



HHS Public Access

Author manuscript

J Fam Issues. Author manuscript; available in PMC 2018 March 01.

Published in final edited form as:

J Fam Issues. 2017 March ; 38(4): 457–479. doi:10.1177/0192513X16646592.

Family Matters: Promoting the Academic Adaptation of Latino Youth in New and Established Destination

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Abstract

As primary agents of socialization, families and schools can powerfully shape the academic adaptation of youth. Using data from the SIAA studies, we compare the family and school environments of Latino high school seniors living in a new destination, North Carolina, with those living in an established destination, Los Angeles. We then evaluate how family and school environments influence their educational aspirations, expectations, and performance. We find that parents' achievement expectations promote Latino youths' academic success while perceived future family obligations inhibit them. Additionally, we find that schools remain essential in promoting Latino immigrant youths' achievement by providing a supportive and safe learning environment. Discrimination in schools and the broader community is associated with lower educational expectations and aspirations but not lower academic performance.

Keywords

Latino; Hispanic; immigrant; education; expectations; aspirations; performance; family; discrimination

INTRODUCTION

Economic success in the U.S. increasingly requires the completion of high school followed by attainment of a 4-year college degree (Haskins & Kemple, 2014). Adolescents' academic aspirations, expectations, and performance in high school provide a strong signal regarding their future educational progress and status attainment (Bohon, Johnson, & Gorman, 2006; Eccles, Vida, & Barber, 2004; Kao & Thompson, 2003). Students' aspirations identify how far students would like to go in school. Their expectations measure how far they believe they will go in school after taking into account the realities of their life situations and potential barriers that may hinder them from furthering their education. Lastly, their high school

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performance (e.g., GPAs and test scores) measures their capacity to achieve in an academic setting. Consequently, research on academic aspirations, expectations, and performance has become central to understanding the academic adaptation of children of immigrants.

Previous research on the academic adaptation of children of immigrants shows that compared to established immigrant destinations, new immigrant destinations have fewer resources. Ethnographic studies have shown that new destinations have inadequate bilingual services for parents, insufficient cultural competency training for teachers, and generally poorer resources compared to those in established communities (Wortham, Murillo, & Hamann, 2002). At the same time, Latino immigrant children in new immigrant communities typically achieve higher levels of education than those in established communities (Stamps & Bohon, 2006). While previous research shows that there are significant differences between new and established immigrant destinations, no studies have examined the various ways in which immigrant families contribute to helping their children succeed academically in these different communities.

This study contributes to filling this gap in the literature by comparing the family and school environments of Latino high school seniors living in new or emerging immigrant destinations in North Carolina (NC) with those living in established immigrant destinations in Los Angeles (LA), California. We then examine how differences in these family and school environments influence youth's educational aspirations, expectations, and performance.

Our examination draws upon ecological perspectives in child development and segmented assimilation theories of immigrant adaptation. Ecological perspectives in child development argue that a variety of systems or environments shape children's development (Bronfenbrenner, 1979). These include the home or family environment, the school or peer environment, and the broader local community, state, and national contexts in which they reside. Segmented assimilation theory delineates how the children of immigrants' successful adaptation depends on their social context of reception (Portes & Rumbaut, 2001; Zhou & Bankston, 1998). Three particular aspects of the social context of reception are given special consideration in segmented assimilation theory: (1) governmental inclusion/exclusion of an immigrant population group; (2) social acceptance/rejection of the immigrant population group by the communities in which they settle; and (3) the co-ethnic presence of immigrants in the settlement community.

For immigrant children, the social context of reception is not only shaped by the broader settlement community but also by the settings in which they spend the majority of their time. In particular, their families and schools shape their overall experiences and daily social interactions. In combination, ecological systems and segmented assimilation theory explain how the context of the settlement location, family, and school shape adolescents' academic adaptation.

Settlement Location: New and Established Destinations

Latino immigrant families and their children have dominated the recent settlement of emergent immigrant communities (Lichter et al. 2010). Prior to 1990, Latino immigrants

settled largely in 5 states—California, Arizona, New Mexico, Texas, and Colorado (Kandel & Cromartie, 2004). In the past few decades, they have moved to mid-sized urban and rural areas in the Midwest and South (Kandel & Cromartie, 2004; Lichter et al. 2010). Among new settlement states, NC had the fastest growing Latino population with a nearly 400% increase from 1990 to 2000. By comparison, the Latino population in California, an established settlement state, grew 43% during this same decade from 7.7 million to 11 million (Guzmán, 2001).

The social context of rural and urban NC vastly differs from LA. As a new immigrant-receiving community, NC only has a small co-ethnic Latino population in both rural and urban areas (4.7% of NC residents were Latino in 2000) compared to LA (45% of Los Angeles County residents were Latino in 2000) (CensusViewer, 2015). As a result, NC governments have little experience helping Latino immigrants successfully adapt to their new surroundings (Clotfelter, Ladd & Vigdor, 2012). National comparisons of new and established Latino or immigrant destinations confirm that schools in new destinations such as NC tend to have fewer linguistic support services for the children of immigrants but also identify potential strengths in new destinations (e.g., lower student-teacher ratios, lower concentrations of poor students, and greater ethnic diversity) that may help to counterbalance their weaknesses (Dondero & Muller, 2012; Fry 2011; Potochnick, 2014). In addition, children of immigrants living in new destinations may be hurt by more residential segregation, fewer cross-cultural interactions, and more negative attitudes towards immigrants (Hirshman & Massey, 2008; Lichter, et al. 2010).

