The Development of Educational Aspirations and Expectations from Adolescence to Young
Adulthood: A Longitudinal Study of Mexican-Origin Youth

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Abstract

Mexican-origin youth are at increased risk for school dropout and low educational attainment. High educational aspirations and expectations provide a potential source of resilience, given that they predict positive educational outcomes. Using data from a large sample of Mexican-origin youth ($N=674$), we examined the development of educational aspirations (how far would you like to go in school?) and expectations (how far do you actually expect to go?) from seventh grade ($M_{age}=12.8$) to two years post-high school ($M_{age}=19.8$). Results indicate that Mexican-origin youth enter adolescence with very high aspirations and expectations, and maintain them even after transitioning into young adulthood. Several demographic and cultural factors, including parental education, family income, the cultural value of *familism*, ethnic identity, and Spanish language use, were associated with higher aspirations and expectations.

Keywords: Mexican-origin youth, educational aspirations, educational expectations, *familism*

Abstract: 127 / 150 words

Introduction

Latinx youth, and Mexican-origin youth in particular, are at high risk for school dropout and low educational attainment (NCES, 2017). A multitude of social and economic obstacles, including low socioeconomic status (SES; Irvin et al., 2011), neighborhood distress (Crowder & South, 2003), and under-resourced schools (U.S. Department of Education, 2014), disproportionately affect Mexican-origin families and impede youths' paths to academic success (Luyckx et al., 2011). These impediments are particularly salient for students who are first-generation immigrants (Tienda & Mitchell, 2006) and whose parents have not attended college (NCES, 1998).

Previous research has largely focused on the above social and economic barriers to educational attainment for Mexican-origin youth. Recently, however, there have been calls for researchers to assess factors that contribute to the positive development of ethnic minority youth, rather than fixating only on risk factors (Gaylord-Harden, Barbarin, Tolan, & Murray, 2018). In an educational context, the Positive Youth Development framework emphasizes the strengths and assets that set youth on a course toward academic achievement and educational attainment. One important educational strength of Mexican-origin youth are their high educational *aspirations*, which represent goals for the future and serve as motivational forces to propel students further in their educational journeys (Bohon, Johnson, & Gorman, 2006; Kao & Tienda, 1998). Another potential strength are high educational *expectations*, which are more realistic assessments of future attainment that take into account external constraints such as financial resources (May & Witherspoon, 2019). Students' educational aspirations and expectations in high school are both positively correlated with academic outcomes in early adulthood (Brumley, Russell, & Jaffee, 2019; Crockett & Beal, 2012), thus highlighting the importance of

psychological factors as sources of resilience for academic achievement. The present study uses longitudinal data from a community sample of 674 Mexican-origin youth to examine how educational aspirations and expectations develop from middle school (age 12) to post-high school (age 19), and how demographic (i.e., gender, parental education, income) and cultural factors (i.e., nativity status, ethnic identity, *familism*, and Spanish use) influence aspiration and expectation trajectories.

Educational Aspirations/Expectations and Demographic Factors

Educational *aspirations* refer to the level of schooling (e.g., high school diploma, Bachelor's degree) students desire to complete. Aspirations serve as long-term goals that students set for themselves, and tap into personal values about education (Bohon et al., 2006; Eccles & Wigfield, 2002; Mickelson, 1990). Educational *expectations* refer to the level of schooling students believe they will actually complete. Compared to aspirations, expectations are more concrete and grounded in realistic self-assessment, because students may have high aspirations for a particular educational path but realize that the path is not feasible for academic, social, and/or financial reasons (Bohon et al., 2006; Gottfredson, 1981; Ovink, 2011). Thus, although both aspirations and expectations presumably reflect – to varying degrees – more general beliefs about the importance of education, aspirations are relatively abstract long-term desires whereas expectations are more concrete appraisals of the likelihood of a future particular outcome (Mickelson, 1990). Consistent with this conceptualization, empirical studies have found that expectations are, on average, lower than aspirations (Bohon et al., 2006, St-Hilaire, 2002), which is what one would expect if expectations are more calibrated with reality than aspirations. Unfortunately, aspirations and expectations are rarely examined in the same study, so we know little about whether they develop in the same way and have similar correlates. Below we review

the small literature on the aspirations and expectations of ethnic minority youth, focusing on findings from large, national studies.

