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Abstract

We assess the intergenerational educational mobility of recent cohorts of high school graduates to consider whether Hispanics' lagging postsecondary attainment reflects a temporary lull due to immigration of low education parents or a more enduring pattern of unequal transmission of social status relative to whites. Using data from three national longitudinal studies, a recent longitudinal study of Texas high school seniors and a sample of students attending elite institutions, we track post-secondary enrollment and degree attainment patterns at institutions of differing selectivity. We find that group differences in parental education and nativity only partly explain the Hispanic-white gap in college enrollment, and not evenly over time. Both foreign- and native-born college-educated Hispanic parents are handicapped in their ability to transmit their educational advantages to their children compared with white parents. We conclude that both changing population composition and unequal ability to confer status advantages to offspring are responsible for the growing Hispanic-white degree attainment gap.

Introduction

The democratization of higher education after the G.I. bill was enacted and again in the aftermath of the Civil Rights movement is evident in higher college participation rates for all demographic groups. At the turn of the 20th century only about 2 percent of the adult population were college graduates and a scant 6 percent achieved college degrees as recently as 1950 (Cox and Alm, 2001). Currently about one in four persons ages 25 and over, and 29 percent of 25-29 year olds, are college graduates. These secular trends conceal persisting differentials along race and ethnic lines, however. As the most rapidly growing segment of the college-age population, Hispanics are notable because they are falling behind whites and blacks even as their college enrollment and graduation rates rise (Tienda and Mitchell, 2006).

Between 1970 and 2000 the share of Hispanics with bachelor's degrees doubled, rising from 5 to 10 percent among adults ages 25 and over. During the same period the share of same age college-educated black adults climbed from 4 to 14 percent and the share of college-educated whites more than doubled, up from 11 to 27 percent (U.S. Bureau of the Census, 2003). Hispanic BA receipt rates trailed those of whites by 6 percentage points in 1970, but the gap widened to 17 points over the next 30 years. Thus, in the midst of an impressive expansion in American higher education, Hispanics have fallen further behind in their attainment of college degrees.

The growing Hispanic-white college gap challenges classic sociological predictions that between-group inequalities will tend to decline as society-wide educational opportunities increase. According to status attainment theory, educational expansion permits upward intergenerational mobility, particularly for groups with low

average levels of educational attainment (Blau and Duncan 1967; Treiman 1970). Thus, lagging Hispanic college degree attainment presents a puzzle that has broad implications for understanding the contours of ethnic stratification as their share of the U.S. population increases while the demand for skilled workers remains high.

The most widely cited explanations for the widening Hispanic-white college attainment gap focus on changes in population composition. Specifically, sustained immigration of low-skilled workers from Mexico and elsewhere in Latin America has put downward pressure on the educational attainment levels of second-generation Hispanic youth, whose low college attendance is traced to low education parents (Fry, 2004; Mare, 1995; Schneider, et al., 2006; Wojtkiewicz and Donato, 1995). Recent trends in educational attainment for native-born Hispanics are consistent with this explanation. The share of native-born Hispanic adults who have BA or higher rose from 10 to 15 percent between 1980 and 2000, while the share of foreign-born Hispanic college graduates declined modestly (Statistical Abstract of the United States 2006). This compositional explanation for the Hispanic college puzzle is consistent with status attainment theory, which predicts rising attainment levels across successive generations, but especially during a period of educational expansion (Blau and Duncan 1967; Hauser and Featherman 1978: Chapter 8; Mare, 1979; 1995).

The voluminous status attainment literature has amply documented the powerful influence of parental education on children's completed schooling. Because parental education provides a floor below which offspring are not likely to fall, sons and daughters of college-educated parents are more likely than offspring with less well educated parents to pursue higher education. Compared with parents who lack post-

secondary degrees, college-educated parents are better equipped to convey their postsecondary expectations at young ages; they better understand the post-secondary landscape and increasingly competitive admission process; and they invest more in resources to promote college-going (Glick and White, 2004; Attewell, et al., 2007; Schneider, et al., 2006; Bellessa-Frost, 2006). For example, in 1994, 59 percent of high school graduates whose parents lacked college degrees enrolled in a post-secondary institution compared with 93 percent of students with college-educated parents. These disparities are even more striking according to type of institution attended. Only 27 percent of high school graduates whose parents were not college educated attended a 4-year institution, but over 70 percent of their schoolmates with college-educated parents did so (Choy, 2001; Nanuz and Cuccaro-Alamin, 1998).

