Expectations, Aspirations, and Achievement Among Latino Students of Immigrant Families

Dick M. Carpenter II

ABSTRACT. This study examines the relationship between various measures of parental and student expectations and aspirations and math achievement among Latino 12th graders of immigrant parents in the Educational Longitudinal Study (ELS): 2002 database. Findings indicate parental expectations and aspirations were not significant predictors of student achievement after controlling for an index of covariates. Moreover, neither were student expectations, agreement between student and parent expectations, nor student perceptions of parental aspirations. The analyses of the secondary questions likewise indicated only one strong relationship between aspirations, expectations, and parents' time in the United States – parental aspirations and expectations.

KEYWORDS. Educational aspirations, educational expectation, immigrants, Latino achievement, parental influence

Dick M. Carpenter II, PhD, is Assistant Professor of Educational Leadership, Research, and Foundations, University of Colorado, Colorado Springs, P.O. Box 7150, Colorado Springs, CO 80933-7150. E-mail: dcarpent@uccs.edu

Marriage & Family Review, Vol. 43(1/2) 2008
Available online at http://mfr.haworthpress.com

doi: 10.1080/01494920802013078

INTRODUCTION AND/OR REVIEW OF THE LITERATURE

In the perpetual quest to identify variables that improve academic achievement, none have proven more consistently influential than those that originate in the home. According to Rumberger (1995), "family background is widely recognized as the most significant important contributor to success in schools" (p. 587). Family background can be defined many different ways, from parental involvement to socioeconomic status, and each definition shows varying degrees of significance. However, one has shown repeated importance in student achievement: parental expectations.

"It is clear that high achieving children tend to come from families which have high expectations for them" (Boocock, 1972, p. 60). Moreover, Henderson (1988) found this holds true across various social, economic, and ethnic backgrounds, which has been confirmed in numerous studies over multiple decades (Alexander, Entwisle, & Horsey, 1997; Casanova, García-Linares, Torre, & Carpio, 2005; Frome & Eccles, 1998; Goyette & Xie, 1999; Hao & Bonstead-Bruns, 1998b; Räty, 2006; Seginer, 1983; Singh, Bickley, Keith, Keith, Trivette, & Anderson, 1995; Steinberg, Lamborn, Dornbusch, & Darling, 1992; Trusty, 2000, 2002; Trusty & Harris, 1999; Vollmer, 1986; Wang & Wildman, 1995; Wright, Horn, & Sanders, 1997). Parental expectation is routinely defined as the conviction a parent holds in his or her child's future level of achievement. Often this is measured by asking a parent how far in school (in terms of grade levels) she/he expects the child to progress. However, it is sometimes measured by asking a parent her/his expectations for the child's performance in a certain course or on a particular test. To further understand parental expectation, an important distinction must be made. Parental expectation differs from parental aspiration. The latter is regularly defined as the *desire* a parent holds about his or her child's future level of achievement, as opposed to a belief in the child's likely future achievement. Sometimes the answers to the questions are the same, but often they are not.

The link between parental expectations and student achievement has been examined by researchers in different ways, from basic small sample correlation studies (Sanders, Field, & Diego, 2001) to sophisticated cross-cultural examinations of student performance using

large datasets (Tsui, 2005). In all, the findings appear quite consistent.

For example, using multiple regression analysis, Jacobs and Harvey (2005) studied a sample of Australian students and found parental expectation was the strongest predictor of student success. Trusty, Plata, and Salazar (2003) applied structural equation modeling to the NELS: 88 database and found parental influence, in the form of expectations and involvement, was the greatest influence on student success. In fact, parental influence dominated the effects of other variables, including SES, student self-perceptions, and prior achievement.

The effects of parental expectations are manifest in studies of elementary-aged students (Gill & Reynolds, 1999) through upper secondary school (Räty, 2006) and using both quantitative (Ma, 2001) and qualitative methods (Lara-Alecio, Rafael, & Ebener, 1997). The latter authors interviewed parents, teachers, and children to discern the parental behaviors or practices most important in student success. High expectations were among the top three.

Of course, the linear relationship of parental expectations and achievement passes though the student, yet few studies of parental expectations take into account student perceptions of parental expectations or aspirations (Gill & Reynolds, 1999). Those that have predictably show that children's perceptions of parental expectations influence children's school success (Alexander, Entwisle, & Bedinger, 1994; Jacobs, 1991; Parsons, Adler, & Kaczala, 1982) and that those perceptions depend on interactions between parents and children (Chin & Kameoka, 2002; Yan & Lin, 2005).

Another limitation in this line of inquiry exists in the composition of the samples. That is, much of this research has been conducted with predominantly Caucasian, middle class children but comparatively fewer with ethnically diverse student groups. As a result, numerous authors conclude the effects of parental expectations among diverse ethnic and racial populations remains unclear (Elliott, Hufton, Illushin, & Willis, 2001; Mau, 1995; Yan & Lin, 2005). This is particularly true for the Latino population (Okagaki & Frensch, 1998). Of those that have studied diverse populations, researchers have paid particular interest to differences between Caucasians, Asians, and/or African Americans (Gill & Reynolds, 1999; Goyette & Xie, 1999; Yan & Lin, 2005). Yet, studies involving Latino families have played a surprisingly small role-surprising given the growth of

the Latino community in the United States. And precious few of those utilize national samples, longitudinal analyses, randomization, or other sophisticated methods (Trusty et al., 2003).

