Investigating the Immigrant Paradox and Latino Adolescents’ Academic Attitudes

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This study investigates the immigrant paradox, whereby early generation immigrant youth exhibit more positive developmental outcomes than their later generation peers. Among our sample of Latino 9th graders \( (n = 212) \) residing in impoverished, urban cities, we examine whether the immigrant paradox exists with regard to Latino adolescents’ educational values and school effort and whether cultural values serve as a protective factor for Latino youth. Our findings provide evidence for the immigrant paradox with regard to educational values in both our full sample as well as the Dominican American subsample and highlight the importance of drawing greater distinctions within cohorts of second-generation Latino youth. Further, greater endorsement of traditional cultural values, such as \textit{familismo} and family obligations, were significantly related to adolescents’ educational values and school effort. Hence, this study underscores the importance of family processes and cultural values in motivating children of immigrants to succeed academically.

\textit{Keywords:} acculturation, academic achievement, \textit{familismo}, immigration, Latino

Improving the educational attainment of Latino youth must be an important priority for our nation’s future. Latinos are the fastest growing ethnic minority group in the United States, and Latino students constitute 24\% of the elementary and high school student population in U.S. schools \cite{U.S. Census Bureau, 2012}. Notably, however, the educational achievement of this growing minority group is alarmingly low. Although some Latino students are able to navigate their way to academic success \cite{Cabrera & Padilla, 2004; Ceballo, 2004}, a majority of Latino youth struggle academically and underperform on virtually every indicator of academic achievement, including rates of high school graduation and college attendance \cite{Ceballo, Huerta, & Epstein-Ngo, 2010; Gandara & Contreras, 2009; Suárez-Orozco & Suárez-Orozco, 2009}.

Of the nearly 50 million Latinos living in the United States in 2011, two thirds were immigrants or the children of immigrants \cite{U.S. Census Bureau, 2011}, making immigration a salient experience for the majority of Latinos in the United States. A growing number of studies now document more positive academic outcomes (such as academic motivation and GPA) in early generation (foreign-born and children of foreign-born parents) adolescents compared with their later generation peers \cite{García Coll & Marks, 2012; Perreira, Fuligni, & Potochnick, 2010; Portes & Rumbaut, 2001}. This phenomenon, whereby early generation youth exhibit more positive developmental outcomes than their later generation peers, is referred to as the immigrant paradox \cite{García Coll & Marks, 2009}. It is a paradox, both unexpected and surprising, because as children and families spend more time in the United States, they...
typically gain social as well as economic resources, such as English language skills. Yet, research indicates that children as well as adults in these families are performing worse across a number of developmental outcomes (e.g., physical health, mental health, and academic achievement) compared with their earlier generation counterparts (Alegria et al., 2008; Fuller et al., 2009; Suárez-Orozco & Suárez-Orozco, 2009).

In the present study, we first seek to establish whether there is evidence of the immigrant paradox with regard to educational values and school effort among a sample of urban, low-income Latino adolescents and specifically, among a subsample of Dominican American adolescents. There is enormous diversity within the Latino population, representing different ethnicities, socioeconomic classes, immigration histories, and acculturative stressors, stressors arising from the acculturation process. To the best of our knowledge, few studies have investigated the immigrant paradox among Dominican American adolescents. Instead, much of the literature, to date, has focused exclusively on Mexican American children and families (Hill & Torres, 2010; Hurtado & Gauvain, 1997; López, Ehly, & Garcia-Vazquez, 2002; Valencia & Johnson, 2006). Our study thus adds a unique focus by examining the immigrant paradox among Dominican American youth specifically.

In 2010, Latinos who traced their ethnic origins to the Dominican Republic comprised approximately 16% of the Latino population in the Northeastern United States (Ennis, Rios-Vargas, & Albert, 2011). Further, 26% of Dominicans were living below the poverty line compared with 23% of Latinos overall and 10% of non-Latino Whites (Macartney, Bishaw, & Fontenot, 2013). An important factor in facilitating Dominican migration to the United States was the 1965 Family Reunification Act, which allowed many Dominicans to enter the United States via strong family networks, making this a distinct characteristic of the Dominican immigration experience (García Coll & Marks, 2009). In addition to strong family networks, Dominicans often join well-established Latino communities (García Coll et al., 2002) that include Spanish-language businesses, churches, clubs, and newspapers. Interestingly, the Dominican community is considered a transnational community, where members maintain strong ties to both the United States and the Dominican Republic, traveling back and forth between countries and communicating with family members in both countries quite often (Rodríguez, 2009).