By contrast, Latino children in LA benefit from established community networks and the availability of linguistic and cultural resources in schools and other government institutions (Saito, 1998). In NC, unauthorized immigrants admitted to state universities must pay out-of-state tuition. All LA high school graduates including those with unauthorized immigration status can be admitted into California's state universities and pay in-state tuition (Potochnick, 2014).

Though the differences in reception context are most stark between NC and LA, within NC, there is also variation in the context of reception between urban areas of the state and more rural areas. In rural areas of NC, Latino immigrants frequently work in agriculture, the meat processing industry, or construction (Kasarda & Johnson, 2006; Perreira, 2011). In urban areas, Latino immigrants more frequently work in the service sector or have professional or semi-professional employment (Kasarda & Johnson, 2006; Perreira, 2011). In rural areas, more opposition to the settlement of Latino immigrants, more discrimination, and more efforts to identify and deport Latino residents who are unauthorized immigrants have been reported than in urban areas (Gill, 2010; Marrow, 2008). These rural areas also tend to be poorer, with lower-quality schools, and, in some cases, more residentially segregated than urban areas (NC RDC, 2015; NC DPI, 2015; High & Owen, 2014). Similar rural-urban differences in new Hispanic or immigrant settlement destinations have been found elsewhere in the U.S. (Hall 2013; Lichter, et al. 2010; Byun, Meece & Irvin, 2012).

As a whole, this previous literature leads us to expect that Latino students in rural NC will have lower educational aspirations, expectations, and performance than those in urban NC

and those in LA. In rural NC, there are less targeted school resources for students with immigrant parents, more hostility towards immigrants, and less established co-ethnic support systems.

Family Influences on Academic Adaptation

Within both new and established destinations, families play an essential role in the academic adaptation of immigrant youth (Portes & Rumbaut, 2001; Zhou and Bankston 1998). Families support the academic adaptation of their adolescents by providing them with the socio-economic resources they need to achieve (White & Glick, 2000), by setting expectations for them and providing them with guidance (Kao & Tienda, 1995; Kao 2004), and by creating a supportive environment in which they can thrive (Suarez-Orozco & Suarez-Orozco 1995; Fuligni et al., 1999). Families can also be a source of obligations and demands which can hinder academic success (Lopez Turley, Desmond, & Burch, 2010; Fuligni et al., 1999).

Family closeness and belonging—Family closeness and belonging provide indications of the emotional bonds between family members. When children feel close to their parents (family closeness) and feel valued by their parents (family belonging), they may communicate more comfortably with one another, encourage one another, and provide support to one another (Suizzo et al., 2012). Previous research on adolescents has found positive associations of family closeness and belonging with academic expectations and performance. In addition, this research suggests that these associations influence adolescents' academic adaptation differently than family obligations or demands (Feliciano 2012; Fuligni, 2001).

Family obligations and demands—Family obligations and demands reflect the importance of assisting and supporting the family that can be found in the cultural backgrounds of many immigrant families (Fuligni, 2001) and is sometimes referred to as familism in the literature on Latino families (Valenzuela & Dornbusch, 1994). Latino adolescents are taught to respect the authority of the family. This respect for the family leads them to feel a sense of obligation or duty to provide current support and future support to their parents (Fuligni, et al., 1999). They may also feel pressure to help their parents with daily activities or demands such as translating letters and bills, assisting with housework, or caring for younger siblings.

Emerging evidence suggests that, in immigrant families, respect can promote adolescents' academic aspirations and success (Crosnoe & Lopez Turley, 2011; Gonzales, 2011; Fulgini, 2001). At the same time, current and future obligations to care for family members and daily demands to assist with household needs can sometimes lower adolescents' academic motivations and thwart their academic success, especially among children with immigrant parents (Fuligni, 1997; Fuligni et al., 1999; Fuligni, 2001; Henderson, 1997).

Family-school involvement—Family-school involvement pertains to the various ways in which families work to support their children's schooling through setting academic expectations, communicating with their adolescents about schooling, and potentially

assisting them with navigating the school system (Desimone, 1999). Some Latino parents explicitly migrate to the U.S. to provide their adolescents with more opportunity and a better education (Perreira & Spees, 2015). Consequently, they set high educational expectations for their adolescents and communicate these expectations and hopes to them (Perreira, Chapman, & Livas-Stein 2006). Prior research has shown that parents' aspirations for their adolescents influence their academic performance and academic aspirations (Bohon, Johnson, & Gorman, 2006; Kao, 2004; Eamon, 2005; Henry et al., 2008). Additionally, discussions among parents and their adolescents, especially pertaining to school experiences, positively influence children's academic performance and academic aspirations/expectations (Aldous, 2006; Desimone, 1999; Kao, 2004).

In this study, we hypothesize that families will promote adolescents' educational success through providing a nurturing environment where their adolescents feel close to and valued by their parents. At the same time, we hypothesize that immigrant parents may hinder their adolescents' academic success by burdening them with family obligations and demands that reduce their capacity to engage in school.

School Influences on Academic Adaptation

The successful adaptation of children in immigrant families also depends on the formation of strong and supportive relationships at school, the setting in which they are first introduced to US cultural values and norms (Portes & Rumbaut, 2001; Zhou & Bankston, 1998). These strong and supportive relationships may be with teachers, school administrators, or peers and shape their overall perception of their school climate and their sense of belonging in school.

