The Role of Familism in Explaining the Hispanic-White College Application Gap

Matthew Desmond, University of Wisconsin–Madison Ruth N. López Turley, University of Wisconsin–Madison

Compared to other ethnic and racial groups, Hispanic youth are worse off in every available measure of educational achievement and attainment at the primary, secondary, and postsecondary levels. Using data from the Texas Higher Education Opportunity Project, we explore the degree to which students' preferences to stay home for college can help explain the low college application rates of Hispanic students. Among high school seniors, we find that (1) Hispanics are the most likely to report it is important to live at home during college, even those with college-educated parents; (2) net of other factors, students who indicate it is important to stay home are significantly less likely to apply to college, especially to selective institutions; and (3) taking account of the preference to stay home significantly reduces the Hispanic-white gap in applying to any college and a four-year college, and it makes the gap in applying to a selective college disappear. Keywords: familism, education, college application, racial inequality, Hispanics.

It is well-established that Hispanic youth, who make up no less than one-fifth of U.S. public school students (U.S. Census Bureau 2002), are worse off in every available measure of educational achievement and attainment at the primary, secondary, and postsecondary levels, and that their access to and attendance at institutions of higher education remains, as it did nearly 40 years ago (Astin 1982), the lowest in the country vis-à-vis non-Hispanic whites, blacks, and Asians.

In a nation where individuals can be more or less confident that their economic prosperity, familial stability, and physical vitality will increase with educational attainment, Hispanic students have the lowest educational aspirations and expectations of all major racial and ethnic groups. Unlike other racial and ethnic groups, the *majority* of Hispanics do not graduate from high school (Chapa and De La Rosa 2004). Non-Hispanic white, black, and Asian high school seniors are far more likely to submit college applications than Hispanic seniors. (Henceforth, we use simply "white" and "black" to refer to non-Hispanic whites and blacks.) According to one study, only 47 percent of surveyed Hispanic seniors submitted an application, and a quarter of those, a group that included many high-achieving students, applied to only one college (Hurtado et al. 1997). Only 22 percent of Hispanics between the ages of 18 and 24 enrolled in a postsecondary institution in 2000, compared to 39 percent of whites and 31 percent of blacks in this age bracket (National Center for Education Statistics 2003). Most Hispanics who enroll in postsecondary institutions attend community and two-year colleges

This research uses data from the Texas Higher Education Opportunity Project (THEOP) and acknowledges the following agencies that made THEOP data available through grants and support: Ford Foundation, The Andrew W. Mellon Foundation, The William and Flora Hewlett Foundation, The Spencer Foundation, National Science Foundation (NSF Grant # SES-0350990), The National Institute of Child Health and Human Development (NICHD Grant # R24 H0047879), and The Office of Population Research at Princeton University. The authors thank Marta Tienda, Thurston Domina, John Levi Martin, Steven Alvarado, and four anonymous reviewers for their stimulating comments. Direct correspondence to: Matthew Desmond, 8128 William H. Sewell Social Sciences Building, 1180 Observatory Drive, Madison, WI 53706–1393. E-mail: mdesmond@ssc.wisc.edu.

Social Problems, Vol. 56, Issue 2, pp. 311–334, ISSN 0037-7791, electronic ISSN 1533-8533. © 2009 by Society for the Study of Social Problems, Inc. All rights reserved. Please direct all requests for permission to photocopy or reproduce article content through the University of California Press's Rights and Permissions website at www.ucpressjournals.com/reprintinfo/asp. DOI: 10.1525/sp.2009.56.2.311.

(Chapa and De La Rosa 2004), institutions that do far less than selective four-year universities to equip students with the skills, network ties, and pedigrees necessary to compete in a swelling knowledge economy. Hispanic students who attend four-year universities are less likely to attend prestigious institutions, relative to Asian and white students (Karen 2002); and those select few who enroll in four-year universities are more likely to drop out after their first year, with an attrition rate of 34 percent, a rate that far outpaces that of blacks (29 percent), whites (25 percent), and Asians (14 percent) (Peng 1988).

College completion rates show equally alarming patterns. In 1980, only 8 percent of college graduates were Hispanic, and that percentage rose a mere two points in 2000, a paltry increase given the rapid demographic growth of Hispanic youth over the last two decades (Tienda and Mitchell 2006). According to the National Center for Education Statistics (2003), the proportion of Hispanic students graduating from college has not increased since 1990, despite the growth of Hispanics within the United States, and, compared to Hispanics, whites are over three times, and blacks are nearly two times, as likely to complete college. By one estimate, while 49 percent of Asians, 30 percent of whites, and 16 percent of blacks enrolled in kindergarten today will grow up to earn a bachelor's degree, only 6 percent of Hispanics will obtain the same level of schooling (Williams 2003). All the evidence yields the conclusion that Hispanic students seem to be falling through the cracks even as they are rising, *en masse*, at a population pace that is fundamentally altering the American landscape.

Divergent Explanations and their Shortcomings

Researchers attempting to account for Hispanics' low rates of educational achievement and attainment have advanced at least three types of complementary explanations based on (1) socioeconomic status and parental education, (2) inadequate schools and teachers, and (3) the experiences faced by recent immigrants. We briefly take up these explanations in turn.

Socioeconomic Status and Parental Education

When calculating racial and ethnic gaps in achievement and enrollment, socioeconomic status and parental education are regarded widely as the most powerful predictors (Kao and Thompson 2003). An examination of individual income estimates from 2006 reveals that, while whites on average made \$38,253 a year, Asians \$40,511 a year, and blacks \$26,919, Hispanics made only \$25,674 a year. According to this estimate, Hispanics earned roughly 33 percent less than whites in 2006. Some estimates place the percentage even lower, finding that Hispanics earn a full 55 percent less. Recent research approximates that one in five Hispanics lives below the poverty line (Tienda and Mitchell 2006), a grim economic condition that severely limits the resources available to Hispanic children.

It is not surprising, then, that dozens of researchers have found that Hispanic students' educational achievement increases when their parents' socioeconomic status improves (Bradley and Corwyn 2002; Brooks-Gunn and Duncan 1997; Vernez and Abrahamse 1996). Parental education levels are a particularly important component of socioeconomic status; in some analyses, their effect on college aspirations is equal to (and sometimes greater than) that of family income (cf. Bohon, Johnson, and Gorman 2006). Not surprisingly, researchers have found that parental education explains a significant portion of the low levels of Hispanic educational performance (Chapa and Valencia 1993; Rodriguez and Morrobel 2004). Relative to other racial and ethnic groups, Hispanic parents have particularly low levels of educational attainment, with Mexican Americans having the lowest levels (National Center for Education Statistics 2003; Zambrana 1995).

Nevertheless, the low aspirations and expectations of Hispanic students seem to persist even after controlling for socioeconomic status. And although a monotonic rise in educational ambition has been documented among white students for each increasing interval of parental education, the same cannot be said for Hispanic students. Indeed, at least one study has found that "aspirations and expectations among Latino adolescents are not as sensitive to changes in the levels of parental education as non-Latino whites are" (Bohon et al. 2006:222). Moreover, as network analysts long have argued, socioeconomic status manifests itself through students' access to information only available through social ties (Kerckhoff and Campbell 1977; Stanton-Salazar and Dornbusch 1995). Conventional status attainment models that do not take into account the ways in which socioeconomic status is transferred to students through multiple social networks fail to grasp the important interconnection between human capital and social capital that James Coleman (1988) articulated so forcefully.

Inadequate Schools and Teachers

Pointing to the fact that Hispanic students are more segregated in the educational realm than whites, blacks, or Asians, some analysts have attributed low levels of Hispanic achievement and attainment to poor schools and unqualified teachers. High levels of school segregation are negatively correlated with college enrollment and completion (Orfield and Yun 1999). In Texas, Hispanic students attending public schools are more likely to be taught by uncertified teachers than their white counterparts, and they are more likely to drop out relative to other students (Haney 2000; Valencia 2000). Some researchers, however, have cast doubt on the importance of deficient schools and teachers, claiming that, on average, individual performance is affected only marginally by school quality, if at all (Arum 2000). And at least one researcher has argued that Hispanic students in segregated schools, especially those employing minority teachers, are more receptive to schooling than their peers in more integrated schools (Goldsmith 2004).

The Struggles of Immigrants

Immigrants and children of immigrants comprise roughly half of the entire population of Hispanic youth (Kao and Thompson 2003), and Hispanic immigrants—foreign-born Mexican women, in particular—have exceptionally low levels of educational attainment (Portes and Rumbaut 1996). As such, some researchers have accounted for educational inequalities affecting Hispanic students by pointing to the unique struggles facing recent immigrants. Yet this strand of literature is full of contradictory findings. Some have found that Spanish use at home is associated with low aspirations and expectations (e.g., Valdes 2001), while others have found that students benefit greatly from bilingualism (e.g., Bohon et al. 2006). Moreover, while some claim that first-generation Hispanic students fare worse than second- or third-generation students (White and Glick 2000; White and Kaufman 1997) and that they have lower levels of attainment than native-born Hispanics (Tienda and Mitchell 2006; Wojtkiewicz and Donato 1995), others have put forth opposite observations, finding that, compared to first-generation Hispanic students, second-generation students have lower levels of achievement (Driscoll 1999; Hirschman 2001; Rumbaut 1996) and less ambitious educational aspirations (Kao and Tienda 1995; Suarez-Orozco and Suarez-Orozco 1995).

That socioeconomic status, parental education, school quality, and immigrant status are important predictors of Hispanic educational performance and completion, few would deny. Even taken together, however, these explanations cannot fully account for Hispanic underachievement (Kao and Thompson 2003; Ream 2005). Another kind of explanation investigates how familism affects educational outcomes. This approach is attractive for our purposes not only because it incorporates the three aforementioned explanations within a relational framework but also because numerous studies have concluded that familism is especially pronounced in Hispanic culture—and that it may both help and hinder Hispanics in school.