Despite community niches and the motivation to seek better opportunities, many Dominicans are relegated to the lowest paying jobs in American society (García Coll & Marks, 2009; Motel & Patten, 2012). Thus, this study represents one of only a few studies to focus specifically on Dominican adolescents, an at-risk and understudied subgroup of Latino youth in the United States.

Another objective of the current study is to better understand the immigrant paradox by examining whether cultural values serve a protective function, influencing adolescents’ educational values and school effort. Specifically, in the current article, we focus on two Latino cultural values, familismo and family obligations, and assess educational values and school effort as positive developmental outcomes. García Coll and colleagues’ (1996) integrative model for the study of developmental competencies among racial/ethnic minority children provides a theoretical framework for this study. Their model expanded previous models of child development to consider the larger societal contexts in which racial/ethnic minority children develop. It was originally developed as a response to the lack of attention developmental scientists gave to issues of race, ethnicity, and culture while overemphasizing deficiency and deviance when studying minority children. In response, the authors provided a comprehensive framework to serve as a heuristic guide for research on minority child development (Rodríguez, Umaña-Taylor, Smith, & Johnson, 2009).

In keeping with this integrative model, our study foregrounds acculturation and cultural values as salient indicators of an “adaptive culture” that may potentially impact several developmental outcomes (García Coll et al., 1996, p. 1896). According to the model, indicators of adaptive culture may serve a protective function by directly influencing developmental competencies or by indirectly influencing developmental competencies via their effects on child and family characteristics. As conceptualized by García Coll and colleagues, adaptive culture may be “defined by sets of goals, values, and attitudes that differ from the dominant culture.”
Generational Status and Adolescents’ Academic Outcomes

Generational status is a commonly used indicator of acculturation, and research addressing the relation between generational status and Latino students’ academic outcomes has been largely inconsistent (Colón & Sanchez, 2010; Valencia & Johnson, 2006). First, some studies have found that later generation students tend to fare better academically (as measured by GPA, college attendance, dropout rates, academic motivation, and educational aspirations; García Coll & Marks, 2009; Martinez, DeGarmo, & Eddy, 2004; Plunkett & Bama-Gomez, 2003). Second, other researchers report that biculturalism in the second generation (children of immigrants) emerges as the best predictor of children’s academic outcomes (as measured by GPA, school adjustment, behavior problems, and achievement motivation; Suárez-Orozco & Suárez-Orozco, 1995).

A third pattern in the literature suggests that earlier generation immigrant status is associated with positive educational outcomes. Specifically, second-generation children have been found to complete more years of schooling, to graduate from college, and to have better math and English grades than subsequent generations (García Coll & Marks, 2012; Portes & Rumbaut, 2001; Suárez-Orozco & Suárez-Orozco, 1995). These latter findings provide the basis of support for the immigrant paradox. Prior results from the few studies that include Dominican youth have been mixed (García Coll & Marks, 2009; Suárez-Orozco, Rhodes, & Milburn, 2009). Suárez-Orozco, Rhodes, and Milburn (2009) found evidence of the immigrant paradox among Dominican immigrant students in relation to academic engagement while García Coll and Marks (2009) found no evidence of the paradox among Dominican American adolescents in relation to academic values and practices.

Cultural Values and Adolescents’ Academic Outcomes

Despite the enormous heterogeneity that exists among Latino families, cultural values, like familismo, are viewed as frequently shared commonalities among Latinos (Cruz-Santiago & Ramirez García, 2011). Familismo encompasses a strong sense of family loyalty and unity, prioritizing family over individual needs, and relying on the family for social support (Calzada, Fernandez, & Cortes, 2010; Halgunseth, Ispa, & Rudy, 2006). Although little research has investigated the influence of familismo on adolescents’ academic outcomes, the research conducted has produced mixed results (Roche, Ghazarian, & Fernandez-Esquer, 2012; Suárez-Orozco & Suárez-Orozco, 1995), suggesting both strengths and vulnerabilities associated with adherence to familismo. Suárez-Orozco & Suárez-Orozco (1995) propose that feelings of duty and responsibility to one’s family can take priority over education, especially in families with financial difficulties, thus offering a possible explanation for the vulnerabilities associated with familismo. Alternatively, Ojeda, Navarro, and Morales (2011) propose that a sense of family obligations and duty to advance the family may be experienced as a source of motivation among children of immigrants. Indeed, Roche and colleagues (2012) found that familismo positively predicted academic achievement among second-generation Latino students.