Using data from the National Education Longitudinal Study of 1988 (NELS:88), Kao and Tienda (1998) found that White, Latinx, and Black students had similarly high educational *aspirations* in eighth grade, but unlike their White peers, Latinx and Black students did not maintain these aspirations in 10th and 12th grade. The authors suggest that difficulties maintaining high aspirations for Black and Latinx students (particularly those from low SES backgrounds) contributes to the decreased likelihood of reaching their educational goals later in adolescence. A large-scale study using data from the Educational Longitudinal Study (ELS; 2002) found that 69% of 12th grade students *expected* to complete a Bachelor's degree or higher, but the percentages were considerably lower for Latinx (57%) than White students (71%) (NCES, 2005). Relatedly, demographic factors disproportionately affecting Latinx families, including low SES, low parental education, and English as a second language, were associated with lower expectations. Another study using the ELS data as one of two large samples of Hispanic youth found that expectations increased slightly from 10th to 12th grade in one sample but decreased slightly from 10th to 12th grade in the other (May & Witherspoon, 2019). These authors also found that expectations were positively associated with parent education level and family income. A fourth large study found that Mexican-origin and Puerto Rican students (ranging from seventh to 12th grade) had significantly lower aspirations and expectations than their White, Black, and Cuban peers, and that these racial/ethnic differences were due, in part, to SES (Bohon et al., 2006). Finally, a cross-sectional study of Mexican-origin eighth- and ninth-grade students found that a large percentage aspired to graduate from college (75%), and even graduate school

(48%), although much fewer (60% and 29%, respectively) expected to actually attain these educational goals (St-Hilaire, 2002).

Together, these findings suggest that Mexican-origin youth have lower educational aspirations and expectations than their White peers, and that they have greater difficulty maintaining aspirations and expectations during high school. Furthermore, these studies suggest that Mexican-origin youth have lower educational aspirations and expectations in part because of their low SES, low parental education levels, and immigrant status (NCES, 2017; Schoon, 2010). Lower expectations are theoretically consistent with having fewer resources to pursue higher education, and lower aspirations are consistent with the theory that material barriers like poverty not only block societal advancement, but also hinder youth's aspirations to strive toward educational advancement (Laurin, Engstrom, & Alic, 2019).

Cultural Factors

Although the large, national studies reviewed above provide a descriptive, bird's-eye view of Latinx students' aspirations and expectations during (primarily) high school, it is critical to use more in-depth studies of ethnic minority youth to place aspirations and expectations in a cultural context (Boyce & Fuligni, 2007). Ovink (2011) followed 50 Mexican-origin high school students as they transitioned to postsecondary education, and found that aspirations were primarily motivated by the anticipated economic benefits of higher education and that, despite high aspirations, students managed their expectations by considering social and economic barriers to achieving their educational goals.

Ovink (2011) also found that the Mexican cultural value of *familism* is meaningfully related to both aspirations and expectations in Mexican-origin youth. *Familism* emphasizes the centrality of the family and the importance of prioritizing family needs over one's own desires

and goals (Desmond & Lopéz Turley, 2009). Indeed, there is evidence that youth high in *familism* feel an obligation to succeed through education (and therefore possess higher aspirations), with educational success being an investment for the family that will pay off down the line (Brand & Xie, 2010; Ovink, 2011). In one study, this desire to honor parental struggle and pay back parents' sacrifices through academic achievement was endorsed by almost all Mexican-origin high school participants (Easley, Bianco, & Leech, 2012).

On the other hand, *familism* may contribute to lower expectations because strong family ties can pose a barrier to leaving home, thereby limiting college options and feasible paths to higher education (Desmond & Lopéz Turley, 2009; Ovink & Kalogrides, 2015). Despite believing that college is important for future success, many Latinx youth report that the driving force in stopping their educational journey is a responsibility to support their family (Pew Hispanic Center, 2009). Further, in open-ended responses to questions about future expectations, Latinx high school students' lower expectations were driven, in part, by youth high in *familism* seeing educational goals as incongruent with their strong family ties (Turcios-Cotto & Milan, 2013).

