

Ambitions in Action: Investigating College Enrollment Among Hispanic Youth Who Expect to Complete a Bachelor's Degree

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Abstract

Using data from the *Educational Longitudinal Study of 2002* and structural equation modeling techniques, this study focuses on the unique experiences of Hispanic adolescents who maintain bachelor's degree expectations through the end of high school. Results indicate that the degree to which Hispanic students' college expectations are aligned with the completion of key college-going actions during high school is strongly associated with their later level of college enrollment. The relationship between parent resources, including parent social capital, and engagement in college-aligned actions among Hispanic youth, however, appears less straightforward.

Resumen

Usando información del estudio longitudinal de 2002 y técnicas de modelo de ecuación estructural, este estudio enfoca en las experiencias únicas de adolescentes hispanos que a través de preparatoria mantienen expectativas de obtener un grado universitario. Resultados indican que el grado al que las expectativas universitarias de estudiantes hispanos se alinean con completar acciones claves de ir a la universidad durante la preparatoria está fuertemente asociado con su nivel posterior de registro universitario. La relación entre recursos parentales, incluyendo capital social parental, e involucramiento en acciones alineadas con ir a la universidad entre la juventud hispana, sin embargo, parece menos directa.

Keywords

Latina(o), higher education, social capital, parent resources, expectations

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The number of U.S. Hispanic students enrolled in college reached a record 16.5% share of all college enrollees in 2011, making Hispanic students the largest minority group on the nation's 4-year college campuses (Fry & Lopez, 2012). To be sure, these substantial strides merit recognition. Nonetheless, Hispanic youth continue to be over-represented in 2-year colleges. Although their 4-year college enrollment and completion rates have risen impressively since 2000, a stubborn gap persists between U.S. Hispanic students and other racial/ethnic groups in bachelor's degree completion (Aud et al., 2012; Carnevale & Strohl, 2013). If the bachelor's degree has become the critical threshold for racial and ethnic parity in educational attainment (Carnevale & Strohl, 2013), then even as we celebrate their large and important gains in postsecondary access, we must forge ahead in our efforts to understand the obstacles that Hispanic students encounter during the pursuit of a 4-year degree.

Numerous studies support the notion that there is a distinct process by which Hispanic youth come to plan on, prepare for, and enroll in college that merits continued investigation (Pérez & McDonough, 2008). Evidence from recent research suggests that parental assets including education and income may not offer the same benefit when it comes to college enrollment among Hispanic youth as is the case among other groups (Alon, Domina, & Tienda, 2010; Nuñez & Kim, 2012; O'Connor, Hammack, & Scott, 2010). Furthermore, Hispanic students often face unique challenges in converting high educational expectations into the completion of critical steps required for enrollment in a 4-year institution. These challenges are due in part to limited access to complete information about college options and the preparation each requires (Gándara & Contreras, 2009; Gonzalez, Stoner, & Jovel, 2003; Pérez & McDonough, 2008).

The current study builds from these recent findings to explore the intergenerational transmission of resources as Hispanic youth go about preparing to fulfill their postsecondary ambitions. Unlike much of the college pathways research, which is often oriented toward differences between racial/ethnic groups, this study takes a quantitative approach with a critical eye (Carter & Hurtado, 2007). The research presented here focuses on the unique experiences of a specific group of Hispanic adolescents—those who leave high school planning to complete a bachelor's degree. Of particular interest is the possibility that parents of ambitious Hispanic youth may be challenged to guide their offspring in aligning high educational goals with an appropriate sequence of college-preparatory actions. Completing college-aligned actions appears to be a key mechanism for reducing gaps between college ambitions and enrollment (Stephan & Rosenbaum, 2013). At the same time, it has been well documented that parents of Hispanic youth may have limited access to social circles in which information and advice about college preparation and enrollment freely circulate (Gándara & Contreras, 2009; Gonzalez et al., 2003; O'Connor et al., 2010; Pérez & McDonough, 2008; Tienda, 2011).

The current study uses a national longitudinal data set and structural equation modeling (SEM) techniques to test the hypothesized associations among parent resources, aligned actions, and college enrollment. The following two research questions are pursued:

- **Research Question 1:** To what extent is the match between student college expectations and preparation, or aligned actions, in 2004 associated with college enrollment level in 2006 among Hispanic youth who were in the 10th grade in 2002?
- **Research Question 2:** How are parent resources associated with student college enrollment following high school, both directly and also indirectly *via* aligned actions?

The results indicate that the degree to which Hispanic students' college expectations are aligned with the completion of key college-going actions during high school is strongly associated with their later level of enrollment. However, the relationship between parent resources, including parent social capital, and aligned actions appears less straightforward. The next section offers a review of the literature in which the study is situated along with the theoretical framework that informs the research design. After a summary of the data and methods used, the results are presented and key findings are discussed.