The limited research on family obligations and academic outcomes indicates that adolescents with a stronger sense of obligations to support and assist their families tend to invest more in their schooling and have higher academic motivation (Fuligni, 2001; Fuligni, Tseng, & Lam, 1999; Perreira et al., 2010; van Geel & Vedder, 2011). Interestingly, Latino adolescents place a greater importance on family obligations than do their peers from European backgrounds across generations (Fuligni et al., 1999). On this basis, researchers speculate that Latino students with a strong sense of family obligations view trying hard and doing well in school as one of their family duties, perhaps as
a response to their parents’ sacrifices as well as to obtain better jobs to help support their parents in the future (Ceballo, Maurizi, Suarez, & Arretakis, 2014; Fuligni, 2001; Fuligni et al., 1999; Perreira et al., 2010). However, the relation between family obligations and academic success may not necessarily be linear. Fuligni and colleagues (1999) reported a curvilinear relation such that moderate acceptance of family obligations had the greatest association with academic success.

The Present Study

This study investigates whether evidence of an immigrant paradox emerges among a sample of low-income Latino adolescents and a subsample of Dominican American adolescents with regard to their educational values and school effort. The extant literature has found mixed evidence for the immigrant paradox, and few studies have examined the immigrant paradox among Dominican American adolescents specifically. Additionally, our study contributes to the literature by providing a more in-depth focus on differences within the same generational cohort (second-generation youth who are born in the United States with foreign-born parents). More specifically, we consider differences among second-generation adolescents by dividing this group into those from two-immigrant parent families and those from families where only one parent is an immigrant. To the best of our knowledge, research considering differences among second-generation, Latino adolescents is practically nonexistent. Yet, it is reasonable to consider whether second-generation adolescents have qualitatively different experiences when having two immigrant parents as opposed to one immigrant parent. Families with two immigrant parents may convey greater closeness to the practices and values of their country of origin than families with only one immigrant parent. Indeed, García Coll and colleagues (1996) discuss parental acculturation levels in delineating the possible influences of an adaptive culture.

In keeping with mounting evidence for the immigrant paradox, we expect that generational status will be associated with developmental competencies as an indication of adaptive culture, confirming the immigrant paradox. Specifically, we hypothesize that earlier generation Latino youth will demonstrate more positive educational values and school effort than later generation youth from families with presumably greater social and economic resources. This hypothesis is consistent with several findings that confirm the immigrant paradox with regard to education (Perreira et al., 2010; Suárez-Orozco & Suárez-Orozco, 1995, 2001). Because parental education is strongly associated with children’s academic achievement (Davis-Kean, 2005), we will control for maternal education in all analyses. Further, we posit that traditional cultural values, such as familismo and family obligations, will similarly represent the protective and adaptive benefits of belonging to a less acculturated, earlier immigrant group. We thus expect that greater endorsement of familismo and family obligations will be related to greater educational values and school effort among Latino youth across generational status groups.

Method

Participants

The sample consists of ninth grade Latino adolescents (n = 212) with a mean age of 14.54 years (SD = .69). The 127 girls and 85 boys in this sample attended one of three schools, a parochial school and two public high schools, in two cities located in the northeastern United States. In the parochial school, 85% of the students qualified for free or reduced lunch, and 91% identified as Latino. The parochial school and one of the public high schools are located in the same city. This public high school was recently divided into six smaller schools, each with a different academic focus, located on one campus. The students participating in the current study were drawn from two of these programs: Health & Human Services (HHS) and Math, Science, & Technology (MST). In the HHS program, 85% of the students qualified for free or reduced lunch, and 91% identified as Latino. The parochial school and one of the public high schools are located in the same city. This public high school was recently divided into six smaller schools, each with a different academic focus, located on one campus. The students participating in the current study were drawn from two of these programs: Health & Human Services (HHS) and Math, Science, & Technology (MST). In the HHS program, 85% of the students qualified for free or reduced lunch, and 91% identified as Latino; in the MST program, 85% of the students qualified for free or reduced lunch, and 85% identified as Latino. A second public high school was located in a nearby city. Similar to the first two high schools, 87.5% of the students qualified for free or reduced lunch, and 71% identified as Latino. Overall, participating students resided in 28 different census tracts.
All participating adolescents self-identified as Latino and further identified their specific ethnic group affiliations. The largest ethnic group was represented by Dominican adolescents (61%). Other ethnic groups represented in our sample included Colombians, Mexicans, and Puerto Ricans. The majority of adolescents (76%) were born in the United States, however the majority of their mothers and fathers were born outside of the U.S. (80% and 78%, respectively). Most (63%) reported speaking “only Spanish” or “mostly Spanish/some English” at home. Adolescents reported an average of 5 people living in their homes.

Procedure

The data for the present study are part of a larger study examining the lives of Latino adolescents living in poor, urban neighborhoods. Recruitment letters describing the study, along with consent forms, were sent home to parents of all 9th graders at each of the schools. All study materials were translated into Spanish and then back-translated so that recruited families were provided with written materials in both English and Spanish. Adolescents with written parental consent completed self-report questionnaires during the school day in groups supervised by graduate and undergraduate research assistants. As a token of appreciation, participating students received a $30 gift certificate.