By assuming that the relationship between parental and children's education is similar across social groups, status attainment theory predicts a narrowing of group inequalities over time, as greater shares of disadvantaged young adults surpass their parents' completion levels. Yet, even early mobility theorists acknowledged that the assumption of uniform transmission might be unwarranted. In a classic article about occupational mobility, Otis Dudley Duncan (1968) showed that black men were more likely than white men to experience downward mobility (based on their fathers' and their own first job). Duncan viewed this as a transitory aberration associated with the great migration of southern-born blacks to the industrial North. In his words (1968:21), "it is virtually certain …that this pattern cannot prevail indefinitely in the future."

Recent scholarship documenting that black parents have a more difficult time transmitting their educational advantages to their offspring challenges both the

assumption that mobility rates are uniform among demographic groups and that unequal transmission rates between blacks and whites are temporary. Hertz (2004) finds that white children born in the top income quartile have a 45 percent chance of remaining there compared with only 15 percent of their black counterparts. Moreover, he reports that affluent black children are nearly four times more likely than whites to experience extreme downward mobility, from the top to the bottom income quartile, and that black children from the lowest income quartile attain the top income quartile at only a quarter of the rates of whites. Likewise, Attewell and associates (2007) show that young black adults with college-educated parents experience higher rates of educational downward mobility than their white statistical counterparts.

These stylized facts correspond to Persell, Catsambis and Cookson's (1992) notion of "differential asset conversion" – a process by which the economic, social, and cultural assets that influence educational attainment of one group do not operate in similar ways for other groups. In their words, "Social stratification may influence the rate of asset conversion, as it does in financial markets, where small savers receive lower returns than do large savers. Thus, members of disadvantaged groups may lack equal access to certain markets or may pay higher prices in the same market" (p. 209). If college-educated Hispanic parents are less able to transmit educational opportunities to their children than college-educated whites are, changes in population composition may explain only part of the widening Hispanic-white gap in college attainment.

Whether and to what extent unequal intergenerational transmission rates account for Hispanics' lagging educational attainment is an open question. Recent evidence that educational attainment of fourth- and fifth-generation Mexican-Americans trails that of

whites (Telles and Ortiz 2008) suggests that Hispanics lagging educational attainment is not a temporary lull, but likely reflects stymied mobility across parental education levels. However, these findings are based on residents in two Southwestern metropolitan sampled in 1968 and re-interviewed 35 years later and may not generalize to the current Mexican origin population, which is more geographically dispersed.

By assessing the intergenerational educational mobility of three recent cohorts of high school graduates (1982, 1992 and 2004), we consider whether Hispanics' lagging postsecondary attainment reflects a temporary lull or a more enduring pattern of unequal transmission of social status relative to whites. Specifically, we decompose the Hispanic-white college gap into its *explained* and *unexplained* components, distinguishing between differences in population composition, notably parental education and immigration status, and unequal transmission rates by origin. If immigration mainly changes the educational composition of Hispanic parents, our analyses of the relationship between parental education and young adults' college trajectories adequately account for its role in the Hispanic college puzzle. But if, as several studies have suggested, foreign-born parents face unique challenges transmitting status advantages to their children (Glick and White, 2003; 2004; Wojtkiewicz and Donato, 1995), the growing Hispanic-white college gap also may derive from nativity differences in intergenerational transmission of educational status.

Our approach to the well investigated process of intergenerational mobility is situated to unveil the presence of differential transmission rate by origin among youth with comparable background in terms of parental education and nativity. Importantly, the empirical analyses also consider how expansion of the postsecondary system and the

greater postsecondary stratification it generated impacted the Hispanic-white college gap by distinguishing between quantitative and qualitative enrollment inequities. Finally, given the significance of our research question to the current debate about the assimilation of immigrants, we complement analyses of national trends in Hispanic postsecondary enrollment with data of Texas high school seniors (in 2002).[1]

The following section outlines implications of the postsecondary education system expansion that are germane for understanding trends in social mobility. After outlining our research strategy—formulating testable hypotheses and estimation approach, and describing the data and key constructs—we discuss the empirical results. In addition to summarizing key findings, the concluding section discusses several mechanisms that may be responsible for the *unexplained* share of the Hispanic-white college attainment gap.