Aligned Ambitions and Actions

Over a decade ago, Schneider and Stevenson (1999) wrote about an “ambitious generation” of youth, the vast majority of whom aspired to a college degree but were misguided about how to get there. These students were referred to as having misaligned ambitions. Students with poorly aligned ambitions may not have a complete understanding of the admission process.

Becoming college aligned, however, is not a simple process. While a large number of studies have attended to the formation of college expectations and students' ultimate enrollment decisions, fewer studies have carefully considered the elaborate maze of plans, decisions, and actions that make up the search phase of the college choice process (Klasik, 2012). Results from investigations that have focused on the steps students must take between expectations and enrollment demonstrate that students navigate the complex path between college aspirations and enrollment in a multitude of ways, not all of which lead bachelor's degree-seeking students to 4-year institutions.

Part of the gap between ambitions and outcomes arises because, to realize their goals, students who plan to complete a 4-year degree must engage in a particular series of actions at specific points in time. Berkner and Chavez (1997) narrowed these actions to a sequence of five essential steps required to master the process of college enrollment, particularly at 4-year institutions. These five steps are roughly aligned with Hossler and Gallagher's (1987) three-stage model—predisposition, search, and choice—of the college choice process. The first step involves the decision to pursue postsecondary education. Next, students must become academically qualified for college. As a third step, students need to complete either the SAT or ACT entrance examination. Fourth, students have to choose one or more institutions they wish to attend

and submit applications. Finally, they must gain acceptance and make the financial and other arrangements necessary to enroll.

Although the actions required to make one's way to college have been identified, the evidence suggests that information about this sequence of steps still remains out of reach for many students and families. Blocked access to complete information about various available college options, and the preparation each requires, appears to be especially acute among Latino students (Gándara & Contreras, 2009; Gonzalez et al., 2003; O'Connor et al., 2010; Pérez & McDonough, 2008). This information gap is concerning given that those students who have timely access to accurate information are better poised to align their plans and actions with their educational expectations.

Although not the only source of information and assistance for Hispanic youth as they navigate educational pathways, parents are a key source of college knowledge and guidance (Zarate & Fabienke, 2007). Schneider and colleagues (Kim & Schneider, 2005; Schneider & Stevenson, 1999) suggested that parent social capital may play an important role in the process by which ambitious youth become college aligned. Yet, given racial/ethnic stratification in access to the types of social networks in which college-relevant resources tend to be concentrated, Hispanic parents may be especially likely to encounter barriers as they seek information and advice about college preparation and enrollment. Limited access to college-relevant social capital may in turn inhibit their ability to fully maximize other kinds of resources, such as income and education, on behalf of their college-aspiring children (Tornatzky, Cutler, & Lee, 2002).

Parent Resources

Numerous studies have documented a positive relationship between family income and children's outcomes, including the number of applications submitted, enrollment in either a 2-year or 4-year institution, and number of years of schooling completed (Ellwood & Kane, 2000; Perna, 2006). An expansive body of literature has also provided evidence of the strong relationship between parents' education level and children's college enrollment and attainment (Cabrera & La Nasa, 2001). However, findings from a number of recent investigations offer evidence that the economic and human capital resources possessed by parents of Hispanic students may not operate in the same way as for other groups when it comes to college enrollment (Alon et al., 2010; O'Connor et al., 2010).

Moving beyond parents' human and economic capital resources, less is known about the quantity and quality of parents' formal and informal social ties relevant to the college preparation and enrollment processes. Enrolling in college and obtaining a degree are not simply the products of parents' income and education. Instead, the efficient exchange of money and information, according to social capital theory (Bourdieu, 1986; Coleman, 1988) also depends on the interpersonal ties and social structures that bind people together. One less tangible and often overlooked piece of the Hispanic college attainment puzzle is the role played by the different forms of household social resources available as youth navigate college preparation and enrollment (O'Connor et al., 2010; Pérez & McDonough, 2008; Perna, 2006; Stephan & Rosenbaum, 2013; Tienda, 2011).

Theoretical Framework

Social capital theory offers a useful lens through which to understand and explain access to college-relevant information among Hispanic students and parents (Cabrera et al., 2006; O'Connor et al., 2010; Perna, 2006; Rios-Aguilar & Deil-Amen, 2012). To make their way through the complicated process that involves selecting the right courses, preparing and submitting 4-year college applications, and arranging for financial aid, students must make plans and then act on those plans (Cabrera et al., 2006). Navigating this process successfully depends on key social resources, including college knowledge, assistance, and social support (Stephan & Rosenbaum, 2013).