Previous research demonstrates that Latino students who experience a positive school climate where they feel accepted and valued not only perform better academically but are also more motivated to achieve (Perreira, Fuligni, & Potochnick, 2010; Stone & Han, 2005). Like school climate, school belonging is associated with increased academic motivations and engagement even among students who struggled to achieve (Gillen-O'Neel & Fuligni, 2013; Suarez-Orozco, Rhodes, & Milburn, 2009). In contrast, unsupportive school environments where immigrant youth feel threatened or discriminated against can lower Latino youths' academic motivations and achievement (Crosnoe 2005; DeGarmo & Martinez, 2006; Stone & Han, 2005).

Based on this previous research, we hypothesize that perceptions of a positive school climate, a sense of school belonging and support from teachers and peers will be associated with higher academic aspirations, expectations, and performance. In contrast, the perception of discrimination and the frequency of discriminatory experiences in school or the community will demoralize Latino youths and depress their educational outlook and performance.

DATA AND METHODS

Data

We used data on high school seniors from the Los Angeles Social Identification and Academic Adaptation study (LA-SIAA) and from a companion study, the North Carolina

Southern Immigrant Academic Adaptation study (NC-SIAA). The Los Angeles (LA) sample consisted of students enrolled in three public high schools with high concentrations of Latino youth in 2005–06. The NC sample consisted of students enrolled in four urban and five rural high schools in counties selected through a stratified cluster design in 2009–10. All high schools included in the sampling frame had at least 24 Latino students enrolled in 9th grade. Those included in the urban strata had more than 50% of their population living in urban areas. Among the rural schools in our sample from NC, the average Latino student population was 37%, and 21% among urban schools. Reflecting a similar distribution, the NC counties sampled had, on average, a Latino population that was 14.9% in the rural counties and 8.8% in the urban counties.

All students who self-identified as Latino were invited to participate. They completed a 30 minute questionnaire in small 3–5 person groups during school. An additional 15 minute questionnaire was given to students to be completed at home. While questionnaires were available in both Spanish and English, the majority of students (97%) completed the English versions. All scales used in the survey had previously validated Spanish and English versions. The few questions that required new translations were forward and back translated following recommended procedures by Brislin (1986). All students received a \$15 incentive. Both studies required active consent from parents and achieved a response rate between 60–65%.

The combined LA-NC SIAA data include 511 Latino high school seniors with 297 from LA and 214 from NC. From these 511 observations, 8 are missing information on their expectations and aspirations and 36 are missing information on their GPAs. The additional observations dropped (N=27) had data missing primarily on the family and school context variables of interest. However, only a few observations were missing on any one independent variable and we had no basis for imputing these values. Thus, we employed listwise deletion. The final analytic samples included 476 students for the educational aspirations and expectations models and 460 for the GPA model.

The majority of youth in the rural NC (48%), urban NC (43%), and LA (56%) samples were second-generation immigrant students. Most of the sample considered themselves fluent in English (97%). Over half of the youth were of Mexican background (54%) followed by youth from El Salvador (5%), Ecuador (3%), Honduras (3%), and Guatemala (3%).

At the same time, reflecting the recent emergence of the Latino community in NC, more Latino students in urban NC versus LA were first-generation immigrants (53% vs. 16%) and fewer had a Mexican heritage (38% vs. 56%). In rural NC compared to urban NC, more students had a Mexican heritage (65% vs. 38%) and fewer had a parent who had graduated high school (37% vs. 73%) compared to those in LA.

Measures

This study included measures of three dependent variables – educational aspirations, educational expectations, and academic performance (i.e. grade point averages). Differences in these outcomes were estimated as a function of settlement location, students' perceptions of family contexts (closeness and belonging; obligations and demands; and family-school

involvement), and students' perceptions of school contexts (social acceptance and discrimination by peers and adults). These multi-item family and school context scales were used in our analysis because of their prevalence and significance in the existing literature on immigrant achievement. We also controlled for student demographic characteristics, family structure, and family socioeconomic status (SES). In the descriptions below, we report the Cronbach's alphas for [this sample](#) for all multi-item scales.

Educational aspirations and expectations—To measure aspirations, Latino youth were asked, “How far would you like to go in school?” To measure expectations, youth were asked “How far do you think you actually will go in school?” Responses were categorized into three categories: (1) complete 2-year college degree or less, (2) complete 4-year college degree, and (3) complete graduate school degree. Aspirations and expectations had a correlation of $r=.66$.

Academic performance—To measure academic performance, we used students' unweighted cumulative high school grade point averages (GPAs) collected from their high school transcripts. If students' transcripts were missing, we used GPAs provided by students on their in-school survey when asked, “On your last report card, what was your overall GPA?” Among students for whom we had both the self-reported and transcript-based GPA ($N=234$), the correlation was .80. GPA was correlated with both aspirations ($r=.24$) and expectations ($r=.26$).

Location—Students resided in either rural NC (=0), urban NC (=1), or urban LA (=2).

Family Closeness and Belonging—Adolescents completed ten 5-point Likert items from the cohesion subscale for the Family Adaptation and Cohesion Evaluation Scales (FACES) II for each parent (Olson et al., 1979). We averaged these 10 items and measured family closeness (1=low and 5=high) using the maternal closeness score if the mother was present in the household ($\alpha=.87$) and the paternal closeness score if only the father was present ($\alpha=.87$). Our family belonging variable, adapted from Tyler and Degoey (1995), utilized an average of 8 items (e.g., “I feel like a valued member of my family”) to indicate whether respondents felt valued by and important to their families (1=low and 5=high). It had a good internal consistency ($\alpha=.90$) and a correlation of $r=.58$ with family closeness.