Nevertheless, among studies on Latino populations, the relationship between parental expectations and student achievement parallels those in other populations (Trusty et al., 2003). For example, Fisher and Padmawidjaja (1999), through interviews of Mexican–American college students, found that parents' high expectations had a strong and lasting influences on students' educational and career development.

Ramos and Sanchez (1995) studied the postsecondary educational expectations of Mexican–American high school students from a school in Northern California. They found that students' reports of parents' educational expectations had significant effects on students' expectations. Hao and Bonstead-Bruns (1998a) further found that *agreement* between parents and children about expectations played an important role in achievement among Mexican families. Specifically, low levels of agreement led to lower achievement, even after controlling for parent SES.

A particularly salient recent study examined parental expectations and student achievement specifically among Latino immigrant families (Goldenberg, Gallimore, Reese, & Garnier, 2001). In the current context, such research has significant practical implications. While exact numbers remain unknown, estimates put the number of immigrants to the United States at more than one million per year, many of whom are Latino (Dillin, 2001). Although this presents challenges to schools that serve immigrant families, some postulate that immigrant parents are actually the school's "best friends" (Henderson, 1988) in that immigrant parents hold high expectations in an attempt to maximize educational opportunities for upward social mobility (Sue & Okazaki, 1990). As a result, children of immigrant parents should exhibit greater academic achievement.

Yet, expectations and achievement among immigrant families appears uneven. For example, although Hao and Bonstead-Bruns (1998a) found a significant relationship between parental expectations and student achievement, they also discovered that Asian immigrant parents held higher expectations than their Latino peers, and Asian students significantly outperformed their Hispanic peers.

Goldenberg et al.'s (2001) study further challenges previous findings in that they found no significant relationship between parental expectations and student achievement among Latino immigrant

families. That is, while the parents in this study held high expectations and aspirations, those did not translate into higher performance. Given contemporary immigration patterns, this is an important finding. Yet, the study's limitations necessitate further research in this area.

Specifically, the Goldenberg and colleagues sample included 81 Latino children in Los Angeles. Clearly, other studies with larger, if not national samples would contribute to this line of inquiry. In addition, their study measured parental expectations but not student perceptions, students' own expectations, or the agreement between them. As referenced earlier, these are important factors in research of this type. Finally, this sample only included elementary-aged students. This line of inquiry would greatly benefit from a sample comprised of older students.

Given the importance of this research and the limitations noted, our research expands on Goldenberg et al. and other studies of parental expectations and student achievement among Latino high school students of immigrant parents included in the ELS:2002 database. Findings indicate parental expectations and aspirations are not significant predictors of student achievement after controlling for an index of covariates. Moreover, neither were student expectations, agreement between student and parent expectations, nor student perceptions of parental aspirations. The analyses of the study's secondary questions likewise indicated only one strong relationship between aspirations, expectations, and parents' time in the United States – parental aspirations and expectations. The remaining correlations never exceeded a moderately weak relationship.

METHODS

This study begins with the following primary questions.

1. What is the relationship between parental expectations and student achievement among Latino students with at least one immigrant parent?
2. What is the relationship between student expectations and achievement among Latino students with at least one immigrant parent?

3. What is the relationship between parental aspirations and student achievement among Latino students with at least one immigrant parent?
4. What is the relationship between student perceptions of parental aspirations and student achievement among Latino students with at least one immigrant parent?
5. Is there a significant difference in student achievement based on agreement of expectations between parents and students?

Secondarily, this research asks:

1. What is the relationship between parental expectations and student expectations?
2. What is the relationship between parental aspirations and student perceptions of parental aspirations?
3. What is the relationship between the length of time immigrant parents have been in the United States and their expectations?
4. What is the relationship between parental aspirations and parental expectations?

This study's data came from the Educational Longitudinal Study (ELS):2002 database. ELS:2002 is the fourth in a series of longitudinal studies conducted by the National Center for Education Statistics (NCES). This iteration began in 2002 with a national sample of 15,362 10th graders in 752 public and private schools and is expected to gather data on these participants for 10 years. Currently, data are available for 10th grade, herein called base year (BY), and 12th grade, referred to as first follow-up (F1).

The ELS:2002 schools were selected from a population of approximately 25,000 public and private schools. For the 752 public and private schools with 10th grades that were randomly sampled and agreed to participate in ELS:2002, complete 10th-grade rosters were produced for each school. From this roster, approximately 25 students per school, on average, were randomly selected, with Asian and Hispanic students selected at a higher rate than others.

In the first year of data collection, ELS:2002 measured students' achievement in reading and math and obtained information from students about their attitudes and experiences. The students who remained in their base year schools were tested (in math only) and surveyed again in 12th grade. A freshened sample was also included

in 12th grade, making the study representative of spring 2004 high school seniors nationwide. Although the practice of freshening samples draws mixed opinions, NCES has successfully used freshened samples in earlier longitudinal studies. In ELS:2002, the sample was freshened with students who did not have the opportunity to be selected into the sample during the 10th grade (e.g., they may have been out of the country or out of grade sequence). In so doing, this reflects the actual context common in schools (i.e., students who leave the country in one grade but return in another) and strengthens the database in cross-sectional research. However, those completing longitudinal research must take steps to ensure that the sample is a panel composed of students present in all waves, thus eliminating students included in the freshening. The panel sample herein is just that-students who were present in both 10th and 12th grade.