Measures

Demographic characteristics. Adolescents completed a demographic questionnaire where they reported on their age, sex, school attended, and whether they were born abroad or in the United States. A separate variable was created for each of the three schools and dummy-coded in order to control for school in the regression analyses. The parochial school was the referent for this set of dummy variables. Adolescents also reported on the highest school grade completed by their mothers. Responses to this question ranged from (1) grammar school (Grades 1–8) to (6) graduate/professional degree.

Generational status. The following definitions were used to classify adolescents’ generational status: (a) “first generation” were those adolescents born outside of the United States; (b) “second generation A” included adolescents who were born in the United States and whose parents were both immigrants; (c) “second generation B” included adolescents who were born in the United States with only one parent born outside the United States; and (d) “third generation” included adolescents who were born in the United States and whose parents were also born in the United States. Three dummy variables were created for generational status, with the reference group being the first generation. The dummy variables were dichotomously coded “1” for students in that generation and “0” for students not in that generation. Fifty-one students (24%) were first-generation (immigrant) adolescents, 107 students (50%) were in the second generation (A) category, 29 students (14%) were in the second generation (B) category, and 25 students (12%) were in the third generation.

Familismo. Familismo, a sense of family loyalty, support and commitment, was assessed with the familism values scale developed by Gaines et al. (1997) with one additional item from the familism scale of the Multiphasic Assessment of Cultural Constructs–Short Form (MACCSF; Cuéllar, Arnold, & Gonzalez, 1995). Adolescents answered 11 questions with responses ranging from (1) strongly disagree to (5) strongly agree. The mean of these items was calculated to create a total score for each participant, with higher scores indicating greater endorsement of familismo. Sample items included I cherish the time that I spend with my relatives and In my opinion, the family is the most important social institution of all. Cronbach’s alpha was .92 for our full sample, .91 for the Dominican subsample, and .93 for the non-Dominican subsample.

Family obligations. Family obligations was assessed using the “Family Current Support” measure (Fuligni et al., 1999) tapping attitudes toward specific family obligations. Adolescents answered 11 questions with responses ranging from (1) almost never to (5) almost always. The average score was calculated to create a total “Family Current Support” score. Higher scores reflected stronger adolescent beliefs in the importance of providing support to their families. Sample items included How often should you run errands that the family needs done? and How often should you help take care of your brothers and sisters? Cronbach’s alpha
was .83 for the full sample, .82 for the Dominican subsample, and .82 for the non-Dominican subsample.

**Educational values.** Educational values were measured using a 6-item scale developed by Fuligni, Witkow, and Garcia (2005) to assess the importance of education to students. Responses to each question ranged from (1) *not at all important* to (5) *extremely important*. The mean was calculated to create a total score for each participant, with higher scores indicating more value placed on education. Sample items included *How important is it to you that you do well in school?* and *How important is it to you that you go to a good college after high school?* Cronbach’s alpha was .75 for the full sample, .84 for the non-Dominican subsample, and .84 for the non-Dominican subsample.

**School effort.** School effort was measured with a 5-item scale adapted from Steinberg and colleagues (1992). Students responded to five items with responses ranging from (1) *never* to (5) *almost always*. The mean of these items was calculated to create a total score, with higher scores indicating greater effort exerted in school. Sample items included *How often do you complete all assigned readings and homework before quizzes and tests?* and *How often do you really pay attention in class?* Cronbach’s alpha was .75 for the full sample, .76 for the Dominican subsample, and .72 for the non-Dominican subsample.

### Results

#### Preliminary Analyses

Correlations, t tests, and Analyses of Variance (ANOVA) were conducted to examine the influence of demographic background variables on predictor and outcome variables and to identify demographic variables to be included as controls in later regression analyses. Correlations for all of the variables are presented in Table 1 for the full Latino sample and the Dominican subsample.

### The Immigrant Paradox: Examining Generational Status

To test whether earlier versus later generations differed significantly on educational values or school effort, ANOVAs were performed...
on the full sample of Latino adolescents examining differences in mean scores on educational values and school effort for each generation. Tukey’s HSD pairwise comparisons were performed to further analyze the differences in means between generations. For educational values, since Levene’s test for homogeneity of variance was found to be violated, $F_{(3, 206)} = 2.83, p < .05$, the Welch statistic was computed to determine whether a significant difference in mean scores on educational values by generation existed. These results are displayed in Table 2. Although no significant differences emerged between first-generation immigrants and third-generation Latino adolescents, earlier generation students did place a higher value on education and reported greater school effort than their later generation peers. Specifically, first-generation immigrant adolescents and U.S.-born adolescents in the second generation (A) group (with two immigrant parents) endorsed significantly greater educational values and school effort than U.S.-born adolescents in the second generation (B) group (with only one immigrant parent).