Family Obligations and Demands—Youth completed four measures regarding their sense of duty and obligation to the family—family respect, current obligations, future obligations, and daily demands. Measures of family obligation were developed after collecting information from several focus groups and examining existing literature (Fulgini et al., 1999). Based on an average of 7 items, family respect evaluated the importance of making sacrifices for one's family and respecting parents and older family members ($\alpha = .76$; 1=low to 5=high). Based on an average of 12 items, current obligations indicated how often students felt they should engage in activities such as running errands for the family (1=low to 5=high, $\alpha = .84$). Based on an average of 6 items, future obligations measured how important it was to youth to support their parents in the future ($\alpha=.76$; 1=low to 5=high). To measure daily demands, we utilized 5 items to assess how often the need to help the family with finances, housekeeping, and caregiving got in the way of school work ($\alpha=.$

74; 1=low to 5=high). Correlations among family respect, future obligations, and current obligations ranged from .51–.59. Correlations with daily demands were less than .20.

Family-school Involvement—We considered three dimensions of family involvement—parent achievement expectations, talking to parents about future plans and school, and parental school encouragement measured by averaging items scored on a 5-point Likert scale (1=low to 5= high). Parent achievement expectations ($\alpha=.77$) measured the pressure students felt from their parents to achieve academically by evaluating four statements such as, “my parents will be disappointed if I don’t get mostly As on my report card.” Following Fuligni et al. (1999), the frequency with which youth and their parents talked about future plans was based on three questions asking how often youth discussed their future job plans, future educational plans, and classes in high school ($\alpha=.84$). Parental school encouragement was based on an average of two questions asking about encouragement to take advanced courses and go to college ($r=.42$). The highest correlation among all family-school involvement measures was .41 between parent encouragement and talking about future plans.

School/Social Acceptance—We considered three indicators of general social acceptance at school — a positive school climate, school belonging, and encouragement from adults at school. Using questions about feeling valued and respected at school by teachers, positive school climate utilized an average of 5 items adapted from Tyler and Degoe’s (1995) and had an internal consistency of $\alpha = .89$ with a range from 1 (low) to 5 (high). Closely related, students’ sense of school belonging reflected average responses to seven 5-point Likert scale questions on the importance of school to their identity ($\alpha=.87$; 1=low to 5=high). Lastly, adult school encouragement was calculated as the average of two questions regarding how often students feel encouraged by adults at school to pursue harder classes and to further their education ($r =.39$; 1=low to 5=high). Correlations between these three measures of social acceptance ranged from .32 to .61 with the highest correlation between school climate and school belonging.

We also considered three indicators of peer acceptance and support for school –peer school encouragement, peer school support, and peer educational values. Following Fuligni (1997), peer school encouragement was averaged from two questions regarding how often students feel encouraged by peers at school to (1) pursue harder classes and (2) to further their education ($r=.45$; 1= low to 5=high). Peer school support was calculated as the average of seven 5-point Likert items regarding talking about educational plans and gaining other school-related help and advice from peers ($r=.85$; 1=low to 5=high; Fuligni et al., 1999). Following Eccles (1983), peer educational values were averaged from four 5-point Likert-items regarding the proportions of friends who are very ambitious, have college plans, do well in school, and are hard-working ($\alpha=.73$, 1=none to 5=all). These three measures had a correlation of $r =.34-.52$.

School/Social Discrimination—We defined three measures of discrimination. First, to measure the perceived likelihood of discrimination, respondents read four hypothetical scenarios about mistreatment due to students’ race-ethnicity (e.g., not being chosen by a teacher). Then, using a 5-point Likert scale, they evaluated how *likely* discrimination was to

happen to them (Mendoza-Denton et al., 2002). Scores ranged from 1 (low) to 20 (high) and the likelihood scale had good internal consistency ($\alpha=.83$). Second, we identified how often participants experienced racial/ethnic discrimination from adults (an average of seven 5-point Likert items, 1=low to 5=high) or peers (also, an average of seven 5-point Likert items, 1=low to 5=high). Taken from Rosenbloom and Way (2004), items for both adults and peers identified types of discrimination such as unfair treatment, being treated with less respect, or not being trusted. Because measures of discrimination by adults and by peers were highly correlated ($r=.76$) and bivariate associations with our outcomes were similar for both adults and peers, these measures were averaged into a single measure ($\alpha=.94$). Lastly, we utilized these two measures to create a dichotomous variable indicating whether students had experienced discrimination sometimes/often/always (1=yes, 0=no). The perceived likelihood of discrimination and the frequency of experiencing discrimination by adults or peers were correlated ($r=.46$).

Additional Controls—Student characteristics that may have influenced Latino youths' educational outcomes were also controlled for such as gender (1=female, 0=male), age, ethnicity (Mexican=1, not Mexican=0), language of interview (1=English, 0=Spanish), generational status, and ethnic belonging. First-generation students were defined as foreign-born with foreign-born parents; second-generation students were defined as US-born with at least one foreign-born parent; third-generation students were defined as US-born with US-born parents. Ethnic belonging (Phinney, 1992) utilized seven 5-point Likert items to measure the degree to which students felt like members of their own ethnic group (1=low, 5= high, $\alpha=.87$). We also controlled for family structure and socioeconomic status based on whether a student lived with two parents (1=yes, 0=no) and at least one parent was a high school graduate (1=yes, 0=no). Previous studies show that parent's education is a core indicator of SES (Davis-Kean, 2005).