In addition to *familism*, other indicators of acculturation may be associated with aspirations and expectations. Specifically, ethnic identity, or the extent to which one has a sense of belonging to one's ethnic group, is generally considered a source of academic resilience in ethnic-minority youth (Wong, Eccles, & Sameroff, 2003). In particular, Wong and colleagues (2003) found that ethnic minority youth who began seventh grade with higher levels of ethnic identity were buffered against declines in academic achievement and self-concept in the face of racial discrimination at the end of eighth grade. These findings suggest that ethnic identity may be associated with increased aspirations and expectations, given greater positive feelings about

education and fewer academic barriers to attainment. Spanish language use and nativity (i.e., born in the U.S. vs. Mexico) have also been examined in cross-sectional studies, though neither demonstrate consistent relations with aspirations or expectations (Hao & Bonstead-Bruns, 1998; Kandel & Kao, 2000; St-Hilaire, 2002). Together, these findings suggest that cultural factors may be consequential for the development of aspirations and expectations of Mexican-origin youth, especially for youth who are first-generation immigrants and/or the first in their families to attend college (Ovink & Kalogrides, 2015). However, the small samples and cross-sectional design of many past studies limit conclusions that can be reached about the role of cultural factors in the development of Mexican-origin youth's aspirations and expectations. The present study addresses these limitations and examines how a broad range of cultural variables shape the developmental trajectories of aspirations and expectations.

The Present Research

In the present study, we used data from a large sample of Mexican-origin youth ($N=674$) assessed annually from age 12 to 19 to address the following research questions:

- (1) Do Mexican-origin youth have high educational aspirations and expectations? We consider aspirations and expectations to be “high” if they are near the ceiling of educational attainment (i.e., graduate/professional degree), and if they surpass the level of educational attainment actually reached by most Americans.¹
- (2) Do the youth maintain their high educational aspirations and expectations as they progress from middle school through high school and beyond?

¹Approximately one-third of Americans graduate from college and 3% receive a doctoral or professional degree at some point in their lives (U.S. Census Bureau, 2017).

- (3) To what extent do educational aspirations and expectations co-develop from middle school to young adulthood? That is, to what extent do increases or decreases in aspirations covary with increases or decreases in expectations?
- (4) Do the developmental trajectories of educational aspirations and expectations vary by gender, parental education, and family income?
- (5) Do the developmental trajectories of educational aspirations and expectations vary as a function of cultural factors (nativity, *familism*, ethnic pride, Spanish language use)?

The present study is exploratory and, consequently, we do not have specific hypotheses. This study extends previous work in several substantive and methodological ways. First, we examined both educational aspirations and expectations, instead of one or the other, addressing the need for “a comparison of results based on aspirations [and] expectations” (Kao & Tienda, 1998, p. 380). Second, whereas most prior studies have focused on a specific developmental period (e.g., high school), the present study spans an eight-year period from middle school to post-high school. Multiple studies have called for research taking a “longer temporal perspective” (Kao & Tienda, 1998, p. 380) to determine whether youth “maintain their initially high ambitions throughout high school and the years immediately following” (Bohon et al., 2006, p. 224). Using a longitudinal design also allows us to examine how social-contextual factors “launch” youth on subsequent developmental trajectories. Third, whereas most past studies focused on youths’ aspirations and expectations to graduate from college, the present study differentiates two forms of postsecondary education (Bachelor’s degree and graduate degree). Fourth, whereas most past studies have focused on superficial aspects of culture (e.g., nativity status), we examined whether *familism*, ethnic identity, and language use buffer youth against the social and economic barriers they face in the pursuit of higher education, directly

addressing the recent challenge that “relevant ethnic and cultural factors should be explicitly tested rather than assumed” (May & Witherspoon, 2019, p. 14).