ELS:2002 also gathered information from students' parents, their teachers, and the administrators (principal and library media center director) of their schools. Students who transferred to a different school, switched to a home school environment, graduated early, or dropped out were administered a customized questionnaire tailored to their first follow-up status. School administrators at the participating schools were surveyed once again. For further information about ELS:2002, see Burns et al. (2003).

Sample. The sample in this study includes 1,050 Latino students with at least one immigrant parent. This equals a weighted sample of 260,320. The students in this sample were present in both 10th and 12th grade.

Instrumentation. The instruments used in ELS:2002 include questionnaires and student tests. Each of the components underwent field-testing prior to administration. Questionnaires were designed to be self-explanatory and gathered a wide range of information on student interests, uses of time, involvement in activities, etc. Teacher, parent, and administrator questionnaires gathered descriptive information pertinent to their respective fields of involvement and influence.

The cognitive tests measured achievement at grade 10 in reading and math and grade 12 in math. There were different versions (forms) of the mathematics cognitive test of varying difficulty designed to meet different levels of student ability. The purpose of the multilevel design was to guard against ceiling and floor effects, which may occur when testing spans multiple years of schooling. The tests contained a mix of multiple choice and open-ended items addressing simple

mathematical skills, comprehension of mathematics concepts, and problem solving ability. Some of the open-ended items required setting up formulas, solving equations, or writing explanations.

Variables. Because only math was measured in both grades, it was used as the dependent variable in this study, as measured by the ELS variable: FITXM1IR Math IRT Estimated Right. Although a detailed explanation of Item Response Theory (IRT) lies outside of this treatment, some description is helpful in understanding this measure.

Raw scores achieved on different tests that vary in average difficulty are not comparable to each other. IRT was employed to calculate scores that could be compared regardless of which test form a student took. A core of items shared among the different test forms made it possible to establish a common scale. IRT uses the pattern of right, wrong, and omitted responses to the items actually administered in a test form, and the difficulty, discriminating ability, and "guess-ability" of each item, to place each student on a continuous ability scale. It is then possible to estimate the score the student would have achieved for any arbitrary subset of test items calibrated on this scale.

Independent variables included parental expectations, parental aspirations, student expectations, student perceptions of parental aspirations, and agreement of parent and student expectations. Consistent with Goldenberg et al. (2001) and others referenced above, the ELS questionnaire measured expectation by asking how far in school the parent expected the child to go (or how far the student expected to go) in school on a Likert-type scale, where 1 was noncompletion of high school and 7 was a PhD, MD, or equivalent. Aspiration was measured using the same scale. Agreement was created as a yes/no dichotomous variable using the aforementioned parent and student expectation variables.

Fourteen covariates were included based on prior research and the study's theoretical framework: family SES (Chen & Lan, 1998; Chin & Kameoka, 2002; Der-Karabetian, 2004; Gill & Reynolds, 1999; Hao & Bonstead-Bruns, 1998a; Smith-Maddox, 1998; Trusty et al., 2003; Tsui, 2005; Yan & Lin, 2005), prior math achievement (Bandura, 1982; 1995; Gill & Reynolds, 1999; Trusty et al., 2003), students' sex (Chen & Lan, 1998; Der-Karabetian, 2004; Gill & Reynolds, 1999; Hao & Bonstead-Bruns, 1998a; Räty, 2006; Yan & Lin, 2005), length of parents' time in United States (Hao & Bonstead-Bruns, 1998a), child is interested in school (Goldenberg et al., 2001),

TABLE 1. Coding of Nominal Variables.

Variable	Coding
Students' sex	0 = male, 1 = female
Child's is interest in school	0 = no, 1 = yes
Parents take children to educational/ cultural activities	0 = no, 1 = yes
Parent/child interactions	0 = never, 1 = sometimes, 2 = frequently
Number of parents/guardians in the home	0 = single parent/parents, 1 = two parents/guardians
Parents' religion	0 = none, 1 = Christian, 2 = other
Parents' command of English	0 = not well, 1 = well
School type	0 = private, 1 = public
Urbanicity	0 = urban, 1 = suburban, 2 = rural
Geographic location of the school	0 = Northeast, 1 = Midwest, 2 = South, 3 = West

hours per week spent on homework (Smith-Maddox, 1998), parents taking children to educational/cultural activities (Smith-Maddox, 1998), number of siblings (Gill & Reynolds, 1999; Hao & Bonstead-Bruns, 1998a), parent/child interactions (Gill & Reynolds, 1999; Hao & Bonstead-Bruns, 1998a), number of parents/guardians in the home (Hao & Bonstead-Bruns, 1998a), parents' religion (Hao & Bonstead-Bruns, 1998a), parents' command of English (Hao & Bonstead-Bruns, 1998a), school type (Hao & Bonstead-Bruns, 1998a), urbanicity (Hao & Bonstead-Bruns, 1998a), and geographic location of the school (Hao & Bonstead-Bruns, 1998a).

Five of the control variables-SES, prior achievement, hours spent on homework, length of parents' time in United States, and number of siblings-were continuous (ordinal or scalar). The remainder was nominal. Table 1 indicates how the latter variables were coded.