Analytic Plan

We began our analysis by assessing differences in the distributions of our dependent variables and independent variables by settlement location—rural NC, urban NC, and urban LA. Next, we evaluated the unadjusted or bivariate associations between each independent variable and dependent variable, using ordered logistic regression for the educational aspirations and expectations model or Ordinary Least Squares (OLS) regression for the GPA model. In our data, the proportional odds assumption made by ordered logistic regression was tested using the Brandt test and this assumption held. Based on the analysis of unadjusted associations, we identified one variable—family respect—which was never significant at the .10 level and could be dropped from subsequent models. To reduce multicollinearity in our final models, we also removed highly correlated measures in our sets which did not contribute separately to improving the fit of our final models. These included one measure of family-school involvement (i.e. parental school encouragement), two measures of school/social acceptance (i.e. climate and belonging), two peer measures (i.e. peer school encouragement and support) and two measures of school/social discrimination (i.e. frequency of discrimination by adults or kids and any discrimination). Our final models show differences in educational aspirations, educational expectations, and GPAs as a function of location, family contexts, and school contexts after controlling for student

characteristics, family structure, and family SES. All analyses were adjusted for the stratified sampling design and clustering by location. Additionally, we conducted a sensitivity analysis which included running our full model with school fixed effects.

RESULTS

Latino youth enrolled in 12th grade have high educational aspirations and expectations across all sites, but these aspirations and expectations are highest in LA (Table 1). On average, 91% of Los Angeles students *aspire* to complete a college degree or more and 82% *expect* to complete a college degree or more. The primary variation in educational aspirations and across sites stems from lower aspirations and expectations in rural and urban NC when compared to LA. In rural and urban NC, 24–25% of students aspire to complete a 2-year college degree or less versus only 9% in LA. With respect to expectations, 52% of students in rural NC expect to complete only a 2-year college degree or less but only 34% of urban NC students and 18% of LA students expect to end their education with a 2-year college degree or less. Additionally, academic performance, measured by GPA, was lower in urban NC than in either rural NC or LA.

Family and school contexts experienced by Latino students also varied significantly across these three settlement locations (Table 2). In general, Latino students in rural and urban NC frequently felt close to their families, but they also frequently experienced high levels of family obligations. Family-school involvement varied little between locations; all students frequently felt encouraged by their parents to do well in school. Students in NC typically reported more positive school climates and more encouragement from adults at school than those in LA despite the fact that students in NC perceived a higher likelihood of discrimination. Students believed it was unlikely that they would be discriminated against.

Differences in the family and school contexts experienced by Latino students across these settlement locations can potentially explain differences in educational aspirations, expectations, and performance (Table 3). Unadjusted or bivariate associations suggested strong associations of both family and school contexts with each of our educational outcomes. Students with a stronger sense of family belonging had higher GPAs; students with higher future or current obligations had lower odds of expecting to complete a 4-year college degree or more; and students who reported more family-school involvement measured along several dimensions had higher educational aspirations, expectations, and GPAs. Likewise, each of our measures of school/social acceptance was positively associated with the educational outcomes we measured and each of our measures of school/social discrimination was negatively associated with these educational outcomes. Our control variables (e.g., gender, Mexican heritage, immigrant generation, parents' education) had more limited associations with educational outcomes. Thus, they are unlikely to explain much of the observed variation in educational outcomes by location.

After accounting for differences in family contexts, school social contexts, and the demographic characteristics of students, we continue to find significant differences in educational outcomes across locations (Table 4). In fact, our fully adjusted models revealed greater differences across locations. Latino youth in NC reported significantly lower

expectations than those in LA and, at least in urban NC, reported lower GPAs as well. These results suggest that, compared to their LA counterparts, Latino children of immigrants in NC may be protected from having lower educational expectations and GPAs by their relatively positive family and school/social environments. Overall, Latino students had the highest educational aspirations, expectations, and GPAs when their parents set high achievement expectations and teachers in their schools encouraged them to take more advanced courses or continue their educations after high school. High family future obligations and perceptions of discrimination adversely affected aspirations, expectations, and GPAs.

DISCUSSION

Both ecological perspectives of child development and segmented assimilation theories of immigrant adaptation emphasize the importance of family, school, and state environments. This study contributes to the literature on the academic adaptation of children of immigrants by comparing and contrasting the family and school environments in two different destinations for Latino immigrant families – LA, an established destination, and NC, a new destination. We also consider differences between rural and urban NC.

We find significant differences in family environments across these destinations. Youth in NC report greater family belonging and in rural NC, higher parental achievement expectations compared to youth in LA. Family belonging and parental achievement expectations are both positively associated with either academic expectations or performance. These results support past literature suggesting that immigrant parents help to promote their children's school success by fostering a sense of interdependence and belonging in the family and by communicating high achievement expectations for their children (Kao 2004; Crosnoe & Lopez Turley, 2011).

Simultaneously, these results show that close family networks can have a downside – family obligations and daily demands. Students in rural NC report higher levels of current obligations than those in urban NC and LA. Our results confirm previous research indicating that obligations and demands can hinder the academic success of Latino immigrant students (Fuligni, 2001; Henderson, 1997). However, the negative effects of obligations and demands are not sufficient to explain the lower educational expectations and performance that we observe in youth residing in NC versus LA.