A number of researchers have observed that a lack of college-relevant social resources can effectively serve as a roadblock on the pathway to college (Pérez & McDonough, 2008; Stephan & Rosenbaum, 2013). Moreover, the amount and quality of the information about college that Hispanic students have access to may influence their postsecondary behaviors more strongly than those of other students (O'Connor et al., 2010). Accordingly, the current research focuses on whether the intergenerational transmission of resources—including research exchanged via relationships among parents, their children, and high school personnel—may affect students' college preparation and enrollment decisions.

In this investigation, social capital refers to individuals' capacity to gain access to valuable resources by virtue of their membership in groups and participation in broader structures of society. This definition attempts to capture elements of both Coleman's and Bourdieu's work on social capital, given that both perspectives offer interpretive insight into the associations among parent resources, aligned actions, and college enrollment.

In his perspective on social capital, Coleman views parents' roles as predominant in promoting their children's status attainment and sees the family as a particularly important source of social capital. Of the three forms of social capital Coleman (1988) discussed, it is especially critical to focus on the availability of social capital in the form of information channels among Hispanic parents and youth, who may be less likely than other groups to have access to complete and accurate information about preparing for and entering college (Gándara & Contreras, 2009). Coleman (1988; Coleman & Hoffer, 1987) also emphasized intergenerational closure as a form of parental social capital beneficial to children. Intergenerational closure reflects the extent to which parents know and exchange information and resources with the parents of their children's friends.

More so than Coleman, Bourdieu's (1986) approach to social capital focuses on the restrictions on access to social capital imposed by structural barriers. For example, while it can sometimes be in the best interest of students and parents to seek college information beyond the family and community walls, structural barriers make Hispanic students less likely than their White and Black peers to seek information and assistance from school agents (Stanton-Salazar & Dornbusch, 1995).

Drawing on both social capital theory and the notion of aligned ambitions, this study hypothesizes that the extent to which Hispanic students match high educational

expectations with the completion of key college-going actions will be strongly related to their likelihood of 4-year college enrollment following high school. It is also hypothesized that at least some of the resources at parents' command will be weakly associated with the development of highly aligned actions among Hispanic adolescents. The latter hypothesis arises not from an "imagining" (Moll, 2000) that Hispanic youth and their families do not possess the characteristics needed to enroll in and succeed in college but from the recognition that Hispanic youth and parents are too often excluded from the social networks in which timely and accurate information about all aspects of college preparation and enrollment is embedded (Gándara & Contreras, 2009). In other words, reduced access to college-relevant social capital, or access to college knowledge and assistance via social ties, may make it more difficult for the parents of Hispanic adolescents to fully maximize other more tangible assets to the benefit of their college-aspiring children.

Method

Data Source and Participants

This research uses data from the *Educational Longitudinal Study of 2002 (ELS:2002; <http://nces.ed.gov/surveys/els2002/>)*, an integrated, multilevel study that involves multiple respondent populations including students, parents, teachers, and school personnel. Initial data from student sample members were collected during the base-year interview in the spring of 2002, when students were in 10th grade. The first follow-up interview was conducted in 2004, and the second follow-up interview occurred in 2006, when most participants were two years beyond high school graduation.

Drawing from the base-year panel of all 10th graders who also participated in the survey in both 2004 and 2006 ($n = 13,220$), the sample is narrowed to those students who reported Hispanic ethnicity ($n = 1,880$). The sample is further limited to students who, based on their high school transcript, had obtained a high school diploma or had completed an alternative credential within one year of expected high school completion and who, as 12th graders, reported plans to complete a bachelor's or advanced degree ($n = 1,020$). Students who expected some level of education less than a bachelor's degree are excluded because the goal is to understand the experiences of the specific group of Hispanic students who, upon the precipice of high school graduation, expected that they would complete a bachelor's or advanced degree.

Dependent variable. The key outcome of interest in this investigation is the level of college enrollment in 2006. This outcome, measured a year and half after expected high school graduation, is an ordered categorical observed variable reflecting whether a student was (a) not enrolled in any institution, (b) enrolled in a 1- or 2-year institution, or (c) enrolled in a 4-year institution.

Background variables. The literature on college choice has documented a number of individual characteristics that are associated with student college enrollment. Students

who maintain consistent bachelor's degree expectations over time may be more likely to pursue postsecondary education, particularly at a 4-year institution. In addition, students with better academic preparation prior to high school may be more likely to take higher level academic courses during high school. Whether a student attends a public or private high school may also influence his or her transition to higher education. Furthermore, female Hispanic students are less likely than their male counterparts to drop out of school and are more likely to have higher educational aspirations and to state that education is an important way in which to get ahead. Finally, national origin and English language usage may also be associated with college outcomes. To reduce the probability of unmeasured selection processes, a number of control covariates that could account for the influence of parent resources on both aligned actions and postsecondary outcomes are included in all models. These background variables include 10th-grade postsecondary expectations, prior academic achievement in the form of standardized test scores, gender, family structure, school control (public or private), national origin status, and first language learned at home.