Analysis. All analyses utilized the American Institutes for Research AM software program. The AM software is designed specifically for analyzing the complex sampling designs inherent within NCES datasets, such as ELS:2002.

The primary research questions were analyzed using the enter method of multiple regression. Separate analyses were performed for each independent variable using the same dependent variable and covariates described above. The secondary research questions were examined using simple correlations.

For comparison purposes, these same analyses were performed on a sample of non-Latino students with at least one immigrant parent

($N = 2{,}150$). While comparing results across different groups is not the thrust of this article, the comparison provides a useful point of reference in understanding results from the Latino sample.

RESULTS

Table 2 includes descriptive statistics for both the Latino and non-Latino samples. Looking specifically at the Latino sample, some variables indicate mean differences in math achievement that are inconsistent with some of the aforementioned findings. For example, students who expressed interest in school scored lower ($M = 39.95$) than those who did not ($M = 42.17$). Likewise, students who interacted with parents scored lower ($M = 40.29$) than those who interacted only sometimes ($M = 42.21$) or rarely ($M = 44.42$) with parents.

However, other variables indicated mean differences as expected. In particular, students who accompany parents to educational/cultural activities showed greater math performance ($M = 42.12$) than those who did not attend such activities ($M = 38.52$). The same pattern held for those whose parents indicated a greater command of English (Well $M = 43.97$, Not Well $M = 38.61$). Moreover, students in private schools ($M = 51.91$) outperformed those in public schools ($M = 40.13$), and students in two parent homes ($M = 40.73$) enjoy greater math achievement than those in single parent homes ($M = 39.90$).

In the non-Latino sample, almost all of the same patterns were consistent with the Latino sample. One difference of note was in the parents' command of English. Among non-Latinos, students with parents who did not indicate a strong command of English demonstrated slightly greater math achievement ($M = 54.51$) than students of parents with a stronger command of English ($M = 54.05$). Finally, a comparison of the grand mean shows that Latino students demonstrated significantly lower math achievement ($M = 40.54$) than their non-Latino peers ($M = 51.38$), $t(2770) = -12.40$, $p = .000$.

Primary Questions

1. *What is the relationship between parental expectations and student achievement among Latino students with at least one immigrant parent?*

TABLE 2. Descriptive Statistics of Nominal Variables for Latinos and Non-Latinos.

	Latino		Non-Latino	
	M	*SD*	*M*	*SD*
Students' sex				
Male	41.70	13.76	51.86	15.76
Female	39.56	13.27	50.89	14.80
Child is interested in school				
Yes	39.95	13.65	51.23	15.57
No	42.17	13.30	51.81	14.20
Parents take children to educational/cultural activities				
yes	42.12	13.29	52.74	14.64
No	38.52	13.60	50.82	15.81
Parent/child interactions				
Rarely	44.42	16.20	53.21	13.73
Sometimes	42.21	13.93	52.98	15.59
Frequently	40.29	13.28	51.67	14.82
Number of parents/guardians in the home				
Single parent	39.90	12.95	48.19	15.17
Two parents	40.73	13.70	52.00	15.28
Parents' religion				
None	39.84	11.53	59.88	15.65
Christian	40.63	13.55	51.42	14.57
Other	44.81	14.23	52.83	15.64
Parents' command of English				
Not well	38.61	12.56	54.51	15.08
Well	43.97	14.40	54.05	15.00
Urbanicity				
Urban	40.13	13.81	49.37	15.08
Suburban	40.71	13.00	52.34	15.50
Rural	41.93	15.08	53.06	14.49
School type				
Public	40.13	13.34	50.79	15.41
Private	51.91	14.05	56.70	13.16
Geographic location of the school				
Northeast	41.31	12.77	50.40	15.23
Midwest	38.77	12.29	48.74	16.18
South	42.59	14.25	53.44	14.37
West	39.63	13.51	51.80	15.38
Grand Mean	40.54	13.54	51.38	15.31

In the full regression model, parental expectations proved not to be a significant predictor of student achievement ($B = .148$, $p = .51$). Among the covariates, only three proved to be significant-prior

performance ($B = 1.04$, $p = .000$), hours spent on homework ($B = .709$, $p = .007$), and number of siblings ($B = -.430$, $p = .03$). The model with this independent variable accounted for a substantial amount of variance ($R^2 = .79$).

2. *What is the relationship between parental aspirations and student achievement among Latino students with at least one immigrant parent?*

Results for parental aspirations paralleled those of parental expectations. Like expectations, parental aspirations proved not to be a significant predictor of student achievement ($B = .416$, $p = .07$). Among the covariates, the same three proved to be significant-prior performance ($B = 1.03$, $p = .000$), hours spent on homework ($B = .695$, $p = .01$), and number of siblings ($B = -.419$, $p = .02$). The model with this independent variable accounted for a substantial amount of variance ($R^2 = .79$).

3. *What is the relationship between student expectations and student achievement among Latino students with at least one immigrant parent?*

When student expectations are used as the independent variable, the results are largely the same as parental expectations, but with one difference. As with parents, student expectations proved not to be a significant predictor of student achievement ($B = -.015$, $p = .95$). Among the covariates, prior performance ($B = 1.03$, $p = .000$) and hours spent on homework ($B = .792$, $p = .009$) again were significant, but number of siblings was not. And nearly identical to the previous model, this accounted for a substantial amount of variance ($R^2 = .78$).