Postsecondary Education Expansion and Ethnic Stratification

The expansion of the postsecondary system during the period of the current investigation provides an intriguing setting for assessing questions related to temporal changes in intergenerational mobility. That not all segments of the postsecondary system expanded uniformly has direct implications for the college choices confronted by successive cohorts of college entrants. Specifically, the relative growth of public and private, selective and nonselective, as well as two- and four-year institutions determines both the number and range of college options confronted by white and Hispanic high

[1] High-immigration states, like Texas, are notable for their high level of ethnic inequality in educational attainment (Murdock, 2003). For example, in 2005, 35 percent of adult white Texans held college degrees compared with less than 10 percent of comparably aged Hispanics (U.S. Census Bureau 2006).

school graduates in recent decades. Both quantitative and qualitative dimensions of the postsecondary system are important for understanding trends in educational intergenerational mobility, and the Hispanic college puzzle in particular.

Recent trends reveal that the postsecondary education expansion from 1970 to 2000 largely involved 2-year institutions because enrollment at 4-year public and private universities grew slowly over the same period (Digest of Education Statistics, 2003). In Texas, for example, the share of total post-secondary enrollment at 2-year institutions surpassed that at 4-year institutions after 1995 (Tienda, 2006). That demand for access to selective institutions surged as children of baby boomers graduated from high school in unprecedented numbers created a college squeeze and sharpened divisions within the higher education system (Alon and Tienda, 2007).

Enrollment trends are also relevant for understanding persistent inequality in higher education because many recent studies show that the type and selectivity of college attended—2-year vs. 4-year; non-selective vs. selective—influences the probability of graduation as well as long-term life chances (Bowen and Bok, 1998; Alon and Tienda, 2005). Notably, Hispanics are over-represented at 2-year institutions compared with whites, and among those who attend 2-year colleges they are less likely than whites to transfer to 4-year institutions. Not surprisingly, Hispanic college enrollees are less likely than whites to complete baccalaureate degrees (Schneider et al., 2006; Fry, 2004).

Thus, decoding the Hispanic college puzzle requires consideration of both quantitative and qualitative aspects of postsecondary outcomes. The quantitative aspect refers to the chances of college attendance and the qualitative aspect, i.e. the stratification

within the postsecondary system, refers to the selectivity and type of college destinations. In particular, Raftery and Hout's (1993) notion of Maximally Maintained Inequality (MMI) is relevant to understanding college enrollment differentials during a period of postsecondary expansion. They posit that even when post-secondary educational capacity expands, educational disparities between high- and low- status groups will persist until most members of high-status groups have reached the prevailing attainment threshold. Lucas (2001) refined the MMI concept by distinguishing between quantitative and qualitative inequities, arguing that privileged groups use their status advantages to secure quantitatively similar, but qualitatively superior education. His theoretical refinement, denoted Effectively Maintained Inequality (EMI), predicts that educational outcomes will become increasingly stratified along qualitative dimensions (such as college type and selectivity) even as disparities in overall college attainment levels shrink.

These formulations suggest that both quantitative and qualitative dimensions of inequality should guide our quest to solve the puzzle of lagging Hispanic college degree attainment. Accordingly, our empirical analyses address several specific questions about quantitative and qualitative inequality in postsecondary education and how it might have structured and helped to maintain the ethnic gap in intergenerational mobility: (1) Are white and Hispanic students with college-educated parents equally likely to attend college? (2) Are white and Hispanic students with college-educated parents equally likely to attend 4 year non-selective and selective post-secondary institutions? Given claims that population composition, and immigration in particular, is largely responsible for the rising Hispanic-white college gap, we further ask: (3) Are native-born white and Hispanic students with college-educated parents equally likely to *attend* college, and, if so, are they

equally likely to attend 4-year selective post-secondary institutions? Finally, because the Hispanic-white college gap is also attributed to differential access to 2- and 4-year institutions, we also ask whether (4) conditional on enrollment in 4-year institutions, are Hispanic students with college-educated parents as likely as whites to earn a BA?

Individually and collectively answers to these questions will reveal whether Hispanics' lagging educational attainment is a temporary lull or potentially more enduring stymied intergenerational mobility. Finding that a substantial share of the attainment gap is *unexplained* by compositional differences—education and nativity status of parents—will require further research to theorize about *why* transmission rates are unequal in order to fully understand the growing ethnic disparities in college degree attainment.

