adolescents are also transitioning to spending more time out of the home (e.g., Steinberg, 2010) and in areas where they may be exposed to and adapt values that may not be emphasized in the family. Therefore, the current study will examine the acculturation experience of Latino youth living in a new destination area, how this experience (measured through profiles of cultural values and beliefs) is associated with academic outcomes, and how these associations may be modified by the neighborhood context (i.e., ethnic density and cohesion).

Latino Youth and Academic Experiences

The US Latino youth population continues to grow (US Census, 2010; PEW, 2011). While the academic achievement gap is not growing apace, it is also not shrinking. Between 1998 and 2009, Latino youth belonged to the only racial/ethnic group that did not experience a significant increase in grade-point average (GPA; High School Transcript Study (HSTS), 2011). Further, after adjusting for socioeconomic status and school attitudes, Latino tenth graders have significantly lower GPAs than non-Latino White and Asian peers (HSTS, 2011; Pong & Zeiser, 2012). In addition, the discrepancy between academic achievement (e.g., grades) and academic beliefs (e.g., attainment aspirations) remains strong (Immerwahr, 2000; Ojeda & Flores, 2008; NCES 2012). Specifically, whereas grades tend to be low, Latino youth's academic attainment aspirations (i.e., how far youth want to go in school) tend to be high and relatively stable (Goldenberg, Gallimore, Reese, & Garnier, 2001; Kao & Tienda, 1998; Lopez, 2009), despite increased risks for lower performance and failure to fulfill high attainment aspiration goals (Perreira, Chapman, & Stein, 2006). In contrast to aspirations, Latino youths' academic attainment expectations (i.e., how far youth believe they will actually be able to go in school) vary widely, tend to be lower than those of their non-Latino peers (Cheng & Stark, 2002), and decrease as Latino youth age (Goldenberg et al., 2001). Therefore, it is important to consider academic performance (i.e., grades), academic aspiration beliefs, and academic expectation beliefs, independently of each other.

Unique experiences associated with immigration (e.g., acculturation) and residential contexts may contribute to both the broader Latino academic achievement gap and to the disparities between academic performance and both academic aspiration and expectation beliefs. Immigration and residential contexts have been explored in a variety of different ways. For

example, the role of Latino immigrants' culture-of-origin academic values, the existence of geographically proximal co-ethnic social networks, and residential setting-specific cultural values have all been posited as potential contexts which may influence Latino student's academic beliefs and behaviors in various ways (Conger & Atwell, 2012; Portes & Rumbaut, 2001). Specifically, Latino immigrant students' academic achievement aspirations, expectations, and academic performance (i.e., grades) may be influenced by their *acculturation* to the United States as well as the *neighborhoods* in which they settle.

Acculturation Models and Academic Outcomes

Acculturation refers to the process individuals and groups go through as they adjust to first-hand exposure to a new culture. This includes the overall changes (e.g., psychological, economic, social, behavioral) experienced as a result of exposure to the new culture and the specific strategies used to adapt and adjust to the new culture, which may include the maintenance or rejection of the native culture. In addition, psychological acculturation includes the experiences individuals have that result from employing specific acculturative strategies (Berry, 1997; 2003). Acculturative strategies include both *acculturation attitudes*, or preferences toward cultural engagement and the actual behavioral outcomes of repeated and consistent intercultural contact (Berry, 2003). Often, these strategies and experiences involve shifting cultural values and behaviors as a result of cultural exposure and transmission (Berry, 2003; Birman, Trickett, & Vinokurov, 2002; Marín & Gamba, 2003; Portes & Rumbaut, 2001).

Unidimensional model of acculturation. Typically, acculturation is operationalized using a *unidirectional model* – a sliding scale with native cultural values on one end and host cultural values on the other. Researchers have conceptualized the details of this model using both single- and multi-variable approaches (Flannery, Reise, & Yu, 2001); regardless, the predicted

effects are similar. Under both representations of this model, the assumption is that as immigrants adapt to the cultural beliefs, behaviors, and practices of the host country's predominant culture, they shed the cultural beliefs, behaviors, and practices of their culture of origin.

In the unidirectional model, acculturation is most often measured with language use as a proxy, as language use in multiple domains (e.g., at home, in primary media consumption) is considered to be an indicator of direct cultural transmission or immersion (Berry, 2003; Cuellar, Arnold, & Maldonado, 1995; Ramirez, Cousins, Santos, & Supik, 1986; Social Science Research Council, 1954). Specifically, the assumption is that as immigrants acculturate to and participate in a new host country, they will speak the host country's language more frequently and speak their native language less often. However, though language may seem to be a simple way of assessing acculturation, it is important to acknowledge that measures of language acculturation vary significantly in what they assess (e.g., language fluency, preferential language use, contexts of language use; Zane & Mak, 2003). Further, although language use is often used as a proxy for assessing cultural transmission, it does not distinguish or indicate cultural experiences.

Acculturation experiences are also shaped by prolonged exposure to new contexts and cultural environments (Berry, 2003; Zane & Mak, 2003), suggesting that longer exposure to a new culture results in a higher degree of adaptation to that culture (e.g., Acevedo-Garcia et al., 2010; Bui, 2013; Smokowski, Rose, & Bacallao, 2008). As such, demographic indicators such as generational status as well as length of time spent in a new host country have also been used as indicators of acculturation in the unidirectional model. However, using length of residence as a proxy for acculturation is limited, particularly because it does not necessarily reflect the actual lived experiences of immigrants in a new cultural context.

The limited work on the acculturation experience and academic outcomes utilizes the unidirectional perspective and offers mixed findings. For Latino youth, academic performance and attainment beliefs are not consonant. Overall, Latino youth hold high, stable aspirations throughout their schooling (Lopez, 2009; Goldenberg et al., 2001), which may be informed by Latino students' belief that higher education is essential for upward assimilation and mobility within the United States (e.g., Ojeda & Flores, 2008). Conversely, some suggest that increased awareness of the reality of economic obstacles decreases Latino youth's academic aspirations (Kao & Tienda, 1998). Most studies that examine the association between acculturation and academic outcomes operationalize acculturation using either demographic measures such as length of time in the US and/or generational status or behavioral indices such as language use and language use preferences (e.g., Colon & Sanchez, 2010; Fuligni, 1997; Garcia Coll & Marks, 2009; Plunkett & Bámaca-Gomez, 2003). Length of residence suggests a persistent trend, such that earlier-generation Latino immigrants tend to have more positive academic attitudes and engagement (i.e., immigrant optimism, Kao & Tienda, 1995; Perreira, Harris, & Lee, 2006) than later-generation immigrants (Fuligni, 1997; Garcia Coll & Marks, 2009; Portes & Rumbaut, 2001). This phenomenon, the immigrant paradox, manifests itself by decreases in school performance (Suárez-Orozco & Suárez-Orozco, 2001, Pong & Zeiser, 2012) and higher negative attitudes toward school (Fuligni, 1997; Garcia Coll & Marks, 2009; Portes & Rumbaut, 2001) the longer Latino youth are in the US. However, research shows a strong positive association between "less-acculturated" youth (i.e., foreign-born youth, earlier-generation youth, and immigrant youth who use more Spanish) and academic well-being (i.e., better GPAs, higher achievement test scores and achievement orientations, and lower drop-out rates; Feliciano, 2001; Berry et al., 2006; Portes & Rumbaut, 2001; Garcia Coll & Marks, 2012). Related, some studies

show that language use and/or generational status (e.g., Garcia Coll & Marks, 2009; Martinez, DeGarmo, & Eddy, 2004; Plunkett & Bamaca-Gomez, 2003) is associated with lower drop-out and grade repetition rates, as well as higher motivations, aspirations, and likelihood of college attendance. Explanations for this effect vary, though some (e.g., Chrispeels & Rivero, 2001) make the argument that increasing familiarity with US school systems or increasing ability to navigate US culture or use English fluently may explain Latino students' academic persistence (i.e., performance and beliefs). More informative methods of characterizing acculturation and establishing a link between acculturation and academic outcomes may include direct measures of psychological acculturation such as the inclusion of indicators that measure cultural values and beliefs (Knight et al., 2010; Zane & Mak, 2003)—a task that the current proposed study will undertake.

Bidimensional model of acculturation. Even though unidirectional models are useful for examining demographic and behavioral indicators of acculturation (Flannery, Reise, & Yu, 2001), they do not adequately portray the nuances of the full acculturation experience. In order to address these shortcomings, *bidimensional models* of acculturation have been employed. Bidimensional models of acculturation explore individuals' orientations toward both their native and host cultures independently. One of the most widely used bidimensional models is Berry's model of acculturation. Within Berry's conceptualization of acculturation (1997, 2003), four main acculturation experiences emerge based on the degree to which individuals embrace or reject their native or host cultures.

Integration, also referred to as biculturalism, characterizes individuals who have a relatively high orientation to both their culture of origin and their new host culture. *Separation* (e.g., Latino orientation) characterizes individuals who have a relatively high orientation to their

culture of origin while simultaneously rejecting – or having a relatively low orientation to – their host culture. Berry stressed that both of these experiences rely, at least in part, on a community-collective interest in maintaining cultural heritage, as it is difficult to maintain one's culture of origin when members of your cultural group do not value this continued cultural maintenance. The neighborhood context may facilitate continued cultural maintenance. A more individualistic experience is *assimilation*, which refers to relative rejection of the culture of origin combined with a relatively high orientation to the new host culture. Assimilation is individualistic because individuals can employ this strategy without the support of their native group. The final acculturative experience is *marginalization*, which is characterized by a relative lack of maintenance of native cultural identity and lack of engagement in the dominant host culture. It can be difficult to identify individuals who truly reject both their native culture and their host culture (Tran, 2012). However, Berry suggested that many immigrants who qualify as 'marginalized' may have attempted and failed to assimilate due to roadblocks such as rejection from their host culture. Specifically, individuals who attempt to assimilate to broader US culture and experience interpersonal and structural discrimination may fail to successfully participate within US culture and be unable or unwilling to return to (or sustain) native cultural practices (Berry, 2003). As such, it may be easier to identify marginalized individuals who fail to assimilate than self-selected marginalized individuals who truly reject cultural insertion (Berry, 2003). Individual experiences of acculturation vary within the four main acculturative types of Berry's bidimensional model, but each typology can inform the strategies individuals employ to respond to and enrich their acculturation experience (Berry, 2003; Berry et al., 2006).

Research suggests that cultural beliefs (e.g., orientation toward the family) and cultural behaviors (e.g., language use) are better described using bidimensional models of acculturation

(Flannery, Reise, & Yu, 2001), because orientation toward one culture and adoption of one culture's values does not necessarily preclude engagement in another culture (Zane & Mak, 2003). The bidimensional model considers orientation toward and engagement in home and host culture simultaneously. Rather than suggesting acculturation naturally results in the shedding of the culture of origin in order to gain the host culture, the bidimensional model suggests that according to individuals' unique experiences and intercultural encounters, they can both adapt and reject values from both cultures in multiple ways. This approach allows for greater specification of the acculturation experience (Flannery, Reise, & Yu, 2001; Schwartz & Zamboanga, 2008).

In line with a bidimensional model of acculturation, several studies have begun to use a profile approach to better characterize acculturation experiences. For example, Berry, Phinney, and colleagues studied the acculturation experience and psychological and behavioral outcomes of nearly 8,000 immigrant adolescents living in 13 settlement countries and hailing from 26 origin countries (Berry et al., 2006). Their study, which operationalized acculturation *attitudes* as preference towards national group and/or ethnic group or neither national nor ethnic group in language use preferences, friend selection, social activities, marriage partner preferences, and cultural traditions, found evidence for Berry's four profiles among Asian, African, Eastern European, and Central/South American immigrants residing in Western countries. Based on Berry's model and using indicators of preferred cultural practices, such as food and entertainment preferences, Schwartz and Zamboanga (2008) found evidence for six acculturation profiles (i.e., assimilated, separated, undifferentiated/ marginalized, and three nuanced manifestations of bicultural/integrated) among Cuban college students in Miami. Fox, Merz, Solórzano, and Roesch (2013) found evidence for three profiles based on Berry's model (i.e.,

integrated, assimilated, and separated) with Asian, Latino, and non-Latino Black college freshmen. With Vietnamese immigrants, Pham and Harris (2001) found evidence of integration, marginalization, and separation profiles.

Even though there is evidence for multiple profiles of acculturation experiences using a bidimensional model, these studies focused on cultural practices (e.g., traditions, language use) and preferences (e.g., food) rather than internal and intrinsically held cultural-specific values. Focusing on specific cultural values in addition to typically-studied language use preferences when constructing acculturation profiles may be informative and contribute to the broader understanding of how acculturation affects immigrant youth. The current study uses Latino adolescents' cultural values to identity acculturation profiles among youth in a new destination area.

Segmented assimilation. As bidimensional models of acculturation help identify the acculturation strategies that immigrants may employ and the associated experiences they may have, Portes and Rumbaut's (2001) Segmented Assimilation Theory may help further explain why certain acculturation types may be associated with particular outcomes (e.g., academic) and trajectories. Specifically, segmented assimilation is characterized by three predominant trends. Upward assimilation occurs when immigrants to the US enter the middle class and successfully assimilate. "Fitting in" to the middle class depends, at least in part, on the individual's ability to adopt American cultural values and behaviors (Portes & Rumbaut, 2001). Downward assimilation occurs when immigrants to the US enter the "urban underclass" through one or more of several processes, and subsequently experience poverty and downward mobility. For example, immigrants may settle in low-income neighborhoods, where access to resources that would facilitate upward mobility is limited. Additionally, endemic racism and prejudice in the US may

restrict assimilating immigrants' access to resources and/or facilitate marginalization, thus also contributing to downward mobility. Downward assimilation may be partially explained by a failure to successfully adapt to US values (e.g., among marginalized populations) and may be more likely to occur when there is less external support (e.g., family, neighborhood) in confronting negative experiences (Portes & Rumbaut, 2001).

If individuals maintain integrated acculturation strategies, Portes and Rumbaut contend that they can experience upward mobility with persistent biculturalism (i.e., successful integration of native and host cultural orientations that results in advancement into the higher socioeconomic strata; 2001; Waters, Tran, Kasinitz, & Mollenkopf, 2010). Remaining bicultural may enable immigrants to rely upon both ethnic and cultural community networks as well as family support and general community resources. As such, these immigrants may be able to assimilate upward while maintaining the bicultural identity orientation found to be protective in the academic domain (Portes & Rumbaut, 2001; 2006).

The concept of segmented assimilation, considered in conjunction with acculturation, expands on the associations between acculturation and individual outcomes. Specifically, one component of both upward assimilation and upward mobility with consonant biculturalism is attaining the education levels adequate to promote socioeconomic advancement. Thus, whereas segmented assimilation pathways may not predict acculturation experiences or academic outcomes specifically, the beliefs and values inherent in each segmented assimilation experience may be helpful in explaining the associations between acculturation and academic outcomes.