Parent resources. A careful examination of theory and prior research informed the selection of indicators for three latent social capital constructs. To achieve domain specificity, the *ELS* data set was searched for items reflecting parents' relationships with school personnel and with their children that involved the exchange of college-relevant resources as well as items reflecting intergenerational closure. The three forms of parent social capital include the following:

- *College-Relevant School Social Capital* ($\rho = .85$)¹: A three-item construct including the frequency with which the parent contacts the school about the student's course selection, school program for the following year, and plans after high school.
- *College-Relevant Family Social Capital* ($\rho = .82$): A three-item construct including the frequency with which the parent provides the student with advice about selecting high school courses, about plans for taking college entrance exams, and about applying to college after high school.
- *Intergenerational Closure* ($\rho = .87$): A five-item construct including whether the parent reports knowing the mother and/or the father of the student's closest friend, how often students' friends' parents gave the parent advice about the school's courses or teachers, how often the parent received a favor from one of the student's friend's parents, and how often the parent has provided a favor to one of the student's friend's parents.

Economic capital is represented by an indicator of parents' income from all sources. This measure, taken during base-year data collection, was rescaled by National Center for Education Statistics (NCES) as a 13-level variable prior to data release. Human capital is represented by a single indicator of the highest level of education completed by either parent: no college experience, some college experience, or a bachelor's or advanced degree.

Measuring aligned actions. Berkner and Chavez (1997) outlined a set of five critical steps that are all but required for postsecondary enrollment, particularly at a 4-year college or university. The first step involves the decision to pursue postsecondary education. Next, students must become academically college qualified. As a third step, students need to complete either the SAT or ACT entrance examination. Fourth, students choose one or more institutions they wish to attend and submit applications. Finally, they must gain acceptance and make the financial and other arrangements necessary to enroll. Indicators of these steps were used to construct an aligned actions construct ($\rho = .84$) that is reflected by variables indicating whether the student is academically prepared, as measured by his or her cumulative high school grade point average (GPA) and the highest math course he or she has taken, whether the student has taken a college entrance exam, and whether the student has applied to one or more 4-year colleges. Data regarding students' actions are based on student reports, with cross-verification using institutional data.

Conceptual Framework and Statistical Analyses

The hypothesized associations among parent resources, aligned actions, and student college enrollment are tested using SEM techniques (Mplus statistical software; Muthén & Muthén, 2014). Largely a confirmatory technique, SEM consists of two parts, including (a) a measurement model in which confirmatory factor analysis is used to model associations between latent variables and their observed indicators, and (b) a structural model in which path analysis is used to account for relationships among both observed and latent endogenous and exogenous variables according to an a priori theoretical framework (Raykov & Marcoulides, 2006). The conceptual model below (Figure 1) depicts the hypothesized framework that is tested here. In Figure 1, ellipses depict latent measures whereas rectangles represent observed measures. Although several background covariates are used in the model estimation, for ease of readability, these associations are not depicted in Figure 1.

The robust weighted least squares (WLSMV) estimator is used in model estimation because almost all of the observed variables used in this research, including the outcome, are categorical in nature. The WLSMV estimator provides standard errors and a chi-square test statistic that are robust to nonnormality and nonindependence of observations and is an appropriate estimator when the dependent variable is categorical (Muthén & Muthén, 2014).

All models are assessed for fit to the data according to the chi-square statistic, the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). The chi-square statistic is the traditional method for evaluating model fit (Hu & Bentler, 1999), with good fitting models ideally yielding a nonsignificant result ($p \leq .05$). However, this test assumes multivariate normality and is very sensitive to sample size; departures from normality or sample sizes over 200 nearly always lead to model rejection, even when it is properly specified (Hu & Bentler, 1999). Therefore the CFI, which accounts for sample size, is also used to examine model fit. Values of the CFI can range from 0 to 1.0, and Hu and Bentler (1999) suggested that a CFI of at least 0.90 indicates a good fit between the model and the data. The RMSEA indicates how well the model