4. *What is the relationship between student perceptions of parental aspirations and student achievement among Latino students with at least one immigrant parent?*

Student perceptions followed the pattern set above. Perceptions of neither mother's ($B = -.018$, $p = .94$) nor father's ($B = -.140$, $p = .64$) aspirations proved significant, but prior performance ($B = 1.05$, $p = .000$) and hours spent on homework ($B = 1.01$, $p = .003$) were. And as before, the model accounted for a notable amount of variance ($R^2 = .81$).

5. *Is there a significant difference in student achievement based on agreement of expectations between parents and students?*

Results from the final question mirrored those in other questions. Agreement between student and parent expectations proved not to be

a significant predictor of student achievement ($B = .049$, $p = .781$). But, as before, prior performance ($B = 1.03$, $p = .000$) and hours spent on homework ($B = .747$, $p = .014$) were significant. This model, too, accounted for a substantial amount of variance ($R^2 = .78$).

For point of comparison, these analyses were also completed with non-Latino students of immigrant parents. As Table 3 indicates, only one of the independent variables, parental aspirations, proved to be a significant predictor of achievement ($B = .776$, $p = 01$). The remainder, as with Latino students, was not significant. Moreover, the models with non-Latino students accounted for substantial variance, similar to the Latino sample. However, more of the covariates in the non-Latino sample were significant, specifically SES, the mothers' number of years in the United States, and parents' command of English.

Secondary Questions

As Table 4 indicates, only one pair of variables under consideration in the secondary questions indicates a strong relationship-parent aspiration and parent expectation ($r = .70$). The next strongest correlation was only a moderately weak relationship between student expectation and parent expectation ($r = .33$). The remaining variables under question-parental aspirations, student perceptions of parental aspirations, and number of years parents have been in the United States and their expectations-appear to be essentially unrelated. Although not included in the secondary research questions, one relationship is worth noting. What parents want for their children appears unrelated to how long the parents have been in the United States.

Table 5 indicates some of the same patterns in the Latino sample appear in the non-Latino sample. Specifically, there appears to be no relationship between parental expectations and the number of years in the United States (Mother $r = .008$, Father $r = .07$). Moreover, parental aspirations and expectations are strongly related ($r = .67$). However, a notable difference between the samples appears in the relationship between student and parent expectations. While somewhat weak among Latino families, the relationship appears stronger among non-Latino families ($r = .33$), although the relationship is still only moderate in the latter sample.

TABLE 3. Expectation, Aspirations, and Significant Covariates for Regression Analyses of Non-Latino Sample.

		Independent Variables		SES		Prior Achievement		Hours on Homework		# Years Mother in United States		Parent Command of English	
	R^2	*B*	*p*	*B*	*p*	*B*	*p*	*B*	*p*	*B*	*p*	*B*	*p*
Parental expectations	.85	.389	.23	1.90	.00	1.06	.00	.528	.00	.109	.04	−2.51	.00
Student expectations	.85	.487	.23	1.83	.00	1.05	.00	.521	.00	.135	.02	.067	.92
Parental aspirations	.85	.776	.01	1.82	.00	1.05	.00	.541	.00	.135	.01	−2.26	.01
Student perceptions of parental aspirations	.84	M = −.014 F = .725	M = .97 F = .07	1.72	.01	1.01	.00	.597	.00	.170	.00	−3.37	.00
Agreement of expectations	.86	−.426	.57	1.98	.00	1.06	.00	.594	.00	.121	.03	−3.02	.00

TABLE 4. Intercorrelations of Expectations, Aspirations, and Time in the United States for Latino Students.

	# Years Mother in United States	# Years Father in United States	Parent Aspiration	Parent Expectation	Student Perception of Mother Aspiration	Student Perception of Father Aspiration
Student expectation	.09	.03	.27	.33	.32	.28
# Years mother in United States		.71	.00	−.05	.06	.05
# Years father in United States			−.02	−.06	.01	.003
Parent aspiration				.70	.15	.05
Parent expectation					.20	.07
Student perception of mother aspiration						.75

TABLE 5. Intercorrelations of Expectations, Aspirations, and Time in the United States for Non-Latino Students.

	# Years Mother in United States	# Years Father in United States	Parent Aspiration	Parent Expectation	Student Perception of Mother Aspiration	Student Perception of Father Aspiration
Student expectation	.03	.06	.42	.46	.43	.33
# Years mother in United States		.85	.07	.008	−.04	−.02
# Years father in United States			.11	.07	.01	.03
Parent aspiration				.67	.30	.30
Parent expectation					.23	.19
Student perception of mother aspiration						.71

DISCUSSION

This study examined the relationship between various measures of parental and student expectations and aspirations and math achievement among Latino 12th graders of immigrant parents in the ELS:2002 database. Consistent with Goldenberg et al. (2001),

parental expectations and aspirations were not significant predictors of student achievement after controlling for an index of covariates. Moreover, neither were student expectations, agreement between student and parent expectations, nor student perceptions of parental aspirations.