Data and Methods

Estimation Strategy and Hypotheses

The key question raised by the Hispanic college puzzle is whether the relationship between parental and offspring's educational attainment differs between white and Hispanic high school graduates.[2] If the rates of intergenerational educational transmission for whites and Hispanics are equal, then the Hispanic college puzzle derives mainly from changes in the Hispanic population's educational composition. If status transmission rates are unequal, educational attainment for Hispanic youth would lag behind that of whites even in the absence of changes in population composition.

[2] Students who failed to earn a high school diploma or a GED (and thus were ineligible to enter college) were excluded from the analysis.

To understand Hispanics' lagging postsecondary attainment, we first estimate the odds of college enrollment (or graduation) using the following general form:

$\Omega(\mathbf{x})=\exp(\mathbf{x}\beta)$

Where x includes a series of dummy variables indicating the individual's ethnicity and parental education (Hispanic no college, Hispanic some college, Hispanic college, white no college, and white some college). The odds-ratios for these variables represent the college enrollment (or graduation) odds for each ethno-education group relative to the reference category (white high school graduates with college-educated parents. To differentiate the effect of parental education from that of immigration we also estimate a specification that fully interacts parental education with nativity.

The hypothesis of equal transmission rates (**H0**) will be supported if at any given time point, the college-going and completion odds of Hispanic students whose parents lack college degrees roughly equal those of white students with similarly educated parents. The enrollment/graduation odds of children of both white and Hispanic parents lacking college experience should be lower than those of the children of parents with BA degrees. Furthermore, equal transmission rates imply trivial ethnic inequalities among children whose parents are college graduates. The "differential asset conversion" hypothesis (**H1**) assumes unequal intergenerational transmission rates for each cohort. Lower odds of college enrollment/graduation for Hispanic students compared with white students with similarly educated parents refute the null hypothesis. Furthermore, lower enrollment/graduation rates for all Hispanic cohorts would suggest that the observed ethnic inequities are not transitory.

We also model students' odds of enrolling in two-year, four-year and four-year selective institutions in order to evaluate qualitative stratification among postsecondary outcomes.[3] These specifications are based on multinomial logistic regressions where the dependent variable is an array of college destinations stratified by college type and admission selectivity. H1 predicts that qualitative disparities in college destination will be larger than the quantitative gap in college enrollment. Furthermore, among students with college-educated parents, the Hispanic-white gap will be larger for 4-year compared with 2-year institutions, and for selective four-year compared with nonselective four-year institutions.

Simulations

To decompose intergenerational educational mobility into its explained and unexplained components, we compare the observed matriculation rates for white and Hispanic students with two simulated alternatives. The first simulates Hispanic college enrollment if their parents' education matched that of white parents, holding constant their intergenerational educational transmission rates. This isolates the share of the ethnic college gap attributable to a key difference in population composition, namely parental education. The second simulation estimates Hispanic college enrollment if they experienced the same rate of intergenerational educational asset conversion as whites, given their parents' actual education. This exercise isolates the share of the ethnic gap due to unequal transmission rates.

[3] The model follows this general form: $\Omega_{m|n}(\mathbf{x})=\exp(\mathbf{x}[\beta_m-\beta_n])$, where m and n are types of college destinations.

Computationally, the first simulation is generated by regressing college destinations on parental education levels for white students only, and then applying the resulting white coefficients to Hispanic high school graduates for the corresponding parent education strata. The second simulation is produced by regressing college destinations on parental education levels for Hispanic students only and estimating their enrollment patterns after substituting white average educational levels for the Hispanic parental education distribution. To further disaggregate the explained component of the gap, we repeat these simulations by disaggregating Hispanic students according to their parents' education *and* birthplace.

Data Description

We use five different data sets to answer the specific questions posed above. First, to assess the intergenerational educational mobility during a period of educational expansion and population diversification, we analyze three nationally representative cohorts of high school graduates in 1982, 1992, and 2004.[4] High School & Beyond (HS&B), which surveyed a nationally-representative sample of high school sophomores in 1980, re-interviewed respondents in 1982, when most were high school seniors. Additional follow-up interviews were administered until approximately 10 years post-high school. The National Education Longitudinal Study of 1988 (NELS) drew a representative sample of 8th graders in 1988 and re-interviewed them in 1990, 1992 (their senior year), 1994, and 2000. More recently, the Education Longitudinal Study of 2002

[4] These longitudinal surveys were conducted by the National Center for Education Statistics.