Similar ANOVAs were performed on the subsample of Dominican adolescents, and these findings are also shown in Table 2. Dominican adolescents in the first generation endorsed higher educational values and greater school effort than third-generation adolescents. Likewise, Dominican adolescents in the second generation (A) group endorsed higher educational values and greater school effort than their third-generation counterparts. Further, Dominican adolescents in the second generation differed significantly on educational values, such that adolescents in the second generation (A) group placed greater value on education than those in the second generation (B) group. As with the full sample, Dominican adolescents in earlier generations reported significantly greater valuing of education than later generation peers. Analyses of Variance were also performed on the subset of non-Dominican students, the findings for which are also shown on Table 2. Significant relationships were not revealed between generational status and either educational values or school effort, and therefore post hoc tests were not performed.

### Examining Cultural Values: Familismo and Family Obligation

Before conducting regression analyses, assumptions were checked by plotting residuals. The residuals for each regression were normally distributed. Thus, no transformations were performed, and the regressions were completed with the original variables. We first tested the direct effects of generational status and cultural values (familismo and family obligations) on the developmental competencies of adolescents’ educational values and school effort. Using hierarchical multiple regression analyses, parallel regression analyses were conducted for the full Latino sample ($n = 212$), for the Dominican subsample ($n = 135$), and for the non-Dominican subsample ($n = 77$). Several demographic background variables were included in

<table>
<thead>
<tr>
<th>Outcome variables (Sample)</th>
<th>First generation $M (SD)$</th>
<th>Second generation A $M (SD)$</th>
<th>Second generation B $M (SD)$</th>
<th>Third generation $M (SD)$</th>
<th>Statistic ($F$) ($W$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational values</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full sample</td>
<td>4.42 (.64)</td>
<td>4.41 (.52)</td>
<td>4.03 (.72)</td>
<td>4.16 (.67)</td>
<td>$W_{(3, 63.91)} = 3.07$</td>
</tr>
<tr>
<td>Dominicans</td>
<td>4.40 (.67)</td>
<td>4.39 (.53)</td>
<td>3.96 (.77)</td>
<td>3.08 (.59)</td>
<td>$F_{(3, 125)} = 5.35$</td>
</tr>
<tr>
<td>Non-Dominicans</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>$F_{(3, 72)} = 0.98$</td>
</tr>
<tr>
<td>School effort</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full sample</td>
<td>3.86 (.70)</td>
<td>3.87 (.61)</td>
<td>3.46 (.75)</td>
<td>3.50 (.69)</td>
<td>$F_{(3, 206)} = 4.49$</td>
</tr>
<tr>
<td>Dominicans</td>
<td>3.78 (.71)</td>
<td>3.86 (.62)</td>
<td>3.42 (.84)</td>
<td>2.50 (.71)</td>
<td>$F_{(3, 125)} = 4.41$</td>
</tr>
<tr>
<td>Non-Dominicans</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>$F_{(3, 72)} = 1.74$</td>
</tr>
</tbody>
</table>

*Note.* Superscripts of a and b and of c and d indicate pairs of means that significantly differ from each other. $n = 210$ for reports of educational values and school effort for the Latino sample; $n = 129$ for reports of educational values and school effort for the Dominican sample.

$p < .05$. $^* p < .01$. $^{**} p < .001$. 

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the first step of the regressions: age, sex, school attended, and mother’s education. Generational status, *familismo*, and family obligations were added in the second step.

As predicted, the regression analyses for both the Latino sample and the Dominican subsample demonstrated evidence of greater educational values and school effort among earlier generation youth and among those who endorsed traditional Latino cultural values. These findings are displayed in Table 3. The model examining educational values as the outcome for the full sample was significant and predicted 24% of the variance in adolescents’ educational values. Specifically, generational status was significantly related to educational values in the predicted direction, such that adolescents in later generations (second generation [B] \( \beta = -0.17, p \leq .05 \)) and third generation \( \beta = -0.15, p \leq .05 \)) were significantly less likely to value education compared to first-generation immigrants. Moreover, adolescents who endorsed the importance of *familismo* and greater family obligations were more likely to value education \( \beta = 0.29, p \leq .001; \beta = 0.17, p \leq .05, \) respectively.