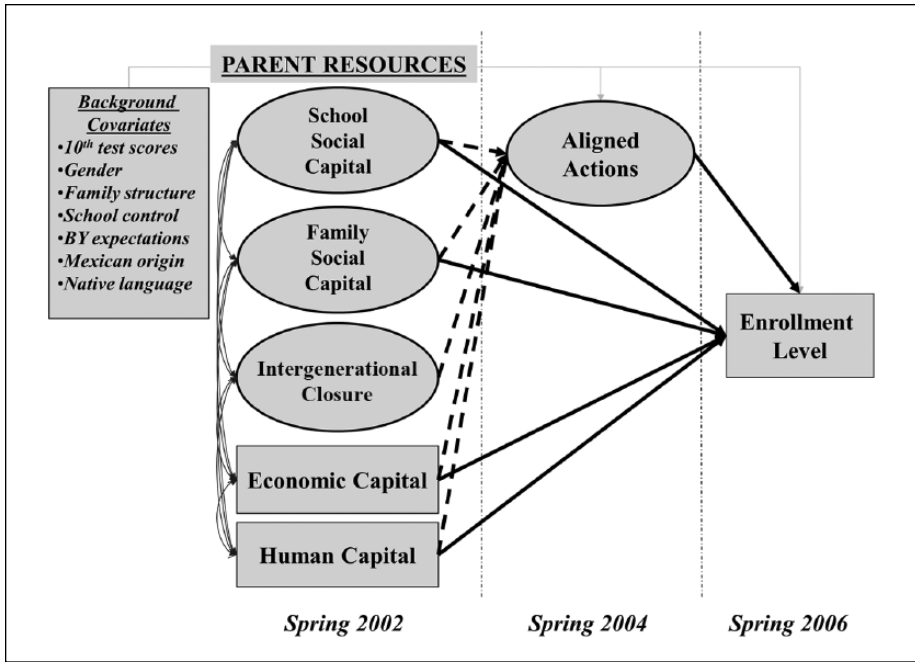


Figure 1. Conceptual model.

would fit the population covariance matrix given unknown but optimally chosen parameters and its suggested upper limit cutoff is .06 (Hu & Bentler, 1999).

Results

The results are presented in three main sections. First, the average characteristics of the sample are described, as reflected by the variables and constructs of interest in this investigation. Second, the specified associations among the latent constructs and their corresponding indicators are analyzed using confirmatory factor analysis. Finally, the hypothesized framework is tested by simultaneously estimating a series of regression equations.

Descriptive Findings

The results of the descriptive analyses are displayed in Table 1. The mean sample income for Hispanic families in 2001 was just over US\$30,000 (median ≈ US\$35,000) and the highest average level of education attained by either parent was some college. The fact that at least one parent of the typical sample member had some college experience indicates that the average student in the study sample was not a first-generation college student. Approximately half of the students in the sample were of Mexican

Table 1. Descriptive Statistics on Primary Study Measures ($n = 1,020$).

	M (SD)	Range	Factor loading
Parent resources			
Social capital			
College-relevant SSC			
How often parent contacts school about academic track (BYP53B)	1.42 (0.66)	1-4	.67
How often parent contacts school about course selection (BYP53C)	1.28 (0.55)	1-4	.88
How often parent contacts school about plans after HS (BYP53D)	1.25 (0.55)	1-4	.87
College-relevant FSC			
How often parent provides advice about course selection (BYP56A)	2.38 (0.68)	1-3	.75
How often parent provides advice about entrance exams (BYP56B)	2.19 (0.77)	1-3	.85
How often parent provides advice about applying to college (BYP56C)	2.21 (0.79)	1-3	.73
Intergenerational closure			
Knows mother of child's friend (BYP59DA)	0.81 (0.39)	0-1	.57
Knows father of child's friend (BYP59EA)	0.63 (0.48)	0-1	.33
How often another school parent gives advice about teachers/courses (BYP60A)	1.36 (0.70)	1-4	.71
How often parent receives a favor (BYP60B)	2.09 (1.13)	1-4	.72
How often parent provides a favor (BYP60C)	2.20 (1.13)	1-4	.67
Economic capital			
Income (BYINCOME)	8.63 (2.37)	1-13 ^a	
Human capital			
Education (FIPARED)	2.01 (0.81)	1-3	
Student characteristics			
Aligned actions			
High school GPA (FIRGPP2)	4.05 (1.37)	0-6	.81
Highest math course completed (FIHIMATH)	2.32 (0.75)	1-3	.73
Has taken a college entrance exam (F2PSEEXM)	0.73 (0.44)	0-1	.67
Number of 4-year schools applied to (F2NAPP2P)	1.54 (1.21)	0-3	.72
College enrollment			
Level of enrollment in 2006 (F2PS0601)	2.00 (0.85)	1-3	
Background covariates			
10th-grade expectations (BYSTEXP)	0.78 (0.41)	0-1	
Standardized test scores (BYTXCSTD)	49.74 (8.88)	20.91-81.04	
Gender (FISEX)	0.58 (0.49)	0-1	
Family structure (FIFCOMP)	0.40 (0.49)	0-1	
School control (BYSCTRL)	0.23 (0.42)	0-1	
National origin (BYHISP)	0.58 (0.49)	0-1	
Native language (BYSTLANG)	0.54 (0.50)	0-1	

Note. SSC = school social capital; HS = high school; FSC = Family Social Capital; GPA = grade point average; ELS:2002 = Educational Longitudinal Study of 2002.