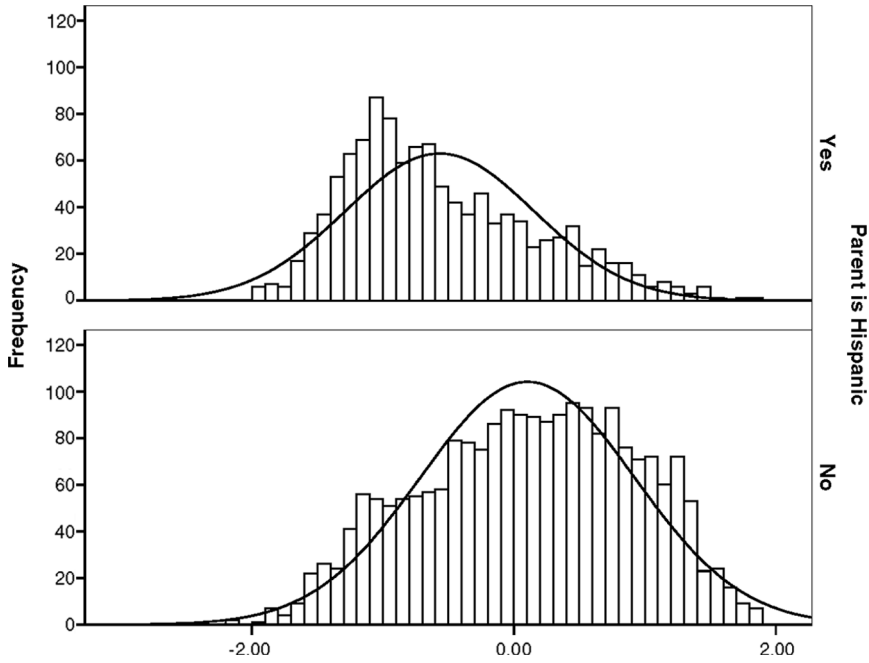
The analyses of the secondary questions likewise indicated only one strong relationship between aspirations, expectations, and parents' time in the United States – parental aspirations and expectations. The remaining correlations never exceeded a moderately weak relationship.

Although not central to this study, findings related to some of the covariates are notable. First, prior achievement and hours spent on homework were both significant predictors of math achievement, which is consistent with previous findings (Bandura, 1982; 1995; Gill & Reynolds, 1999; Smith-Maddox, 1998; Trusty et al., 2003). Second, these were the only consistently significant covariates herein. Number of siblings was significant for some of the independent variables but not all. Third, several variables that have proven influential in numerous other studies were not significant in this one, particularly SES, school type, and urbanicity.

The nonsignificant effect of SES deserves some discussion here. An examination of the data used herein reveals this noneffect is largely a function of the rather homogenous quality of the Latino immigrant sample in terms of SES, particularly compared to the non-Latino immigrant comparison group. As Figure 1 illustrates, the mean SES in the Latino sample ($M = -.655$, $SD = 668$) is considerably less than that of the non-Latino group ($M = .117$, $SD = .773$), $t(3025) = -18.84$, $p = .000$. But the distribution of the Latino group is far from normal, as the demonstrable positive skew illustrates. Moreover, as the standard deviations indicate, the Latino scores show less variance.

Yet, the same is not the case for parental expectations between the Latino and non-Latino samples. Specifically, Latino ($M = 5.27$, $SD = 1.38$) and non-Latino ($M = 5.27$, $SD = 1.32$) parents hold nearly identical expectations, $t(2615) = -1.06$, $p = .288$. And as both Figure 2 and the standard deviations indicate, the distributions are quite similar. Thus, the weak correlation between SES and parental expectations among Latino parents ($r = .09$) reflects the homogeneity of SES in the Latino sample, not randomness in expectations. Indeed, Latino parents hold the same expectations for their children as do non-Latino parents regardless of their SES.

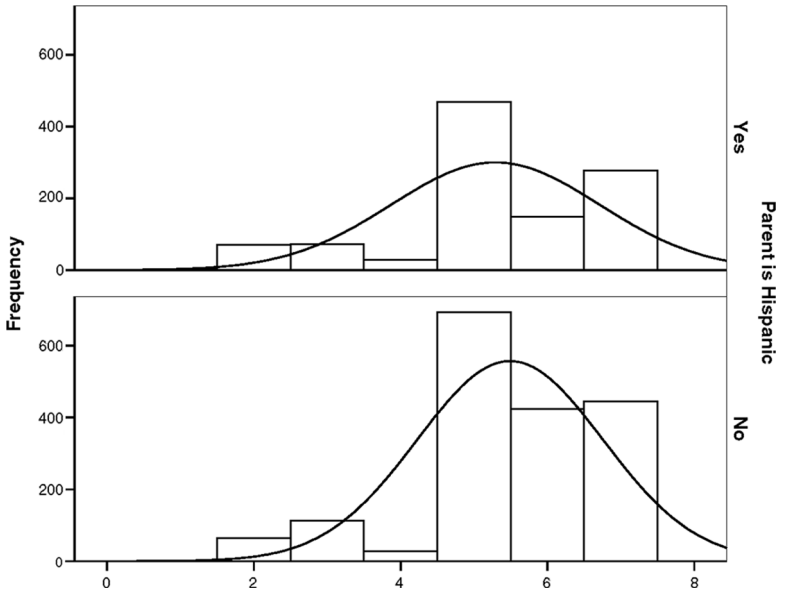
FIGURE 1. SES Distribution of Latino and Non-Latino Families.



Some of the findings related to the primary and secondary questions challenge prevailing wisdom, previous findings about immigrant parents' expectations and aspirations, agreement between parents and children, and the relation of those to academic achievement. To begin, there remains a popular belief that immigrant parents hold high expectations for their children, since they see education as a means to social acculturation and economic success. Those expectations are then expected to translate into children's greater educational achievement (Sue & Okazaki, 1990).