Acculturation as cultural values and relation to academic outcomes. There are several cultural values that have been repeatedly identified as informing the acculturation experience of most Latino immigrants. One such value is familism, or *familismo*, which refers to

the idea that the family comes before the individual and includes concepts such as family obligation, family as a reference point in self-identity, and family emotional and economic support (e.g., Knight et al., 2010; Sabogal, Marin, Otero-Sabogal, Marin, & Perez-Stable, 1987). Familism has generally been found to be positively associated with increased academic effort and performance, possibly due to youth who are higher in familism focusing more on academics when it is an expressed family value (Esparza & Sánchez, 2008). Fuligni (2001) suggests that when immigrant children place less value on familism, the value they place on their education decreases rapidly. Another important cultural value is respect – also referred to as *respeto* – for elders, including both parents and adults outside of the nuclear family unit (Knight et al., 2010; Halgunseth, Ispa, & Rudy, 2006; Vesely, Ewaida, & Anderson, 2013). Respect informs family processes and functioning and may contribute to greater adjustment within the family (Calzada, Fernandez, & Cortes, 2010). Respect may also extend to teachers and other school staff, particularly given Latino parents' professional respect of teachers. Although a dearth of literature exists on the link between respect (as a cultural factor) and youth's outcomes, some work suggests a positive association, such that respect is associated with youth well-being (Delgado-Gaitan, 1992; Drummond & Stipek, 2004). Woolley, Kol, and Bowen (2009) argued that certain Latino values, including respect, can be beneficial to academic performance as they facilitate respect toward teachers and positive classroom comportment. Other work nesting respect as a cultural value within broader academic socialization processes suggests that respect is positively associated with academic beliefs, including expectations, valuation of education, and school effort, and it strengthens the positive association between parental involvement and these academic beliefs (Ceballo, Maurizi, Suarez, & Aretakis, 2014).

Other frequently-cited cultural values include religious orientation – generally conceptualized as Christian-based spirituality, including a belief in God and a belief that God will provide when others cannot (Edwards, Fehring, Jarrett, & Haglund, 2008; Knight et al., 2010) – and gender-based values. Most studies exploring religion as a cultural value, often operationalized as religiosity rather than spirituality, focus on mental health and substance use outcomes (e.g., Cuadrado, 2015) or the impact of Latino youth attending parochial schools (e.g., Valenzuela, 1993). For example, religious observation (e.g., attending church regularly) has been found to be protective against negative academic trajectories and associated with greater academic socialization (Sikkink & Hernandez, 2003). However, religious orientation (i.e., spirituality) has been identified as a core value that Latino immigrants hold (Knight et al, 2010). Considered with other core cultural values, it is plausible that religious orientation may have implications for academic outcomes.

Gender-based values include adherence to traditional gender roles, such as women as caretakers (i.e., *marianismo*) and *machismo*-- a man's responsibility to provide for, protect, and defend his family (Knight et al., 2010; Morales, 1996). Adherence to these traditional gender roles may be more difficult in the US, where Latina women have greater access to minimum wage jobs and often take them to help provide for their families (Cabrera & Garcia Coll, 2004; Parrado & Flippen, 2005). Overall, traditional gender roles may inform access to and creation of social ties and social capital (e.g., social support) within families, schools, and neighborhoods (Parrado & Flippen, 2005); increases in social capital and support may be associated with positive academic outcomes. Further, whereas immigration to the US may afford girls a greater opportunity for academic advancement, changes in national context are often associated with a

stricter *endorsement of* traditional gender roles (Parrado & Flippen, 2005) and potentially lower academic beliefs among girls.

These Latino cultural values are distinct from ones considered to be endemic to the US – for example, material success and competition with the ultimate goal of personal achievement (Knight et al., 2010). Material success refers to the prioritization of earning money over other activities; competition and personal achievement reflects individualistic values prioritizing personal over collective achievement, often obtained through competitive behaviors at the expense of others. Particularly for individuals living in lower-income areas (e.g. inner cities), higher endorsement of these values may be associated with deviant behavior for the sake of personal gain (e.g., gang activity; Portes & Rumbaut, 2001) or acquisition of scarce resources (e.g., Jencks & Mayer, 1990). These specific cultural values have rarely been examined in relation to academics. However, similar constructs have been examined. For example, in a study of academic-specific personal achievement goals, Dennis, Phinney, and Chuateco (2005) found that immigrant youth (i.e., Latino and Asian) who highly valued personal academic achievement were more committed to academic success than their peers. As such, it is possible that greater values of general competition and personal achievement may lead to greater effort to perform optimally in school or attain higher levels of education. However, it is also possible that growing awareness and/or evaluation of the material gains necessary to pursue higher education may result in lowered academic expectations among Latino youth.

Research examining the effect of acculturation on Latino youth's academic outcomes is limited. Further, very little empirical work has considered the association between specific cultural values such as familism, respect, and traditional gender roles, and academic outcomes. Broadly speaking, however, in accordance with the immigrant paradox, assimilating to

mainstream American culture has been linked to lower academic achievement and higher negative attitudes toward school among Latino immigrants (Fuligni, 1997; Garcia Coll & Marks, 2009; Portes & Rumbaut, 2001). Conversely, a number of studies find that a primary orientation toward US culture (i.e., assimilation) is associated with lower drop-out and grade repetition rates, as well as higher motivations, aspirations, and likelihood of college attendance (e.g., Garcia Coll & Marks, 2009; Martinez et al., 2004; Plunkett & Bamaca-Gomez, 2003). Explanations for this effect vary, though some have made the argument that increasing familiarity with American school systems may be at least partially attributable. This limited set of findings suggests a complex contextual-based relation between cultural values and academic outcomes which merits extensive further exploration. With additional study, it may be possible to better understand how cultural values matter for immigrant youth's academic outcomes.

Neighborhoods

Neighborhoods are important and rich ecological contexts that inform development and associated outcomes in multiple domains. Both neighborhood structural features (e.g., proportion of same-ethnic neighbors) and social processes (e.g., feelings of cohesion between residents) have been associated with behavioral and academic outcomes in multiple ways (e.g., Leventhal & Brooks-Gunn, 2000; Sampson, Raudenbush, & Earls, 1997). This pattern of associations may be particularly true for immigrants who tend to settle in specific neighborhood contexts.

Structural characteristics of neighborhoods. Neighborhoods are dynamic spaces that are constantly evolving based on structural characteristics (e.g., racial/ethnic demographics, SES). The increasing influx of immigrant families into new destination contexts means they may be exposed to neighborhoods with qualitatively different structural characteristics (e.g., fewer co-ethnic neighbors). Social disorganization theory (Shaw & McKay, 1942) suggests that higher

rates of disadvantage erode the social fabric of neighborhoods and worsen academic and behavioral outcomes (Conger & Atwell, 2012; Leventhal & Brooks-Gunn, 2000). In general, structural neighborhood disadvantage has been linked to poorer academic outcomes across multiple populations (McBride Murry, Berkel, Gaylord-Harden, Copeland-Linder, & Nation, 2011; Wodtke, Harding, & Elwert, 2011). Indicators of concentrated disadvantage include low rates of median household income, high rates of female-headed households, and racial-ethnic heterogeneity. Racial-ethnic heterogeneity is of particular relevance to immigration research, because immigrants to the US have historically settled in *ethnic enclaves*, neighborhoods with a relatively high proportion of co-immigrant and/or co-ethnic residents.

Although the definition of "ethnic enclave" varies by area of research (e.g., economic, sociological, etc.), ethnic enclaves are generally understood to be either neighborhoods with a long history of being associated with a certain ethnic group or areas where residents from a certain ethnic group compose a specific proportion (i.e., double the city-wide proportion of the ethnic group; Edin, Fredriksson, & Åslund, 2003) of the population (e.g., Logan, Zhang, & Alba, 2002). Regardless of the construct used to define them, ethnic enclaves are traditionally found in immigrant gateway cities, such as Miami or New York (Logan et al., 2002; Portes & Rumbaut, 2001). Most work examining immigrant populations has been conducted in areas with ethnic enclaves or a generally high proportion of ethnic residents, such as Miami and San Diego (Portes & Rumbaut, 2001).

A higher concentration of immigrant residents within neighborhoods is often consider to be an indicator of neighborhood disadvantage; it has been linked to lower academic performance outcomes among non-immigrant children (Macartney, 2012). Importantly, Garcia Coll and Marks (2009) point out that living in ethnic enclaves may buffer the effects of acculturation on

academic outcomes, as ethnic enclaves can serve to both segregate and support immigrant families. Indeed, specific findings regarding whether ethnic enclaves are protective for academic outcomes compared to neighborhoods where Latinos are in the ethnic minority are mixed. Higher immigrant concentration has also been associated with lower English proficiency among immigrant children (Pong & Hao, 2007), which may be a barrier to academic achievement (Kieffer, 2008). Overall, shared values regarding education may vary by neighborhood, such that education may not be collectively valued in areas where most residents did not attain advanced education, and particularly in areas where a sizeable proportion of residents did not complete high school or its equivalent. This type of environment may be characteristic of immigrant enclaves (e.g., Portes & Manning, 2005). However, higher Latino immigrant concentration has been associated with positive health outcomes (Cagney, Browning, & Wallace, 2007; Johnson & Marchi, 2009), reduced externalizing and internalizing behavioral outcomes (Georgiades, Boyle, & Duku, 2007) and better academic performance outcomes among Latino children (Hibel & Hall, 2014; Macartney, 2012), suggesting that ethnic enclaves and generally higher proportions of co-ethnic residents may be beneficial for academic and other outcomes. Among immigrants, proximity to co-ethnics and/or co-immigrants may impact the retention of cultural values as well as enhance cohesion among neighbors (Cagney et al., 2007; McLafferty, Widener, Chakrabarti, & Grady, 2012). Therefore, it is conceivable that the proportion of co-ethnic neighbors may influence the association between acculturation and other outcomes, such that areas with a higher proportion of co-ethnic neighbors may be associated with more positive academic beliefs for youth with higher degrees of native cultural insertion (i.e., separated, integrated), but more negative academic behaviors.

Berry and colleagues (2006) examined the association between acculturation profiles and neighborhood composition. In their work, they found a clear positive association between neighborhood ethnic composition and profile membership (2006), such that separated individuals tended to live in ethnic enclaves, while integrated individuals tended to live in truly ethnically heterogeneous areas (i.e., ethnically balanced neighborhoods). Further, assimilated youth tended to live in neighborhoods with a higher proportion of residents native to that area. As such, Berry and colleagues (2006) posited that these associations were due to exposure to same- or different-group peers and the common-use language within neighborhoods. However, they did not examine the potential moderating effect of living in such a neighborhood on any outcomes beyond identifying associations between neighborhood and acculturation profile. In addition, Latino families are increasingly either moving out of ethnic enclaves into new destination areas or immigrating directly to new destination areas. Thus, it is important to expand the scope of the literature to examine how residential contexts may moderate the association between acculturation and academic outcomes in these new destination areas.

In work comparing ethnic enclaves to ethnic minority neighborhoods, such as new-destination neighborhoods, Rauh, Parker, Garfinkel, Perry, and Andrews (2003) suggest that high proportions of co-ethnics may facilitate an optimism-driven protective effect on residents. For example, because immigrant parents, including Latino parents, do emphasize and promote academic achievement (Kao & Tienda, 1995), living in ethnic enclaves may expose youth to positive academic attitudes, which may subsequently influence aspirations and achievement. However, living in ethnic enclaves may conversely increase exposure to disadvantaged settings, fewer resources, and a higher proportion of delinquent or limited-English proficient peers. These qualities are associated with neighborhood segregation, which has deleterious effects on

academic engagement and grades as moderated by ethnic identity, possibly due to greater removal from resources that facilitate academic success such as exposure to group valuation of academic success (Oyserman & Yoon, 2009). Further, this may detract from language development and, subsequently, school performance (Pong & Hao, 2007) unless peers value school and confer these values upon youth (Goyette & Conchas, 2002). As such, living in a neighborhood with fewer co-ethnic residents may be associated with lower academic outcomes. However, Updegraff and colleagues did not find an association between overall neighborhood ethnic density and grades (2006).

Less work has examined the move from the ethnic enclave into new destination sites where there may be new work opportunities but fewer same-ethnic neighbors. In one of the few studies examining new-destination contexts, Brown and Brooks (2006) examined unique new-destination contexts (i.e., Latino residents living in a predominantly Black neighborhood) and have found that, in these neighborhoods, Latino residents may be likely to seek other Latino individuals outside the neighborhood if necessary in order to form social ties (Brown & Brooks, 2006). Further, Latino residents perceived great social distance, but were interested in integration between the two groups. Marrow (2008) suggests that intergroup relations between Black and Latino residents in a new destination rural area may be strained due to competition for neighborhood economic and social resources. This work highlights the importance of examining the impact of settling in new destination areas more closely.

Neighborhood social processes/social capital. A social capital model offers an important view of the role of social processes within the neighborhood. Social capital refers to a productive social resource, characterized by social networks and the shared social norms within these networks, as well as a sense of mutual trust and reciprocity. A key component to assessing

sense of social capital involves assessing the degree to which neighbors perceive trust and reciprocity within the neighborhood. One measure frequently used to tap into this component of social capital is cohesion and trust (Subramanian, Lochner, & Kawachi, 2003). Cohesion and trust is a process characterized by closeness between neighbors and a willingness of neighbors to help each other out. (e.g., Sampson et al., 1997). Social capital, including cohesion and trust, operates by facilitating connections among neighbors, as well as between neighbors and institutions. These connections can encourage collective action, improve access to resources, and enhance feelings of subjective well-being (Coleman 1988; Portes 1998). Social capital and cohesion and trust bind a community together and allow individuals in a community to work toward mutually beneficial goals.

Positive social processes in neighborhoods can promote positive outcomes, even in the presence of disadvantage (Sampson et al., 1997). Neighborhood levels of cohesion and trust are positively associated with physical well-being and stress reduction (Robinette, Charles, Mogle, & Almeida, 2013) as well as behavioral outcomes such as deviance and delinquency (Bowen & Chapman, 1996; Plybon & Kliewer, 1996). There is less evidence linking cohesion and trust to academic outcomes. However, some researchers have found positive associations between perceived cohesion and trust and youth's academic performance and beliefs. Most of these studies have focused on African American samples, and have found that cohesion and trust promoted academic achievement throughout development, including young children's vocabulary development (Jones & Shen, 2014); elementary school students' likelihood of passing (Emory, Caughy, Harris, & Franzini, 2008); achievement test scores (Durfur, Parcel, & Troutman, 2013; Ainsworth, 2002); and self-reported grades (Witherspoon & Hughes, 2014; Plybon, Edwards, Butler, Belgrave, & Allison, 2003). For academic beliefs, neighborhood

cohesion was associated with greater school efficacy and higher academic aspirations (Plybon et al., 2003; Stewart, Stewart, & Simons, 2007). A few studies have examined these relations exclusively among Latino populations and found that indicators of social capital (e.g., supportive family and school ties; access to "high-status" adults such as teachers and highly educated neighbors) are positively associated with academic achievement and aspirations in Latino youth (Stanton-Salazar & Dornbusch, 1995; Valenzuela & Dornbusch, 1994).

Some studies have used neighborhood structural properties as a proxy for social processes, particularly among immigrant populations. Specifically, working under the assumption that a higher proportion of co-ethnic residents will lead to stronger social ties within a neighborhood, Pfeffer and Parra (2009) suggested that findings regarding the protective effects of higher proportions of co-ethnic residents could be interpreted as evidence that social capital is protective of Latino outcomes. Evidence for this interpretation is mixed. Living in an ethnic enclave is associated with a higher proportion of social ties, particularly among Latino residents. There is evidence to suggest that certain manifestations of social ties, including collective efficacy, are stronger and not as sensitive to structural disadvantage within ethnic enclaves compared to other neighborhoods (Burchfield & Silver, 2013). However, some find that although there is a higher proportion of social ties within enclaves, social cohesion and trust in neighborhoods with high co-ethnic populations is relatively low (e.g., Almeida et al., 2009). Because these mixed findings suggest that it is important not to conflate structural characteristics with social processes, the present study will consider neighborhood Latino concentration and neighborhood cohesion and trust independently.