Methods

Participants

Data come from the California Families Project, a longitudinal study of 674 Mexican-origin youth and their parents.² Children were drawn at random from rosters of students from the Sacramento and Woodland, CA, school districts. The focal child had to be in the 5th grade, of Mexican origin, and living with his or her biological mother, in order to participate in the study. Approximately 72.6% of the eligible families agreed to participate in the study, which was granted approval by the University of California, Davis Institutional Review Board (Protocol #217484-21). The children (50% female) were assessed annually from fifth grade (M_{age} at Wave 1=10.86, $SD=0.50$) to two years post-high school (M_{age} at Wave 10=19.86, $SD=0.52$). Participants were interviewed in their homes in Spanish or English, depending on their preference, and were compensated in cash. Interviewers were all bilingual and most were of Mexican heritage. Median household income was \$32,500, which is lower than median incomes in Woodland (\$49,000) and Sacramento (\$47,000). In the present study, we used data for all available participants (i.e., no exclusions were applied) and we have reported all analyses conducted to address our research questions.

Measures³

²One previous article used child educational aspiration/expectation data from the California Families Project. In particular, Castro-Schilo et al. (2016) used child aspiration/expectation data from 5th to 7th grade to examine the development of school attachment. This study included minimal overlapping data with the present study and examined distinct research questions. For a full list of CFP publications, see: <https://osf.io/rn34p/>.

³Materials, analysis scripts, and output files, are available at: https://osf.io/j9dws/?view_only=89d5e71599944382aa881279cb47686b.

Educational aspirations and expectations. Aspirations and expectations were assessed annually from seventh to 12th grade and then one year and two years post-high school (8 waves total).⁴ Children were asked, “*How far would you like to go in school?*” (aspirations) and “*How far do you really think you will go in school?*” (expectations). They responded to these questions with an eight-level response scale – (a) *8th grade or less*, (b) *9th-11th grade*, (c) *High school graduate/GED*, (d) *Vocational, technical, trade, or business school*, (e) *Junior college degree*, (f) *4-year Bachelor’s degree*, (g) *Master’s degree*, or (h) *Ph.D. or professional degree (law, medicine, dentistry, etc.)*. For all analyses, these responses were collapsed into three categories – (0) *Less than Bachelor’s* (response options “a” to “e”); (1) *Bachelor’s degree* (response option “f”); and (2) *Graduate degree* (response options “g” and “h”). These ordered categories are consistent with past research (e.g., NCES, 2005; Rutherford, 2015) and allow us to analyze change over time in non-interval data.

Nativity status. We created dichotomous nativity status variables comparing youth born in Mexico (29%) versus the U.S. (71%).

Parent educational level. Mothers reported on their own and their child’s biological fathers’ total years of education. A parent education variable was created by averaging the mother’s and father’s education level (for single-parent families, we used the mother’s education level). The resulting variable ranged from 0 to 19 years ($M=9.3$, $SD=3.3$). Sixty-three percent of mothers and 65% of fathers had less than a high school education (median=9th grade).

Family income. Total household income was reported by the mothers when the children were in seventh grade using a 20-point ordinal response scale, with response options increasing

⁴Aspirations/expectations were also measured in fifth and sixth grades but the response scale only went up to Bachelor’s degree. Consequently, we began longitudinal analyses in seventh grade, when all response categories were first used.

in \$5,000 increments (1="Less than \$5,000", 2="\$5,000-\$10,000",...,up to 20="95,000 or more"). We recoded this response scale by taking the midpoint dollar amount for each response option (1="\$2,500, 2="\$7,500",...,up to 20="\$100,000), and then dividing by household size to compute per capital income ($M=\$6,996$, $SD=\$5,538$ in seventh grade).⁵

Familism. Children completed the 50-item Mexican-American Acculturation/Enculturation Scale (MACVS; Knight et al., 2010) when they were in seventh grade. In the present study, we focus on the *familism* domain (16 items), and its three subscales. The Support subscale focuses on the desire to maintain close personal relationships with family members. The Obligation subscale focuses on the importance of tangible caregiving. The Referent subscale focuses on the reliance on communal interpersonal reflection to define the self. Response options ranged from 1 (*Not at all*) to 4 (*Very much*). We computed total *familism* (and facet) scores by averaging across items ($M_{total}=3.60$, $SD_{total}=0.33$, $\alpha=.86$).