(ELS) sampled 10th graders in U.S. highs schools in 2002 and followed up with respondents in 2004 and 2006, when most were two years out of high school.[5]

Because sample sizes of college-educated immigrant parents are tiny in these national samples, we supplement the national studies with a large, representative survey of Texas public high school graduates, which permits sample stratification by both parental education and nativity. We use data from the Texas Higher Education Opportunity Project (THEOP), based on a representative sample of 13,803 high school seniors who were interviewed in spring of 2002.[6] A random sample of 5,863 respondents was re-interviewed one year later to ascertain their college enrollment status. We restrict analyses to students who participated in both the base-year study and in the 2003 follow-up.

Finally, to track ethnic differences in college graduation likelihood according to college selectivity level and parental education, we use the College and Beyond (C&B) database, a restricted-access database built by the Andrew W. Mellon Foundation, based on a large sample of students who enrolled in 28 academically "more competitive" college and universities in the fall of 1989 (Bowen and Bok, 1998). Again, national datasets contain too few observations of college enrollees to allow simultaneous

[5]Because all three national studies are based on two-stage, stratified sampling designs, our multivariate analyses correct the downwardly biased standard errors due to the clustering of students in institutions.
[6] Like the national surveys, the THEOP data are based on a school-level sampling scheme. 108 Texas public high schools were randomly selected based on a scheme that classified Texas public high schools as of 2000 based on region, urbanicity, and school racial/ethnic composition. 82 of these high schools granted permission to administer surveys during class-time to all seniors present, and the remaining schools required the project to sample a small number of classes or administer the survey via the mail. Sample weights produce the population distribution

stratification by ethnicity, parental education and college type. [7] The C&B sample is sufficiently large to stratify both by ethnicity and parents' educational level.[8]

Variable Definitions

Empirical analyses focus on high school graduates' ethnicity and parental educational attainment as determinants of their postsecondary outcomes (college enrollment, destination and attainment). Respondents missing data on any of these attributes are dropped from the samples.

We use students' self-reported *race and ethnicity* to define four demographic groups: whites, blacks, Hispanics, and Asians.[9] All statistical analyses include blacks and Asians, but for parsimony of exposition these coefficients are reported only in Appendix Tables A-1 and A-2. One issue that may create a bias in our findings is Hispanics' heterogeneity based on national origin. This is because immigrants from different countries differ in their educational selectivity vis-à-vis non-migrants in the home country, which in turn affects the college attainment of the second generation (Feliciano, 2005; Bohon, Johnson, and Gorman, 2006). To a large extent, however, these differences reflect variation in family background, and parental education in particular (Duncan, Hotz and Trejo, 2006). Moreover, it was demonstrated that generation status is more influential predictor of socioeconomic outcomes than national origin (Tienda and

[7] These samples include relatively few Hispanic students who graduated from college in each cell.
[8] The C&B analyses are adjusted to account for the clustering of observations in a small number of institutions.

[9] Native Americans and students who reported another race or ethnicity are excluded from these analyses.

Mitchell, 2006). Unfortunately, few data sets permit disaggregation of Hispanics by both nativity and national origin.

Our focus on Hispanics with college-educated parents precludes a full disaggregation by national origin, but as a sensitivity analysis we have disaggregated Hispanics to Mexicans and non-Mexican, as was done by two NAS studies (Smith and Edmonston, 1997; Tienda and Mitchell, 2006). As expected, our results show that parents of Mexican youth average lower education levels compared with other Hispanic youth.[10] Within parental education strata, however, nationality differences regarding college destination are statistically insignificant and substantively trivial for most comparisons. Stated differently, for the datasets analyzed here, the educational transmission rate *among* Hispanics varies little by national origin. This claim finds further support in lower Hispanic transmission rates compared with whites in all four data sets, despite different changes in the composition of the national origin groups during the observation period. In the interest of clarity and parsimony, we do not disaggregate Hispanics by their national origin for multivariate analyses, but do reference relevant Mexican – non-Mexican differences when these are statistically significant.

Parental educational attainment is measured by three categories representing the highest degree attained by either the respondents' mother or father. High school graduates whose parents dropped out of high school or completed a high school diploma but never enrolled in post-secondary education are designated "No college parents." If at least one parent had entered college, but did not earn at least a bachelor's degree, students are classified as having "Some college parents." Finally, graduates who had at least one BA-credentialed parent, including those who completed a graduate degree, are designated

[10] These results are not reported but are available from the authors.