Similarly, the model examining school effort for the full Latino sample was significant and predicted 22% of the variance. As with educational values, students in later generations (second generation [B], \( \beta = -0.17, p \leq .05 \); and third generation, \( \beta = -0.16, p \leq .05 \)) reported less school effort than those in the first generation. Additionally, adolescents who endorsed greater *familismo* \( \beta = 0.28, p \leq .001 \) also reported greater school effort. Family obligations was not related to school effort in the full sample.

The models for the Dominican subsample were also significant, explaining 33% of the variance in Dominican adolescents’ educational values. Generational status was significantly related to educational values, such that Dominican adolescents in later generations (second generation [B] \( \beta = -0.18, p \leq .05 \) and third generation \( \beta = -0.19, p \leq .05 \)) were significantly less likely to value education compared to first-generation immigrants. Dominican adolescents who adhered to the value of *familismo* \( \beta = 0.31, p \leq .01 \) and the importance of family obligations \( \beta = 0.19, p \leq .05 \) were more likely to report valuing education.

Similarly, the model examining school effort for the Dominican subsample was significant and explained 24% of the variance. As with educational values, students in later generations (here, third generation \( \beta = -0.19, p \leq .05 \)) reported less school effort than those in the first generation. Additionally, adolescents with greater endorsement of *familismo* \( \beta = 0.22, p \leq .05 \) reported exerting more school effort. As with the full Latino sample, family obligations was not related to school effort in the Dominican subsample.

The regression model examining educational values for the non-Dominican subsample was not significant. However, the model examining school effort for the non-Dominican subsample was significant and explained 25% of the variance. Students in later generations (second generation [B] \( \beta = -0.29, p \leq .05 \)) and third generation \( \beta = -0.33, p \leq .05 \)) reported less school effort compared to first-generation immigrants. Furthermore, non-Dominican Latino adolescents with greater endorsement of *familismo* \( \beta = 0.27, p \leq .05 \) reported exerting more school effort.

Finally, regression analyses were performed to test whether there was a curvilinear relation between family obligations and educational values or school effort, such that a moderate endorsement of family obligations would be related to better academic outcomes. No significant relations were found for either the full sample or the Dominican or non-Dominican subsamples.

**Discussion**

As Latinos rapidly become a greater proportion of the United States’ population and workforce, educators and policymakers can no longer ignore the importance of understanding how to better facilitate the academic success of this diverse and culturally rich group. At present, Latino youth underperform on all measures of academic attainment (Gandara & Contreras, 2009). Even more troubling is evidence indicating that successive generations of Latinos in the United States demonstrate declines in academic achievement (Portes & Rumbaut, 2001; Suárez-Orozco & Suárez-Orozco, 1995). As children of immigrants become “more American,” their chances of achieving developmental competencies seem to become worse in comparison to
Table 3
Hierarchical Regression Analyses of Generational Status and Cultural Values on Academic Outcomes

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>Full Latino sample (n = 207)</th>
<th>Dominican subsample (n = 207)</th>
<th>Non-Dominican subsample (n = 71)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Educational values</td>
<td>School effort</td>
<td>Educational values</td>
</tr>
<tr>
<td></td>
<td>(β, B, SE)</td>
<td>(β, B, SE)</td>
<td>(β, B, SE)</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student’s age</td>
<td>-.04 (.04, .06)</td>
<td>-.02 (.02, .07)</td>
<td>-.11 (.09, .09)</td>
</tr>
<tr>
<td>Student’s sex</td>
<td>.04 (.05, .09)</td>
<td>.15* (.21, .10)</td>
<td>.01 (.12, .10)</td>
</tr>
<tr>
<td>Student’s school 1</td>
<td>(.ref: parochial)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.07 (.11, .12)</td>
<td>-.02 (.04, .13)</td>
<td>-.02 (.28, .06)</td>
</tr>
<tr>
<td>Student’s school 2</td>
<td>.08 (.10, .10)</td>
<td>-.03 (.11, .11)</td>
<td>.09 (.12, .06)</td>
</tr>
<tr>
<td>Mother’s education</td>
<td>.06 (.02, .02)</td>
<td>.09 (.03, .03)</td>
<td>.05 (.02, .03)</td>
</tr>
<tr>
<td>F</td>
<td>42 (.137)</td>
<td>57 (.57)</td>
<td>57 (.57)</td>
</tr>
<tr>
<td>R²</td>
<td>.01 (.03)</td>
<td>.02 (.02)</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>5</td>
<td>5</td>
<td>5</td>
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<tr>
<td>Step 2</td>
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<td></td>
<td></td>
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<tr>
<td>Student’s age</td>
<td>-.03 (.03, .06)</td>
<td>-.01 (.01, .07)</td>
<td>-.10 (.08, .04)</td>
</tr>
<tr>
<td>Student’s sex</td>
<td>.05 (.06, .08)</td>
<td>.17* (.23, .09)</td>
<td>.02 (.11, .10)</td>
</tr>
<tr>
<td>Student’s school 1</td>
<td>(.ref: parochial)</td>
<td></td>
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<tr>
<td></td>
<td>.11 (.17, .11)</td>
<td>.02 (.04, .13)</td>
<td>-.02 (.25, .06)</td>
</tr>
<tr>
<td>Student’s school 2</td>
<td>.12 (.15, .09)</td>
<td>.02 (.10, .10)</td>
<td>.10 (.13, .10)</td>
</tr>
<tr>
<td>Mother’s education</td>
<td>.02 (.01, .02)</td>
<td>.05 (.02, .02)</td>
<td>.01 (.03, .03)</td>
</tr>
<tr>
<td>F</td>
<td>6.10***</td>
<td>5.46***</td>
<td>5.72***</td>
</tr>
<tr>
<td>R²</td>
<td>.24</td>
<td>.22</td>
<td>.33</td>
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<td>df</td>
<td>10</td>
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*p ≤ .05. **p ≤ .01. ***p ≤ .001.
their earlier generation peers (García Coll & Marks, 2012). To better understand this paradox, our study uses García Coll and colleagues’ (1996) integrative model for the study of developmental competencies among racial/ethnic minority children to examine how the unique phenomena of generational status and Latino cultural values represent salient indicators of an “adaptive culture” which relate to Latino adolescents’ educational values and school effort.