The Current Study

With the ongoing demographic shift in the United States and Latino families moving away from ethnic enclaves and immigrant gateway cities and into new destination sites (Congressional Budget Office, 2011), it is important to understand the association between acculturation and academic outcomes in this context. The purpose of the present study is threefold. First, the current study takes a person-centered (i.e., profile) approach to acculturation. Specifically, participant's acculturation status, theoretically informed by Berry's 1997 model of acculturation, were assessed using a profile analysis of both Latino and American cultural beliefs, values, and language use behaviors. Because of the wealth of studies using demographic and behavioral measures (e.g., language use and generational status/time in US) in operationalizations of acculturation, measuring acculturation using cultural beliefs and values offer an important and unique understanding of the way immigrants navigate and adapt to their environments. However, language use behavior is prevalent within the literature and continuing to include it may enrich the understanding of how cultural values and beliefs manifest together to inform acculturation status. After establishing the acculturation profiles, the current study explores how each of the profiles is associated with academic beliefs (i.e., aspirations for and expectations of highest level of academic achievement) and performance (i.e., core subject grade point average). Last, given that the acculturation process and youth development are informed by the contexts in which youth live, the current study examines whether the proportion of Latino residents in the neighborhood (i.e., ethnic density) and neighborhood cohesion and trust moderate the association between acculturation profiles and youth academic outcomes.

Research Questions & Hypotheses

The goal of the current study is to explore the association between acculturation, measured specifically by cultural values and language use behavior, and academic outcomes among Latino adolescents living outside of traditional ethnic enclaves or immigrant gateway cities. Because of the unique residential context of these adolescents, the moderating effect of neighborhood contexts is also considered. Specifically, I seek to answer the following research questions: (1) Can conceptually meaningful acculturation profiles be constructed using Latino and American cultural values and language use preferences among a sample of Latino-origin adolescents who live in new immigrant destinations (e.g., non-immigrant gateway city and non-ethnic enclave)? (2) Do academic behaviors (i.e., grades) and beliefs (i.e., educational attainment aspirations and expectations) differ by acculturation profiles? And finally, (3) How do neighborhoods' structural (i.e., Latino density) and social (i.e., cohesion and trust) characteristics moderate the association between acculturation and these academic outcomes? To address these research questions, I hypothesized the following:

Hypothesis 1: There will be full profile representation of all four of Berry's proposed acculturation experiences (i.e., integrated, separated, assimilated, marginalized; 1997). However, given that a lack of cultural engagement is rare, proportionally fewer adolescents will fit in the marginalized profile. Further, while existing research suggests that bicultural orientations (i.e., integrated) are the most common, because data from this study are collected in a new destination site, this trend may not be found.

Hypothesis 2a: Based on previous research (Portes & Rumbaut, 2001), individuals who belong to the integrated profile will report higher grades than those belonging to all other profiles. Additionally, individuals who belong to the marginalized profile will report lower grades than those belonging to all other profiles.

Hypothesis 2b: Given that higher endorsement of Latino values is generally associated with more positive outcomes (Fuligni, 2001; Aretakis, 2012), any Latino orientation (i.e., integrated and separated profiles) will be associated with higher academic beliefs (i.e., aspirations, expectations) compared to those lacking Latino orientation (i.e., assimilated and marginalized profiles). Further, given that greater awareness of barriers is associated with lower expectations (Napolitano, Pacholok, & Furstenburg, 2013) among less-enculturated individuals (Perreira et al., 2006), and that adolescents with a stronger American orientation have a greater awareness of barriers (Vela, Johnson, Cavazos, Ikonomopoulos, & Gonzalez, 2014), individuals belonging to a separated profile will have significantly higher *academic expectations* than those in other profiles, including those belonging to an integrated profile. However, *for academic aspirations*, there will be no significant difference between separated and integrated profiles.

Hypothesis 3a: Because ethnic enclaves are generally associated with positive outcomes for immigrants youth (Cagney et al., 2007; Georgiades et al., 2007; Hibel & Hall, 2014), higher levels of Latino homogeneity (i.e., higher proportions of Latino residents) will strengthen the positive relationship between most acculturation profiles and grades. However, higher levels of Latino homogeneity may be associated with lower grade outcomes among those in a separated profile due to potential reinforced distance from the American school system (Pong & Hao, 2007). As with hypothesis 3a, due to their cultural disengagement, the association between the marginalized profile and academic performance will not be dependent on neighborhood ethnic density.

Hypothesis 3b: Because Latino families tend to emphasize the importance of education (Kao & Tienda, 1995), a higher proportion of co-ethnic residents will be promotive in strengthening the positive association between academic expectations and all profiles associated

with a Latino orientation (i.e., integration, separation). The association between academic aspirations and assimilated profile membership will not be strengthened by a higher proportion of Latino residents. However, social disorganization theory suggests that overall ethnic heterogeneity may be a risk factor for academic outcomes; as such, greater ethnic heterogeneity (i.e., a lower proportion of co-ethnic residents) will suggest even greater removal from Latino education values and strengthen a negative association between assimilated profile membership and academic expectations. As with grades, it is expected that neighborhood ethnic density will not modify the association between marginalized profile membership and academic expectations. Hypothesis 3c: A higher proportion of Latino residents will strengthen the positive association between academic aspirations and all profiles with a Latino orientation (i.e., integrated, separated). However, individuals with a relatively lower Latino orientation (i.e., marginalized, assimilated) will not reap the benefits of living in an ethnic community; therefore, the association between these profiles and academic aspirations will not be dependent on neighborhood ethnic composition.

Hypothesis 3d: Given that stronger social ties between residents is protective of academic outcomes (Durfur, Parcel, & Troutman, 2013), and following the hypotheses regarding associations between acculturation profiles and academic outcomes above, higher levels of neighborhood cohesion and trust will serve to strengthen the positive association between most acculturation profiles and academic outcomes. Specifically, high levels of cohesion and trust will have the most impact on the association between acculturation and both academic beliefs and behaviors for individuals belonging to profiles characterized by cultural insertion (i.e., integrated, separated, assimilated), while low levels of cohesion and trust will not have an impact on the association between acculturation and academic outcomes. Because individuals belonging

to the marginalized profile are more likely to be culturally disengaged, and by extension, may conceivably be less integrated into their neighborhoods, neighborhood cohesion and trust will not influence the association between the marginalized profile and academic outcomes in any way.

Method

Sample

Data for this study were taken from Phase II of the Families, Adolescents, and Neighborhoods in Context (FAN-C) study. FAN-C is a mixed-method (i.e., questionnaire and focus group data), multi-informant (i.e., parents and adolescents) study examining the neighborhood, cultural, and family experiences of families of color in central Pennsylvania. Phase II consists of an oversampling of Latino family dyads (i.e., adolescents and primary caregivers); only adolescent data was used in this study. All adolescents self-identified as Latino and read and spoke English fluently enough to complete study protocols in English. Participants included 83 adolescents, ranging in age from 11-17 (M=13.41; SD=1.98; 51% female). Of these participants, 46% were of Puerto Rican descent, 22% were of Dominican descent, 20% were of Mexican descent, and 12% came from other Caribbean, Central and South American countries, including Cuba, Ecuador, Salvador, and Peru. Participants lived in 15 census tracts within the target city. One participant showed no variation in response type on over 60% of the questionnaire measures and was excluded from all subsequent analyses, resulting in a final sample of 82 adolescents. Age, ethnicity, and gender were explored in preliminary analyses as potential covariates. Correlations between all variables of interest can be found in Table 1.

Measures

Acculturation – Cultural values. ***Familism***. An adapted 14-item version of the Cultural Values Scale (CVS; Unger, Ritt-Olson, Teran, Huang, Hoffman, & Palmer, 2002) was used to assess youth-self report indicators of various aspects of familism, including feelings of obligation toward family, using the family as a referent for personal identity, and perceptions of family-based emotional support. This scale includes items such as “when I make an important decision,

I think about how my decision will affect my family." Responses ranged from 1(not at all) to 5 (completely agree). On average, youth somewhat endorsed values of familism (*M* = 3.03, *SD* = .53). This scale demonstrated good reliability (α= 0.86).

***Other cultural values and beliefs*.** The Mexican-American-Cultural Values Scale (MACVS; Knight et al., 2010) was used to measure youth's self-reported cultural indicators of acculturation. The MACVS is a values-based measure of the dual cultural adaptation of immigrants and includes multiple subscales indicating orientation to both Mexican and American cultural values. Even though this scale was developed specifically for Mexican-Americans, the cultural value indicators assessed are present across multiple Latino cultures (e.g., Morales, 1996). All items on the MACVS are based on a five-point agreement scale (1 = "not at all", 5 = "completely", with higher values suggesting greater agreement with and endorsement of cultural values. All acculturation scales were subjected to exploratory and confirmatory factor analyses. Five subscales are used in the proposed project. Internal consistency coefficients for each subscale are significantly higher than or statistically equivalent to those found for adolescents in the initial construction of the measure (Knight et al., 2010). The following subscales are taken from the MACVS.

Latino cultural values. *Respect* – also referred to as *respeto* in multiple countries and multiple studies – is a subscale consisting of eight items that assess intergenerational behavior between youth and adults both inside and outside of the nuclear family. Specifically, respect assesses values of deference to adults in matters of demeanor and decision making, such as "Children should respect their adult relatives as if they were parents." This value is considered to be collectivistic in nature. This measure demonstrated good reliability (α=.79). Overall, participants endorsed values of respect (Mean = 4.11, SD = .82).

Religion is a subscale consisting of seven items that measures spirituality through belief in God and the importance of having religion in daily life with items such as "If everything else is taken away, one still has their faith in God." This measure demonstrated good reliability (α=.88). Overall, participants endorsed values of spirituality, (Mean = 3.92, SD = .63).

Traditional gender roles is a 5-item subscale that examines the differential expectations that individuals hold for males, as the breadwinner and head of the family, and females, as the homemaker and as needing protection by males. For example, this subscale asks, "A wife should always support her husband's decisions, even if she does not agree with him." Reliability for this scale was acceptable (α=.75).Overall, participants somewhat ascribed to traditional gender roles (Mean = 2.91, SD=1.03).

American cultural values. *Material success* is a five-item subscale tapping into the prioritization of earning money over other activities, particularly in order to gain happiness and respect. For example, one item is "Owning a lot of nice things makes one happy." Reliability for this subscale was acceptable (α=.71).Overall, participants did not prioritize material success (Mean = 2.18, SD=.79).

Competition and personal achievement is an adapted three-item version of a subscale assessing an emphasis on employing competitive behaviors for success and prioritization of personal achievement over group achievement. This subscale includes items such as "Parents should teach their children to compete to win," and is considered a traditionally individualistic value. Reliability for this subscale was low (α=.65). Youth indicated that they somewhat endorsed values of competition (Mean = 2.86, SD = 1.01).

Acculturation—behaviors. Language use measures were taken from the Brief Acculturation Rating Scale for Mexican-Americans-II (Brief ARSMA-II) for children and

adolescents (Bauman, 2005; from Cuellar et al., 1995). This scale assesses familiarity with and preference for English and Spanish use in multiple domains, including primary spoken language, preference for TV shows and film language as well as reading and writing. Youth reported frequency of English and Spanish language use on a 5-point scale ranging from 1 (not at all) to 5 (always).

English. The English subscale of the Brief ARSMA-II consists of four items that assess English language use in multiple domains. For example, one item of this subscale is "I write letters in English." Participants almost always used English in their daily life (Mean = 4.33, SD = .79). Reliability for this scale was acceptable (α=.71) and standard for similar populations (i.e., age and ethnicity; Updegraff et al., 2006).

Spanish. The Spanish subscale of the Brief ARSMA-II consists of six items that assess Spanish language use in multiple domains. For example, one item on this subscale is "My thinking is done in the Spanish language." Participants almost always used Spanish in their daily life (Mean = 3.87, SD = .91). Reliability for this scale was good (α=.81).

Neighborhood*. Cohesion and trust.* The neighborhood cohesion and trust scale was adapted from the Collective Efficacy Scale (Sampson, Raudenbush, & Earls, 1997) and assesses perceived neighborliness and feelings of mutual trust within neighborhoods. Four items from this scale (e.g., "People in your neighborhood are willing to help each other out") were used in this study. Youth indicated on a 4- point Likert scale ranging from 1(agree a lot) to 4 (completely disagree) the level of social support present in the neighborhood (i.e. higher scores indicated more cohesion and trust). The measure demonstrated good reliability (α =0.85). On average, youth were ambivalent about the extent to which they felt close to their neighbors and could trust them (M = 2.38, SD = 0.87).

Latino density (percent co-ethnic). Participants reported home addresses, which were then geocoded to determine the census tracts in which participants lived. Demographic data for each tract were accessed from the most recent American census (Census 2010). Latino density scores indicate the proportion of Latino residents within a census tract (i.e., percent co-ethnic) and was calculated by dividing the number of Latino or Hispanic residents of any race within the tract by the total population of the tract. Participants lived in census tracts with Latino density ranging from 1% to 30% Latino or Hispanic. Given that Latino residents make up 18% of the city's population, scholars would not characterize any of these neighborhoods as an ethnic enclave (Edin et al., 2003). Half of the participants lived in neighborhoods with a greater proportional Latino ethnic density than the overall city.

Academic outcomes. ***Self-reported grades***. Participants rated their grades for most recent course performance in four subject areas – math, language arts, science, and humanities/social studies – on a scale of 1 (scores 64 or below) – 8 (scores 95 or higher). Adolescents' reports of their core subjects were averaged to create a mean score. On average, youth reported a B-average in core subjects (M = 5.97, SD = 1.42).

Educational attainment beliefs. Aspirations and expectations were both single-item measures with identical response options asking participants to indicate how far they **wanted** to go in school (i.e., aspirations) and how far they truly **expected** to go in school (i.e., expectations). Options ranged from 1 (less than high school degree) to 7 (an advanced, post-master's degree such as a doctorate or law degree). Participants could also indicate that they did not know how far they wanted or expected to go in school. This data was coded as 'missing' for statistical analyses. For *aspirations,* youth reported that they wanted to attend and complete a four-year college (M = 4.83, SD = 1.53); 13% (N=11) of participants indicated that they "did not

know" how far they wanted to go in school. Similarly, for *expectations,* youth reported that they believed they would attend and complete a four-year college ($M = 4.76$, $SD = 1.56$); 11% (N=9) of the youth indicated that they "did not know" how far they expected to go in school.

Covariates. ***Demographic characteristics***. As described in sample characteristics, participants self-reported gender, ethnicity (e.g., Puerto Rican, Dominican), and date of birth. Date of birth was used to calculate age at the time of data collection. Variables of interest did not vary as a function of age or ethnicity.

Table 1.

Correlations between all variables of interest.

	1	2	3	4	5	6	7	8	9	10	11	12
1. Religion	-											
2. Respect	.552**	-										
3. Familism	.229*	.392**	-									
4. Traditional Gender Roles	.209†	.164	-.089	-								
5. Materialism	.124	-.038	.002	.421**	-							
6. Competition/ Personal Achievement	.223*	.153	-.176	.558**	.368**	-						
7. Spanish use	.141	.066	-.085	.065	-.134	.115	-					
8. English use	.133	.105	.106	-.015	.037	.107	-.048	-				
9. Grades	.035	-.021	.096	.026	-.142	-.143	-.070	.077	-			
10. Aspirations	.304**	.412**	.376**	-.226†	-.132	-.096	-.146	.288*	.262*	-		
11. Expectations	.196†	.211†	.226†	-.352**	-.205†	-.134	-.105	.292*	.255*	.755**	-	
12. Percent Co-Ethnic	-.175	-.092	-.038	.252*	.173	.056	-.027	.133	.180	-.128	-.101	-
13. Cohesion and Trust	.105	.066	.235*	-.034	.047	-.083	.117	.216†	.036	.115	.250*	.060

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

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

† - Correlation is marginally significant at the 0.1 level (2-tailed).