Additionally, we find significant differences in school environments across these destinations and confirm that discrimination can hinder the academic adaptation of immigrant youth (Crosnoe 2005; DeGarmo & Martinez, 2006; Stone & Han, 2005). Youth living in urban NC report more adult encouragement in their schools than youth in LA. Rural NC youth perceive more discrimination in their schools and community than youth in LA, which is not surprising since, in past literature, families in new destinations expressed that the most significant problem faced was racism and discrimination (Perreira, Chapman, and Livas-Stein, 2006). To some extent, the positive effects of adult encouragement appear to counterbalance the negative effects of perceived discrimination. However, these experiences also cannot fully explain the lower educational expectations and performance that we observe in youth residing in urban and rural NC versus LA.

Our results, therefore, beg the question: what can explain these differences in the academic adaptation of the children of immigrants in NC versus LA? One possibility is the legal status of the first-generation youth and their eligibility for in-state tuition. In LA, graduating high school students can attend state universities at in-state tuition rates. In NC, they cannot. Moreover, recent research has shown the legal status of both parents and children can influence the family environment and children's academic adaptation (Dreby, 2012; Perreira & Spees, 2015; Gonzales, 2011). Future research should collect this information.

While our study illustrates the importance of school and familial environments on the academic adaptation of Latino children of immigrants, we also note that our sample consists of relatively, high-achieving Latino students from only one new and one established settlement state. The family and schooling experiences of children of immigrants who have dropped out by 12th grade may differ significantly from those in our sample and data in other new and established states need to be examined to determine if our findings apply elsewhere. Some differences between the two immigrant destinations may be due to the different years in which the data were collected. NC data was collected after the 2008 recession, which may have lowered NC students' aspirations and expectations. Lastly, our results using GPA as the outcome variable should be interpreted cautiously since GPAs is a subjective measure of achievement.

Despite these limitations, our study begins to provide policymakers and others with insights into how educators can work with parents, teachers, and peers to improve the academic outlook of children of immigrants. To promote the academic adaptation of children of immigrants, policies and programs directed at these children must capitalize on the importance of family, promote goal setting and positive parent-child communication within families, and develop resources (e.g., translation and childcare services) for immigrant parents and children that help to reduce the burden of family obligations and daily demands. Within schools, administrators and community leaders must work with teachers to develop repertoires for positive feedback and encouragement while reducing feedback that might be perceived as discriminatory by kids. Future researchers should collect larger samples of comparative data on children in new and established destinations and identify the most effective policies and programs to promote the academic adaptation of youth in each destination.

Acknowledgments

We gratefully acknowledge funding from the Russell Sage Foundation (RSF 88-06-07; 87-03-01; 87-05-02), the Russell Sage Visiting Scholar program, the William T. Grant Foundation (WTG #9203), and the Population Research Training Grant (5 T32 HD007168), awarded to the Carolina Population Center at The University of North Carolina at Chapel Hill by the Eunice Kennedy Shriver National Institute of Child Health and Human Development, in support of this research. We also thank Sandi Chapman and Paula Gildner for their excellent project management. In addition, we would like to thank Christina Holub, Tia Palermo, and Pan Riggs for their assistance with data collection and data entry.

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Mean Differences in Educational Aspirations, Expectations, and Unweighted GPAs of 12th Grade Latino Students in Los Angeles and North Carolina

Table 1

	Full Sample		NC Rural		NC Urban		LA Urban	
	%/mean	(se)	%/mean	(se)	%/mean	(se)	%/mean	(se)
Educational Aspirations								
Complete <= 2-year college degree	15%	(0.02)	25%	(0.04)	24%	(0.10)	9%	(0.01)
Complete a 4-year college degree	46%	(0.05)	42%	(0.04)	38%	(0.08)	50%	(0.08)
Complete a graduate degree	39%	(0.05)	33%	(0.05)	38%	(0.03)	41%	(0.09)
Educational Expectations								
Complete <= 2-year college degree	29%	(0.02)	52%	(0.04)	34%	(0.09)	18%	(0.02)
Complete a 4-year college degree	45%	(0.04)	29%	(0.05)	42%	(0.08)	52%	(0.04)
Complete a graduate degree	26%	(0.03)	19%	(0.05)	24%	(0.08)	30%	(0.06)
Educational Performance								
Overall Unweighted GPA (4-point scale)	2.58	(0.05)	2.64	(0.08)	2.34	(0.06)	2.63	(0.06)
Sample Size	503		106		104		293	

Note: Unweighted Ns and %s. Estimates adjusted for clustering and stratification.

^aMean is different between NC Rural and NC Urban at the 5 percent level.

^bMean is different between NC Rural and LA Urban at the 5 percent level.

^cMean is different between NC Urban and LA Urban at the 5 percent level.