Hispanic Familism

Familism can be defined as a social pattern whereby individual interests, decisions, and actions are conditioned by a network of relatives thought in many ways to take priority over the individual. This social pattern manifests itself through three dimensions: (1) the attitudinal, expressed in dispositions, values, and beliefs that prioritize the welfare of the family; (2) the behavioral, expressed in everyday actions, or major decisions, informed by one's attachment to family ties; and (3) the structural, expressed in the spatial architecture of family networks (Steidel and Contreras 2003; Valenzuela and Dornbusch 1994). Researchers from several disciplines have observed that familism is an important component of Hispanic culture (Okagaki and Frensch 1998; Oyserman, Coon, and Kemmelmeier 2002). At the attitudinal level, Hispanic adults and adolescents value interdependence, as well as family support and obligations, more so than whites (Fuligni, Tseng, and Lam 1999; Harrison et al. 1990; Sabogal et al. 1987). At the behavioral level, Hispanics report higher degrees of familial cohesion and intimacy than whites (Niemann, Romero, and Arbona 2000; Sabogal et al. 1987) and assist family members in instrumental ways more so than whites (Sarkisian, Gerena, and Gerstel 2006). And at the structural level, Hispanics, and Mexican Americans in particular, live in larger and denser kinship networks than whites (Sarkisian et al. 2006; Valenzuela and Dornbusch 1994).

It is no wonder, then, that researchers have explored how Hispanic familism affects educational outcomes. By and large, they have discovered that Hispanic youth greatly benefit from extended family ties. Psychologists have found that familism produces positive psychological effects (Fuligni et al. 1999; Suarez-Orozco and Suarez-Orozco 1995), while educational scholars argue that familism can mitigate the negative experiences associated with minority status (Zhou and Bankston 1998). High academic performance of Mexican American students has been linked to social capital provided by family and peer networks (Ream 2005; Stanton-Salazar and Dornbusch 1995). Some have found that, while whites gain nothing from familism when it comes to achievement, Hispanics gain much, on the condition that their parents have at least 12 years of schooling (Valenzuela and Dornbusch 1994). Others have cited a positive association between familism and students' aspirations and expectations (Pribesh and Downey 1999; Quian and Blair 1999; Smith-Maddox 1999), and one study suggested that extended family ties help Hispanic students make informed educational decisions (Valadez 2002).

While most have focused on the overwhelmingly positive effects of Hispanic familism on educational outcomes, some researchers have documented negative effects (Niemann et al. 2000; Portes and Landolt 1996; Ream 2003). Alejandro Portes (1998) pointed out that families with dense network ties, comprised of kin who often place weighty demands on their talented and privileged members and who value group conformity, can stifle high-achievers' motivation and ambition. Indeed, some researchers have attributed the poor performance of Hispanic students to the unique demands and restrictions placed on them by their parents (Brooks-Gunn and Markman 2005). Noting that intelligence is a culturally-conditioned entity (Sternberg 1985), some have found that Hispanic parents value the noncognitive and social aspects of intelligence as much as the cognitive and individualistic aspects, a precedence that might result in Hispanic youth underperforming in (cognitive and individualistic) educational evaluations (Okagaki and Sternberg 1993).

Familistic networks comprised mainly of immigrants may be accompanied by their own set of disadvantages. Among those of Mexican descent, immigrant parents tend to favor conformism, while native-born parents value autonomy; the former trait is correlated with low educational achievement (Okagaki and Sternberg 1993). Rubén Rumbaut (1977) found strong bonds of familistic solidarity to be associated with weak test scores and grades. Alternatively, immigrant students and children of immigrants may take advantage of resources located in intergenerational network relations more readily than their third-generation counterparts, who tend to be more peer-oriented (Kao 1999; Zhou 1997). The peer networks in which Hispanic students are embedded, some contend, discourage educational success. For example, 22 percent of Hispanic

students polled in a recent study claimed that "my friends make fun of people who try to do well in school," while only 13 percent of whites reported likewise (Ferguson 2002).

Currently, there is not enough evidence to conclude precisely how familism affects Hispanic students' performance and attainment; however, there is certainly enough evidence to conclude that this topic deserves further investigation. Exploring college application patterns provides an especially fruitful opportunity to understand how familism might serve or disserve Hispanic students. During this critical juncture, students must decide if and where they will apply to college, and, for many, going to college requires leaving home, severing oneself from familistic support networks. A tension thus presents itself, as students are pulled in two competing directions: One impulse encourages students to cultivate themselves, to leave home if the best education requires it so, while another impulse encourages them to stay put, to uphold familistic ties that have played such an important role in establishing their identity and, perhaps, their academic success thus far. If one of the most important components of familism is the subordination of the self to the family (Steidel and Contreras 2003), then students with durable and deep family ties exploring the possibility of higher education might be reluctant to remove themselves from such networks. For these students, assuming they have the ability, track record, and drive to attend college, the question is not so much "Where should I apply?" but "Do I want to leave home?"

Living at Home during College

Of course, there is a middle ground: Students may choose to live at home while attending college. For many students and their parents, the ability to attend a college or university while living at home is an important factor in selecting a postsecondary institution. In fact, 54 percent of parents of high school seniors in 1992 felt that it was important for their children to live at home during college, and 76 percent of those students agreed with their parents (Turley 2006). Even those living in rural areas, where postsecondary institutions are scarce, want to stay close to home. One survey found that nearly 75 percent of high school seniors living in rural Iowa communities believed it was very important to live near their parents (Johnson, Elder, and Stern 2005). Indeed, the chances a student will apply to a college increase as her household's distance from that college decreases (Weiler 1994). In addition, the likelihood of leaving home for college is higher for those whose parents' income is higher (Mulder and Clark 2002). Because living at home during college offers students a way to remain embedded in family networks while defraying a significant amount of college expenses (e.g., rent, food, start-up costs, out-of-state tuition), we have strong reason to expect this option to be quite attractive for Hispanic students.

Living at home during college, however, may result in negative consequences regarding students' educational attainment. First, familistic obligations might narrow students' postsecondary opportunities, resulting in many colleges and universities being tossed aside as "discarded possibles," to borrow an expression from Pierre Bourdieu (1998). Such self-imposed restrictions, conditioned by family relations, could force students to attend mediocre institutions close to home rather than top-notch institutions further away—or, worse, they could discourage students from applying to college at all (Portes 1998; Turley 2006; Wellman 1983). Indeed, young adults who leave home to attend school obtain higher levels of educational attainment than those who stay home (Bozick 2007; White and Lacy 1997). Second, while living away from home during college cultivates students' independence and establishes bonds of mutual respect between parents and children (Flanagan, Schulenberg, and Fuligni 1993), living at home during college often whittles away students' aspirations (Dubas and Petersen 1996). Finally, a surfeit of responsibilities confronts students who live at home (e.g., caring for younger siblings, elderly parents, grandparents, or other relatives), obligations that may distract them from their studies.

For all these reasons, investigating if, and to what degree, Hispanics find it important to live at home during college, and the consequences of this decision on educational outcomes, might help us better grasp their desperately low levels of college attendance. Our goals are twofold: (1) to examine racial and ethnic differences in college application patterns (specifically, if students applied to any college, a four-year college, and a selective college) and (2) to analyze the extent to which, net of other factors, these differences can be explained by students' preference to live at home during college. In doing so, we hope to concentrate on a dimension of educational stratification rarely emphasized in the literature (college application patterns), traverse the black-white binary that continues to saturate most work on educational stratification, and highlight a unique mechanism, that of familism, that may help to explain why Hispanic youth lag so far behind other racial and ethnic groups in virtually every measure of educational success.

Data and Methods

This study draws on data from the Texas Higher Education Opportunity Project (THEOP) (Office of Population Research 2002). The sample is comprised of 13,803 seniors who attended 96 Texas public high schools in the spring of 2002, selected through stratified random sampling. All public high schools in Texas were included in the sampling frame except charter schools, special education schools, and schools with fewer than ten seniors. Our study focuses on Hispanic seniors, who make up 36 percent of the sample—a proportion almost as large as whites, who make up 42 percent of this sample. All students were surveyed during their last semester in high school, a time when post-graduation plans, for most, should have been solidified. Data were collected through self-administered surveys, which, for the most part, were completed during class time (a small number of surveys were mailed to students).

We focus on the preference to live at home during college and its influence on college application patterns. Students were asked whether they had applied to college and to indicate the colleges to which they had applied. Our main dependent variables are whether they had applied to (1) at least one college of any type, (2) at least one four-year college, and (3) at least one selective college. We defined students as having applied to a selective college if they had applied to at least one school categorized as either more selective or most selective, according to the *U.S. News and World Report*, which groups schools into five categories: least selective, less selective, selective, more selective, and most selective. The *U.S. News and World Report* ranks institutions based on 15 indicators, including peer assessment surveys, retention and graduation rates, faculty resources, student academic performance before college, alumni gifts, and financial resources. While many have criticized this ranking system, there is little doubt that it significantly influences how students view prospective institutions (Chang and Osborn 2005).

Our measure of the importance of living at home during college is based on the question, "In choosing a college or university to attend, how important to you are/were each of the following? . . . Ability to attend school while living at home." Approximately 59 percent of the students responded that the ability to attend school while living at home was somewhat or very important (these two categories, which yielded similar results in terms of college application, were collapsed in order to obtain a more equal distribution). Students who indicated that they did not aspire or expect to continue their education beyond high school (about 6 percent of the sample) were not asked about college applications or their preference to live at home during college, and about 50 percent of students who did not aspire or expect to continue their education were Hispanic. (Although it may seem unusual that only 6 percent of the sample had no college plans, bear in mind that our sample is comprised of second term high school seniors, staring down graduation. Many students who did not intend to continue their education dropped out before this time and, therefore, were excluded from our sample. A good number of students, however, aspired to college but had not yet submitted an

application.) Because this study is based only on students who expect to continue their education, our findings may be somewhat conservative as students not expecting to go to college systematically are excluded and a higher proportion of those excluded are Hispanic (who are much more likely to state that living at home during college is important). This means that it is quite likely that our analyses underestimate the Hispanic-white gap in college application, as well as the effect of students' desire to stay home for college. Furthermore, colleges that do not require advance application, which tend to be unselective, may have been excluded if students had not applied by the second term of their senior year.