^aThe ELS:2002 income levels range from (1) no income to (13) US\$200,001 or more.

origin and reported English as the language they first learned at home. Sixty percent of students in the sample lived with both parents and most (77%) attended a public high school. Almost 80% of sample members had bachelor's degree expectations while in 10th grade, suggesting that most of the students in the sample maintained high expectations over time. The average sample member had a high school GPA just under 3.0 and had passed Algebra II. Almost three quarters (73%) of the sample had taken a college entrance exam. The average student in the sample had applied to at least one 4-year college or university and was enrolled in a 1- or 2-year institution in 2006. Highlighting the importance of high expectations, among this sample of Hispanic students with bachelor's degree expectations in their senior year, 68% were enrolled in college in 2006, which is markedly higher than the 44% of all Hispanic students in the full *ELS* sample. Twenty-seven percent of Hispanic college attendees in the research sample were enrolled in a 1- or 2-year institution in 2006 and 41% were enrolled in a 4-year institution.

Confirmatory Factor Analysis

Confirmatory factor analysis was used to analyze the proposed measurement model specifying the associations among the three parent social capital constructs and the aligned actions construct and their corresponding observed indicators. Item descriptions and standardized factor loadings from the measurement model are provided in Table 1. The results of the confirmatory factor analysis indicated that the measurement model fit the data well, $\chi^2 = 103.48(82)$, $p = .05$, CFI = 0.99, RMSEA = .02.

Structural Equation Modeling

The series of regressions that made up the structural model hypothesized in this research used ordered probit regression because the outcome is an ordered categorical variable with three levels.² To assess the hypothesized associations among parent resources, aligned actions, and college enrollment, students' 2006 college enrollment level was regressed on aligned actions as well as parent resources both before and after accounting for background covariates (Models 1 and 2, respectively). In fitting both models, the "model indirect" command in Mplus was used to pursue the four-step process for investigating mediation outlined by Baron and Kenny (1986).³ Both of these models fit the data well and explained approximately 62% of the variability in college enrollment status. Table 2 provides the parameter estimates, along with standardized coefficients and significance tests, for the decomposition of the total effect of each parent resource on student college enrollment into its direct and indirect effects.

Strikingly, even after accounting for parent resources and background covariates, the association between a student's level of aligned actions and his or her level of college enrollment remained positive and highly significant, $t(177) = 12.15$, $p < .001$. In terms of the predicted probability of enrollment, the results suggest that for the average student in the sample, a one standard deviation unit increase in the level of aligned actions increases his or her predicted probability of 4-year enrollment from 27% to

Table 2. Decomposition of Total Effects of Parent Resources on College Enrollment via Aligned Actions (Standardized Path Coefficients; $n = 1,020$).

Variable	Direct effect		Indirect effect via aligned actions		Total effect	
	M1	M2	M1	M2	M1	M2
	β	β	β	β	β	β
Parent resources						
Social capital						
College-relevant SSC	-.02	-.04	.03	.08†	.00	.04
College-relevant FSC	-.03	-.03	.06	.03	.03	.00
Intergenerational closure	.04	.06	.13**	.03	.17**	.09
Economic capital						
Income	.01	.02	.12**	.02	.13**	.04
Human capital						
Education: BA or above	.09	.20	.38**	.09	.47***	.29**
Background covariates						
10th-grade expectations		-.21*		.48***		.27**
Test scores		-.06		.41***		.35***
Gender		-.09		.20***		.11
Family structure		-.02		-.19***		-.21*
School control		.04		.38***		.42***
National origin		.10		-.07		.02
Native language		-.19†		.05		-.14
χ^2					167.64(122) $p = .004$	240.98(199) $p = .001$
CFI					.99	.98
RMSEA					.02	.02
R^2					.62	.61

Note. M1 and M2 denote Models 1 and 2. CFI = comparative fit index; RMSEA = root mean square error of approximation.

†Significant at $p \leq .10$. *Significant at $p \leq .05$. **Significant at $p \leq .01$. ***Significant at $p \leq .001$.

76% while reducing the likelihood that the student will not enroll at all or will begin the pursuit of a bachelor's degree at a 1- or 2-year institution.