Results

Acculturation Profiles.

To identify profiles of acculturation (i.e., cultural values and language use) among new-destination Latino adolescents, a latent profile analysis (LPA) was conducted in Mplus version 7.11 (Muthén & Muthén, 2013). Latent profile analysis differs from latent class analysis (LCA) in that it utilizes continuous, rather than categorical, variables (Oberski, 2016). However, like LCA, LPA represents a method of creating unobserved typologies from observed data. LPA utilizes a probabilistic approach that allows researchers to explore typologies within models that have increasing numbers of categories (i.e., generally, from one through one category larger than a theory would suggest; Beadnell et al., 2005). Each individual is assigned a probability score of falling within each category and is ultimately placed into the typology of best fit.

A maximum likelihood algorithm was used to create these profiles, as described by Loken (2004). Within-profile means and variances were estimated. Following standard LPA creation protocol, five profile solutions were explored, corresponding to one and five possible acculturation profiles – one more than the four suggested by Berry (1997). The final profile solution that best approximated the data was selected based on Berry's theory, including the validated profiles found by several researchers (e.g., Berry et al., 2006; Schwartz & Zamboanga, 2008), and model fit indices, including the log likelihood, the entropy value for the profile solution, the Akaike information criterion (AIC), and the Bayesian information criterion (BIC). Entropy values approaching one indicate a clear delineation of the profiles (Celeux & Soromenho, 1996), suggesting that higher entropy values are indicative of better model fit. However, there is precedence for selecting profile solutions with slightly lower entropy values, as long as entropy values are acceptable (e.g., greater than .85; Muthén, 2008), other fit indices

are good, and the overall model is parsimonious and theoretically validated (e.g., Berlin, Williams, & Parra, 2013). AIC values indicate asymptotically unbiased estimations of the model's expected distance from the truth, while BIC values are an approximation to the log marginal likelihood of a model; smaller values for both indicate greater likelihood of model fit (Posada & Buckley, 2004). Profile selection and identification were also theoretically informed. Specifically, the solution with the largest number of profiles with a significantly better fit than the next largest solution was chosen. Further, the chosen solution offered additional, meaningful and interpretable information about the sample. Thus, the chosen solution included conceptually distinct profiles with adequate representation within the sample population and good model fit.

The five-profile solution had overall good model fit (i.e., smaller AIC and adjusted BIC, see Table 2). Although the entropy value for the five-profile solution was slightly smaller (i.e., .003 points smaller) than that for the four-profile solution, the four profile solution included one typology that only consisted of one participant, whereas the five-profile solution had a better distribution of participants within typologies (smallest n=6). Further, the five-profile solution was conceptually meaningful. Three of Berry's proposed acculturation experiences were represented by the data. Specifically, there was evidence of marginalized, integrated, and separated groups. However, there was no clear assimilated group within the sample. Instead, there were two other typologies characterized by unique patterns of cultural beliefs and behaviors similar to several profiles previously identified by Schwartz and Zamboanga (2008). As such, the five-profile solution was selected. Figure 1 highlights the patterns of cultural value endorsement by profile as indicated by standard deviations from sample grand mean.

Three groups matched expected typologies of acculturation. Group 1 (n=6; 7.31%) was labeled *Marginalized*. These youth fell at least half a standard deviation below the mean on most

cultural and language use variables, suggesting overall cultural disengagement. Group 3 (n=16; 19.51%) was labeled *Separated*. These youth exemplified typical interpretations of separated youth. Specifically, they were over half a standard deviation above the mean on most Latino cultural values, and at least half a standard deviation below the mean on US values, suggesting a higher orientation to Latino values than US values. They were also at mean on language use behaviors. Interestingly, these youth were also over half a standard deviation below the mean on endorsement of traditional gender roles. Group 5 (n=21; 40.38%) was labeled *Integrated*, and was characterized by youth who endorsed all cultural values at roughly half a standard deviation above the mean. This group was slightly below mean on Spanish use, but overall, language behaviors were comparable to the sample.

Two profiles did not match expected typologies of acculturation. Group 2 (n=31; 37.80%) was labeled *Undifferentiated/Low-Assimilated*. These youth fell largely at mean (i.e., within half a standard deviation above or below the mean) on all variables except religion and familism, which they were more than half a standard deviation below the mean on. Although this group was close to the sample average, it was proportionally lower on Latino-specific values and only negligibly higher on Spanish use, thus rendering it largely undifferentiated, but closer to an assimilated group, as described by Berry (1997; 2003), than any other typology. Group 4 (n=8; 9.76%) was labeled *Individualistic-Bicultural* and was characterized by youth being, on average, over 1.5 standard deviations above the mean on competition and personal achievement endorsement, over one standard deviation above the mean on endorsement of traditional gender roles, and one standard deviation below the mean on endorsement of familism values. Overall, this suggests that, while this group espoused most Latino values and preferred to speak Spanish

more than any other group, they were also disengaged from collectivist values (i.e., familism) and more highly engaged in individualistic behaviors.

Further analyses explored demographic differences between each profile. Profiles varied by gender ($F(4,77)=2.87$, $p<.05$), such that separated youth were significantly more likely to be girls, whereas integrated youth were significantly more likely to be boys. However, there were no significant differences in other demographic indicators (i.e., age, family structure, ethnic group) between profiles; as such, gender was controlled for in subsequent analyses.

In order to validate the selected profile solution, analyses of variance (ANOVA) were conducted to determine if there were significant differences in mean levels of cultural value endorsement and language use across profiles. These series of tests highlighted the quality of the profile solution. For English language use, the overall model was not significant ($p=.67$). For all cultural indicators and Spanish language use, there was significant variation on key indicators between all or most profiles (see Table 3). However, the pattern of differences between profiles varied by indicator. For example, marginalized youth were significantly lower on most values except familism compared to most other profiles, while separated youth were comparable to Integrated or Individualistic-Bicultural youth for most Latino values, but significantly lower on US values indicators than other profiles.

Academic Outcomes

To assess the association between acculturation profiles and academic outcomes, Analyses of Variance (ANOVAs) were conducted in SPSS version 22 to examine the association between acculturation profiles and academic outcomes. First, demographic variables (i.e., gender and age) were entered into each model (i.e., explaining grades, aspirations, and expectations). Age did not significantly explain variance in any model ($p>.2$) and was removed from

subsequent analyses in the interest of parsimonious models. Gender did not significantly explain variance in grades or expectations and was removed from subsequent analyses for these models. Aspirations did vary by gender, such that girls had higher aspirations than boys $F(1,69)=4.44$, $p=.04$. As such, gender was included as a covariate in subsequent analyses for this model.

Next, to answer Research Question 2, profile was entered into each model. Hypothesis-driven non-orthogonal planned comparison models were run, described below. Post-hoc comparisons of all profiles for all models were conducted. See Table 4 for a full summary of findings, including non-significant and marginal results.

Grades. A planned contrast was examined that focused on the risk associated with being disconnected from any culture on academic performance, comparing the marginalized profile to all other profiles. Neither the contrast comparing integrated youth to all other youth $F(1,79)=.794$, $p=.38$ nor the contrast comparing marginalized youth to all other youth was significant, $F(1,79)=.41$, $p=.53$. Additionally, post-hoc comparisons of all profiles indicated that grades did not significantly differ between any two profiles.

Educational attainment beliefs: *Aspirations*. A planned contrast model explored whether insertion into Latino culture is protective of *academic aspirations*. Specifically, profiles characterized by a high degree of Latino cultural insertion (i.e., integrated, separated) were compared to profiles characterized by a low degree of Latino cultural insertion (i.e., marginalized, undifferentiated). Given the unique patterns of their beliefs, individualistic-bicultural youth were not included in this contrast. Because gender was associated with academic aspirations, gender was included as a covariate in this model. The model for this planned contrast was significant, $F(3,67)=5.77$, $p<.01$; however, gender was rendered marginally significant with the addition of profile comparisons. Profiles characterized by a high degree of Latino cultural

insertion had significantly higher aspirations than profiles characterized by a low degree of Latino cultural insertion. Specifically, marginalized and undifferentiated youth suggested that they would like to attend a four-year college, while integrated and separated youth indicated that, on average, they would like to complete a degree at a four-year college. Post-hoc Tukey tests suggest that academic aspirations varied significantly between profiles, $F(4,64)=3.07$, $p<.05$. These differences may have been driven by the undifferentiated and separated groups, such that undifferentiated youth had significantly lower aspirations when compared to the separated group in particular, $p<.05$.

Expectations. A planned contrast was used to assess whether a higher degree of insertion into Latino culture in conjunction with a lower degree of insertion into American culture is protective of *academic expectations*. Specifically, the separated (exclusive endorsement of Latino cultural values) profile was compared to all other profiles. Overall, this model was significant, $F(1,70)=10.20$, $p<.01$. Separated youth had significantly higher academic expectations than all youth in other profiles. On average, separated youth expected to obtain a Master's or equivalent degree, while other youth, on average, expected to attend, but not necessarily complete a degree at, a four-year college. Additionally, in line with hypotheses for Research Question 2, separated youth reported significantly higher educational attainment expectations than integrated youth in particular, $t=2.15$, $p<.05$.

Neighborhood Effects

To examine the way that neighborhood structural (i.e., percent co-ethnic) and social (i.e., cohesion and trust) features moderate the association between acculturation and academic outcomes for Research Question 3, Analyses of Covariance (ANOVAs) were conducted using SPSS version 22. Two models – one for each neighborhood characteristic - were conducted for

each of the three academic outcomes of interest (6 total models) to explore whether neighborhood structural and social characteristics moderate the relation between acculturation profiles and Latino youth's academic outcomes. Specifically, the main effects of profile membership and neighborhood, as well as the interaction between the two, was explored. While there were no a priori planned comparisons or contrasts for research question three, there were specific hypotheses for the effect of neighborhood on specific profiles. As such, the individual parameter estimates for each profile and the individual parameter estimates for the interaction of each profile with neighborhood variables were explored. Additionally, for models where non-orthogonal planned comparisons yielded significant results under Research Question 2, these contrasts were examined under Research Question 3 to explore whether neighborhood variables helped further explain the associations between these contrasts and academics.

Grades. ***Percent co-ethnic*****.** Overall, the model was not significant, $F(9,71)=1.64$, $p=.12$. However, a higher proportion of co-ethnic neighbors was marginally associated with better grades, $F(1,71)=3.58$, $p=.062$. Additionally, having a higher proportion of co-ethnic neighbors was not associated with significantly better grades among any profile. However, while the overall model was not significant, hypothesis 3a was somewhat supported. Specifically, parameter estimates suggest that a higher proportion of co-ethnic neighbors was associated with significantly worse grade outcomes for separated youth, $\beta=-12.20$, $p<.05$.

Cohesion and trust. Overall, the model was not significant, $F(9,71)=1.08$, $p=.39$. Grades did not vary by profile, degree of cohesion and trust within the neighborhood, or interaction of profile and cohesion and trust. However, parameter estimates suggest that, contrary to the hypothesized positive effect of cohesion and trust on academic outcomes, perceived cohesion and trust negatively influenced individualistic-bicultural youth, such that higher perceived

cohesion and trust was associated with lower grades for these youth, β=-1.43, p<.05. See Table 5 for a full summary of findings, including non-significant and marginal results.

Aspirations. ***Percent co-ethnic.*** Overall, the model approached significance, $F(10,60)=1.85$, p=.07. However, when the proportion of co-ethnic neighbors was included in the model, aspirations only varied by gender, such that girls had somewhat higher aspirations than boys, p=.08. Overall, percent co-ethnic did not matter for aspirations, either by itself or for any specific profiles. While profile alone matters for aspirations, the inclusion of percentage of co-ethnic neighbors renders this association non-significant. This may be due to in part to the loss of power within the model.

Because the planned contrast comparing profiles with a Latino cultural insertion to profiles with a lack of Latino cultural insertion was significant for research question 2, a model was also run exploring the moderating influence of percent of co-ethnic neighbors on this contrast. While the overall model was significant, $F(6,64)=2.87$, p<.05, this effect was again driven by gender. Neither profile contrast nor percent of co-ethnic neighbors nor the interaction of the two significantly influenced youth's academic aspirations.

Cohesion and trust. Overall, the model was significant, $F(10,60)=2.06$, p<.05. However, when perceived cohesion and trust was included in the model, aspirations only varied significantly by gender, such that girls had higher aspirations than boys, p<.05. Profile, perceived cohesion and trust, and the interaction of the two did not significantly influence aspirations.

Because the planned contrast comparing profiles with a Latino cultural insertion to profiles with a lack of Latino cultural insertion was significant for research question 2, a model was also run exploring the moderating influence of percent of co-ethnic neighbors on this contrast. The overall model was significant, $F(6,64)=3.60$, p<.01. This effect was again driven

by gender, such that girls had higher aspirations than boys ($p<.05$). While neither profile contrast nor percent of co-ethnic neighbors nor the interaction of the two significantly influenced youth's academic aspirations, parameter estimates suggest that cohesion may matter somewhat for youth characterized by a lack of Latino cultural insertion, such that higher rates of perceived social cohesion are marginally associated with lower aspirations for these youth, β=-.81, p=.07. See Table 6 for a full summary of findings, including non-significant and marginal results.

Expectations. ***Percent co-ethnic.*** Overall, the model trended toward significance, $F(10,60)=1.78$, p=.09. However, when the proportion of co-ethnic neighbors was included in the original model, expectations did not vary significantly by profile, percent co-ethnic, or the interaction of profile and percent co-ethnic. While parameter estimates suggested that undifferentiated youth had somewhat lower expectations than other integrated youth within this model (β=-1.88, p=.07), Latino concentration did not significantly influence this association.

Because the planned contrast comparing separated youth to all other profiles was significant for academic expectations for research question 2, a model was also run exploring the moderating influence of percent of co-ethnic neighbors on this contrast. While the overall model was significant, $F(3,68)=3.43$, $p<.05$, expectations did not vary significantly by contrast, percent co-ethnic, or the interaction of contrast and percent co-ethnic.

Cohesion and trust. Overall, the model was only marginally significant, $F(9,62)=1.98$, p=.06. However, when perceived cohesion and trust was included in the original model, expectations did not vary significantly by profile, percent co-ethnic, or the interaction of profile and percent co-ethnic. Further, parameter estimates did not suggest any meaningful unique associations between neighborhood cohesion and profile for academic expectations.

Because the planned contrast comparing separated youth to all other profiles was significant for academic expectations for research question 2, a model was also run exploring the moderating influence of perceived cohesion and trust on this contrast. While the overall model was significant, $F(3,68)=4.32$, $p<.01$, expectations did not vary significantly by contrast, cohesion and trust, or the interaction of contrast and cohesion and trust. See Table 7 for a full summary of findings, including non-significant and marginal results.