Ethnic identity. Children completed an eight-item Ethnic Identity scale adapted from Phinney's (1992) Multigroup Ethnic Identity Measure. Response options ranged from 1 (*Not at all true*) to 4 (*Very true*). We computed ethnic identity scores by averaging across items ($M=3.47$, $SD=0.48$, $\alpha=.83$).

Spanish language use. Children completed the five-item Spanish language subscale of the Acculturation Rating Scale for Mexican Americans-II (Cuellár, Arnold, & Maldonado, 1995), which asks about frequency of speaking, thinking, writing, and listening to music and television in Spanish. Response options ranged from 1 (*Almost never or never*) to 4 (*Almost always or always*). We computed Spanish use scores by averaging across items ($M=2.51$, $SD=0.73$, $\alpha=.83$).

⁵Per capita income was z-scored for analyses to make unstandardized coefficients more interpretable.

Statistical Analyses

All analyses were conducted using *Mplus* Version 8 (Muthén & Muthén, 1998-2017) using robust weighted least squares estimation (WLSM; Brown, 2006). For all analyses, we assessed model fit via comparative fit index (CFI), Tucker-Lewis index (TLI) values, and the root-mean-square error of approximation (RMSEA; Hu & Bentler, 1998).

Given the ordinal nature of aspirations and expectations, we used a variant of the standard Latent Growth Curve (LGC) model developed for use with ordinal, non-interval data (Feldman, Masyn, & Conger, 2009; Skrondal & Rabe-Hesketh, 2004). This model assumes an underlying continuum in the constructs of interest even though the observed measure is ordinal; that is, the observed repeated measures are discretized forms of a continuous underlying latent variable. The discretized continuum is defined by two cut points (i.e., thresholds) that map onto the observed ordinal values (i.e., *Less than Bachelor's*, *Bachelor's degree*, *Graduate degree*). This model allows us to establish longitudinal threshold invariance by constraining the thresholds (τ_1 , τ_2) to be the same across waves to ensure that we are assessing the same construct over time (Lee, Wickrama, & O'Neal, 2018; Masyn, Petras, & Liu, 2013).

To guide our selection of a growth trajectory, we conducted a series of LGC model comparisons and evaluated changes in fit indices. Specifically, we compared three models: (1) no growth model, where the slope is fixed to be zero over time; (2) linear growth model, where the slope increases linearly over time; and (3) latent basis model, where the first and last time points of the slopes are fixed to zero and seven, respectively, and the middle time points are freely estimated in order to detect nonlinearities in the growth model. In all models, the mean of the latent intercept was set to be zero (because the thresholds provide information about the latent levels) and the latent intercept variance was estimated. Additionally, the intercept and

slope were allowed to covary. We considered model fit, as well as parsimony, when selecting a growth curve model.

To examine the co-development of aspirations and expectations, we conducted a bivariate LGC model using the selected growth trajectories for aspirations and expectations. In particular, we specified correlations among the levels and slopes of the aspiration trajectory and the expectation trajectory.

To examine gender and nativity differences in the aspiration and expectation trajectories, we conducted multi-group LGC analyses with and without equality constraints across gender and nativity subgroups. To examine the influence of continuous predictors (parent education, income, *familism*, ethnic identity, Spanish use) measured in seventh grade on the subsequent development of aspirations and expectations, we included the continuous variables as predictors of the latent levels and slopes for aspirations/expectations.

Results

How High Are Educational Aspirations and Expectations?

As shown in Table 1, when children were in seventh grade, the vast majority aspired to complete a Bachelor's degree (80%), and a substantial percentage aspired to complete some type of graduate degree (60%). Expectations were consistently lower than aspirations, although still quite high; in seventh grade, 67% of children expected to complete a Bachelor's degree.