Table 2

Mean Differences in Covariates, by Location

	Full Sample		NC Rural		NC Urban		LA Urban	
	%/mean	(se)	%/mean	(se)	%/mean	(se)	%/mean	(se)
Family Closeness and Belonging								
Closeness	3.50	(0.06)	3.59	(0.07)	3.62	(0.05)	3.42	(0.07)
Belonging	4.06	(0.06)	4.22	(0.15)	4.22	(0.11)	3.94	(0.04)
Family Obligations and Demands								
Family Respect	4.06	(0.04)	4.28	(0.04)	4.22	(0.05)	3.92	(0.02)
Current Obligations	3.53	(0.02)	3.74	(0.06)	3.57	(0.03)	3.45	(0.04)
Future Obligations	3.53	(0.02)	3.76	(0.02)	3.69	(0.05)	3.40	(0.02)
Daily Demands	2.36	(0.05)	2.52	(0.10)	2.38	(0.03)	2.29	(0.08)
Family-School Involvement								
Parent Achievement Expectations	2.90	(0.09)	3.21	(0.10)	2.95	(0.15)	2.78	(0.12)
Talk about Future Plans	3.83	(0.07)	3.78	(0.16)	3.88	(0.10)	3.83	(0.11)
Parental School Encouragement	3.94	(0.05)	3.85	(0.09)	4.00	(0.21)	3.95	(0.01)
School/Social Acceptance or Discrimination								
Positive School Climate	3.49	(0.05)	3.60	(0.08)	3.67	(0.18)	3.38	(0.03)
School Belonging	3.15	(0.04)	3.25	(0.09)	3.17	(0.14)	3.11	(0.03)
Adult School Encouragement	3.85	(0.06)	4.01	(0.09)	4.07	(0.08)	3.72	(0.05)
Peer School Encouragement	3.50	(0.05)	3.48	(0.14)	3.58	(0.15)	3.48	(0.04)
Peer School Support	3.44	(0.05)	3.39	(0.09)	3.41	(0.16)	3.47	(0.06)
Peer Educational Values	3.55	(0.04)	3.49	(0.07)	3.53	(0.13)	3.58	(0.05)
Perceived Likelihood of Discrimination	8.82	(0.21)	9.86	(0.30)	9.28	(0.13)	8.27	(0.40)
Freq. Adult or Peer Discrimination	1.89	(0.04)	1.98	(0.09)	1.90	(0.05)	1.85	(0.06)
Any Discrimination	21%	(0.02)	20%	(0.04)	17%	(0.02)	23%	(0.03)
Control Variables								
Female	55%	(0.03)	58%	(0.10)	49%	(0.05)	55%	(0.03)
Age (mean)	18.33	(0.05)	18.69	(0.16)	18.51	(0.12)	18.13	(0.04)
Mexican	54%	(0.05)	65%	(0.07)	38%	(0.11)	56%	(0.05)

	Full Sample		NC Rural		NC Urban		LA Urban	
	%/mean	(se)	%/mean	(se)	%/mean	(se)	%/mean	(se)
Generational Status								
First Generation	30%	(0.04)	45%	(0.08)	53%	(0.08)	16%	(0.01)
Second Generation	52%	(0.04)	48%	(0.07)	43%	(0.10)	56%	(0.04)
Third Generation	18%	(0.04)	7%	(0.02)	4%	(0.02)	27%	(0.05)
English Survey	97%	(0.01)	91%	(0.04)	93%	(0.05)	100%	–
Ethnic Belonging	3.72	(0.16)	4.38	(0.04)	4.33	(0.02)	3.27	(0.11)
Lives with two parents	68%	(0.01)	66%	(0.04)	70%	(0.04)	68%	(0.00)
Parent graduated high school	65%	(0.04)	37%	(0.07)	72%	(0.11)	73%	(0.05)
Sample Size	503		106		104		293	

Note: Unweighted Ns and %s. Estimates adjusted for clustering and stratification.

^aMean is different between the NC Rural and NC Urban at the 5 percent level

^bMean is different between NC Rural and LA Urban at the 5 percent level

^cMean is different between NC Urban and LA Urban at the 5 percent level

Table 3 Unadjusted Odds Ratios for Educational Expectations and Aspirations, and Unadjusted Regression Coefficients for Unweighted GPA

	Aspirations (N=503)		Expectations (N=503)		Unweighted GPA (N=484)	
	OR	[95% CI]	OR	[95% CI]	B	(se)
Location						
Urban Los Angeles (ref)	—	—	—	—	—	—
Urban North Carolina	0.63	(0.25–1.55)	0.58	(0.23–1.48)	-0.29	(0.07) ***
Rural North Carolina	0.54	(0.26–1.13) *	0.29	(0.17–0.49) ***	0.00	(0.10)
Family Closeness and Belonging						
Family Closeness	1.11	(0.87–1.41)	1.12	(0.85–1.47)	0.03	(0.02)
Family Belonging	1.01	(0.85–1.19)	1.06	(0.87–1.30)	0.09	(0.03) ***
Family Obligations and Demands						
Family Respect	0.84	(0.55–1.28)	0.77	(0.53–1.13)	-0.04	(0.06)
Current Obligations	1.06	(0.85–1.34)	0.80	(0.69–0.93) **	0.02	(0.04)
Future Obligations	0.78	(0.66–0.93) **	0.72	(0.49–1.04) *	-0.10	(0.06) **
Daily Demands	0.94	(0.72–1.22)	0.81	(0.63–1.02) *	-0.04	(0.04)
Family-School Involvement						
Parent Achievement Expectations	1.51	(1.08–2.11) **	1.25	(1.01–1.54) **	0.10	(0.04) ***
Talk about Future Plans	1.20	(0.91–1.58)	1.35	(1.09–1.67) **	0.06	(0.04)
Parental School Encouragement	1.47	(1.32–1.65) ***	1.53	(1.32–1.78) ***	0.09	(0.04) *
School/Social Acceptance or Discrimination						
Positive School Climate	1.12	(1.01–1.25) **	1.22	(1.03–1.44) **	0.12	(0.03) ***
School Belonging	1.06	(0.81–1.39)	1.19	(0.83–1.70)	0.06	(0.04)
Adult School Encouragement	1.34	(1.01–1.78) **	1.41	(1.20–1.67) ***	0.17	(0.03) ***
Peer School Encouragement	1.47	(1.25–1.72) ***	1.51	(1.22–1.88) ***	0.11	(0.03) ***
Peer School Support	1.58	(1.13–2.19) **	1.45	(1.02–2.07) **	0.10	(0.03) ***
Peer Educational Values	1.84	(1.52–2.22) ***	1.87	(1.41–2.47) ***	0.14	(0.02) ***
Perceived Likelihood of Discrimination	0.94	(0.89–0.98) **	0.92	(0.88–0.97) ***	-0.01	(0.01)
Freq. Adult or Peer Discrimination	0.75	(0.63–0.89) ***	0.72	(0.59–0.88) ***	-0.09	(0.04) **