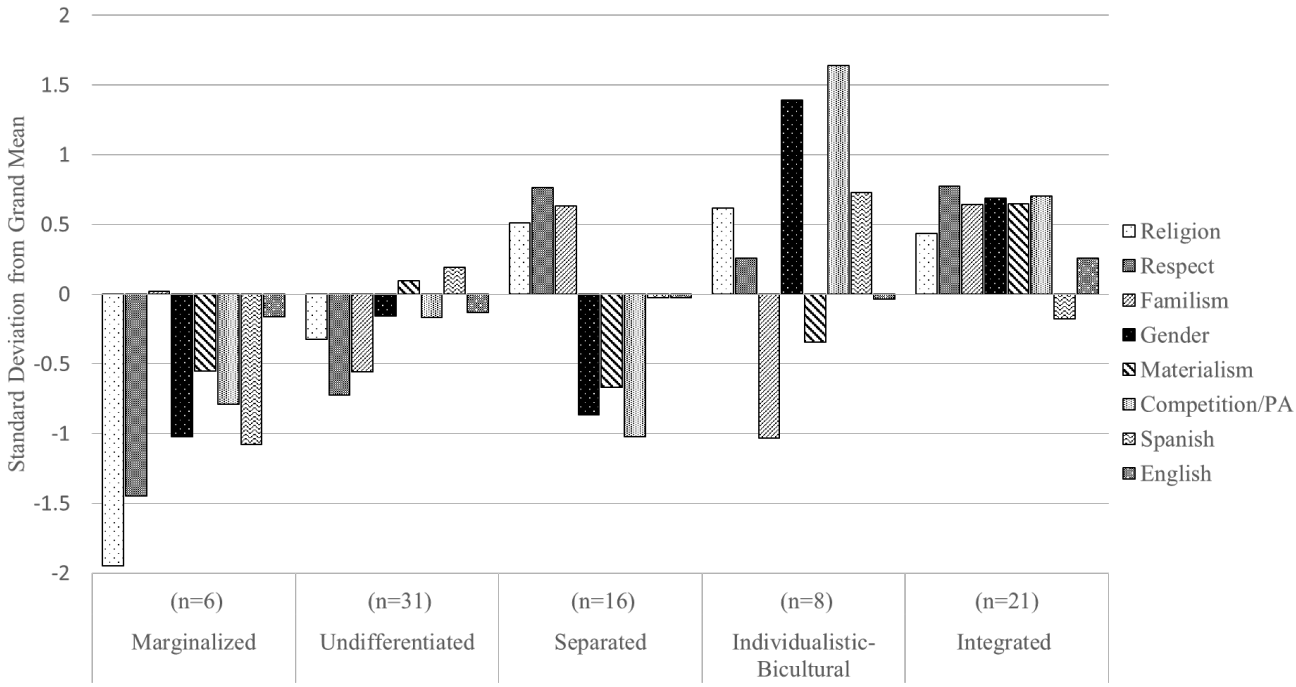

Figure 1. Acculturation profile mean scores' standard deviations from sample mean on all profile variables.

Table 2.

Model fit information for each tested iteration of latent acculturation profiles.

	Entropy	**AIC**	**BIC**	**Sample size-adjusted BIC**
One profile		1598.66	1637.17	1586.70
Two profile	0.87	1555.35	1615.52	1536.67
Three profile	0.84	1521.78	1603.61	1496.38
Four profile	0.88	1515.79	1619.28	1483.66
Five profile	0.88	1506.63	1631.78	1467.78

Table 3.

Bonferroni-corrected differences in cultural values endorsement by profile.

	Religion	**Respect**	**Familism**	**Gender Roles**	**Materialism**	**Competition**	**Spanish**	**English**
(4,77)	17.32***	42.43***	13.48***	26.62***	5.79***	36.73***	4.68**	.59
arginalized	2.48 (.70)	3.02 (.56)	3.02 (.49)	1.83 (.56)	1.73 (.33)	2.06 (.49)	2.78 (.87)	4.33 (.66)
ndifferentiated	3.86 (.72)	3.57 (.38)	2.74 (.38)	2.78 (.63)	2.25 (.71)	2.63 (.62)	4.06 (.76)	4.21 (.88)
eparated	4.41 (.43)	4.62 (.30)	3.40 (.31)	2.01 (.64)	1.66 (.54)	1.85 (.72)	3.82 (.96)	4.28 (.87)
ıdependent-icultural	4.58 (.23)	4.26 (.43)	2.52 (.72)	4.39 (.45)	1.93 (.64)	4.50 (.44)	4.56 (.47)	4.28 (.85)
ıtegrated	4.63 (.60)	4.63 (.41)	3.38 (.38)	3.61 (.83)	2.70 (.91)	3.57 (.56)	3.65 (.95)	4.55 (.60)

*** = p<.001

**=p<.01

Table 4.

ANOVA summary for the association between profile (and non-orthogonal planned comparisons) and academic outcomes.

Source	**DF**	**F**	**p**	**Partial η^2**
Dependent Variable: Grades				
Between	4	.88	.48	.04
Within	67			
Dependent Variable: Grades; Integrated vs. Other				
Between	1	.79	.38	.01
Within	79			
Dependent Variable: Grades; Marginalized vs. Other				
Between	1	.41	.53	.01
Within	79			
Dependent Variable: Aspirations				
Between	5	3.45	.01	.21
Gender	1	3.62	.06	.05
Profile	4	3.07	.02	.16
Within	65			
Dependent Variable: Aspirations; degree of Latino cultural insertion				
Between	3	5.77	<.01	.21
Gender	1	5.22	.03	.07
Profile	4	6.11	<.01	.15
Within	67			
Dependent Variable: Expectations				
Between	4	3.65	.01	.18
Within	67			
Dependent Variable: Expectations; Separated vs. Other				
Between	1	10.20	<.01	.13
Within	70			

Table 5.

ANOVA summary for the association between profile (and non-orthogonal planned comparisons) and grades, moderated by neighborhood context.

Source	**DF**	**F**	**p**	**Partial η^2**
Grades x Percent Co-ethnic				
Between	9	1.64	.12	.18
Profile	4	2.22	.08	.11
% Co-ethnic	1	3.59	.06	.05
Interaction	4	1.36	.26	.07
Within	71			
Grades x Cohesion and Trust				
Between	9	1.08	.39	.12
Profile	4	1.77	.14	.09
Cohesion	1	.24	.63	<.01
Interaction	4	1.51	.21	.08
Within	71			

Table 6.

ANOVA summary for the association between profile (and non-orthogonal planned comparisons) and aspirations, moderated by neighborhood context.

Source	**DF**	**F**	**p**	**Partial η^2**
Aspirations x Percent Co-ethnic				
Between	10	1.85	.07	.24
Gender	1	3.06	.09	.05
Profile	4	.34	.85	.02
% Co-ethnic	1	.01	.92	<.01
Interaction	4	.49	.75	.03
Within	60			
Aspirations (planned comparison) x Percent Co-ethnic				
Between	6	2.88	.02	.21
Gender	1	4.80	.03	.07
Profile	2	.56	.58	.02
% Co-ethnic	1	.33	.57	.01
Interaction	4	.19	.83	.01
Within	64			
Aspirations x Cohesion and Trust				
Between	10	2.06	.04	.26
Gender	1	4.60	.04	.07
Profile	4	.16	.96	.01
Cohesion	1	.26	.61	<.01
Interaction	4	.88	.48	.06
Within	60			
Aspirations (planned comparison) x Cohesion and Trust				
Between	6	3.60	<.01	.25
Gender	1	6.07	.02	.09
Profile	2	.324	.73	.01
Cohesion	1	.01	.93	<.01
Interaction	2	1.92	.16	.06
Within	64			

Table 7.

ANOVA summary for the association between profile (and non-orthogonal planned comparisons) and expectations, moderated by neighborhood context.

Source	**DF**	**F**	**p**	**Partial η^2**
Expectations x Percent Co-ethnic				
Between	9	1.78	.09	.21
Profile	4	1.11	.36	.06
% Co-ethnic	1	<.01	.99	<.01
Interaction	4	.51	.73	.03
Within	62			
Expectations (planned comparison) x Percent Co-ethnic				
Between	3	3.43	.02	.13
Profile	1	1.11	.30	.02
% Co-ethnic	1	.25	.62	<.01
Interaction	1	.31	.58	<.01
Within	68			
Expectations x Cohesion and Trust				
Between	9	1.98	.06	.22
Profile	4	.33	.85	.02
Cohesion	1	1.90	.17	.03
Interaction	4	.29	.88	.02
Within	62			
Expectations (planned comparison) x Cohesion and Trust				
Between	3	4.32	.01	.16
Profile	1	.21	.65	<.01
Cohesion	1	1.29	.23	.02
Interaction	1	.05	.83	<.01
Within	68			

Discussion

There were several goals in the present study. The first goal was to identify profiles of acculturation, theoretically informed by Berry's (1997; 2003) bidimensional model of acculturation. Five profiles of acculturation were identified, rather than the expected four. In line with the hypotheses, adolescents who were culturally disengaged (i.e., marginalized) were less represented in the final sample than other profiles. The second goal was to identify how profile membership was associated with academic outcomes. Contrary to expectations, acculturation profile was not significantly associated with academic performance (i.e., grades). However, consistent with expectations, both aspirations and expectations did vary by profile membership in the expected directions. The third goal was to explore how the association between profile membership and academic outcomes varied by neighborhood context. Contrary to expectations, neither percent of co-ethnic neighbors nor neighborhood cohesion and trust altered the association between acculturation and academic outcomes.

Acculturation Profiles

With Latino youth in a new destination area, five unique profiles of acculturation were identified using both *cultural values* and *behaviors* (i.e., language use). As expected, these five profiles provide some insight into a nuanced representation of acculturative experiences and cultural values endorsement (Flannery, Reise, & Yu, 2001; Schwartz & Zamboanga, 2008). Whereas Berry (1997; 2003) suggests four profiles, characterized by insertion or lack of insertion into host and/or native cultures, this study identified profiles characterized by more nuanced insertion into both cultures. Using cultural values and language use as indicators of acculturation, rather than duration of residence or language use independently of values, may account for this more nuanced representation of cultural insertion. Specifically, cultural values may reflect a

more internal process than the behavioral and demographic indicators traditionally used to construct acculturation profiles (e.g., Schwartz et al., 2014; Zane & Mak, 2003). As such, patterns of engagement and disengagement may be more varied and nuanced than when using more traditional indicators of acculturation. For example, although the marginalized group endorsed relatively significantly fewer Latino and US cultural values overall than other groups, they were not truly culturally disengaged. A trend toward relatively disengaged rather than truly disengaged marginalized groups has been identified in existing research, as true cultural disengagement may be rare or nonexistent (Berry, 2003; Berry et al., 2006; Tran, 2012).

Additionally, whereas there were profiles represented that were similar to Berry's proposed integrated (i.e., fully biculturally inserted) and separated dimensions (i.e., significantly more inserted in Latino culture than American), no profile showed identical alignment with Berry's conceptualization of an assimilated dimension. Rather, there was a profile of youth who were relatively somewhat culturally disengaged on most variables, but not significantly so; these were designated an "undifferentiated" group in line with other research revealing similar groups (e.g., Schwartz & Zamboanga, 2008) characterized by sub-marginalization cultural disengagement. There was also a profile characterized by relative biculturality, with an emphasis on individualism (e.g., competition and personal achievement endorsement) and traditional gender role endorsement, and a significant lack of endorsement of collectivistic values such as familism. This profile, although most closely in line with Berry's conceptualization of an assimilated dimension within the present array of profiles, was still characterized by youth endorsement of other Latino values, such as respect and religion; as such, it was designated as individualistic-bicultural. These two profiles, which do not map neatly onto Berry's bidimensional model of acculturation, may be reflective of the multicultural residential context.

For example, the absence of a traditional "assimilated" group may also be reflective of the unique racial/ethnic and cultural composition of the target city. Given that the scale used to operationalize these cultural values was developed to differentiate Mexican cultural values from stereotypical (White) American cultural values, it is possible that endemic cultural values within the broader, African American majority city are not represented most successfully by White American indicators.

Overall, the present pattern of results only partially replicates Berry's conceptualization of acculturative experiences. However, these results are not without support within the broader literature. Alternate models of acculturation that add further detail and nuance to bidimensional models have been established, often as a result of testing Berry's model. For example, Flannery, Reise, and Yu (2001) suggest that intercultural contact, rather than naturally leading to unidirectional or bidimensional acculturative patterns, may also result in a more nuanced tridimensional "ethnogenesis," meaning that unique ethnic groupings may result from persistent bi-cultural contact and lead to the formation of a unique cultural group. Specifically, Flannery and colleagues (2001) suggest that a subculture may be formed by the integration of two or more cultures; as such, assessments of patterns of acculturation may not fit neatly into four bidimensional categories. The "blended" nature of, for example, the individualistic-bicultural group found in the present sample may reflect such a process.

In line with Flannery et al.'s (2001) argument, other researchers testing Berry's model (1997; 2003) have identified between three and six profiles of acculturation in a number of different studies focusing on different samples in the past that reflect the blended nature of cultural experiences. For example, as indicated earlier, Schwartz and Zamboanga (2008) identified several unique typologies of biculturality; the individualistic-bicultural profile

identified in the present sample is at least somewhat in line with the American-oriented bicultural profile they identified. Further, Schwartz and Zamboanga (2008) also identified an "undifferentiated" profile of youth who endorsed cultural values, but to a lesser extent than other groups. However, they envisioned their undifferentiated group as a real-world alternative to a marginalized group, and unlike the present study, did not identify a distinct culturally disengaged marginalized group.

Whereas the profiles identified by Schwartz and Zamboanga's (2008) are more similar to those identified in the present study than Berry's original bidimensional conceptualization of acculturation, there are clear distinctions between the two. It is likely that these distinctions (e.g., specific types of biculturality; representation of undifferentiated vs marginalized individuals) are due at least in part to certain sample characteristics. First, there is a developmental consideration. Specifically, Schwartz and Zamboanga's (2008) study included a college sample, students who have presumably had more time to explore their own cultural and ethnic identities (e.g., French, Seidman, Allen, & Aber, 2006; Umaña-Taylor et al., 2014), whereas the present sample is post-elementary school students. Existing research suggests that individuals engage in deeper reflection and introspection about their ethnic and racial identities as they age and gain more specificity in these identities (Umaña-Taylor et al., 2014); it is possible that reflection on cultural values and cultural identity may follow suit. As such, it is possible that there is a developmental component to the acculturation process, such that as youth age, they are more interested in exploring and affirming their cultural beliefs and identities, thus resulting in individuals becoming progressively less “undifferentiated” as they age. From a lifespan development perspective on identity (e.g., Sokol, 2009; Waterman & Archer, 1990; Yip, Seaton, & Sellers, 2006), it is also possible that stronger verification of Berry's model (1997; 2003) may be found in

adults than in youth given the change in normative developmental tasks during these periods of the life course. Indeed, Schwartz and colleagues (2013) identified that Latino youth's active engagement in their cultural identities – American-oriented or Latino-oriented – strengthened with age. Second, Schwartz and Zamboanga's (2008) study was conducted in a traditional immigrant enclave, whereas the present study was conducted in a new destination context where the majority population is a group of color (i.e., African American).

Schwartz and colleagues (2014) found that when immigrant adolescents residing in traditional gateway cities (i.e., Miami, Los Angeles) perceived White US residents as being unreceptive, ambivalent, or antagonistic to immigrants settling in their cities, these immigrant adolescents tended to espouse more highly individualistic attitudes, whereas maintaining collectivistic values was associated with perceiving higher degrees of host cultural receptivity to immigration settlement. As such, it is possible that the unique way the profiles in the present analysis came together is informed by youth's perceptions of the nature of intergroup relations between African American and Latino residents, rather than or in addition to basic intergroup cultural exposure. For example, youth in the present study who belong to the individualistic-bicultural profile – or even the integrated profile – may perceive less receptivity to Latino cultural expression than youth who do not strongly endorse American cultural values and adapt accordingly by embracing more individualistic cultural values, similar to the way that youth in ethnic enclaves did in Schwartz and colleagues (2014) sample. Conversely, it is further possible that in this predominantly African American receiving context, separated youth may feel more confident expressing exclusively Latino cultural values, may not feel a pressure to espouse individualistic attitudes, or both.