Table 1

Educational Aspiration and Expectations of Mexican-origin Youth

	Aspirations			Expectations			<i>N</i>
	Less than Bachelor's	Bachelor's Degree	Graduate Degree	Less than Bachelor's	Bachelor's Degree	Graduate Degree	
Child							
7th grade	19.8%	21.2%	59.0%	33.0%	25.0%	42.0%	576
8th grade	16.1%	26.4%	57.5%	29.1%	29.2%	41.7%	585
9th grade	14.4%	28.7%	56.9%	26.1%	34.9%	39.0%	602
10 th grade	17.5%	34.2%	48.2%	31.2%	34.6%	34.2%	587
11 th grade	17.4%	33.8%	48.7%	31.6%	34.9%	33.6%	597
12 th grade	31.7%	32.3%	36.0%	44.8%	33.3%	21.8%	600
One-year post	18.1%	30.7%	51.2%	28.7%	38.3%	33.0%	585
Two-years post	19.0%	36.8%	44.3%	28.0%	42.0%	30.0%	583

Note. *N* refers to the total sample assessed at each grade level. Percentages are rounded and therefore may not exactly add up to 100%.

How do Aspirations and Expectations Change from Age 12 to 19?

We selected a linear model for both aspirations and expectations (see Table 2 for results of linear model, and Table S1 for model comparisons). On average, aspirations show a slight (but significant) decline from 7th grade to two years post high-school. This normative decline was about .05 units per year; these decreases are relatively small compared to the thresholds ($\tau_1 = -1.02$, $\tau_2 = -.16$; $p < .001$). There was also a slight (but significant) decline in expectations (.03 units per year; $\tau_1 = -.60$, $\tau_2 = .29$; $p < .001$).

Table 2

Model Statistics for Best-Fitting Ordinal LGC Models for Educational Aspirations and Expectations

	Aspirations	Expectations
Means		
Level	.00	.00
Slope	-.05*	-.03*
Thresholds		
τ_1	-1.02(.04)	-.60(.04)
τ_2	-.16(.04)	.29(.04)
Variances		
Level	.66*	.71*
Slope	.02*	.02*
Covariance _{Level, Slope}	-.05*	-.05*
Goodness-of-Fit		
χ^2 (df)	484 (38)	485 (38)
RMSEA [90% CI]	.13[.12, .15]	.13[.12, .15]
CFI	.91	.93
Fit changes, $\Delta\chi^2/\Delta df$	174/3	147/3

Note. Values are unstandardized coefficients for the linear models. Slope loadings are linear [0, 1, 2, 3, 4, 5, 6, 7]. τ = time-invariant threshold between two ordinal categories. χ^2 = Chi-square. df = degrees of freedom. RMSEA = Root-mean-square-error of approximation. CI = 90% confidence interval. CFI = Comparative fit index.

How do Aspirations and Expectations Co-develop across Eight Years?

Levels of aspirations and expectations were significantly positively correlated in 7th grade ($r = .79$, 95%CI = [.73, .85], $p < .001$). Further, there was a significant correlation between the slopes of aspirations and expectations, such that greater decreases in aspirations were associated with greater decreases in expectations ($r = .38$, CI = [.30, .45]. $p < .001$).

Although the ordinal LGC analyses showed that, on average, aspirations and expectations declined over time (see Figures S1-S2), they also had significant variances in the slopes, indicating that there were individual differences around the general trends. In the next section, we examine factors that might be associated with these individual differences in the trajectories.

Do the Developmental Trajectories Vary by Demographic and Cultural Factors?⁶

⁶Unstandardized regression coefficients are reported in the manuscript. Standardized regression coefficients are provided in the supplemental materials (Tables S5-S7).

Gender differences. Multiple-group analyses for boys and girls showed no significant differences when the equality constraints were removed, which suggests that the trajectories of aspirations and expectations did not significantly differ for boys and girls (see Table S2 for model comparisons).

Parent education and income. Table 3 shows results when the level and slope of aspirations and expectations were regressed on parental education and family income. Parental education was associated with higher levels of expectations (but not aspirations). Additionally, income was associated with higher levels of aspirations and expectations in seventh grade.