Before accounting for various background covariates known to influence student postsecondary outcomes, the results suggest that greater intergenerational closure and higher levels of parent income and education are strongly associated with college enrollment among Hispanic youth. However, after accounting for student background factors including college-going expectations while in 10th grade, prior achievement, family structure, and private school attendance, as well as national origin and language use, most kinds of parent capital were only weakly associated, directly or indirectly, with the outcome. One exception was parent human capital in the form of a bachelor's

or advanced degree, which had a significant, $t(177) = 2.24, p = .03$, total effect on college enrollment.

Limitations

Although the findings presented here add to the body of research that seeks to better understand how Hispanic youth and their families navigate college preparation and enrollment, it was not possible to account for all aspects of this process. With respect to the issue of generalizability, the reader is reminded that this research excludes students who did not expect to complete a bachelor's degree in their senior year of high school and/or who did not complete high school. Excluding such students allowed a closer examination of how alignment between students' expectations and actions may influence 4-year college enrollment among Hispanic youth. In addition, it is possible that there may be more nuanced patterns of college choice depending on students' national origin and nativity status. Finally, although this study carefully considers the role of certain parent and student characteristics during the process of college preparation and enrollment, it was not possible to account for all possible factors that may influence this process for Hispanic youth. For example, other research has suggested that financial factors as well as students' geographical contexts may have an especially strong influence on the college-going decisions of Hispanic youth (Nuñez & Kim, 2012; O'Connor et al., 2010). Despite these limitations, the findings from this research inform the existing knowledge base regarding Hispanic postsecondary access and offer directions for future research.

Discussion and Implications

When it comes to preparing for and enrolling in a 4-year college or university, few studies have simultaneously considered *both* expectations *and* the fulfillment of critical college prerequisites in the investigation of student college enrollment behavior. An even smaller number of studies have focused specifically on the intervening period between the formation of expectations and actual college enrollment among Hispanic youth. Therefore, perhaps the most important finding arising out of this investigation is that the level of aligned actions, in other words the degree of match between high expectations and college-going actions, seems to be a critical aspect of Hispanic 4-year college access. Illustrating the importance of aligned expectations and actions, separate analyses demonstrated that, among students at or above the sample mean on the aligned actions construct, 76% were enrolled in a 4-year college in 2006. Among students falling one standard deviation or more beyond the mean level of aligned actions, 94% were enrolled in a 4-year college.

But what are the factors that seem to promote higher levels of aligned actions among Hispanic youth? Prior to accounting for student background characteristics, the results indicated that several kinds of parent resources were strongly associated with aligned actions. Moreover, the significant positive associations shared between

intergenerational closure, income, and education, on one hand, and student college enrollment, on the other, appeared to be fully mediated by aligned actions. The inclusion of student background characteristics, however, altered the strength of the aforementioned relationships.

Many of the student characteristics included in this study were strongly associated with both aligned actions and college enrollment. Students who also held bachelor's degree expectations while in the 10th grade were significantly more likely to be enrolled in a 4-year institution in 2006 and this relationship was largely explained by the fact that these students were much more likely to engage in aligned actions. This finding is consistent with earlier research demonstrating that maintaining high expectations over time may be especially critical for Hispanic youth (Kao & Tienda, 1998). Students with higher standardized test scores and students who attended a private high school were also more likely to be enrolled at a higher level, again largely because they were more likely to demonstrate highly aligned actions. The finding that females demonstrated higher levels of aligned actions suggests that the documented higher rates of college participation among Latinas may occur in part through their greater likelihood to become college prepared (Saenz & Ponjuan, 2009). The finding that national origin and native language shared no discernible association with either outcome offers some evidence that differences in college-going rates among Hispanic students of different national origin or language background are partly explained by variability in parent resources and students' college goals and preparation.

Once accounting for these student attributes, the only parent resource that remained significantly associated with college enrollment was education in the form of a bachelor's degree. Intergenerational closure and parent income were no longer significantly associated with either aligned actions or college enrollment, perhaps suggesting that these resources may indirectly influence the development of aligned actions through an association with children's educational expectations, test scores, or school placement.

Social capital theory has been asserted as a valuable framework for explaining access to college among youth generally (Perna, 2006) as well as among Hispanic students specifically (Cabrera et al., 2006; O'Connor et al., 2010; Rios-Aguilar & Deil-Amen, 2012). However, the forms of parent social capital accounted for in this research were not strongly associated with higher levels of enrollment among Hispanic students after controlling for a number of student characteristics. Yet, the results hint at a potentially complex interplay among various parent resources and suggest that the forms of social capital drawn upon by Hispanic parents as their children prepare for college may often depend upon the availability of other resources. For example, only after accounting for student background characteristics did evidence of a moderate ($p = .09$) association between parent school social capital and aligned actions become apparent. Furthermore, additional analyses suggested a strong positive association between parent school social capital and student native language. The fact that the parent social capital–aligned actions relationship reached significance only after accounting for differences in home language use may reflect the difficulty that Hispanic

parents who do not speak English encounter as they attempt to communicate and establish relationships with school personnel.