We also control for ascribed characteristics such as gender, race/ethnicity, and immigrant status. Race/ethnicity was based on four categories: (1) non-Hispanic white (reference category), (2) non-Hispanic black, (3) Hispanic (Mexican/Mexican American and other Hispanic), and (4) other, which includes Asian and Native American students. Eighty-four percent of the Hispanics in our sample identified as "Mexican/Mexican American," although this sizeable percentage is underestimated, as a non-negligible number of those who could be categorized as "Mexican/Mexican American" instead listed a different ethnic label, such as "Mexicano," or "Mexican Azteca," or they listed a specific city or state in Mexico. The remaining 16 percent of Hispanics identified with several other Hispanic subgroups, rendering these subgroups too small for separate analyses. Those who have analyzed intra-ethnic differentiation within the Hispanic population have concluded that by and large Mexican Americans are the most disadvantaged subgroup, scoring lower on standardized tests and other measures of achievement (Crosnoe 2005; Portes and Rumbaut 2001), possessing lower educational aspirations and expectations (Bohon et al. 2006), and completing college at lower rates than other Hispanic subgroups (Chapa and Valencia 1993; Vernez and Mizell 2002). Although our analyses group all Hispanics together, we emphasize that our results are most applicable to students of Mexican descent.

If students were not born in the United States, they were asked about the age at which they arrived in the country. Those who arrived at age 12 or older were categorized as first-generation immigrants, and those who arrived prior to age 12 were categorized as 1.5-generation immigrants (cf. Rumbaut 2004), both of which were compared to native-born students (our reference category). Unfortunately, we lack information on where students' parents were born and thus are unable to identify second-generation students. However, previous research suggests that 1.5-generation and native-born, second-generation students are remarkably similar with respect to educational indicators (Boyd 2002). That being the case, we expect the differences between native-born respondents (including second-generation students) and 1.5-generation immigrants to be appreciably smaller than those between native-born respondents and first-generation immigrants.

We also take into account family structure and parents' socioeconomic status (SES). Family structure is comprised of three measures: (1) whether the students have two parents in the household, including stepparents, foster parents, and guardians; (2) whether they have siblings in the household, including step-siblings and half-siblings; and (3) whether they have other relatives in the household, including grandparents, other children, and other adults. Although SES typically is measured by education, income, and/or occupation, student-reported

data must collect SES data by alternative means. Because adolescents tend to report inaccurate estimates of their parents' income, respondents instead were asked to report their parents' occupations. However, this (open-ended) question yielded equally unhelpful data, as 38 percent of students left their father's occupation blank, while a full 45 percent failed to report their mother's occupation. Of the students who did report their parents' occupations, many listed uninformative answers (e.g., "owner," "self employed," "none of your business"). Add to these complications the fact that indexes of occupational socioeconomic status have been called scientifically obsolete, especially for women, since many occupations do not correspond to the typical relationships among prestige, education, and earnings (Hauser and Warren 1997). For these reasons, we do not use occupation but parents' education (whether parents completed a four-year degree, based on the highest level completed by either parent or guardian), together with home ownership, as a measure of SES. We enrich this measure by including school-level SES variables: the percentage of students within each school receiving free or reduced-price lunch, as well as the percentage of students who plan to go to college. We also include several measures of school racial/ethnic composition, including the percentage of students enrolled in their schools who are white, black, Asian American, and Hispanic. All of these school-level measures were obtained from school administrative records and, as such, are based on all the students in the schools, not just those in our sample.

We also account for the number of colleges in proximity to each student's high school. Using THEOP restricted data to obtain high school zip codes, and data from the Integrated Postsecondary Education Data System (IPEDS) (National Center for Education Statistics 2002) to obtain college zip codes, we employed a customized software program to calculate the number of colleges (by type) within commuting distance of each student's high school. The estimate of a typical college commuting distance was based on the median mileage between home and the first choice college of a national sample of students who claimed that living at home during college was important (obtained from the National Education Longitudinal Survey of 1988 [NELS] [National Center for Education Statistics 1992; Turley 2009]). Based on this estimate, a college was deemed proximate to a student's home if it was located within a 24-mile radius of those living in rural or suburban areas and within a 12-mile radius of those living in urban areas. Although we were able to estimate the number of total colleges and the number of four-year colleges in proximity, we were not able to estimate the number of selective colleges in proximity because the college selectivity measure in our student data (based on U.S. News and World Report) did not correspond with the college selectivity measures in IPEDS data (which include admission rates and average SAT/ACT scores but not *U.S. News and World Report* rankings). As a result, for applying to a selective college, we use the number of four-year colleges in proximity.

Some of the variables in our analyses contain a significant amount of missing data (see Table 1). For example, two of the three dependent variables (applied to a four-year college and applied to a selective college) have higher levels of missing data because they require more information from the students. Each student was asked whether he/she had a first through fifth college preference choice and, if so, to report each college's name and state and to indicate whether he/she had applied to each school. For the first dependent variable (applied to any college), it was necessary only to know whether students had applied to any of their choices. But the other two dependent variables required obtaining the schools' names, which enabled us to determine whether they were four-year or selective colleges. Because far fewer students filled in the names of the colleges to which they had applied than indicated that they had applied to any college, our second and third dependent variables have much more missing data than our first.

As a result, missing values were estimated using multiple imputation (executed by NORM software [Schafer 1999], which is appropriate for both categorical and continuous variables). Multiple imputation aims to preserve the characteristics of the data set as a whole (including dependent variables), rather than the attributes of specific variables, and is appropriate for addressing data missing randomly and nonrandomly (Schafer and Graham 2002). Five equally plausible complete data sets were constructed through information obtained from the

Table 1 • Summary Statistics

	MI Com	bined D	ata Sets ^a	Single Data Set							
		ll Studer [= 13,80		Whites (n = 5,959)		Blacks (n = 1,789)		Hispanics (n = 4,977)			
	% Imputed	Mean	Std Errb	Mean	Std Dev°	Mean	Std Dev ^c	Mean	Std Dev		
Outcomes											
Applied to any college	9.91	.62	.00	.66		.70		.54			
Applied to 4yr college	34.90	.51	.00	.55		.56		.42			
Applied to selective college	42.90	.24	.00	.31		.19		.14			
Student-level predictors											
White (ref)	12.45	.42	.00								
Hispanic	12.45	.36	.00								
Black	12.45	.13	.00								
Other	12.45	.09	.00								
Class rank	3.99	67.00	.21	70.72	23.42	62.15	23.58	62.99	24.95		
General curriculum track	13.37	.30	.00	.31		.28		.30			
(ref)	12.25		0.1	- 1				5.0			
College prep track	13.37	.57	.01	.54		.64		.59			
Distinguished achievement track	13.37	.13	.00	.15		.08		.11			
GPA	2.47	3.11	.01	3.24	.64	2.95	.59	2.98	.60		
Female	12.70	.53	.00	.53		.56		.52			
U.Sborn (ref)	13.66	.88	.00	.97		.94		.82			
Foreign-born (arrival age <12)	13.66	.09	.00	.02		.05		.14			
Foreign-born (arrival age 12+)	13.66	.03	.00	.01		.01		.04			
Two parents in hhld	13.26	.72	.00	.76		.53		.73			
Siblings in hhld	13.26	.72	.00	.67		.67		.78			
Other relatives in hhld	13.26	.15	.00	.09		.20		.21			
Parents college grads	19.60	.22	.00	.29		.22		.12			
Parents own home	17.18	.81	.00	.88		.61		.81			
Staying home important	15.19	.59	.00	.46		.58		.74			
Staying home × parents col grads	25.36	.10	.00	.11		.12		.08			
Staying home × Hispanic	19.11	.27	.00	.00		.00		.74			
Hispanic × parents col grads	21.07	.04	.00	.00		.00		.12			
Staying home ×	26.31	.03	.00	.00		.00		.08			
Hisp \times col grads	20.51	.05		.00		.00		.00			
School-level predictors											
% economically	.00	34.29	n/a	21.41	15.65	36.71	19 76	51.34	23.66		
disadvantaged	.00	71.27	117 Ct	21.11	17.07	50.71	17.70	71.71	25.00		
% planning to go to	.00	75.31	n/a	76.96	19.96	76.32	19.84	72.35	20.66		
college			,								
% white enrollment	.00	42.87	n/a	62.84	21.06	32.11	27.78		24.97		
% black enrollment	.00	13.87	n/a	11.80	10.55	31.18	23.83	9.47	14.11		
% Asian Am enrollment	.00	3.84	n/a	3.82	5.21	4.82	6.58	2.30	4.75		
% Hispanic enrollment	.00	38.20	n/a	19.78	18.51	30.55	24.73		32.06		
Total colleges in proximity	.42	9.50	.03	6.64	6.78	15.51	11.29	10.20	11.29		
4yr colleges in proximity	.42	2.92	.01	2.05	2.61	5.01	3.91	2.93	3.75		

Source: Texas Higher Education Opportunity Project (THEOP) Senior Cohort Wave 1 (Office of Population Research 2002).

 $[^]a Missing \ values \ were \ imputed \ using \ multiple \ imputation; \ five \ data \ sets \ were \ combined \ using \ Rubin's \ rule \ of \ combination.$

^bStandard errors are not applicable for variables with no missing data.