The number of profiles in the present study, and the typologies represented by these profiles, has support within the literature. Further, the five profiles of acculturation identified were overall comprised of cultural values in the expected directions. However, there were some differences between the hypothesized profile structure (i.e., expected patterning of cultural values) and the identified profiles. As Berry (1997; 2003) would suggest, Latino cultural values (Knight et al., 2010) tended to be more highly endorsed in profiles characterized by Latino cultural insertion, whereas American cultural values tended to be more highly endorsed in profiles characterized by American cultural insertion. However, although research suggests that Latino immigrants may have more traditional perceptions of gender roles than US (White) majority culture (e.g., Knight et al., 2012; Parrado & Flippen, 2006), within the present sample traditional gender roles were interestingly more highly endorsed in profiles characterized by American cultural insertion and biculturality and less highly endorsed in profiles characterized by Latino cultural insertion. Further evidence suggests that adherence to and endorsement of traditional gender roles may change as a function of new residential contexts, the changing constellations of family structures, and economic demands placed on families post-migration (e.g., Dion & Dion, 2001; Parrado & Flippen, 2006); as such, it is possible that the unique representations of traditional gender roles in the current study reflect a context-specific process resulting from a greater move away from traditional gender role endorsement.

Existing research suggests that adherence to traditional gender roles may be "difficult" in the US, given that Latina women increasingly need to seek employment in order to provide for the family (Parrado & Flippen, 2005), though it is possible that endorsement of traditional gender roles increases even as adherence to these values decrease by necessity. While the profile distribution of gender role endorsement in this sample (i.e., more highly represented in American

value-oriented profiles) suggests that this value may be more representative of American or mainstream culture than Latino culture, there are several possible explanations for this trend. For example, profile differences in gender role endorsement may be due to the fact that the acculturation rating scale was developed among Mexican-American samples in the Southwest (Knight et al., 2010), and the present sample is primarily Dominican and Puerto Rican immigrants in the Northeast. Values among different Latino national groups and immigrants from different Latino countries are often distinct from each other, due both to basic national or sub-group differences and to variation in settlement areas (Taylor, Lopez, Martínez, & Velasco, 2012). Also, this unexpected patterning of traditional gender roles may be due to the residential context of these youth. Specifically, youth in this study live in a new-destination city with a majority African American population (i.e., 52%, with 25% White non-Hispanic and 18% Hispanic or Latino). It is possible that profiles are less reflective of Latino and mainstream US dimensionality and more reflective of the variety of possible cultural contact. For example, the identified profiles could be representative of a constellation of "mainstream" White American cultural values, African American cultural values, and Latino cultural values. Unfortunately, given that we cannot construct comparable profiles in White and African American residents of the city, we cannot identify precisely how traditional gender role endorsement maps onto mainstream versus Latino cultural values specifically. That said, other researchers (e.g., Fox et al., 2013) have identified more nuanced patterns of cultural values resulting from exposure to multiple groups (i.e., more than the one majority comparison group often highlighted in acculturation research) within the same context, suggesting that this may be a ripe avenue for future research.

Academic Outcomes

Another goal of the present study was to examine how youth's acculturation experiences in a new destination area impacted their academic well-being. Results showed that Latino youth's acculturation profiles were linked to youth academic beliefs (i.e., aspirations and expectations) in the expected directions, but not associated with academic performance (i.e., self-reported grades).

Although the body of literature linking cultural values to academic beliefs is limited, there is evidence to suggest that Latino cultural values, such as familism, are linked to academic outcomes (Esparza & Sanchez, 2008). Further, a dearth of literature suggests that Latino cultural values (e.g., familism, respect) may matter for academic beliefs (e.g., valuation, expectations, attitudes) via a variety of mechanisms, including parental academic involvement and socialization (e.g., Ceballo et al, 2014; Sikkink & Hernandez, 2003), cultural identity (e.g., Fuligni, 2001), and overall classroom engagement (Wooley et al., 2009).

While some evidence suggests that generally holding any cultural beliefs may be beneficial for academic belief outcomes (e.g., values of personal achievement may be linked to academic engagement; Dennis et al., 2005), Latino values may be more strongly associated with academic beliefs (Garcia Coll & Marks, 2009). The present study supports these limited suggestions. Specifically, within the present sample, Latino cultural orientation in particular was associated with higher aspirations and expectations, particularly compared to youth who did not endorse Latino cultural values as highly. This contributes to the limited literature exploring the association between cultural and academic beliefs by suggesting that immigrant youth who maintain native cultural insertion tend to have higher aspirations and expectations than immigrant youth who do not maintain Latino cultural insertion. Additionally, within the present sample, American cultural value endorsement was found to be a risk factor for academic

expectations, such that separated youth had significantly higher attainment expectations than did integrated youth. This also contributes to findings within the established acculturation literature (i.e., research focusing on behavioral and demographic indicators in association with academic outcomes; e.g., Martinez et al., 2004; Plunkett & Bamaca-Gomez, 2003) by corroborating findings which suggest that American cultural orientations may be a risk factor for academic beliefs. Specifically, the present study provides evidence that American cultural values, in addition to more often-studied demographic and behavioral indicators of American cultural insertion, may also be a risk factor for academic outcomes.

Although the present study did not directly assess awareness of obstacles to attainment, others have found that greater awareness of barriers is associated with lower expectations (Napolitano et al., 2013) among individuals who are less likely to endorse native cultural values (Perreira et al., 2006), and that adolescents with a stronger American orientation have a greater awareness of barriers (Vela et al., 2014). As such, the association between Latino cultural disengagement and lower attainment beliefs across the board may be at least partially related to familiarity with either the American school system in particular, or general barriers to success. The specific gap difference between the higher academic expectations of separated youth, who primarily endorse only Latino cultural values, and the lower expectations of integrated youth, who highly endorse both Latino and American cultural values, may also be indicative of school system familiarity. Further, because there was no significant difference between separated and integrated youth's academic aspirations, it is possible that youth may aspire highly even when awareness of barriers may be associated with decreases in their attainment expectations; this is in line with findings that suggest aspirations can remain high and stable while expectations are

variable and decrease as youth age (Cheng & Stark, 2002; Goldenberg et al., 2001; NCES, 2012).

Overall, the findings that Latino cultural engagement are protective of academic aspirations and expectations contribute to our understanding of how cultural engagement may matter for academic outcomes. Given that the youth in this sample live in a new destination context, rather than an ethnic enclave, this provides evidence that native cultural maintenance and values endorsement may be associated with immigrant optimism, or other, similar constructs suggesting that native cultural maintenance is protective of positive forward-thinking among immigrants, may be universal rather than particular to individuals living in an area with a sizeable and historically established co-ethnic population.

One interesting thing to note is the effect of gender in these models. Though there were no specific hypotheses in the present study about gender, gender did matter for aspirations, such that girls had higher aspirations than boys. It is possible that Latino parents are increasingly likely to emphasize girls' academic achievement in Latino families, as Ojeda and Flores (2008) suggest. Further, because some research suggests that girls are more likely to be kept close to the family than boys (Domenech Rodriguez, Donovick, & Crowley, 2009; Suárez, 1998), they are more exposed to their parents' messages about academic attainment and cultural values. As such, though this was not tested in the present study, it is possible that boys, who were more likely to be integrated in the present study, are more exposed to both Latino and American cultural values, while girls, who were more likely to be separated in the present study, are more exposed to Latino cultural values. The interplay between gender, aspirations, and Latino cultural value endorsement, regardless of level of American cultural value endorsement, may be related to these cultural processes. As with findings that suggest that the association between cultural

values endorsement and academic beliefs may not be context-specific, it is possible that the association between being a girl and having higher aspirations may be processes that are maintained in new destination neighborhoods, rather than just ethnic enclaves.

In the present study, contrary to expectations, academic performance (i.e., grades) did not vary by profile. The fact that cultural beliefs seem to matter for educational beliefs whereas grades, overall, do not follow the same pattern suggests that while beliefs and goals may remain high in these new destination areas, actual performance may not be as systemically associated with certain cultural orientations and may in fact be due to other factors than beliefs. For example, given previous literature that suggests an association between demographic indicators of acculturation (e.g., generational status; Fuligni, 1997; Garcia Coll & Marks, 2009; Garcia Coll & Marks, 2012; Kao & Tienda, 1995; Pong & Zeiser, 2012; Portes & Rumbaut, 2001) and academic performance, it is possible that acculturative and other immigrant experiences beyond patterns of cultural values and belief endorsements are what influence grade outcomes most. Further, existing research has found that cultural behaviors (e.g., language use, family socialization behaviors, traditions) in particular are associated with academic performance (e.g., Arevalo, So, & McNaughton-Cassill, 2014, Santiago, Gudiño, Baweja, & Nadeem, 2014). As such, it is possible that cultural behaviors matter more than cultural beliefs for academic performance.

Neighborhood Effects

Contrary to expectations neighborhood (percent co-ethnic and cohesion and trust) did not significantly matter for the association between acculturation typologies and academic outcomes. Specifically, neighborhood did not explain significant variation in academic outcomes when acculturation profile was considered. Neighborhood researchers do overwhelmingly agree that

neighborhood, although important for a number of developmental processes and outcomes, tends to account for a smaller proportion of variance in academic outcomes than more proximal contexts (e.g., Leventhal & Brooks-Gunn, 2010), but substantive links between neighborhood and academics have been drawn in numerous existing studies focusing on diverse populations (e.g., Garcia Coll & Marks, 2009; Halpern-Felsher et al., 1997; Hibel & Hall, 2014; Macartney, 2012), though some evidence suggests overall socioeconomic disadvantage may matter more than racial/ethnic neighborhood composition for various outcomes (Leventhal & Brooks-Gunn, 2010).

The lack of significant findings in the present study may suggest several methodological concerns. For example, there may be an issue of power. Specifically, while the overall models were mostly significant for aspirations and expectations, individual predictors did not ultimately matter for these outcomes. Further, while the proportion of same-ethnic neighbors was marginally associated with better grades, the overall model assessing the way co-ethnic neighbors moderated the association between acculturation profile and grades was not significant. As such, we cannot have much confidence in drawing conclusions from these data. However, this could indicate that structural neighborhood factors do matter for measurable performance outcomes, as limited research suggests (e.g., SES and racial/ethnic neighborhood composition are associated with attendance and achievement; Chase-Lansdale & Gordon, 1996; Duncan, 1994; Halpern-Felsher et al., 1997). It is possible that alternate indicators of neighborhood ethnic composition (e.g., overall immigrant concentration; overall ethnic heterogeneity) may be more strongly associated with academic outcomes than co-ethnic neighbors specifically. For example, findings by Hibel and Hall (2014) suggest that immigrant enclaves may be protective of academic performance outcomes among elementary-aged

immigrant children when adjusting for socioeconomic status, whereas others suggest that immigrant concentration can often be distinct from ethnic concentration, and the two may matter differently for outcomes (e.g., Logan et al., 2002).

It is also possible that the findings that neighborhood does not significantly influence or otherwise moderate the association between acculturation profile and academic outcomes are due to neighborhood being the wrong unit of analysis for contextual effects in this new-destination population (e.g., Green & Flowerdew, 1996). Specifically, research suggests that Latinos in new-destination contexts tend to travel further in order to engage with co-ethnic others (Brown & Brooks, 2006; Kwan, 2013; McPherson, Smith-Lovin, & Cook, 2001). Further, participants, and Latino immigrants in new-destination areas overall, tend to remain separate from out-group neighbors (e.g., Brown & Brooks, 2012). As such, census tract-level indicators of disadvantage may not be the most appropriate metric for assessing structural effects of heterogeneity on the association between acculturation and academic outcomes. Therefore, alternate units of analysis, such as social network and/or activity space (i.e., places regularly [e.g., daily] traveled outside of the home and the school) characteristics, may be more meaningful for academic outcomes than are residential neighborhood contexts for these youth. Alternately, alternate units of neighborhood (e.g., school districting zones, census block groups) may be more informative than census tracts.

Overall, contrary to expectations, youth-identified cohesion and trust within neighborhoods also did not matter for the association between acculturation and academic outcomes. Moreover, cohesion and trust did not uniquely matter for academic outcomes more generally. While existing research tends to draw more substantive connections between structural indicators of disadvantage and lower academic outcomes (see Leventhal & Brooks-Gunn, 2010

for a review), there is evidence to suggest that social capital and cohesion and trust may be protective of academic outcomes, even in the presence of disadvantage (e.g., Plybon et al., 2003). The lack of a meaningful association in the present study, coupled with the relatively low sample-wide levels of perceived cohesion and trust between neighborhood residents, could suggest that the diverse neighborhoods where these youth live are not conducive to the formation of weak social ties (e.g., Marrow, 2008), which are associated with academic well-being.

Limitations and Future Directions

The present study both supports and expands upon research suggesting that acculturation is not a unidirectional or unidimensional construct. Further, evidence was found that youth in new destination contexts may experience a range of unique patterns of cultural value endorsement. However, the present study did not account for type of intergroup contact. Specifically, while traditional destination work approaches acculturation from the perspective of experiences and cultural values being shaped in an ethnic enclave, or between Latino immigrants and White non-Hispanic residents, the present study was situated in a city that is primarily African American, and where the majority culture that immigrants are exposed to as they navigate their culture and cultural beliefs is African American, rather than the "mainstream US culture" that scientists often refer to when speaking of the White majority. As such, it is impossible to disentangle whether specific profiles are more representative of Latino culture specifically, or of Latino and/or target city majority and/or US majority culture. Future work should focus more on characterizing the unique values and belief systems of each group in order to better identify how, precisely, acculturation experiences are representative of intercultural contact in new-destination areas. One way to do this may be to systematically analyze qualitative data that explores intergroup contact and feelings of neighborhood cultural cohesion.

Future work should also examine whether youth's aspirations and expectations are related to awareness of barriers to success. For example, it is possible that being aware of roadblocks to success may make youth have lower expectations for educational attainment (Napolitano et al., 2013; Perreira et al., 2006; Vela et al., 2014). However, it is also conceivable that certain youth may be more determined to succeed despite these barriers (e.g., Mickelson, 1990). Tapping explicitly into knowledge of the American education system and potential roadblocks that may be encountered in route to college or more advanced degrees, in conjunction with cultural orientation, may provide insight into what shapes youth's academic beliefs.

Additional limitations of the present work are largely methodological in nature. Due to the sample size, models were underpowered, and, as such, definitive conclusions about neighborhood effects cannot be drawn. While this is less easily rectified given the present data, future studies addressing neighborhood effects may benefit from including multiple levels of contextual analysis. For example, examining the places outside of residential neighborhoods and schools where youth regularly travel (i.e., activity spaces) rather than residential neighborhoods may yield more pertinent information about contextual effects of academic outcomes for immigrant populations, as youth may be exposed to a broader area with different features than residential neighborhoods. Finally, the present study was cross-sectional in nature; although associations between acculturation and academic outcomes were found, it is impossible to identify how endorsement of cultural values may shift over time as a result of increased time of exposure to majority cultural groups. Because acculturation is a process, rather than an endpoint, it is possible that trajectories of shifting cultural values may have more explanatory power than cultural values measured at a single timepoint. For example, as suggested earlier, it is possible that acculturation and cultural identities gain more specificity and clarity as youth age; this

potential clarity in identity may result in youth becoming less undifferentiated as they age (e.g., Schwartz & Zamboanga, 2008) and more likely to reflect alternate profiles of acculturation. This may have unique implications for trajectories of academic outcomes, as well. Further, longitudinal work suggests that academic aspirations remain stable across youth's academic careers, while expectations shift over time within Latino samples (Goldenberg et al., 2001). Future work should explore how shifting patterns of cultural values may help explain the stability or lack thereof of academic belief outcomes within Latino samples.