Table 3

Ordinal LGC Models with Parental Education and Income as Covariates

	Parental Education		Per Capita Income	
	Level	Slope	Level	Slope
Aspirations	.02[-.01, .04]	.00[-.00, .01]	.10* [.02, .18]	.00 [-.02, .01]
Expectations	.03* [.01, .05]	.00[-.00, .01]	.18* [.10, .26]	-.01[-.02, .01]

Note. Values are unstandardized regression coefficients when the “Level” or “Slope” of aspirations or expectations from the univariate LGC models were regressed on the level of the covariate. Values in brackets are the 95% confidence intervals. Per capita income was z-scored for these analyses. * $p < .05$.

Nativity status. Multiple-group analyses for youth born in the U.S. versus Mexico showed no significant differences when the equality constraints were removed, which suggests that the trajectories of aspirations and expectations do not significantly differ for youth born in Mexico versus the U.S. (see Table S3 for model comparisons).

Familism. Table 4 shows the influence of *familism*, ethnic identity, and Spanish language use on the level and slope of aspirations and expectations. Total *familism* was associated with higher levels of aspirations and expectations in seventh grade, as well as greater decreases in aspiration and expectations from seventh grade to two years post-high school. Figures 1 and 2 visually depict these associations (i.e., different intercepts and slopes for youth higher versus

lower in familism). Overall, associations between familism and aspirations and expectations were mainly driven by the obligation and support facets (see Table S4 for facet results).

Figure 1. Visual depiction of the longitudinal association between familism and aspirations, separately for youth high (i.e., top third) and low (i.e., bottom third) in level of familism at age 12.

Figure 2. Visual depiction of the longitudinal association between familism and expectations, separately for youth high (i.e., top third) and low (i.e., bottom third) in level of familism at age 12.

Ethnic identity. Ethnic identity was associated with higher levels of aspirations and expectations in seventh grade, as well as greater decreases in expectations (but not aspirations) across adolescence (Fig. 3).

Figure 3. Visual depiction of the longitudinal association between ethnic identity and expectations, separately for youth high (i.e., top third) and low (i.e., bottom third) in level of ethnic identity at age 12.

Spanish language use. Spanish use was associated with higher levels of expectations (but not aspirations) in seventh grade.

Table 4

Ordinal LGC Models with Familism, Ethnic Identity, and Spanish Use as Covariates

	Familism		Ethnic Identity		Spanish Use	
	Level	Slope	Level	Slope	Level	Slope
Aspirations	.32* [.07, .57]	-.06* [-.11, -.02]	.34* [.17, .52]	-.02 [-.06, .01]	.11 [-.00, .22]	-.01 [-.03, .02]
Expectations	.43* [.18, .68]	-.08* [-.13, -.03]	.40* [.24, .56]	-.04* [-.06, -.01]	.17* [.06, .27]	-.01 [-.03, .01]

Note. Values are unstandardized regression coefficients when the “Level” or “Slope” of aspirations or expectations from the univariate LGC models were regressed on the level of the covariate. Values in brackets are the 95% confidence intervals. * $p < .05$.

Discussion

The present study examined the development of educational aspirations and expectations in Mexican-origin youth followed longitudinally from age 12 to 19. We extended previous research by investigating how demographic and cultural factors influence the developmental trajectories of aspirations and expectations.

First, we found that educational aspirations and expectations were quite high. Eighty percent of seventh grade children *aspired* to get at least a Bachelor's degree, which is similar to the 75% found for Mexican-origin eighth- and ninth-graders by St-Hilaire (2002). Additionally, we found that 67% of seventh grade children *expected* to get at least a Bachelor's degree, which is also comparable to the 60% found by St-Hilaire (2002). By 12th grade, expectations had dropped slightly, with 55% of youth expecting to get at least a Bachelor's degree, which is comparable to the 57% found previously for Latinx youth (NCES, 2005). Moreover, the aspirations did not stop at a college degree; the majority aspired to obtain a graduate degree of some kind, which replicates findings from previous cross-sectional research on Mexican-origin youth (St-Hilaire, 2002). These aspirations and expectations are high both in terms of the highest points on our educational attainment scale and in terms of the level of educational attainment actually reached by most Americans (e.g., about one-third of Americans graduate with a Bachelor's degree, about 9% graduate with a Master's degree, and 3% receive a professional or doctoral degree; U.S. Census Bureau, 2017). Despite high levels of aspirations and expectations observed in the present sample, we replicated the finding that expectations tend to be lower than aspirations (e.g., Bohon et al., 2006). Thus, although some youth expect to achieve the same level of education they aspire to, many youth calibrate their aspirations in the face of external

constraints, resulting in lower (and presumably more realistic) expectations (May & Witherspoon, 2019).