^cStandard deviations reported for continuous variables only.

observed data (from a total of 1,000 iterations), as accurate results typically can be obtained from five to ten imputations (Schafer 1999). All statistical analyses were repeated on each of these data sets, producing five sets of results, which were combined to produce one set of estimates and standard errors that incorporate missing data uncertainty, using Rubin's rule of combination (Rubin 1987).

In what follows, we examine differences between whites, blacks, and Hispanics with respect to college application. We begin by comparing the importance of living at home during college by race/ethnicity and other factors. We then examine the association between the preference to live at home and college application. Finally, using hierarchical linear modeling (HLM) software, we use multilevel models with student- and school-level variables to predict the probability of applying to any college, a four-year college, and a selective college. The models are summarized below.

Level 1:

$$Y_{ij} = \beta_{0j} + \sum_{q=1}^{Q} \beta_{qj} X_{qij} - \overline{X_{q \cdot j}} + r_{ij}$$

Level 2:

$$\beta_{qj} = \gamma_{q0} + \sum_{s=1}^{S_q} \gamma_{qs} W_{sj} - \overline{W}_s \cdot + u_{qj}$$

 Y_{ij} represents the log odds of applying to college for student i in school j; X_{qij} represents the student-level predictors that are independent of r_{ij} ; r_{ij} is the independent and normally distributed student-level error term with mean of 0 and variance σ^2 for every student i within each school j; W_{sj} represents the school-level predictors; and u_{qi} is the independent and normally distributed school-level error term. For easier interpretation, most of the variables are centered around the grand mean so that the reported intercept represents the predicted odds of applying to college for the average student. Because we compare the odds of applying to college by race/ethnicity and whether living at home during college is important, these variables and their interaction terms are uncentered (also indicated in the tables).

Results

Compared to whites and blacks, Hispanic high school seniors are significantly less likely to apply to any college (54 percent versus 66 percent of whites and 70 percent of blacks), a four-year college (42 percent versus 55 percent of whites and 56 percent of blacks), and a selective college (14 percent versus 31 percent of whites and 19 percent of blacks) (see Table 1). Chi-squared tests reveal that these differences are statistically significant at p < .001.

Approximately 59 percent of high school seniors in this sample felt that living at home during college was important, but this proportion varies significantly by race/ethnicity (see Table 1). Hispanics are the most likely to state that living at home is important (74 percent), followed by blacks (58 percent), then whites (46 percent), differences that are statistically significant. Furthermore, compared to native-born students, those born outside the United States are significantly more likely to feel that living at home is important (57 percent of native-born versus 72 percent of 1.5-generation immigrants and 79 percent of first-generation immigrants). In addition, students whose parents are less educated are significantly more likely to feel that it is important to live at home during college (62 percent of students whose parents do not have a college degree, compared to 47 percent of students of college-educated parents). Finally, students whose parents rent their homes are significantly more likely to feel it is important to live at home than students whose parents own their homes (68 percent versus 56 percent), suggesting that lower socioeconomic status is associated with higher likelihood of preferring to live at home during college.

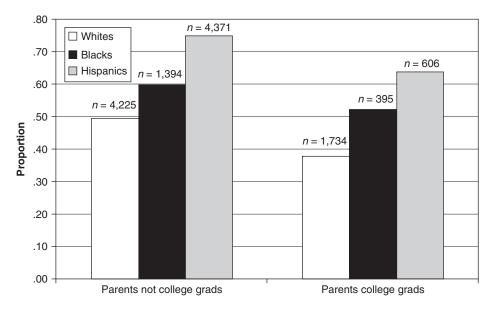


Figure 1 • Proportion for Whom Living at Home is Important

The most significant differences in the preference to live at home during college were found among students with different racial and ethnic identities and among those whose parents had different education levels. Since Hispanics have the lowest educational attainment of all U.S. racial and ethnic groups, the observed differences may be attributed in significant part to parental educational differences instead of racial and ethnic differences per se. However, Figure 1 shows that, regardless of parents' education level, Hispanics are more likely to indicate that living at home during college is important. In fact, Hispanics whose parents are college graduates are more likely to want to live at home than blacks or whites whose parents are *not* college graduates. Parental educational differences alone cannot explain why Hispanics are much more likely to report that it is important to live at home during college.

If this prevalent preference is disconcerting, it is because it is associated with a lower likelihood of applying to college. We find that, relative to students who felt it was not important to live at home during college, students who did feel this was important were significantly less likely to apply to at least one college of any type (53 percent versus 76 percent), at least one four-year college (38 percent versus 69 percent), and at least one selective college (12 percent versus 42 percent). These findings imply that there is a strong negative association between the preference to live at home and the likelihood of applying to college.

Up to this point, we have not accounted for other influential factors that could explain the likelihood of applying to college. We use multilevel models with student- and school-level variables to predict the odds of applying to any college (Table 2), a four-year college (Table 3), and a selective college (Table 4). For each outcome, we use four models to demonstrate the impact of the preference to live at home on the Hispanic-white application gap. Model 1 shows the effect of race/ethnicity without covariates; Model 2 adds student- and school-level covariates, with the exception of the staying home variable; Model 3 adds the staying home variable; and Model 4 adds terms for the interactions between staying home and parental education, staying home and being Hispanic, parental education and being Hispanic, and a three-way interaction between staying home, parental education, and being Hispanic. We report both odds ratios and coefficients, as well as robust standard errors adjusted for clustering within high schools.

Table 2 • Multilevel Models Predicting Whether Students Applied to Any College

	Model 1				Model 2	2		Model	! 3	Model 4		
	OR	Coef	RSE	OR	Coef	RSE	OR	Coef	RSE	OR	Coef	RSE
Student-level predictors						,						
(N = 13,803)												
White	ref			ref			ref			ref		
Hispanic ^{uc}	.56	58	.08***	.78	25	.07***	.85	16	.07*	.66	42	.10***
Black ^{uc}	1.45	.37	.09***	2.32	.84	.09***	2.35	.85	.09***	2.38	.87	.09***
Other ^{uc}	1.04	.04	.08	1.10	.09	.09	1.17	.15	.09	1.19	.18	.09*
Class rank				1.02	.02	.00***	1.02	.02	.00***	1.02	.02	.00***
General curriculum track				ref			ref			ref		
College prep track				1.77	.57	.05***	1.76	.56	.05***	1.75	.56	.06***
Distinguished achievement track				2.63	.97	.09***		.89	.09***	2.43	.89	.09***
GPA				1.55	.44	.04***	1 55	.44	.04***	1.55	.44	.04***
Female				1.21	.19	.04***		.21	.04***	1.23	.20	.04***
U.Sborn				ref	.17	.01	ref	.21	.01	ref	.20	.01
Foreign-born (arrival age <12)					24	.07***		20	.07**		21	.07**
Foreign-born (arrival age 12+)				.74	30	.12*	.80	22	.12	.79	23	.12
Two parents in hhld				1.07	.06	.06	1.07	.07	.06	1.07	.06	.06
Siblings in hhld				1.00	.00	.05	1.02	.01	.05	1.01	.01	.05
Other relatives in hhld				.88	13	.06		11	.07		11	.07
Parents college grads ^{uc}				1.21	.19	.05***		.17	.05***	1.27	.24	.10*
Parents own home				1.23	.21	.08*	1.21	.19	.08*	1.21	.19	.08*
Staying home				1.27	.21	.00		66	.07***		76	.08***
important ^{uc}							.,,,	.00	.07			
Staying home × parents col grads ^{uc}										.87	14	.13
Staying home × Hispanic ^{uc}										1.46	.38	.11***
Hispanic × parents col grads ^{uc}										.89	12	.22
Staying home ×										1.27	.24	.28
Hisp × col grads ^{uc}												
School-level predictors												
(N = 96)												
% economically disadvantaged				1.00	.00	.01	1.00	.00	.01	1.00	.00	.01
% planning to go to college				1.00	.00	.00	1.00	.00	.00	1.00	.00	.00
% white enrollment				1.00	.00	.00	1.00	.00	.00	1.00	.00	.00
% black enrollment				1.00	.00	.00	1.00	.00	.00	1.00	.00	.00
				1.06	.06	.01	1.06	.06	.01	1.06	.00	.01
% Asian Am enrollment				1.06	.06	.02*	1.06	.06	.02^	1.06	.03	.02*
% Hispanic enrollment					02	.00^^		02	.00^^		02	
Total colleges in				.90	02	.01	.98	02	.01	.98	02	.01
proximity	1.89	63	.07***	1.56	.45	.07***	2 30	.83	.08***	2 44	.89	.08***
Intercept	1.09	.03	.07	1.70	.47	.07	4.50	.0)	.00	4.44	.07	.00

Source: Texas Higher Education Opportunity Project (THEOP) Senior Cohort Wave 1 (Office of Population Research 2002).