This said, the present study does contribute to the existing literature. Specifically, the present study suggests that a bidimensional model of acculturation can be identified and further specified using cultural values indicators in conjunction with behavioral (i.e., language use) indicators of acculturation. This "opens the door" to utilizing more nuanced and mechanism-oriented indicators of cultural identity and development when assessing the influence of acculturation and intergroup contact on youth development and outcomes as an alternative to relying on demographic and behavioral-exclusive indicators of acculturation. Further, academic beliefs did vary significantly by these profiles of acculturation, suggesting that cultural values-based indicators of acculturation do have explanatory power for important and understudied developmental outcomes of immigrant youth. Although preliminary in nature, this suggests that programs, policies, and preventive interventions aimed at increasing academic outcomes and trajectories of Latino youth may need to pay close attention to cultural values and incorporate said values into programming in an accessible way for youth.

References

Acevedo-Garcia, D., Bates, L. M., Osypuk, T. L., & McArdle, N. (2010). The effect of immigrant generation and duration on self-rated health among US adults 2003–2007. *Social Science & Medicine*, *71*, 1161-1172.

Aguayo, D., Herman, K., Ojeda, L., & Flores, L. Y. (2011). Culture predicts Mexican Americans' college self-efficacy and college performance. *Journal of Diversity in Higher Education*, *4*, 79-89.

Aldenderfer, M. S., & Blashfield, R. K. (1984). *Cluster Analysis*. Newbury Park, CA: Beverly Hill Sage Publications.

Almeida, J., Kawachi, I., Molnar, B. E., & Subramanian, S. V. (2009). A multilevel analysis of social ties and social cohesion among Latinos and their neighborhoods: Results from Chicago. *Journal of Urban Health*, *86*, 745-759.

Aretakis, M. T. (2012). *Immigration, acculturation, and academic attitudes and performance among Latino adolescents*. (Doctoral Dissertation). Retrieved from http://search.proquest.com/docview/1036891580?accountid=13158.

Arevalo, I., So, Do., & McNaughton-Cassill, M. M. (2015). The role of collectivism among Latino American college students. *Journal of Latinos and Education, 15*(1), 3-11.

Beadnell, B., Morrison, D. M., Wilsdon, A., Wells, E. A., Murowchick, E., Hoppe, M., ... & Nahom, D. (2005). Condom use, frequency of sex, and number of partners: Multidimensional characterization of adolescent sexual risk-taking. *Journal of Sex Research*, *42*(3), 192-202.

Berlin, K. S., Williams, N. A., & Parra, G. R. (2014). An introduction to latent variable mixture modeling (part 1): Overview and cross-sectional latent class and latent profile

analyses. *Journal of Pediatric Psychology*, *39*(2), 174-187.

Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review, 46*: 5–34. doi: 10.1111/j.1464-0597.1997.tb01087.x

Berry, J. W. (2003). Conceptual approaches to acculturation. In K.M. Chun, P.B. Organista, & G. Marín (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 17-37). Washington, DC: American Psychological Association.

Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant youth in cultural transition: Acculturation, identity, and adaptation across national context. *New Jersey: Mahwah*.

Birman, D., Trickett, E. J., & Vinokurov, A. (2002). Acculturation and adaptation of Soviet Jewish refugee adolescents: Predictors of adjustment across life domains. *American Journal of Community Psychology*, *30*, 585-607.

Bowen, G. L., & Chapman, M. V. (1996). Poverty, neighborhood danger, social support, and the individual adaptation among at-risk youth in urban areas. *Journal of Family Issues*, *17*, 641-666.

Brown, A., & Patten, E. (2014). *Statistical portrait of Hispanics in the United States, 2012*. Retrieved from Pew Research, Hispanic Trends Project website: http://www.pewhispanic.org/2014/04/29/statistical-portrait-of-hispanics-in-the-united-states-2012/.

Brown, E. E., & Brooks, F. (2006). African American and Latino perceptions of cohesion in a multiethnic neighborhood. *American Behavioral Scientist*, *50*, 258-275.

Bui, H. N. (2013). Racial and ethnic differences in the immigrant paradox in substance use. *Journal of Immigrant Minority Health, 15*, 866-991.

Burchfield, K. B., & Silver, E. (2013). Collective efficacy and crime in Los Angeles neighborhoods: Implications for the Latino paradox. *Sociological Inquiry*, *83*, 154-176.

Cabrera, N. & Garcia-Coll, C. (2004). Latino fathers: Uncharted territory in need of much exploration. In M. E. Lamb (Ed.), *The role of father in child development, (Fourth Edition)* (pp. 98-120). Hoboken. NJ: Wiley.

Cagney, K. A., Browning, C. R., & Wallace, D. M. (2007). The Latino paradox in neighborhood context: the case of asthma and other respiratory conditions. *American Journal of Public Health*, *97*, 919-925.

Calzada, E. J., Fernandez, Y., & Cortes, D. E. (2010). Incorporating the cultural value of *respeto* into a framework of Latino parenting. *Cultural Diversity and Ethnic Minority Psychology*, *16*, 77-86.

Ceballo, R., Maurizi, L. K., Suarez, G. A., & Aretakis, M. T. (2014). Gift and sacrifice: Parental involvement in Latino adolescents' education. *Cultural Diversity and Ethnic Minority Psychology*, *20*(1), 116-127. doi: http://dx.doi.org/10.1037/a0033472

Celeux, G., & Soromenho, G. (1996). An entropy criterion for assessing the number of clusters in a mixture model. *Journal of Classification, 13*, 195-212.

Chase-Lansdale, P. L., & Gordon, R. A. (1996). Economic hardship and the development of five-and six-year-olds: Neighborhood and regional perspectives. *Child Development*, *67*(6), 3338-3367.

Cheng, S., & Stark, B. (2002). Racial differences in the effects of significant others on students' educational expectations. *Sociology of Education, 75*, 306-327.

Chrispeels, J. H., & Rivero, E. (2001). Engaging Latino families for student success: How parent education can reshape parents' sense of place in the education of their

children. *Peabody Journal of Education*, *76*(2), 119-169.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, S95-S120.

Colon, Y., & Sanchez, B. (2010). Explaining the gender disparity in Latino youth's education: Acculturation and economic value of education. *Urban Education, 45*, 252-273

Conger, D., & Atwell, M. S. (2012). Immigrant gateway communities: Does immigrant student achievement vary by location? In Garcia Coll, C., & Marks, A.K. (Eds.), *The immigrant paradox in children and adolescents: Is becoming American a developmental risk*? (pp. 233-252). Washington, DC: American Psychological Association.

Congress of the United States, Congressional Budget Office, (2011). *A description of the immigrant population: An update.* (CBO Publication No. 4157). Retrieved from http://www.cbo.gov/sites/default/files/06-02-foreign-bornpopulation.pdf.

Cuadrado, M. (2015). Hispanic use of *juramentos* and Roman Catholic Priests as auxiliaries to abstaining from alcohol use/misuse. *Mental Health, Religion & Culture, (ahead-of-print),* 1-8.

Cuellar, I., Arnold, B., & Maldonado, R. (1995). Acculturation rating scale for Mexican Americans-II: A revision of the original ARSMA scale. *Hispanic Journal of Behavioral Sciences, 17*, 275-304. http://dx.doi.org/10.1177/07399863950173001

Delgado-Gaitan, C. (1992). School matters in the Mexican American home: Socializing children to education. *American Educational Research Journal, 29,* 495-513.

Dion, K. K., & Dion, K. L. (2001). Gender and cultural adaptation in immigrant families. *Journal of Social Issues*, *57*(3), 511-521.

Domenech Rodriguez, M. M., Donovick, M. R., & Crowley, S. L. (2009). Parenting styles in a cultural context: Observations of "protective parenting" in first-generation Latinos. *Family Process*, *48*(2), 195-210

Dondero, M., & Muller, C. (2012). School stratification in new and established Latino destinations. *Social Forces*, *91*), 477–502. doi:10.1093/sf/sos127

Drummond, K. V., & Stipek, D. (2004). Low-income parents' beliefs about their role in children's academic learning. *The Elementary School Journal, 104*, 197-213.

Durfur, M. J., Parcel, T. L., & Troutman, K. P. (2013). Does capital at home matter more than capital at school? Social capital effects on academic achievement. *Research in Social Stratification and Mobility, 31*, 1-21.

Edin, P. A., Fredriksson, P., & Åslund, O. (2003). Ethnic enclaves and the economic success of immigrants: Evidence from a natural experiment. *The Quarterly Journal of Economics*, 329-357.

Edwards, L. M., Fehring, R. J., Jarrett, K. M., & Haglund, K. A. (2008). The influence of religiosity, gender, and language preference acculturation on sexual activity among Latino/a adolescents. *Hispanic Journal of Behavioral Sciences, 30*, 447-462.

Emory, R., Caughy, M., Harris, T. R., & Franzini, L. (2008). Neighborhood social processes and academic achievement in elementary school. *Journal of Community Psychology*, *36*(7), 885-898.

Esparza, P., & Sanchez, B. (2008). The role of attitudinal familism in academic outcomes: A study of urban, Latino high school seniors. *Cultural Diversity and Ethnic Minority Psychology, 14*, 193-200.

Feliciano, C. (2001). The benefits of biculturalism: Exposure to immigrant culture and

dropping out of school among Asian and Latino youths. *Social Science Quarterly, 82,* 865-879.

Flannery, P., Reise, S. P., & Yu, J. (2001). An empirical comparison of acculturation models. *Personality and Social Psychology Bulletin, 27,* 1035-1045. doi: 10.1177/0146167201278010

Fox, R. S., Merz, E. L., Solórzano, M. T., & Roesch, S. C. (2013). Further Examining Berry's Model The Applicability of Latent Profile Analysis to Acculturation. *Measurement and Evaluation in Counseling and Development*, *46*, 270-288.

French, S. E., Seidman, E., Allen, L., & Aber, J. L. (2006). The development of ethnic identity during adolescence. *Developmental Psychology*, *42*(1), 1-10.

Fry, R., & Lopez, M. H. (2012, 8 20). Pew Research Hispanic Trends Project. Retrieved from Pew Hispanic: http://www.pewhispanic.org/2012/08/20/ii-hispanic-public-school-enrollments/

Fuligni, A. J. (1998). The adjustment of children from immigrant families. *Current Directions in Psychological Science, 7,* 99-103.

Fuligni, A. J. (2001). A comparative longitudinal approach to acculturation among children from immigrant families. *Harvard Educational Review 71*: 566-578.

Garcia Coll, C. T., & Marks, A. K. (2009). *Immigrant stories: Ethnicity and academics in middle childhood*. New York, NY: Oxford University Press.

Garcia Coll, C., & Marks, A.K. (2012), *The immigrant paradox in children and adolescents: Is becoming American a developmental risk*? Washington, DC: American Psychological Association

Georgiades, K., Boyle, M. H., & Duku, E. (2007). Contextual influences on children's mental

health and school performance: The moderating effects of family immigrant status. *Child development*, *78*, 1572-1591.

Goldenberg, C., Gallimore, R., Reese, L., & Garnier, H. (2001). Cause or effect? A longitudinal study of immigrant Latino parents' aspirations and expectations, and their children's school performance. *American Educational Research Journal, 38*, 547-582.

Goyette, K.A. & Conchas, G. Q. (2002). Family and non-family roots of social capital among Vietnamese and Mexican American children. In Fuller, B, & Hannum, E. (Eds.), *Schooling and social capital in diverse cultures* (pp. 41-72). Boston, MA: JAI/Elsevier Science.

Green, M., & Flowerdew, R. (1996). New evidence on the modifiable areal unit problem. In P. Longley & M. Batty (Eds.), *Spatial analysis: Modelling in a GIS environment* (pp. 41–54). Cambridge, MA: GeoInformation International.

Halgunseth, L. C., Ispa, J. M., & Rudy, D. (2006). Parental control in Latino families: An integrated review of the literature. *Child development*, *77*, 1282-1297.

Halpern-Felsher, B. L., Connell, J. P., Spencer, M. B., Aber, J. L., Duncan, G. J., Clifford, E., et al. (1997). Neighborhood and family factors predicting educational risk and attainment in African American and White children and adolescents. In J. Brooks-Gunn, G. J. Duncan, & J. L. Aber (Eds.), *Neighborhood poverty: Context and consequences for children* (pp. 146–173). New York: Russell Sage.

Hibel, J., & Hall, M. (2014). Neighborhood coethnic immigrant concentrations and Mexican American children's early academic trajectories. *Population Research and Policy Review*, *33*, 365-391.

Immerwahr, J. (2000). Great expectations: How the public and parents – White, African

American, and Hispanic – view higher education. National Center for Public Policy and Higher Education. New York: Ford Foundation.

Jencks, C., & Mayer, S. (1990). The social consequences of growing up in a poor neighborhood. In L. E. Lynn & M. F. H. McGeary (Eds.), *Inner-city poverty in the United States* (pp. 111-186). Washington, DC: National Academy Press

Johnson, M. A., & Marchi, K. S. (2009). Segmented assimilation theory and perinatal health disparities among women of Mexican descent. *Social Science & Medicine*, *69*, 101-109.

Jones, C., & Shen, J. (2014). Neighborhood social capital, neighborhood disadvantage, and change of neighborhood as predictors of school readiness. *Urban Studies Research,* published online at http://www.hindawi.com/journals/usr/2014/204583/

Kao, G. & Tienda, M. (1998). Educational aspirations of minority youth. *American Journal of Education, 106*, 349-384

Kao, G., and Tienda, M. (1995) Optimism and achievement: The educational performance of immigrant youth. *Social Science Quarterly, 76*, 1-21.

Kieffer, M. J. (2008). Catching up or falling behind? Initial English proficiency, concentrated poverty, and the reading growth of language minority learners in the United States. *Journal of Educational Psychology, 100,* 851-868

Knight, G. P., Gonzales, N. A., Saenz, D. S., Bonds, D. D., Germán, M., Deardorff, J., ... & Updegraff, K. A. (2010). The Mexican American cultural values scale for adolescents and adults. The Journal of Early Adolescence, 30, 444-481. http://dx.doi.org/10.1177/0272431609338178

Kwan, M. P. (2013). Beyond space (as we knew it): toward temporally integrated geographies

of segregation, health, and accessibility: Space–time integration in geography and GIScience. *Annals of the Association of American Geographers*, *103*(5), 1078-1086.

Lara, M., Gamboa, C. M., Kahramanian, I., Morales, L.S., and Bautista, D.E.H. (2005). Acculturation and Latino health in the United States: A review of the literature and its sociopolitical context. *Annual Review of Public Health, 26*, 367-397.

Leventhal, T., & Brooks-Gunn, J. (2000). The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin, 126*, 309-337. doi: 10.1037/0033-2909.126.2.309

Logan, J. R., Zhang, W., & Alba, R. D. (2002). Immigrant enclaves and ethnic communities in New York and Los Angeles. *American Sociological Review*, 299-322.

Loken, E. (2004). Using latent class analysis to model temperament types. *Multivariate Behavioral Research, 39*, 625-652.

Lopez, M. H. (2009). *Latinos and education: Explaining the attainment gap*. Retrieved from Pew Research, Hispanic Trends Project website: http://www.pewhispanic.org/2009/10/07/latinos-and-education-explaining-the-attainment-gap/.

Macartney, S. (2012). *Neighborhood contexts and academic achievement: An analysis of Hispanic children in immigrant and native-born families*. SUNY Albany.