Second, we found slight mean-level decreases in educational aspirations and expectations. This suggests that, on average, high aspirations and expectations were maintained across adolescence and into young adulthood, which is inconsistent with past studies that found Latinx students had trouble maintaining their high aspirations across high school (e.g., Kao & Tienda, 1998). This finding also fails to support speculations that an inability to maintain high aspirations or expectations explains the lower levels of educational attainment seen by Mexican-origin youth (e.g., St-Hilaire, 2002).

Third, we found that aspirations and expectations co-develop, on average, from seventh grade to two years post-high school, with increases (decreases) over time in aspirations generally accompanying increases (decreases) over time in expectations. This co-development supports the idea that both aspirations and expectations fall under the same umbrella of educational orientations and reflect broader beliefs about the value of education (Mickelson, 1990).

Additionally, our results suggest that multiple demographic and cultural factors may be associated with the development of educational aspirations and expectations. In particular, we found that parental education was associated with higher initial levels of expectations (but not aspirations), and income was associated with higher initial levels of both aspirations and expectations. These findings are consistent with past work indicating that higher parental education and family income are associated with higher expectations (May & Witherspoon, 2019), but are only partially consistent with Bohon and colleagues (2006), who found that aspirations were associated with both parental education and income. *Familism*, and particularly the support and obligation facets, was associated with higher initial levels of aspirations and

expectations but also with greater decreases in both aspirations and expectations across time. These results are consistent with the notion that obligations to support the family may positively impact youth's educational goals early in adolescence (Brand & Xie, 2010; Easley et al., 2012), but these obligations may also lead them to rule out educational options (e.g., attending a college far from home) as they reach the end of high school (Turcios-Cotto & Milan, 2013). Ethnic identity was also associated with higher levels of child aspirations and expectations, consistent with previous findings that ethnic identity is academically adaptive for ethnic minority youth (Wong et al., 2003) and suggesting that cultural factors in addition to *familism* may be adaptive in relation to aspirations and expectations in Mexican-origin youth.

We found no evidence of gender differences in aspirations or expectations, which is inconsistent with past research showing gender disparities (Fabes et al., 2014; Gutman et al., 2012; Watt et al., 2012). Finally, we found no evidence that nativity status was associated with aspirations or expectations, and Spanish language use was only associated with higher initial expectations, which further muddy prior inconsistent research on the association of nativity and language use with aspirations and expectations (e.g., St-Hilaire, 2002; Turcios-Cotto & Milan, 2013).

Limitations and Future Directions

The present study has several limitations. First, we cannot draw broad conclusions about whether the aspirations and expectations of Mexican-origin youth are high compared to other ethnic groups, given that we do not have a matched comparison sample. Second, although we identified several sociocultural variables that were associated with the developmental trajectory of aspirations and expectations, we did not examine whether aspirations and expectations have reciprocal effects on change in these constructs, which raises questions about the direction of the

effect. Thus, it is important for future research to explore the potentially dynamic relations between aspirations/expectations and socio-cultural variables over time, by examining reciprocal lagged associations. Finally, it would be informative to obtain a more nuanced view of how aspirations and expectations co-develop over time, including whether aspirations have significant lagged effects on subsequent changes in expectations, and vice versa.

Overall, we present evidence that Mexican-origin youth maintain high educational aspirations and expectations into young adulthood. A fundamental question is what happens next. That is, which youth will turn their lofty aspirations into reality, and which will not? A high priority for future research is to identify the barriers that prevent some Mexican-origin youth from realizing their educational goals, as well as the sources of resilience that launch them on pathways to educational success.

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