 $^{^{\}mbox{\tiny uc}}\mbox{Uncentered}$ variable; all other variables are grand-mean centered.

p < .05 *p < .01 **p < .001 (two-tailed tests)

 Table 3 • Multilevel Models Predicting Whether Students Applied to a Four-year College

	Model 1			Model	2		Model	3	Model 4			
	OR	Coef	RSE	OR	Coef	RSE	OR	Coef	RSE	OR	Coef	RSE
Student-level predictors												
(N = 13,803)												
White	ref			ref			ref			ref		
Hispanic ^{uc}	.52	66	.09***	.72	32	.09***	.83	18	.09*	.64	44	.11***
Blackuc	1.26	.23	.12*	2.15	.77	.11***	2.20	.79	.11***	2.24	.80	.10***
Otheruc	1.05	.05	.10	1.09	.08	.11	1.20	.18	.12	1.23	.21	.13
Class rank				1.03	.03	.00***	1.03	.03	.00***	1.03	.03	.00***
General curriculum track				ref			ref			ref		
College prep track				1.83	.60	.06***	1.81	.59	.06***	1.81	.59	.06***
Distinguished achievement track				2.87	1.06	.08***	2.62	.96	.09***	2.63	.97	.09***
GPA				1.46	.38	.05***	1.46	.38	.05***	1.46	.38	.05***
Female				1.10	.09	.05*	1.12	.11	.05*	1.12	.11	.05*
U.Sborn				ref			ref			ref		
Foreign-born (arrival age <12)				.78	25	.08**		20	.08*	.81	21	.08*
Foreign-born (arrival age 12+)				.70	35	.12**	.79	24	.13	.78	25	.13*
Two parents in hhld				1.11	.10	.07	1.11	.11	.07	1.11	.10	.07
Siblings in hhld				1.01	.01	.06	1.03	.03	.06	1.03	.03	.06
Other relatives in hhld				.93	07	.07	.95	05	.07	.95	05	.07
Parents college gradsuc				1.24	.21	.05***	1.20	.18	.05***	1.28	.25	.11*
Parents own home				1.16	.15	.09	1.13	.12	.09	1.13	.12	.09
Staying home important ^{uc}							.41	90	.07***	.36	-1.02	.08***
Staying home ×										.89	11	.14
parents col grads ^{uc} Staying home × Hispanic ^{uc}										1.51	.41	.14**
Hispanic × parents col										.77	26	.21
Staying home \times Hisp \times col grads ^{uc}										1.41	.34	.28
School-level predictors												
(N = 96)												
% economically disadvantaged				.99	01	.01	.99	01	.01	.99	01	.01
% planning to go to college				1.01	.01	.00*	1.01	.01	.00*	1.01	.01	.00*
% white enrollment				1.00	.00	.01	1.00	.00	.01	1.00	.00	.01
% black enrollment				1.00	.00		1.00	.00	.01	1.00	.00	.01
% Asian Am enrollmer	nt			1.07	.07	.02**	1.07	.07	.02**	1.07	.07	.02**
% Hispanic enrollment				1.02	.02	.00***		.02	.00***	1.02	.02	.00***
4yr colleges in proximity				.97	03	.03	.97	03	.03	.97	03	.03
Intercept	1.07	.06	.08	.73		.08***		.19	.08*	1.28	.24	.09**
шистеері	1.07	.00	.00	.,,	.,2	.00	1.41	.1/	.00	1.20	.47	.07

Source: Texas Higher Education Opportunity Project (THEOP) Senior Cohort Wave 1 (Office of Population Research 2002). ^{uc}Uncentered variable; all other variables are grand-mean centered.

^{*}p < .05 **p < .01 ***p < .001 (two-tailed tests)

 Table 4 • Multilevel Models Predicting Whether Students Applied to a Selective College

Table 4 • Munitievei Mod	Model 1				Model 2			Model			Model 4		
	OR	Coef	RSE	OR	Coef	RSE	OR	Coef	RSE	OR	Coef	RSE	
Student-level predictors													
(N = 13,803)													
White	ref			ref			ref			ref			
Hispanicuc	.52	65	.10***	.78	25	.09**	.95	05	.09	.81	21	.14	
Black ^{uc}		41	.10***	1.08	.08	.09	1.05		.10	1.06	.06	.10	
Otheruc	1.24		.08*	1.21	.19	.11	1.44		.11**	1.47	.39	.11**	
Class rank				1.04	.04	.00***			.00***		.03	.00***	
General curriculum track				ref			ref			ref			
				1.23	.21	.07**	1.18	17	.07*	1.18	.17	.07*	
College prep track				1.23	.69	.12***			.12***		.56	.12***	
Distinguished achievement track				1.99	.09	.12	1./)	.50	.12	1./)	.50	.12	
GPA				1.34	.29	.06***	1.32	.28	.06***	1.32	.28	.06***	
Female					21	.07**	.80		.07**		23	.06**	
U.Sborn				ref			ref			ref			
Foreign-born (arrival age <12)					09	.09	1.00	.00	.10		01	.10	
Foreign-born (arrival age 12+)				.78	25	.24	.94	06	.23	.93	07	.23	
Two parents in hhld				1.06	.06	.07	1.06	06	.07	1.06	.06	.07	
Siblings in hhld					03	.06	.99	01			01	.06	
Other relatives in hhld					07	.00	.96	04			04	.10	
				1.06	.06	.07	1.01		.06	1.01	.01	.08	
Parents college grads ^{uc}				1.12	.11		1.01			1.01	.07		
Parents own home				1.12	.11	.08			.10 .09***			.10	
Staying home important ^{uc}							.32	-1.13	.09^^^		-1.20	.12***	
Staying home × parents col grads ^{uc}										.93	08	.17	
Staying home × Hispanic ^{uc}										1.34	.29	.22	
Hispanic × parents col										1.17	.16	.30	
Staying home ×										.91	10	.43	
Hisp × col grads ^{uc}													
School-level predictors													
(N = 96)													
% economically				.98	02	.01***	.98	02	.00***	.98	02	.00***	
disadvantaged													
% planning to go to college				1.00	.00	.00	1.00	.00	.00	1.00	.00	.00	
% white enrollment				1.00	.00	.01	1.00	00	.01	1.00	.00	.01	
% black enrollment				1.01	.01	.01	1.01		.01	1.01	.01	.01	
% Asian Am enrollment				1.04	.04	.02*	1.03		.02*	1.03	.03	.02*	
% Hispanic enrollment	-			1.04	.04	.02	1.01		.02	1.01	.01	.02	
4yr colleges in				1.01	.03	.02	1.01		.02	1.01	.03	.02	
proximity				1.00	.07	.02	1.01	.07	.02	1.04	.00	.02	
Intercept	34	-1.09	.08***	17	-1.78	.08***	29	-1.22	.09***	30	-1.20	.09***	
шистеері	.,,-	1.07		.1/	1.70		.27	1.44	.07	.,,,	1.40		

 ${\it Source}: Texas \ Higher \ Education \ Opportunity \ Project \ (THEOP) \ Senior \ Cohort \ Wave \ 1 \ (Office \ of \ Population \ Research \ 2002).$

^{*}p < .05 **p < .01 ***p < .001 (two-tailed tests)

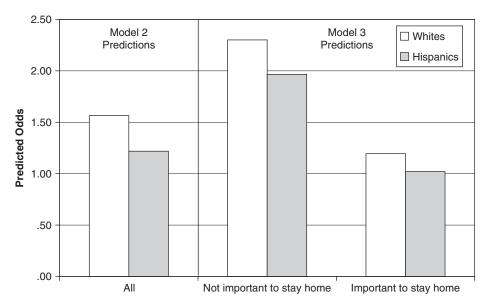


Figure 2 • Predicted Odds of Applying to Any College

Overall, Tables 2 through 4 suggest that, even after controlling for a variety of demographic, academic, and socioeconomic factors, taking account of the preference to live at home during college further reduces the Hispanic-white difference in the odds of applying to college. This is especially true for applying to a selective college, where the Hispanic-white difference becomes insignificant after controlling for preference to live at home. These tables also suggest that, for Hispanics, the difference in odds of applying between those that desire to stay home and those that do not is smaller than the difference for other groups. Despite this small buffering effect for Hispanics, the preference to stay home for college is associated with significantly lower odds of applying to college for all three groups, with Hispanics being much more likely to indicate that staying home for college is important.

Model 1 in Table 2 shows that, without controlling for any factors, Hispanic high school students have about 44 percent lower odds of applying to any college than white students. Model 2 shows that even after controlling for academic achievement, gender, immigration status, proximity to college, family structure, parents' SES, and school-level factors, Hispanic students still have significantly lower odds of applying to any college than white students (about 22 percent lower). The same is not true for black students, who have much higher odds of applying to any college than whites. But Model 3 shows that after controlling for the preference to stay home during college, the application gap between whites and Hispanics is reduced further, such that Hispanics have only 15 percent lower odds of applying than whites. Net of other factors, students who indicate it is important to live at home during college have about 48 percent lower odds of applying to any college than students who indicate it is not important. Finally, Model 4 includes interaction terms and shows that there is a small buffering effect (β = .38) for Hispanics who want to stay home. For them, the negative effects of being Hispanic ($\beta = -.42$) and preferring to stay home ($\beta = -.76$) are not simply additive (-.42 + -.76 =-1.18) but rather are somewhat reduced, though still negative (-.42 + -.76 + .38 = -.80). Despite the small buffering effect for Hispanics, it is important to bear in mind that a large majority of Hispanics—about three quarters—believe it is important to live at home during college. Figure 2 shows the predicted odds of applying to any college for white and Hispanic students, first without controlling for preference to stay home (based on Model 2), then controlling

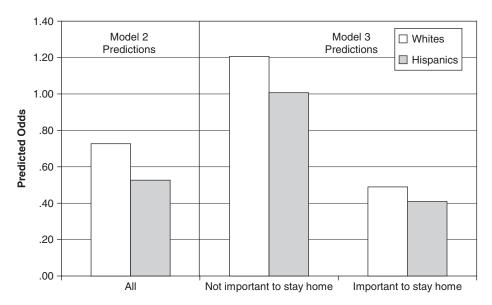


Figure 3 • Predicted Odds of Applying to a Four-year College

for this preference (based on Model 3). This figure illustrates that the Hispanic-white college application gap is slightly smaller when preference to stay home is taken into account, especially among those for whom staying home is important.