Marín, G., & Gamba, R. J. (2003). Acculturation and changes in cultural values. In K. M. Chun, P. Balls Organista, & G. Marín (Eds.), *Acculturation: Advances in theory, measurement, and applied research.* (pp. 83–93). Washington, DC, US: American Psychological Association. Retrieved from http://content.apa.org/books/10472-007

Marrow, H. B. (2008). Hispanic immigration, black population size, and intergroup relations in

the rural and small-town south. In D. S. Massey (Ed.), *New faces in new places: The changing geography of American immigration*. (pp. 211-248). New York: Russell Sage.

Martinez, C. R., DeGarmo, D. S., & Eddy, J. M. (2004). Promoting academic success among Latino youth. *Hispanic Journal of Behavioral Sciences, 26*, 128-151.

Maurizi, L. K. (2012). *Rethinking autonomy: Fostering academic success and well-being among youth and young adults* (Doctoral dissertation, The University of Michigan).

McBride Murry, V., Berkel, C., Gaylord-Harden, N. K., Copeland-Linder, N., & Nation, M. (2011). Neighborhood poverty and adolescent development.*Journal of Research on Adolescence*, *21*(1), 114-128.

McElhaney, K.B., & Allen, J. P. (2001). Autonomy and adolescent social functioning: The moderating effect of risk. *Child Development, 72*, 220-235.

McLafferty, S., Widener, M., Chakrabarti, R., & Grady, S. (2012). Ethnic density and maternal and infant health inequalities: Bangladeshi immigrant women in New York City in the 1990s. *Annals of the Association of American Geographers*, *102*, 893-903.

McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology, 27*, 415-444.

Mickelson, R. A. (1990). The attitude-achievement paradox among Black adolescents. *Sociology of Education, 63*, 44-61

Morales, E. (1996). Gender roles among Latino gay and bisexual men: Implications for family and couple relationships. In J. Laird & R. J. Green (Eds.), Lesbians and gays in couples and families: A handbook for therapists (pp. 272-297). San Francisco: Jossey-Bass.

Muthén, L. K., & Muthén, B. O. (2013). Mplus 7.11. *Los Angeles, CA: Muthén & Muthén*.

Muthén, B. O. (2008, November 21). Re: What is a good value of entropy [Online forum

comment]. Retrieved from http://www.statmodel.com/discussion/messages/13/2562.html?1237580237

Napolitano, L. J., Pacholok, S., & Furstenberg, F. F. (2014). Educational aspirations, expectations, and realities for middle-income families. *Journal of Family Issues, 35*, 1200-1226.

Oberski, D. L. (2016). Mixture models: latent profile and latent class analysis. In Robertson, J., & Kaptein, M. (Eds.), *Modern statistical methods for HCI: a modern look at data analysis for HCI research* Switzerland: Springer. doi:10.1007/978-3-319-26633-6_12

Ojeda, L., & Flores, L. Y., (2008). The influences of gender, generation level, parents' education level, and perceived barriers on the educational aspirations of Mexican American high school students. *The Gender Development Quarterly, 57,* 84-95.

Oyserman, D., & Yoon, K. I. (2009). Neighborhood effects on racial–ethnic identity: The undermining role of segregation. *Race and Social Problems*, 67-76.

Parrado, E.A., & Flippen, C. A. (2005). Migration and gender among Mexican women. *American Sociological Review, 70*, 606-632.

Perreira, K., Chapman, M., G. Stein. (2006). Becoming an American parent: Overcoming challenges and finding strength in a new immigrant Latino community. *Journal of Family Issues, 27*, 1383-1414.

Perreira, K. M., Harris, K. M., & Lee, D. (2006). Making it in America: High school completion by immigrant and native youth. *Demography, 43*, 511-536.

Pew Hispanic Center. (2011, July 14). *Pew Research Hispanic Trends Project*. Retrieved from Pew Hispanic: http://www.pewhispanic.org/2011/07/14/the-mexican-american-boom-brbirths-overtake-immigration/

Pfeffer, M. J., & Parra, P. A. (2009). Strong ties, weak ties, and human capital: Latino immigrant employment outside the enclave. *Rural Sociology, 74*, 241-269

Pham, T. P., & Harris, R. J. (2001). Acculturation strategies among Vietnamese-Americans. *International Journal of Intercultural Relations, 25*, 279-300

Phinney, J. S., Dennis, J. M., & Chuateco, L. I. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development*, *46*(3), 223-236.

Plunkett, S.W., & Bámaca-Gómez, M. Y. (2003). The relationship between parenting, acculturation, and adolescent academics in Mexican-origin immigrant families in Los Angeles. *Hispanic Journal of Behavioral Sciences, 25*, 222-239. doi: 10.1177/0739986303025002005

Plybon, L. E., & Kliewer, W. (2001). Neighborhood types and externalizing behavior in urban school-age children: Tests of direct, mediated, and moderated effects. *Journal of Child and Family Studies*, *10*, 419-437.

Plybon, L. E., Edwards, L., Butler, D., Belgrave, F. Z., & Allison, K.W. (2003). Examining the link between neighborhood cohesion and school outcomes: The role of support coping among African American adolescent girls. *Journal of Black Psychology, 29*, 393-407. doi: 10.1177/0095798403256892

Pong, S., & Hao, L. (2007). Neighborhood and school factors in the school performance of immigrants' children. *International Migration Review, 41*, 206–241. doi:10.1111/j.1747-7379.2007.00062.x

Pong, S., & Zeiser, K. L. (2012). School engagement, school climate, and academic achievement of immigrants' children. In Garcia Coll, C., & Marks, A.K. (Eds.), *The*

immigrant paradox in children and adolescents: Is becoming American a developmental risk? (pp. 209-232). Washington, DC: American Psychological Association.

Portes, A. (1998). "Social capital: Its origins and applications in modern sociology." *Annual Sociology, 24*, 1–24.

Portes, A., & Manning, R. D. (2005). The immigrant enclave: theory and empirical examples. *The Urban Sociology Reader*, *38*, 583-594.

Portes, A. & Rumbaut, R.G. (2001). *Legacies: The story of the immigrant second generation*. Berkeley, CA: University of California Press.

Portes, A., & Rumbaut, R. G. (2006). *Immigrant America: a portrait*. Berkeley, CA: University of California Press.

Posada, D., & Buckley, T. R. (2004). Model selection and model averaging in phylogenetics: Advantages of Akaike information criterion and Bayesian approaches over likelihood ratio tests. *Systematic Biology, 53*, 793-808.

Rauh, V. A., Parker, F. L., Garfinkel, R. S., Perry, J., & Andrews, H. F. (2003). Biological, social, and community influences on third-grade reading levels of minority Head Start children: A multilevel approach. *Journal of Community Psychology, 31*, 255-278.

Ramirez, A.G., Cousins, J.H., Santos, Y., & Supik, J.D. (1986). A media-based acculturation scale for Mexican-Americans: Application to public health education programs. *Family & Community Health, 9,* 63-71.

Riosmena, F., Wong, R., & Palloni, A. (2013). Migration selection, protection, and acculturation in health: A Binational perspective on older adults. *Demography*, *50*(3), 1039-1064.

Robinette, J. W., Charles, S. T., Mogle, J. A., & Almeida, D. M. (2013). Neighborhood cohesion and daily well-being: results from a diary study. *Social Science & Medicine*, *96*, 174-182.

Roosa, M. W., Burrell, G. L., Nair, R. L., Coxe, S., Tein, J. Y., & Knight, G. P. (2010). Neighborhood disadvantage, stressful life events, and adjustment among Mexican American early adolescents. *The Journal of Early Adolescence*, *30*, 567-592.

Sabogal, F., Marin, G., Otero-Sabogal, R., Marin, B. V., & Perez-Stable, E. J. (1987). Hispanic familism and acculturation: What changes and what doesn't? *Hispanic Journal of Behavioral Sciences, 9*, 397–412. doi:10.1177/07399863870094003

Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. Science, 27, 918-924. http://dx.doi.org/10.1126/science.277.5328.918

Santiago, C. D., Gudiño, O. G., Baweja, S., & Nadeem, E. (2014). Academic achievement among immigrant and US-born Latino adolescents: Associations with cultural, family, and acculturation factors. *Journal of Community Psychology*, *42*(6), 735-747.

Schwartz, S. J., Des Rosiers, S., Huang, S., Zamboanga, B. L., Unger, J. B., Knight, G. P., ... & Szapocznik, J. (2013). Developmental trajectories of acculturation in Hispanic adolescents: Associations with family functioning and adolescent risk behavior. *Child Development*, *84*(4), 1355-1372

Schwartz, S. J., Unger, J. B., Des Rosiers, S. E., Lorenzo-Blanco, E. I., Zamboanga, B. L., Huang, S., ... & Szapocznik, J. (2014). Domains of acculturation and their effects on substance use and sexual behavior in recent Hispanic immigrant adolescents. *Prevention Science*, *15*(3), 385-396.

Schwartz, S. J., & Zamboanga, B. L. (2008). Testing Berry's model of acculturation: A confirmatory latent class approach. *Cultural Diversity and Ethnic Minority Psychology*, *14*, 275.

Shaw, C. R. & McKay, H. D. (1942). *Juvenile Delinquency in Urban Areas*. Chicago: University of Chicago Press.

Sikkink, D., & Hernandez, E. I. (2003). *Religion matters: Predicting schooling success among Latino youth*. Notre Dame, IN: Institute for Latino Studies, University of Notre Dame. Retrieved from http://files.eric.ed.gov/fulltext/ED476003.pdf.

Smokowski, P. R., Rose, R., & Bacallao, M. L. (2008). Acculturation and Latino Family Processes: How Cultural Involvement, Biculturalism, and Acculturation Gaps Influence Family Dynamics*. *Family Relations*, *57*, 295-308.

Social Science Research Council. (1954). Acculturation: An explanatory formulation. The Social Science Research Council summer seminar on acculturation, 1953. *American Anthropologist, 56,* 973-1000.

Sokol, J. T. (2009). Identity development throughout the lifetime: An examination of Eriksonian theory. *Graduate Journal of Counseling Psychology*, *1*(2), 14.

South, S. J., Crowder, K., & Chavez, E. (2005). Migration and spatial assimilation among US Latinos: Classical versus segmented trajectories. *Demography*, *42*(3), 497-521.

Stanton-Salazar, R. D., & Dornbusch, S. M. (1995). Social capital and the reproduction of inequality: Information networks among Mexican-origin high school students. *Sociology of Education, 68,* 116-135.

Steinberg, L. (2010). A dual systems model of adolescent risk-taking. *Developmental Psychobiology*, *52*(3), 216-224.

Stewart, E. B., Stewart, E. A., & Simons, R. L. (2007). The effect of neighborhood context on the college aspirations of African American adolescents. *American Educational Research Journal, 44*, 896-919.

Suárez-Orozco, C., & Suárez-Orozco, M. (2001). *Children of immigrants*. Cambridge, MA: Harvard.

Subramanian, S. V., Lochner, K. A., & Kawachi, I. (2003). Neighborhood differences in social capital: a compositional artifact or a contextual construct?. *Health & Place, 9*, 33-44.

Taylor, P., Lopez, M.H., Hamar Martinez, J., & Velasco, G. (2012). *When labels don't fit: Hispanics and their views of identity*. Washington, DC: Pew Hispanic Center

Tran, S. (2012). *Bidimensional acculturation measurement and sexual risk-taking of Latino college students* (Doctoral dissertation, University of Illinois at Urbana-Champaign).

Umaña-Taylor, A. J., Quintana, S. M., Lee, R. M., Cross, W. E., Rivas-Drake, D., Schwartz, S. J... & Seaton, E. (2014). Ethnic and racial identity during adolescence and into young adulthood: An integrated conceptualization. *Child Development*, *85*(1), 21-39.

Unger, J. B., Ritt-Olson, A., Teran, L., Huang, T., Hoffman, B. R., & Palmer, P. (2002). Cultural values and substance use in a multiethnic sample of California adolescents. *Addiction Research & Theory*, *10*(3), 257-279.

University of Washington Beyond High School Study. (2012). *Educational aspirations and expectations*. Retrieved from https://depts.washington.edu/uwbhs/pdf/EducationalAspireExpect.pdf.

US Census Bureau, Current Population Data, Current Population Data on Educational Attainment. (2010). Educational attainment of the population 25 years and over by sex, Latino origin, and race: 2010 (U. S. Census publication CPS-2010-table05). Retrieved

from http://www.census.gov/population/www/socdemo/ Latino/cps2010.html.

US Department of Education, Institute of Education Sciences, National Center for Education Statistics. (2010). *Status and trends in the education of racial and ethnic minorities* (NCES Publication No. 2010-015). Retrieved from http://nces.ed.gov/pubs2010/2010015.pdf.

US Department of Education, Institute of Education Sciences, National Center for Education Statistics. (2011). *America's high school graduates: Results from the 2009 NAEP* (NCES Publication No 2011-462). Retrieved from http://nces.ed.gov/nationsreportcard/pdf/studies/2011462.pdf.

US Department of Education, Institute of Education Sciences, National Center for Education Statistics. (2012). *National assessment of education progress 2012: Trends in academic progress* (NCES Publication No 2013-456). Retrieved from http://nces.ed.gov/nationsreportcard/subject/publications/main2012/pdf/2013456.pdf.

Vela, J. C., Johnson, M. B., Cavazos, L., Ikonomopoulos, J., & Gonzalez, S. L. (2014). The effects of barriers, acculturation, and academic goals on Latina/o students' academic performance. *VISTAS Online*, Article 37. Retrieved from http://www.counseling.org/docs/default-source/vistas/article_37.pdf?sfvrsn=6.

Vesely, C. K., Ewaida, M., & Anderson, E. A. (2014). Cultural Competence of Parenting Education Programs Used by Latino Families A Review. *Hispanic Journal of Behavioral Sciences*, *36*, 27-47.

Waterman, A. S., & Archer, S. L. (1990). A life-span perspective on identity formation: Developments in form, function, and process. In P. B. Baltes, D. L. Featherman, & R. M. Lerner (Eds), *Life-span development and behavior*, *vol. 10*, (pp. 29-57). New York,

NY: Psychology Press.

Waters, M. C., Tran. V. C., Kasinitz, P., & Mollenkopf, J. H. (2010). Segmented assimilation revisited: Types of acculturation and socioeconomic mobility in young adulthood. *Ethnic and Racial Studies, 33*, 1168-1193.

Witherspoon, D. P., & Hughes, D. L. (2014). Early adolescent perceptions of neighborhood: Strengths, structural disadvantage, and relations to outcomes. *Journal of Early Adolescence, 34,* 866-895.

Wodtke, G. T., Harding, D. J., & Elwert, F. (2011). Neighborhood effects in temporal perspective the impact of long-term exposure to concentrated disadvantage on high school graduation. *American Sociological Review, 76*, 713-736.

Woolley, M. E., Kol, K. L., & Bowen, G. L. (2009). The social context of school success for Latino middle school students: Direct and indirect influences of teachers, family, and friends. *The Journal of Early Adolescence, 29*, 43-70.

Wurpts, I. C., & Geiser, C. (2014). Is adding more indicators to a latent class analysis beneficial or detrimental? Results of a Monte-Carlo study. *Frontiers in Psychology, 5,* Article 920. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4140387/pdf/fpsyg-05-00920.pdf.

Zane, N., & Mak, W. (2003). Major approaches to the measurement of acculturation among ethnic minority populations: A content analysis and an alternative empirical strategy. In K.M. Chun, P.B. Organista, & G. Marín (Eds.), Acculturation: Advances in theory, measurement, and applied research (pp. 39-60). Washington, DC: American Psychological Association.