Our findings provide evidence of the immigrant paradox operating with regard to the educational values and school effort of Latino adolescents, and specifically among a Dominican American subsample. Adolescents in earlier generations reported valuing education more and exerting greater effort in school than did their peers in later generations. An important contribution of the present study is the close attention given to adolescents in the second generation. More specifically, differences in academic values were found among Latino adolescents in the second generation, such that Latino adolescents who came from families with two immigrant parents reported valuing education more and exerting more school effort than those who came from families with only one immigrant parent. To date, an in-depth exploration of second-generation Latino youth has not received much attention in the literature. Our findings, distinguishing among adolescents in the second generation, suggest that further research focusing on this group is indeed warranted.

Although results confirming the presence of an immigrant paradox were also found among the Dominican American subsample, the results were somewhat different from the full sample. Significant differences in both educational values and school effort were found between first and third generation and between second generation (A) and third-generation Dominican American adolescents whereas such differences were not found in the full sample. Although Dominican American adolescents who came from families with two immigrant parents reported valuing education more than Dominican American adolescents who came from families with only one immigrant parent, no significant differences were found within the second-generation Dominican American subsample with regard to school effort.

There were no significant generational differences among the non-Dominican subsample. However, the smaller number of adolescents in the non-Dominican subsample likely precluded the ability to detect differences in this group. Still, differences between the Dominican subsample and the full sample may suggest that differences in the manifestation of the immigrant paradox likely exist between different Latino ethnic groups. In fact, researchers report that educational values and performance vary across different Latino ethnic groups (Bohon, Johnson, & Gorman, 2006). Generational differences in valuing education and school effort emerge in the full Latino sample in the second generation group (second generation B with one immigrant parent), although these differences do not emerge in the Dominican American subsample until the third generation when both parents are U.S.-born. Because Dominican immigration history allowed for strong family networks and entrance into well-established Latino communities, it may be that Dominican Americans are able to maintain adaptive cultural values even when only one parent is an immigrant, thus staving off any negative impact of acculturation until the third generation. Moreover, the transnational nature of the Dominican community in the United States may also facilitate adherence to Latino cultural values. This interpretation is supported by findings among the Dominican American subsample in relation to school effort, where lower endorsement of school effort was found among third-generation students, but not among earlier generations. Aggregating diverse Latino ethnic groups may preclude the identification of important differences and thus result in the creation of a “one size fits all” approach to research and policies that do not address the particular needs of specific subethnic groups.