The first part of that wisdom remains uncontested here. Indeed, 46% of the Latino parents in this sample *expected* their children to complete a four year degree, and 25% expected their child to complete a PhD, MD, or equivalent. The numbers for aspiration differed little-45% for a four year degree and 30% for a PhD, MD, or equivalent. What is not supported herein is the idea that those expectations or aspirations predict or effect greater academic achievement.

FIGURE 2. Expectations Distribution of Latino and Non-Latino Parents.



Likewise, the findings concerning agreement between students and parents challenge earlier propositions about its influence on achievement (Hao & Bonstead-Bruns, 1998). Considering the moderately weak relationship ($r = .33$) between parent and student expectations, the non-significant effect is not surprising in these data.

While those findings challenge many prevailing ideas, at least one result herein confirms earlier findings. Specifically, previous studies have found acculturation variables (such as length in the United States or command of English) exhibit weak or nonsignificant influence on student achievement (Goldenberg et al., 2001; Trusty et al., 2003). Among Latino parents the same proved true in these data. Thus, the notion that educational expectation diminishes with one's lack of facility with English, potential experiences with racism, or the simple passage of time appears unsubstantiated.

If most of these findings challenge conventional wisdom concerning the influence of parental expectations among the children of Latino immigrants, they should not be interpreted to mean that parental factors have no influence. Indeed, Table 2 indicates there are achievement

differences among students based on several parent factors, such as the number of parents in the home or parent and child attendance at educational/cultural events. Yet, when controlling for other factors, these parental variables do not act as significant predictors of achievement.

This could reflect the age of the children under question here. As Yan (2005) asserts, late adolescence is a time of changing child-parental relationships and the growth of teens' independence. Thus, parental influence in the lives of 16- to 18-year-olds may be more subtle and indirect than the Pygmalion-like notion of expectations and performance.

Future research should examine such indirect relationships within this population specifically, as well as other student groups. For example, it could be that parental expectations influence achievement indirectly through the significant covariates in this study. Moreover, future research would benefit from expanding the types of outcome variables in this line of inquiry. While achievement measured by reading, math, or content tests provides valuable information, few studies consider the relationship between expectations/aspirations and the actual level of education attained.

Finally, specific to limitations in this article, subsequent research is needed in the creation of models to understand the factors significant in predicting or influencing achievement in Latino immigrant families. This study essentially expanded on and applied the work of others to a national, random sample of Latino students from immigrant families. To date, however, little exploratory research has experimented with diverse variables in the creation of models that then could be tested on other samples and populations. Given recent immigration patterns involving Latino families, such research clearly would be salient.

REFERENCES

Alexander, K. L., Entwisle, D. R., & Bedinger, S. D. (1994). When expectations work: Race and socioeconomic differences in school performance. *Social Psychology Quarterly*, *57*, 283–299.

Alexander, K. L., Entwisle, D. R., & Horsey, C. S. (1997). From first grade forward: Early foundations of high school dropout. *Sociology of Education*, *70*, 87–107.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, *37*, 122–147.

Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. In A. Bandura (Ed.), *Self-efficacy in changing societies* (pp. 1–45). New York: Cambridge University Press.

Boocock, S. P. (1972). *An introduction to the sociology of learning*. Boston: Houghton Mifflin.

Burns, L. J., Heuer, R., Ingels, S. J., Pollack, J., Pratt, D. J., Rock, D. et al. (2003). *Education longitudinal study of 2002 base year field test report* (No. NCES 2003-03). Washington, DC: National Center for Education Statistics.

Casanova, P. F., García-Linares, M. C., de la Torre, M. J., & de la Villa Carpio, M. (2005). Influence of family and socio-demographic variables on students with low academic achievement. *Educational Psychology*, *25*, 423–435.

Chen, H., & Lan, W. (1998). Adolescents' perceptions of their parents' academic expectations: Comparison of American Chinese–American, and Chinese high school students. *Adolescence*, *33*, 385–391.

Chin, D., & Kameoka, V. A. (2002). Psychosocial and contextual predictors of educational and occupational self-efficacy among Hispanic inner-city adolescents. *Hispanic Journal of Behavioral Sciences*, *24*, 448–464.

Der-Karabetian, A. (2004). Perceived family process factors and mathematics performance among Latino, African, and European American middle school students. *Educational Research Quarterly*, *28*, 38–47.

Dillin, J. (2001, March 20). USA: An open border?: Immigration proposals get mixed reviews. *Christian Science Monitor*, *93*, 3.

Elliott, J. D., Hufton, N., Illushin, L., & Willis, W. (2001). The kids are doing all right: Differences in parental satisfaction, expectation, and attribution in St. Petersburg, Sunderland, and Kentucky. *Cambridge Journal of Education*, *31*, 179–204.

Fisher, T. A., & Padmawidjaja, I. (1999). Parental influences on career development perceived by African American and Mexican American college students. *Journal of Multicultural Counseling and Development*, *27*, 136–152.

Frome, P., & Eccles, J. (1998). Parents' influence on children's achievement related perceptions. *Journal of Personality and Social Psychology*, *74*, 435–452.