In Table 3, we examine four-year college applications and observe similar patterns. Without controlling for any factors, Hispanic high school students have about 48 percent lower odds of applying to a four-year college, compared to white students. Model 2 shows that even after controlling for student- and school-level factors, Hispanics still have about 28 percent lower odds than white students. However, Model 3 shows that after controlling for their preference to stay home during college, the application gap between whites and Hispanics is reduced further, such that Hispanics have only 17 percent lower odds of applying than whites. Net of other factors, students who report it is important to live at home during college have about 59 percent lower odds of applying to a four-year college than students who indicate this is not important. In Model 4, there is again a small buffering effect ($\beta = .41$) for Hispanics who want to stay home, although the added effects of being Hispanic ($\beta = -.44$) and preferring to stay home for college ($\beta = -1.02$) remain negative (-.44 + -1.02 + .41 = -1.05). Figure 3 shows the predicted odds of applying to a four-year college for white and Hispanic students, first without controlling for preference to stay home (based on Model 2), then controlling for this preference (based on Model 3). This figure illustrates that the Hispanic-white college application gap is again slightly smaller when preference to stay home is taken into account, especially among those for whom staying home is important.

In Table 4, we analyze selective college applications and, this time, find that the Hispanic-white difference in the odds of applying not only is reduced but also becomes insignificant after controlling for preference to live at home. Without controlling for any factors, Hispanic high school students have about 48 percent lower odds of applying to a selective college than white students and, even after controlling for student- and school-level factors, Hispanics have roughly 22 percent lower odds of applying to a selective college. However, this difference is further reduced and becomes insignificant after controlling for students' preference to stay home during college. Net of other factors, students who report it is important to live at home

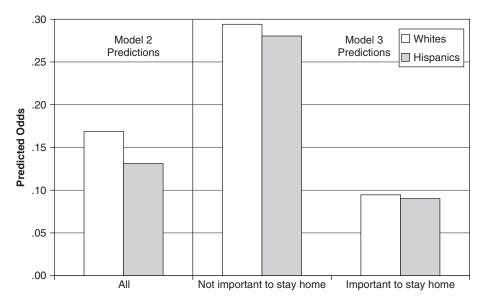


Figure 4 • Predicted Odds of Applying to a Selective College

during college have about 68 percent lower odds of applying to a selective college than students who indicate this is not important. Model 4 includes interaction terms and shows that none of them are significant. Figure 4 again shows the predicted odds of applying to a selective college for white and Hispanic students, first without controlling for preference to stay home (based on Model 2), then controlling for this preference (based on Model 3). This figure illustrates that the Hispanic-white college application gap is significantly smaller and becomes insignificant when preference to stay home is taken into account, both among those for whom staying home is important and among those for whom staying home is not important.

There are other notable differences between applying to a selective college and applying to any college or a four-year college. In terms of applying to a selective college, some studentlevel factors seem to be less important while some school-level factors seem to be more important. For example, while academic achievement (rank, track, and GPA) is important for all three outcomes, parents' education is important only for applying to any college and applying to a four-year college—but not for applying to a selective college. Likewise, immigrant status is important for applying to any college and a four-year college but not for applying to a selective college. In contrast, while school-level racial/ethnic composition (in particular, percent Hispanic and percent Asian American) is important for all three outcomes, school-level socioeconomic status is important only for applying to a selective college. For instance, an increase in the percentage of economically disadvantaged school peers is associated with a significant decrease in the odds of applying to a selective college but does not seem to affect the odds of applying to any college or a four-year college. Likewise, an increase in the number of colleges in proximity to the high school is associated with a marginally significant increase in the odds of applying to a selective college (p < .08) but not to any college or a four-year college. This suggests that school-level and geographic factors are particularly important for applying to a selective college. Moreover, some student-level factors have a very different effect on applying to a selective college. For example, while female students have significantly higher odds of applying to any college or a four-year college, they have significantly lower odds of applying to a selective college. Similarly, compared to whites, black students have significantly higher

odds of applying to any college or a four-year college but not a selective college. These findings suggest that, for female and black students, there are important qualitative differences in the types of colleges to which they apply. Despite these noteworthy differences, a clear pattern emerges across all three college application outcomes, a pattern we now summarize and discuss.

Summary and Discussion

Unlike most studies, which tend to focus on the positive relationship between Hispanic familism and educational outcomes, this study has documented one way in which family ties can disadvantage students transitioning into adulthood. These analyses have shown that, among Texas high school seniors, Hispanics are the most likely to feel that living at home during college is important. The lower education of their parents does not account for this, as even Hispanics with highly educated parents are more likely to indicate that staying home is important, compared to whites whose parents are similarly educated. Moreover, net of student- and school-level factors, including socioeconomic status and academic achievement, students for whom the ability to live at home during college is important are far less likely to apply to college than students who do not hold such a preference. The difference between the two groups grows even more substantial when we examine applications to four-year and selective colleges. Perhaps most significant, controlling for the preference to live at home renders the selective college application gap between Hispanics and whites insignificant.

This study, therefore, has demonstrated that attitudinal familism is a powerful predictor of Hispanic students' college application rates. Although one's preference to stay home during college might be explained in part by socioeconomic factors (as this would defray a portion of college costs), we have seen—to the extent that our data allow—that socioeconomic factors do not entirely explain why living at home during college is so important to Hispanics. It follows, then, that if we wish to understand the low levels of college application among Hispanics, we must pay attention, not only to economic standing, school quality, and the struggles of immigrants, as has been the convention, but also to familistic obligations.

Because this study focused on Hispanics, it sought out a sample with a large number and proportion of Hispanics. With its significant proportion of Hispanics (36 percent, compared to only 12 percent in NELS), as well as its higher number of Hispanics (about 4,200, compared to only 2,100 in NELS), THEOP data were ideal for our purposes. THEOP data have enabled us to explore questions of racial and ethnic variation even though, for generalizability purposes, national data are more informative than regional data. Compared to other states, Texas may be peculiar with respect to the analyses pursued here. There is, first, its size to consider. Many Hispanics in rural Texas live a good distance away from postsecondary institutions, but, nationally, most Hispanics live in urban areas. Nevertheless, we believe that our key findings are not affected by this difference, not only because we incorporate geographic distance into our models and find that familism still matters, but also because our sample is overwhelmingly urban (approximately 90 percent of the students live in urban areas) and therefore resembles national population patterns. If anything, our findings are conservative, as we would expect that students living in rural areas who desired to remain at home during college would be less likely to apply to college than their like-minded counterparts in urban areas.

Our findings might be biased toward the conservative on two other scores as well. First, had we had the ability to analyze all high schools in Texas—not only public schools but also private institutions, traditionally attended by a disproportionate number of white students from wealthy families—we most likely would have observed even larger differentials with respect to white and Hispanic college application rates. Second, Texas's top 10 percent law encourages students to apply to college at higher rates than students living in states without this incentive (Tienda, Cortes, and Nin 2003). For this reason, we might reasonably expect

that some high-achieving students from low-income families that applied to college in Texas might not have done so had they resided in a state where their admission was not guaranteed. This means that, on a national level, the Hispanic-white application gap might be wider than these data suggest and that SES might have a more powerful effect on application outcomes in states without admissions guarantees. We encourage researchers with access to nationally representative statistics from which meaningful racial and ethnic comparisons can be fashioned to carry out analyses that might challenge or verify our findings.

We regret not possessing the ability to operationalize familism in deeper and more complex ways by, for example, exploring the structure of family ties (e.g., their density and relational configuration). Data limitations force us to leave unexplored several questions that would elucidate the connection between familism and educational outcomes: Are educational expectations negatively correlated with the density of family networks? How are some students socialized (by familial, cultural, and social forces) to remain at home during college while others are socialized to leave? We commit these important lines of inquiry to future research.

By way of conclusion, we would like to tender three complementary explanations, ones that only can be championed or refuted by future research, as to why Hispanic students overwhelmingly are less likely than other racial and ethnic groups to leave home to pursue a college degree. The first has to do with the geographic location of postsecondary institutions. Evidence suggests that Hispanics in Texas tend to live further away from colleges and universities than other racial and ethnic groups. One study found that individuals living in counties along the Texas-Mexico border, a predominantly Hispanic region, have to travel five times as far as other Texans to reach a comprehensive university (Jones and Kauffman 1994). Another concluded that students from predominantly minority high schools in Texas live the furthest distance from the University of Texas and Texas A&M, the state's flagship institutions (Tienda and Niu 2006). Thus, for most Hispanic students living in Texas, leaving home for college requires placing much more distance between themselves and their family than it does for white students—a difference that might help explain why Hispanics are much more likely to want to stay home for college. We have good reason to believe that the college application rates of Hispanic students would increase at a significant pace if more Hispanic students were able to stay home while attending college. If this is the case, then effective policy initiatives aimed at improving the state of Hispanic education would attempt to bring postsecondary educational offerings to communities a far throw from college campuses. This could be accomplished, for example, by establishing satellite campuses in rural areas or through Internet-based or videotransmitted instruction.

That said, our findings demonstrate that one's proximity to colleges does not fully account for disparities in application rates. This brings us to our second explanation, one having to do with America's racial climate, in general, and the racial climate on college campuses, in particular. America's preoccupation with illegal immigration and the growing Hispanic population has nourished anti-immigrant and anti-Hispanic sentiment. A recent study found that whites' attitudes toward nonwhites and immigrants grow more negative as their perceptions of the size of these groups increases (Alba, Rumbaut, and Marotz 2005). Enveloped in a society conditioned by racial domination, many college campuses, especially those with a majority white student body, can be hostile environments for nonwhite students. Eleven percent of reported hate crimes occur in schools and on college campuses (FBI 2004), and several studies have documented the workings of racism in the halls of the university (Gordon and Johnson 2003). Many nonwhites applying to college are aware of these hostile incidents, and some are advised to steer clear of such institutions. This was the case for Onaje Barnes, who was a junior at the University of Texas when he confessed to a reporter: "[My family and friends] warned me because, quite frankly, the environment of UT is known for racism . . . A lot of older people told me not to come here, but I felt that I could deal with any issues that arise" (Shah 2002).