	Aspirations (N=503)		Expectations (N=503)		Unweighted GPA (N=484)	
	OR	[95% CI]	OR	[95% CI]	B	(se)
Any Discrimination	0.70	(0.42– 1.17)	0.64	(0.36– 1.13)	-0.15	(0.08)
Control Variables						
Female	1.75	(1.15– 2.65)	1.15	(0.89– 1.48)	0.12	(0.11)
Age	0.64	(0.46– 0.90)	0.60	(0.38– 0.94)	-0.12	(0.07)
Mexican	0.56	(0.39– 0.80)	0.56	(0.43– 0.75)	0.09	(0.06)
Generational Status						
First Generation	1.01	(0.43– 2.42)	0.75	(0.34– 1.62)	-0.07	(0.08)
Second Generation	0.81	(0.39– 1.69)	1.05	(0.53– 2.09)	-0.13	(0.04)
Third Generation (ref)	—	—	—	—	—	—
English Survey	0.41	(0.12– 1.36)			0.27	(0.06)
Ethnic Belonging	0.81	(0.59– 1.11)	0.78	(0.57– 1.07)	-0.05	(0.03)
Lives with two parents	1.05	(0.73– 1.52)	1.06	(0.58– 1.94)	0.11	(0.06)
Parent graduated high school	1.29	(0.80– 2.06)	1.69	(0.87– 3.29)	-0.01	(0.08)

* p<.10,
 ** <.05,
 *** p<.01

Note: Estimates adjusted for clustering and stratification.

Table 4 Final Ordered Logits for Educational Expectations and Aspirations, and Regression Coefficients for Unweighted GPA

	Aspirations (N=476)		Expectations (N=476)		Unweighted GPA (N=460)	
	OR	[95% CI]	OR	[95% CI]	B	(se)
Location						
Urban Los Angeles (ref)	—	—	—	—	—	—
Urban North Carolina	0.52	(0.23–1.21)	0.44	(0.17–1.10)	*	-0.27 (0.08) **
Rural North Carolina	0.45	(0.13–1.50)	0.29	(0.14–0.60)	***	-0.02 (0.12)
Family Closeness and Belonging						
Family Belonging	1.07	(0.88–1.30)	1.07	(0.86–1.33)		0.15 (0.04) ***
Family Obligations and Demands						
Future Obligations	0.65	(0.48–0.89)	**	0.59 (0.43–0.82)	***	-0.16 (0.05) ***
Family-School Involvement						
Parent Achievement Expectations	1.76	(1.12–2.75)	**	1.37 (1.05–1.78)	**	0.13 (0.04) ***
Talk about Future Plans	1.12	(0.76–1.66)		1.32 (0.99–1.76)	*	0.03 (0.04)
School/Social Acceptance or Discrimination						
Adult School Encouragement	1.26	(0.94–1.69)		1.37 (1.09–1.71)	**	0.15 (0.03) ***
Peer Educational Values	1.39	(1.23–1.57)	***	1.42 (0.98–2.04)	*	0.01 (0.04)
Perceived Likelihood of Discrimination	0.94	(0.89–0.99)	**	0.94 (0.90–0.99)	**	-0.01 (0.01)
Control Variables						
Female	1.87	(1.13–3.09)	**	1.10 (0.76–1.58)		0.10 (0.12)
Age	0.71	(0.49–1.03)	*	0.72 (0.41–1.26)		-0.07 (0.09)
Mexican	0.52	(0.34–0.80)	***	0.59 (0.41–0.85)	***	0.08 (0.06)
Generational Status						
First Generation	1.74	(0.69–4.40)		1.40 (0.71–2.74)		-0.08 (0.06)
Second Generation	1.28	(0.66–2.49)		1.73 (1.13–2.67)	**	-0.12 (0.04) **
Third Generation (ref)	—	—	—	—	—	—
English Survey	0.16	(0.06–0.40)	***	0.25 (0.07–0.92)	**	0.00 (0.20)
Ethnic Belonging	0.89	(0.66–1.20)		1.05 (0.82–1.34)		-0.06 (0.02) **

	Aspirations (N=476)		Expectations (N=476)		Unweighted GPA (N=460)	
	OR	[95% CI]	OR	[95% CI]	B	(se)
Lives with two parents	1.11	(0.70–1.74)	0.91	(0.47–1.74)	0.11	(0.07)
Parent graduated high school	0.71	(0.38–1.33)	0.89	(0.57–1.38)	-0.11	(0.10)
F-test (Family Variables)	82.59		4.01		6.15	
F-test (School Variables)	31.70		12.99		23.85	

* p<.10,

** <.05,

*** p<.01

Note: Categories for educational aspirations and expectations include (in order): Completing a 2-year college degree (=1), completing a 4-year college degree (=2), completing a graduate school degree (=3). Estimates adjusted for clustering and stratification.