While accounting for several demographic factors, we also found direct relations between generational status and the developmental competencies of educational values and school effort. As further evidence of the immigrant paradox, later generation adolescents valued education less and exerted less effort in school in both the Latino full sample as well as the Dominican and non-Dominican subsamples. Once again, our findings suggest that further exploration within specific Latino ethnicities is warranted.
Our results demonstrate that familismo and family obligations may be indicators of an “adaptive culture,” serving a protective function for Latino adolescents as well as Dominican American adolescents, specifically. Thus, our findings underscore the importance of incorporating cultural values when studying educational values and school effort among Latino adolescents. Valuing familismo had a significant positive relation with adolescents’ educational values and school effort. Relatedly, Latino adolescents who viewed providing practical assistance to their families as important, measured by family obligations, tended to value education more as well. Suárez-Orozco, Rhodes, and Milburn (2009) reported that academic self-efficacy, the belief in one’s competence and control over learning, attenuated the risk for poor academic outcomes among immigrant youth. One manner of gaining self-efficacy and confidence may emerge from familial relationships and service to the family. Hence, a strong sense of familismo, family loyalty, and family obligations may contribute to a greater desire and effort to do well academically, to “give back” to one’s family (Ceballo et al., 2014). Further research considering the role of familismo in the development of academic self-efficacy and motivation is needed. In a similar vein, familismo may motivate Latino youth to do well academically in efforts to reunite families separated by immigration. By better understanding the role of cultural values, such as familismo and family obligations, and how family influences can serve to motivate youth academically, researchers can make important contributions to policies and interventions that support the academic achievement of Latino youth.

Drawing on our findings, we propose that less acculturation, as indicated by membership in earlier generational cohorts, and endorsement of traditional cultural values embody aspects of an adaptive culture. Explaining the immigrant paradox and the success of early generation Latino youth may, in part, center on their greater adherence to family-focused, culturally salient value systems. As we go forward, it is imperative that psychologists take seriously an accounting for the cultural values and belief systems of Latino youth and families.

Our results corroborate other studies that emphasize the important role of family-centered cultural values on Latino youth (Fuligni, 2001; Roche et al., 2012) and attending to family-focused processes when intervening to help Latino youth succeed academically. An important next step in investigating the relations between generational status and academic outcomes would be the use of longitudinal designs in order to examine causal relationships. The present study relies entirely on self-report and cross-sectional data, possibly inflating associations due to shared methods variance and making it impossible to determine causality. Another limitation of the present study is the absence of data on actual academic performance (e.g., GPA or standardized test scores). Yet, it is important to note that researchers have found both educational values and school effort to be positively related to academic performance (e.g., Fuligni, 1997). Finally, the present study focuses exclusively on ninth graders; this is a time when identity formation and questions about ethnic/cultural identity become central tasks (Erikson, 1968). Nonetheless, focusing on a limited age range makes the results of this study less generalizable to other age groups, and future studies should examine generational status and school-related outcomes across different age groups.

Despite these limitations, the research presented here makes important contributions to our understanding of the relations between immigration, cultural values, educational values, and school effort among Latino, and specifically Dominican American, adolescents. Our findings highlight the importance of attending to distinctions among second-generation Latino youth as well as distinctions among the diverse ethnicities that make up the Latino population. Finally, our findings also highlight the importance of attending to cultural values as an integral component of Latino family belief systems.

Abstracto

Este estudio se enfoca expresamente en la paradoja migrante, en que la primera generaciones de jóvenes migrantes exhibe resultados del desarrollo más positivos que sus pares de generaciones posteriores. Dentro de nuestra muestra de Latinos del 9º grado (n = 212) que residen en ciudades urbanas empobrecidas, examinamos (1) si la paradoja migrante existe en torno a los valores educacionales y esfuerzos esco-
lares de los adolescentes Latinos y (2) si los valores culturales pueden servir como factores de protección para los niños Latinos. Nuestros hallazgos proveen evidencia de la paradoja migrante en torno a los valores educativos tanto en la muestra completa como en la submuestra de Dominicanos Americanos y destacan la importancia de establecer mayores distinciones entre el cohorte de jóvenes Latinos de la segunda generación. Además, mayor respaldo de los valores culturales tradicionales, como familismo y obligaciones familiares, está relacionado significativamente con los valores educacionales y esfuerzos escolares de los adolescentes. Por lo tanto, este estudio subraya la importancia de los procesos familiares y los valores culturales en motivar que los hijos de inmigrantes sean exitosos académicamente.

References


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Etiology and Implications for Prevention and Treatment

The goal of this special issue is to broadly highlight how males and females differ in their risks for substance abuse, in their responses to treatments, and in their relapse to substance use after a period of abstinence. Relevant approaches include (but are not limited to) laboratory behavioral, social behavior and environmental context, brain development and function, and the role of genetics, hormones and neuropeptides. Both animal and human methods are appropriate for this issue. Collaborative manuscripts that bridge animal and human findings are especially valued.

This special issue is intended to showcase the importance of studying sex differences in drug abuse and how this research might lead to more tailored approaches for prevention and treatment. Laboratories engaged in research in this area may submit review articles or primary research reports to Experimental and Clinical Psychopharmacology to be considered for inclusion in this special issue.

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Questions or inquiries about the special issue can be directed to the Guest Editor of the issue, Brady Reynolds, PhD, at brady.reynolds@uky.edu or the Editor, Suzette Evans, PhD at se18@columbia.edu.