"BA or higher parents." Using this classification, respondents were sorted into six ethno-education groups: Hispanics with no college parents, Hispanics with some college parents, Hispanics with BA or higher parents, whites with no college parents, whites with some college parents, and whites with BA or higher parents (which serves as the reference category). *Nativity* was coded, using the Texas survey, by classifying respondents' parents according to their birthplace, and both native- and foreign-born parents were further assigned to the six ethno-education groups.[11]

Degree attainment data was collected 10 years and 8.5 years post high school graduation for the 1982 and 1992 high school cohorts, respectively. We sort students into four categories based on their final educational attainment: (1) no college; (2) attended college but earned no degree; (3) earned a certificate or an Associate Degree (AA); and (4) BA or higher. Analyses of degree attainment are restricted to the 1982 and 1992 national datasets because the college graduation status of the Texas and the 2004 national high school graduation cohort is unavailable. In addition, we model *6-year graduation status* using the C&B database. This dependent variable is obtained from institutional records that were collected for *all* students who enrolled in the fall of 1989 at all of the C&B institutions. In the college graduation analysis we also control for *standardized test scores* and high school *class rank*.

Most studies of post secondary attendance only consider whether or not students matriculated, thus ignoring the "qualitative" stratification in *college destinations*. For Hispanics this is important because their rising college participation involves disproportionate representation in 2-year institutions, with their attendant implications for

[11] Respondents who did not provide data on their parents' nativity are set to missing on this variable, and excluded from relevant analyses.

eventual degree attainment (Schneider, et al, 2006; Swail, et al, 2003; Fry, 2004; Velez, 1985). We use a multiple response category with four outcomes based on selectivity categories from Barron's Profiles of American Colleges (1992), but also including non enrollment and 2-year institutions: (1) no post-secondary education; (2) two-year colleges (those offering programs requiring 2 or less years to complete, including community colleges); (3) four-year noncompetitive colleges; and (4) four -year competitive colleges (median SAT above 900).[12] Finally, in order to improve the comparability between the three national datasets, models include statistical controls for *Census regions*.[13] These regional dummies identify respondents who live in New England, the Mid-Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific states.

Results

Table 1 classifies white and Hispanic high school graduates by parental education status using data from the three national longitudinal studies as well as the Texas study. Hispanic parents average lower levels of post-secondary education in all four surveys. Nationally, the share of white students whose parents lacked college training fell by half between 1982 and 2004, but the comparable drop for Hispanics was less than 25 percent. Consequently the ethnic gap in parental education of high school graduates widened considerably from 1982 to 2004. For both groups, most of the improvement in parental education status occurred during the 1980s, but appears to have slowed during the 1990s, a period coincident with the surge in low skill immigrants from Latin America.

[12] For the analyses based on the ELS data we only consider whether or not students enrolled in 2-year colleges or 4-year colleges because detailed data on postsecondary institutions are not currently available.
[13] This accounts for differences in the sampling frames of the three national datasets.

[Table 1 about Here]

The white-Hispanic ratio provides a convenient way to summarize the trends and differentials reported in Table 1. Nationwide the white-Hispanic ratio for students with parents lacking college fell over the study period, and by 2004, the proportion of white high school graduates with no college parents was less than half the proportion of Hispanic high school graduates with no college parents. The mirror image is the group share with college-educated parents. By 2004 more than 40 percent of white high school graduates had at least one college-credentialed parent (up 17 percentage points since 1982), yet the share of Hispanic high school graduates with college-educated parents rose only 6 percentage points—from 15 percent in 1982 to 21 percent in 2004.[14] The white-Hispanic ratio for students with college-educated parents rose from 1.8 to 2.0 during the 1980s and remained unchanged through 2004. In Texas, the educational divide along ethnic lines is wider still. In 2002, 19 percent of white high school graduates had parents lacking college experience compared with over half of Hispanic students. Conversely, almost 54 percent of white students had college-educated parents, compared with only 19 percent of Hispanics (W-H ratio of 2.87).

Table 2 portrays the ethnic gap in degree attainment by parental education status for the 1982 and 1992 national cohorts. Consistent with secular trends, college attainment rates were higher for both whites and Hispanics from the class of 1992 compared with the 1982 class. Moreover, in accord with predictions of status attainment theory, students with college-educated parents exhibit higher degree attainment than their ethnic peers with less educated parents. Yet, for all levels of parental education, Hispanic high school

[14] Among Mexicans the rise in the share of educated parents was trivial: from 15 percent in 1982 to only 18 percent in 2004. Among non-Mexicans it was more substantial (from 15 to 29 percent, respectively).

graduates from both national cohorts were less likely to earn BA degrees than similarly-situated whites. Of particular note, among students with college-educated parents, whites were nearly twice as likely to earn a baccalaureate degree as Hispanics. To further examine how inequalities in transitions to and from the postsecondary system contribute to the Hispanic-white gap in degree attainment, we estimate the likelihood of college enrollment/destination and college graduation for both groups across different time periods.