A good many nonwhite students may not be as confident as this young man. Perhaps Hispanic students wish to stay home for college because they recognize the importance of having a supportive network of family and friends to protect and sustain them from the racism they will face at the university. And perhaps Hispanic parents discourage their children from attending far-off colleges, not because they (consciously or unconsciously) work to reproduce their own social positions, but because they know well the scars American racism can inflict on the mind and body of a young person. If this is the case, then efforts to reduce the Hispanic-white application gap must interrogate the racial climate of college campuses and develop solutions to combat institutional racism embedded within the structures of the university as well as everyday prejudice thriving within the student body. Such solutions may include implementing programs designed to recruit and retain students from underrepresented minority groups, hiring faculty of color, establishing mandatory "ethnic studies" courses, providing student-organized anti-racist organizations with adequate institutional support, and founding well financed and staffed university offices that work toward sustaining a multicultural learning environment.

One wonders, however, why Hispanic students' college application rates are so much lower than those of black students, even though the latter group is affected by the racial climate on college campuses just as much as the former. This observation prompts our final explanation, one underscoring the unique importance Hispanic families place on familism. Our findings have demonstrated that familism (as measured by one's desire to stay home for college) plays an important role in predicting inequalities in college application patterns; that familism is more salient to Hispanic students; and that the familism effect is not merely a reflection of educational or economic inequalities (though we do not deny the predictive power of these factors). For these reasons, we believe a robust explanation of the Hispanic-white application gap must add to the two institutional factors reviewed above (geographic distance and racial climate) a cultural component that explores how one's loyalty to the family is emphasized, reinforced, and challenged in unique ways within Hispanic networks (cf. Okagaki and Frensch 1998; Oyserman et al. 2002).

We hasten to add, however, that familism should not be thought of monochromatically, as a social configuration that exerts positive effects on some outcomes and negative effects on others. Familism at once may help bring about a whole array of positive outcomes (e.g., family stability, reduced crime rates, community involvement) as well as an equally impressive array of negative consequences (e.g., reduced educational attainment, a pressure toward conformity, the creation of isolated communities). Likewise, familism can exert simultaneously mixed effects on similar outcomes: a stable family life can encourage academic success even as it attenuates students' horizon of postsecondary possibilities. Finally, its goes without saying that familism within one community may look nothing like familism in another and, therefore, may exhibit very different effects. For example, relative to Mexican Americans, South Asians have high levels of educational attainment, even though studies have shown that familism is equally important to both groups (cf. Caplan, Choy, and Whitmore 1991). We believe that research on familism would benefit greatly by examining variations in familistic attitudes and practices across racial and ethnic lines, the unanticipated consequences of familism (that is, its divergent effects on different outcomes), and how familism might serve as a vehicle through which certain opportunities are transferred or denied.

The educational inequality between Hispanics and other groups is likely to become increasingly important in the years to come, if for no other reason than because Hispanics are the fastest growing minority group in America. Currently constituting about 12 percent of the total U.S. population, the Hispanic population grew by about 57 percent between 1990 and 2000, whereas the total U.S. population grew by only 13 percent during that time period (Chapa and De La Rosa 2004). If current levels of educational disadvantage are unabated as the Hispanic population expands, then an increasing fraction of the U.S. population will be insufficiently prepared for work and civic life. The problem is not one for the Hispanic community alone but for the United States as a whole.

References

- Alba, Richard, Rubén Rumbaut, and Karen Marotz. 2005. "A Distorted Nation: Perceptions of Racial/Ethnic Group Size and Attitudes toward Immigrants and Other Minorities." *Social Forces* 84:901–19.
- Arum, Richard. 2000. "Schools and Communities: Ecological and Institutional Dimensions." *Annual Review of Sociology* 26:395–418.
- Astin, Alexander. 1982. Minorities in American Higher Education. San Francisco: Jossey-Bass.
- Bohon, Stephanie, Monica Kirkpatrick Johnson, and Bridget Gorman. 2006. "College Aspirations and Expectations among Latino Adolescents in the United States." *Social Problems* 53:207–25.
- Bourdieu, Pierre. 1998. Practical Reason: On the Theory of Action. Stanford, CA: Stanford University.
- Boyd, Monica. 2002. "Educational Attainments of Immigrant Offspring: Success or Segmented Assimilation?" *International Migration Review* 36:103–60.
- Bozick, Robert. 2007. "Making It through the First Year of College: The Role of Students' Economic Resources, Employment, and Living Arrangements." Sociology of Education 80:261–84.
- Bradley, Robert and Robert Corwyn. 2002. "Socioeconomic Status and Child Development." *Annual Review of Psychology* 53:341–69.
- Brooks-Gunn, Jeanne and Greg Duncan. 1997. "The Effects of Poverty on Children." *The Future of Children* 7:57–71.
- Brooks-Gunn, Jeanne and Lisa Markman. 2005. "The Contribution of Parenting to Ethnic and Racial Gaps in School Readiness." *The Future of Children* 15:139–68.
- Caplan, Nathan, Marcella Choy, and John Whitmore. 1991. *Children of the Boat People: A Study of Educational Success*. Ann Arbor: University of Michigan Press.
- Chang, Gordon and J. R. Osborn. 2005. "Spectacular Colleges and Spectacular Rankings: The U.S. News Rankings of American Best Colleges." *Journal of Consumer Culture* 5:338–64.
- Chapa, Jorge and Belinda De La Rosa. 2004. "Latino Population Growth, Socioeconomic and Demographic Characteristics, and Implications for Educational Attainment." *Education and Urban Society* 36:130–49.
- Chapa, Jorge and Richard Valencia. 1993. "Latino Population-Growth, Demographic Characteristics, and Educational Stagnation: An Examination of Recent Trends." *Hispanic Journal of Behavioral Sciences* 15:165–87.
- Coleman, James 1988. "Social Capital in the Creation of Human-Capital." *American Journal of Sociology* 94:95–120.
- Crosnoe, Robert. 2005. "The Diverse Experiences of Hispanic Students in the American Educational System." *Sociological Forum* 20:561–88.
- Driscoll, Anne. 1999. "Risk of High School Dropout among Immigrant and Native Hispanic Youth." *International Migration Review* 33:857–76.
- Dubas, Judith Semon and Anne Petersen. 1996. "Geographical Distance from Parents and Adjustment during Adolescence and Young Adulthood." New Directions for Child Development 71:3–19.
- Federal Bureau of Investigation (FBI). 2004. *Hate Crime Statistics*, 1995–2004. Washington, DC: Department of Justice.
- Ferguson, Ronald. 2002. "What Doesn't Meet the Eye: Understanding and Addressing Racial Achievement Gaps in High Achieving Suburban School Systems." Working paper. North Central Regional Educational Laboratory Working Paper (ED 474 390).
- Flanagan, Constance, John Schulenberg, and Andrew Fuligni. 1993. "Residential Setting and Parent Adolescent Relationships during the College Years." *Journal of Youth and Adolescence* 22:171–89.
- Fuligni, Andrew, Vivian Tseng, and May Lam. 1999. "Attitudes toward Family Obligations among American Adolescents with Asian, Latin American, and European Backgrounds." *Child Development* 70:1030–44.
- Goldsmith, Pat. 2004. "Schools' Racial Mix, Students' Optimism, and the Black-White and Latino-White Achievement Gaps." *Sociology of Education* 77:121–47.
- Gordon, Jill and Markus Johnson. 2003. "Race, Speech, and a Hostile Educational Environment." *Journal of Social Philosophy* 34:414–36.
- Haney, Walt. 2000. "The Myth of the Texas Miracle in Education." *Educational Policy Analysis Archives* 8(41). Retrieved May 1, 2007 (http://epaa.asu.edu/epaa/v8n41).
- Harrison, Algea, Melvin Wilson, Charles Pine, Samuel Chan, and Raymond Buriel. 1990. "Family Ecologies of Ethnic Minority Children." *Child Development* 61:347–62.