Sensitivity analyses (available upon request) also indicated that intergenerational closure was significantly associated with 4-year college enrollment among students whose parents held a bachelor's degree, and, further, that this association was fully mediated by aligned actions. In contrast, among parents without a 4-year degree, higher levels of family social capital were associated with higher levels of enrollment, an association that also traveled through aligned actions.

In other words, the finding that many parent resources were only weakly predictive of aligned actions and college enrollment after accounting for student background factors should not be taken to indicate that parental involvement and support during the college choice process are not valuable resources for Hispanic youth. Parental support is an important predictor of academic achievement among Hispanic students (LeFevre & Shaw, 2012) and numerous scholars have documented the positive influence of family in the Hispanic college choice process (Pérez & McDonough, 2008; Yosso, 2005). It is likely that some of these parental assets exert their influence further upstream in the college choice process among Hispanic youth, for example, through the promotion of ambitious college expectations and early academic success. Moreover, sensitivity analyses conducted here suggest that parents of Hispanic youth may attempt to support their children as they navigate the path to college by strategically drawing on available resources in the absence of others. The presupposition in most college enrollment research is that most, if not all, parent resources are highly predictive of enrollment and, further, that parent resources work similarly across racial/ethnic groups. The findings encountered here, however, point to the need for research that more carefully explores variation *within* the Hispanic population due to the intersectionality of different forms of parent capital and the diversity of this population.

Finally, the results encountered here support the notion that although many Hispanic students have high academic expectations, many also face significant obstacles as they plan and prepare for college. Although all students in the study sample reported planning to complete a bachelor's or advanced degree on the eve of high school graduation, they did not all engage in actions that were aligned with this goal during high school. Some research suggests that this could be due in part to inadequate or inappropriate high school programs and school structures (Solórzano, 1992). Other researchers have also suggested that Hispanic students and parents may turn predominantly to friends and family for information about schooling because structural barriers at school often prevent them from establishing resourceful relationships with school personnel (Fann, Jarsky, & McDonough, 2009). Future research should more closely examine whether, how, and from whom Hispanic students and their families go about collecting information that can guide them in preparing to fulfill their educational ambitions. Equally important will be research that provides greater detail about how individuals and organizations within schools and communities can better assist Hispanic students in developing and capitalizing upon well-aligned ambitions and actions.

Concluding Remarks

When Hispanic students develop informed expectations regarding the future and then take key steps that match those expectations, they are well positioned to realize their educational goals. The critical nature of aligned actions is good news. Student engagement in college-aligned actions can be influenced through support within the family as well as through policies and practices within the school and the larger community.

Nonetheless, programmatic efforts aimed at boosting postsecondary access and retention among Hispanic youth have not made as big a difference as was hoped, in part, due to a knowledge gap about this specific population (Datnow, Solórzano, Watford, & Park, 2010). The findings from the current study suggest that continued efforts to better understand how Hispanic students develop and act upon expectations for the future, including how these students and their families are granted access to the kinds of resources that can help students realize their ambitions, will be imperative to piecing together the complex Hispanic college puzzle.

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Notes

1. The reliability coefficient, ρ , does not assume tau-equivalence of latent factor indicators, which is an advantage with categorical data (Raykov, 2001).
2. For the ordered probit model to be appropriate, the assumed ordering of the outcome must be realistic; this is referred to as the assumption of parallel slopes. The Mplus software does not offer a direct test of parallel slopes, but the developers suggest comparing results from the analytic model with those from models in which outcome is dichotomized. The current results were compared with results from two other models. In the first, the outcome

was coded to reflect whether or not a student was enrolled in a 4-year institution; in the second, the outcome reflected whether or not a student was enrolled in any institution. Parameter estimates were similar in sign and significance across models.

3. First, variation in parent resources should share a significant association with variation in enrollment. Second, variation in parent resources must significantly account for variation in aligned ambitions. Third, variation in aligned ambitions must significantly account for variation in enrollment, controlling for parent resources. Last, when the impact of parent resources on aligned ambitions and the impact of aligned ambitions on enrollment are accounted for, any previously significant associations between parent resources and enrollment must be reduced—in the instance of full mediation to insignificance (Baron & Kenny, 1986). Results from the separate models are available upon request.

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