Gill, S., & Reynolds, A. J. (1999). Educational expectations and school achievement of urban African American children. *Journal of School Psychology*, *37*, 403–424.

Goldenberg, C., Gallimore, R., Reese, L., & Garnier, H. (2001). Cause or effect? A longitudinal study of immigrant Latino parents' aspirations and expectations, and their children's school performance. *American Educational Research Journal*, *28*, 547–582.

Goyette, K., & Xie, Y. (1999). Educational expectations of Asian American youths: Determinants and ethnic differences. *Sociology of Education*, *72*, 22–36.

Hao, L., & Bonstead-Bruns, M. (1998a). Parent–child differences in educational expectations and the academic achievement of immigrant and native students. *Sociology of Education*, *7*, 175–198.

Hao, L., & Bonstead-Bruns, M. (1998b). Parents' extrafamilial resources and children's school attainment. *Sociology of Education*, *71*, 175–198.

Henderson, A. (1988, October). Parents are school's best friends. *Phi Delta Kappan*, *70*, 149–153.

Jacobs, J. E. (1991). Influence of gender stereotype on parent and child mathematics attitudes. *Journal of Educational Psychology*, *83*, 518–527.

Jacobs, N., & Harvey, D. (2005). Do parents make a difference to children's academic achievement? Differences between parents of higher and lower achieving students. *Educational Studies*, *31*, 431–448.

Lara-Alecio, Rafael, I. J. B., & Ebener, R. (1997). Developing academically supportive behaviors among Hispanic parents: What elementary teachers and administrators can do. *Preventing School Failure*, *42*, 27–33.

Ma, X. (2001). Participation in advanced mathematics: Do expectation and influence of students, peers, teachers, and parents really matter? *Contemporary Educational Psychology*, *26*, 132–146.

Mau, W.-C. (1995). Educational planning and academic achievement of middle school students: A racial and cultural comparison. *Journal of Counseling & Development*, *73*, 518–535.

Okagaki, L., & Frensch, P. A. (1998). Parenting and children's school achievement: A multicultural perspective. *American Educational Research Journal*, *35*,123–144.

Parsons, J. E., Adler, T. F., & Kaczala, C. M. (1982). Socialization of achievement attitudes and beliefs: Parental influences. *Child Development*, *53*, 310–321.

Ramos, L., & Sanchez, A. R. (1995). Mexican–American high school students: Educational aspirations. *Journal of Multicultural Counseling and Development*, *23*, 212–221.

Räty, H. (2006). What comes after compulsory education? A follow-up study on parental expectations of their child's future education. *Educational Studies*, *3*, 1–16.

Rumberger, R. W. (1995). Dropping out of middle school: A multilevel analysis of students and schools. *American Educational Research Journal*, *32*, 583–625.

Sanders, C. E., Field, T. M., & Diego, M. A. (2001). Adolescents' academic expectations and achievement. *Adolescence*, *36*, 795–803.

Seginer, R. (1983). Parents' educational expectations and children's academic achievement: A literature review. *Merrill-Palmer Quarterly*, *29*, 1–23.

Singh, K., Bickley, P. G., Keith, T. Z., Keith, P. B., Trivette, P., & Anderson, E. (1995). The effects of four components of parental involvement on eighth-grades student achievement: Structural analysis of nels-88 data. *School Psychology Review*, *24*, 299–317.

Smith-Maddox, R. (1998). Defining culture as a dimension of academic achievement: Implications for culturally responsive curriculum, instruction, and assessment. *Journal of Negro Education*, *67*, 302–317.

Steinberg, L., Lamborn, S. D., Dornbusch, S. M., & Darling, N. (1992). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement and encouragement to succeed. *Child Development*, *63*, 1266–1281.

Sue, S., & Okazaki, S. (1990). Asian–American educational achievements. *American Psychologist*, *45*, 913–920.

Trusty, J. (2000). High educational expectations and low achievement: Stability of educational goals across adolescence. *Journal of Educational Research*, *93*, 356–365.

Trusty, J. (2002). African Americans' educational expectations: Longitudinal causal models for women and men. *Journal of Counseling & Development*, *80*, 332–345.

Trusty, J., & Harris, M. B. C. (1999). Lost talent: Predictors of the stability of educational expectations across adolescence. *Journal of Adolescent Research*, *14*, 359–382.

Trusty, J., Plata, M., & Salazar, C. F. (2003). Modeling Mexican Americans' educational expectations: Longitudinal effects of variables across adolescence. *Journal of Adolescent Research*, *18*, 131–153.

Tsui, M. (2005). Family income, home environment, parenting, and mathematics achievement of children in China and the United States. *Education and Urban Society*, *37*, 336–355.

Vollmer, F. (1986). The relationship between expectancy and academic achievement—How can it be explained? *British Journal of Educational Psychology*, *56*, 64–74.

Wang, J., & Wildman, L. (1995). An examination of effects of family commitment in education on student achievement in seventh grade science. *Journal of Research in Science Teaching*, *32*, 833–837.

Wright, S. P., Horn, S. P., & Sanders, W. L. (1997). Teacher and classroom context effects on student achievement: Implications for teacher evaluation. *Journal of Personnel Evaluation in Education*, *11*, 57–67.

Yan, W., & Lin, Q. (2005). Parent involvement and mathematics achievement: Contrast across racial and ethnic groups. *Journal of Educational Research*, *99*, 116–127.