- Hauser, Robert and John Robert Warren. 1997. "Socioeconomic Indexes for Occupations: A Review, Update, and Critique." Pp. 177–298 in *Sociological Methodology*, edited by Adrian Raftery. Cambridge, UK: Basil Blackwell.
- Hirschman, Charles. 2001. "The Educational Enrollment of Immigrant Youth: A Test of the Segmented-Assimilation Hypothesis." *Demography* 38:317–36.
- Hurtado, Sylvia, Karen Kurotsuchi Inkelas, Charles Briggs, and Byung-Shik Rhee. 1997. "Differences in College Access and Choice among Racial/Ethnic Groups: Identifying Continuing Barriers." *Research in Higher Education* 38:43–75.
- Johnson, Monica Kirkpatrick, Glen Elder, and Michael Stern. 2005. "Attachments to Family and Community and the Young Adult Transition of Rural Youth." *Journal of Research on Adolescence* 15:99–125.
- Jones, Richard and Albert Kauffman. 1994. "Accessibility to Comprehensive Higher-Education in Texas." *Social Science Journal* 31:263–83.
- Kao, Grace. 1999. "Psychological Well-Being and Educational Achievement among Immigrant Youth." Pp. 410–77 in Children of Immigrants: Health, Adjustment, and Public Assistance, edited by Donald Hernandez. Washington, DC: National Academy Press.
- Kao, Grace and Jennifer Thompson. 2003. "Racial and Ethnic Stratification in Educational Achievement and Attainment." *Annual Review of Sociology* 29:417–42.
- Kao, Grace and Marta Tienda. 1995. "Optimism and Achievement: The Educational Performance of Immigrant Youth." Social Science Quarterly 76:1–19.
- Karen, David. 2002. "Changes in Access to Higher Education in the United States: 1980–1992." Sociology of Education 75:191–210.
- Kerckhoff, Alan and Richard Campbell. 1977. "Race and Social Status Differences in the Explanation of Educational Ambition." *Social Forces* 55:701–14.
- Mulder, Clara and William Clark. 2002. "Leaving Home for College and Gaining Independence." *Environment and Planning A* 34:981–99.
- National Center for Education Statistics. 1992. *National Education Longitudinal Survey of 1988*. Washington, DC: U.S. Department of Education, Institute of Education Sciences.
- ——. 2002. *Integrated Postsecondary Education Data System*. Washington, DC: U.S. Department of Education, Institute of Education Sciences.
- ——. 2003. *Status and Trends in the Education of Hispanics*. Washington, DC: U.S. Department of Education, Institute of Education Sciences.
- Niemann, Yolanda Flores, Andrea Romero, and Consuelo Arbona. 2000. "Effects of Cultural Orientation on the Perception of Conflict between Relationship and Educational Goals for Mexican American College Students." Hispanic Journal of Behavioral Sciences 22:46–63.
- Office of Population Research. 2002. *Texas Higher Education Opportunity Project*. Princeton, NJ: Princeton University.
- Okagaki, Lynn and Peter Frensch. 1998. "Parenting and Children's School Achievement: A Multiethnic Perspective." *American Educational Research Journal* 35:125–44.
- Okagaki, Lynn and Robert Sternberg. 1993. "Parental Beliefs and Children's School Performance." *Child Development* 64:36–56.
- Orfield, Gary and John Yun. 1999. "Resegregation in American Schools." Working paper. The Civil Rights Project, Harvard University.
- Oyserman, Daphna, Heather Coon, and Markus Kemmelmeier. 2002. "Rethinking Individualism and Collectivism: Evaluation of Theoretical Assumptions and Meta-Analyses." *Psychological Bulletin* 128:3–72.
- Peng, Samuel. 1988. Attainment Status of Asian Americans in Higher Education. Washington, DC: U.S. Department of Education, Center for Education Statistics.
- Portes, Alejandro. 1998. "Social Capital: Its Origins and Applications in Modern Sociology." *Annual Review of Sociology* 24:1–24.
- Portes, Alejandro and Patricia Landolt. 1996. "The Downside of Social Capital." *The American Prospect* 26:18–21
- Portes, Alejandro and Rubén Rumbaut. 1996. *Immigrant America: A Portrait*. Berkeley: University of California Press.
- —. 2001. Legacies: The Story of the Immigrant Second Generation. Berkeley: University of California Press.
- Pribesh, Shana and Douglas Downey. 1999. "Why are Residential and School Moves Associated with Poor School Performance?" *Demography* 36:521–34.

- Quian, Zhenchao and Sampson Lee Blair. 1999. "Racial/Ethnic Differences in Educational Aspirations of High School Seniors." *Sociological Perspectives* 42:605–25.
- Ream, Robert. 2003. "Counterfeit Social Capital and Mexican American Underachievement." *Educational Evaluation and Policy Analysis* 25:237–62.
- ———. 2005. "Toward Understanding How Social Capital Mediates the Impact of Mobility on Mexican American Achievement." *Social Forces* 84:210–24.
- Rodriguez, Michael and Diana Morrobel. 2004. "A Review of Latino Youth Development Research and a Call for an Asset Orientation." *Hispanic Journal of Behavioral Sciences* 26:107–27.
- Rubin, D. 1987. Multiple Imputation for Nonresponse in Surveys. New York: John Wiley & Sons.
- Rumbaut, Rubén. 1977. "Ties that Bind: Immigration and Immigrant Families in the United States." Pp. 3–45 in *Immigrants and the Family: Research and Policy on U.S. Immigrants*, edited by Alan Booth, Ann Crouter, and Nancy Landale. Mahwah, NJ: Erlbaum.
- ——. 1996. "The New Californians: Assessing the Educational Progress of Children of Immigrants." *California Policy Seminar* 8:1–11.
- . 2004. "Ages, Life Stages, and Generational Cohorts: Decomposing the Immigrant First and Second Generations in the United States." *International Migration Review* 38:1160–205.
- Sabogal, Fabio, Gerardo Marin, Regina Otero-Sabogal, Barbara Banoss Marin, and Eliseo Perez-Stable. 1987. "Hispanic Familism and Acculturation: What Changes and What Doesn't?" *Hispanic Journal of Behavioral Sciences* 9:397–412.
- Sarkisian, Natalia, Mariana Gerena, and Naomi Gerstel. 2006. "Extended Family Ties among Mexicans, Puerto Ricans, and Whites: Superintegration or Disintegration?" *Family Relations* 55:331–44.
- Schafer, Joseph. 1999. "NORM: Multiple Imputation of Incomplete Multivariate Data under a Normal Model." Retrieved May 1, 2007 (www.stat.psu.edu/~jls/misoftwa.html).
- Schafer, Joseph and John Graham. 2002. "Missing Data: Our View of the State of the Art." *Psychological Methods* 7:147–77.
- Shah, Aarti. 2002. "Racial Issues Influence UT Community," *The Daily Texan*, February 7. Retrieved February 23, 2006 (www.dailytexasonline.com/2.8480/1.1265773-1.1265773).
- Smith-Maddox, Renee. 1999. "The Social Networks and Resources of African American Eighth Graders: Evidence from the National Education Longitudinal Study of 1988." *Adolescence* 34:169–83.
- Stanton-Salazar, Ricardo and Sanford Dornbusch. 1995. "Social Capital and the Reproduction of Inequality: Information Networks among Mexican-Origin High-School-Students." Sociology of Education 68:116–35.
- Steidel, Angel and Josefina Contreras. 2003. "A New Familism Scale for Use with Latino Populations." Hispanic Journal of Behavioral Sciences 25:312–30.
- Sternberg, Robert. 1985. Beyond IQ: A Triarchic Theory of Human Intelligence. New York: Cambridge University Press.
- Suarez-Orozco, Carola and Marcelo Suarez-Orozco. 1995. *Transformations: Immigration, Family Life, and Achievement Motivation among Latino Adolescents*. Stanford, CA: Stanford University Press.
- Tienda, Marta and Faith Mitchell. 2006. *Hispanics and the Future of America*. Washington, DC: National Academy Press.
- Tienda, Marta and Sunny Niu. 2006. "Flagships, Feeders, and the Texas Top 10% Law: A Test of the 'Brain Drain' Hypothesis." *Journal of Higher Education* 77:712–39.
- Tienda, Marta, Kalena Cortes, and Sunny Niu. 2003. "College Attendance and the Texas Top 10 Percent Law: Permanent Contagion or Transitory Promise?" Presented at Conference on Expanding Opportunity in Higher Education, Harvard Civil Rights Project, October 23–25, Sacramento, CA.
- Turley, Ruth López. 2006. "When Parents Want Children to Stay Home for College." *Research in Higher Education* 47:823–46.
- ——. 2009. "College Proximity: Mapping Access to Opportunity. " Sociology of Education 82:126–46.
- U.S. Census Bureau. 2002. Statistical Abstract of the United States. Washington, DC: U.S. Government Printing Office.
- Valadez, James. 2002. "The Influence of Social Capital on Mathematics Course Selection by Latino High School Students." *Hispanic Journal of Behavioral Sciences* 24:319–39.
- Valdes, Guadalupe. 2001. Learning and Not Learning English. New York: Teachers College Press.
- Valencia, Richard. 2000. "Inequalities and the Schooling of Minority Students in Texas: Historical and Contemporary Conditions." *Hispanic Journal of Behavioral Sciences* 22:445–59.
- Valenzuela, Angela and Sanford Dornbusch. 1994. "Familism and Social Capital in the Academic Achievement of Mexican Origin and Anglo Adolescents." Social Science Quarterly 75:18–36.

- Vernez, George and Allan Abrahamse. 1996. How Immigrants Fare in U.S. Education. Washington, DC: RAND Corporation.
- Vernez, George and Lee Mizell. 2002. *Goal: To Double the Rate of Hispanics Earning a Bachelor's Degree*. Washington, DC: RAND Corporation, Center for Research on Immigration Policy.
- Weiler, William. 1994. "Transition from Consideration of a College to the Decision to Apply." *Research in Higher Education* 35:631–46.
- Wellman, Barry. 1983. "Network Analysis: Some Basic Principles." Pp. 155–200 in *Sociological Theory*, edited by Randall Collins. San Francisco: Jossey-Bass.
- White, Lynn and Naomi Lacy. 1997. "The Effects of Age at Home Leaving and Pathways from Home on Educational Attainment." *Journal of Marriage and the Family* 59:982–95.
- White, Michael and Gayle Kaufman. 1997. "Language Use, Social Capital and Schooling Completion among Immigrants and Native-Born Ethnic Groups." Social Science Quarterly 78:385–98.
- White, Michael and Jennifer Glick. 2000. "Generation Status, Social Capital, and the Routes Out of High School." *Sociological Forum* 15:671–91.
- Williams, Belinda. 2003. "What Else Do We Need to Know and Do?" Pp. 13–24 in *Closing the Achieve-ment Gap*, edited by Belinda Williams. Alexandria, VA: Association for Supervision and Curriculum Development.
- Wojtkiewicz, Roger and Katharine Donato. 1995. "Hispanic Educational Attainment: The Effects of Family Background and Nativity." *Social Forces* 74:559–74.
- Zambrana, Ruth, ed. 1995. *Understanding Latino Families: Scholarship, Policy, and Practice*. Thousand Oaks, CA: Sage Publications.
- Zhou, Min. 1997. "Growing Up American: The Challenge Confronting Immigrant Children and Children of Immigrants." *Annual Review of Sociology* 23:63–95.
- Zhou, Min and Carl Bankston. 1998. *Growing Up American: How Vietnamese Children Adapt to Life in the United States*. New York: Russell Sage Foundation.