[Table 2 about Here]

Inequalities in college enrollment and college destinations

For each dataset we estimate the association between parental education and whether offspring enrolled (1) at any post-secondary institution; (2) at a 2-year college; (3) at a 4-year college or university; and (4) at a competitive institution. Figures 1 and 2 plot odds ratios to portray the standing of ethno-education groups relative to whites whose parents graduated from college, represented by the crossing line set at 1.0 (Long, 1997).[15] All of the odds ratios plotted in Figure 1 fall below the crossing line, indicating persistent ethnic disparities in the likelihood of college attendance. In 1982 the odds ratios for Hispanics with college educated parents lag behind their white counterparts, but these youth also were unable to differentiate themselves from whites whose parents had only some college experience. Likewise Hispanic youth whose parents acquired some college were unable to differentiate themselves from whites whose parents lack any college experience.

(Figure 1 about Here)

[15] Estimates for Figures 1 and 2 are reported in Appendix Tables A-1 and A-2.

The 1992 national stratification regime reveals a well-defined tripartite segmentation where white students with college-graduate parents are at the top of the hierarchy—well above Hispanics with college-educated parents—and all other groups are clustered below them. The ensuing dozen years witnessed a pulling apart of whites and Hispanics with college-educated parents. In 2004, the college enrollment odds for Hispanics with college-educated parents are only marginally higher than the enrollment odds for whites whose parents have some college. Results for the 2002 Texas high school cohort also reveal that Hispanics with college-educated parents lag well behind their white peers with comparably educated parents. The point estimates reported in Appendix Table A-1indicate that black high school graduates also are less likely than similarly situated whites to enroll in college.

Figure 2 portrays the qualitative aspects of the stratification regime based on group differences in enrollment at 2-year, 4-year and competitive postsecondary institutions. Panel A shows a white-Hispanic 2-year college enrollment gap for all cohorts with college educated parents (these differences are statistically significant for the 1982 and 2002 cohorts). Moreover, as Panels B and C reveal the association of parental and offspring's educational credentials is coupled with the stratification of the postsecondary system. The odds of 4-year college enrollment are more polarized along ethnic and class lines compared with 2-year enrollment. For all four cohorts, students whose parents lack any college or have some college exposure short of a degree are considerably less likely to enroll in 4-year colleges compared with offspring of parents with baccalaureate degrees. Furthermore, among students with college-educated parents, Hispanics (as well as blacks) are at a large disadvantage vis-à-vis whites in their access to

4-year institutions.[16] Data on competitive university enrollment for the 2004 national cohort is not yet available, but evidence from the other three surveys indicates that white students with college-educated parents are appreciably more likely to attend competitive post-secondary compared institutions with all education-specific demographic groups, including Hispanics with college-credentialed parents. Among students whose parents lack BA degrees the contours of ethnic stratification are less sharply defined for their offspring.

(Figure 2 about Here)

Taken together, the results suggest that the key difference between Hispanics and whites stems from differential access to Bachelor's degree-granting institutions, which prior scholarship largely attributes to family background (notably parental education). The odds ratios plotted in Figures 1 and 2 are consistent with the basic tenets of status attainment theory since they show that within racial groups, higher levels of parental education is associated with higher levels of college enrollment. However, they also challenge the assumption of a uniform association by ethnicity (and race). For all four cohorts, Hispanic students with college-educated parents are significantly *less* likely than white students whose parents are college graduates to enroll at any college, particularly a 4-year institution. That ethnic inequality in educational attainment persists for more than three decades indicates that the Hispanic college puzzle is not a transitory phenomenon. Moreover both differences in the distribution of parental education and Hispanic parents' lower success in transmitting their educational resources to their offspring than comparable white parents, particularly for attendance at 4-year universities, contribute to

[16] A sensitivity analysis reveals that there are no differences in transmission rates between Mexicans and other Hispanics.

the Hispanic-white college disparity. To better appreciate the relative magnitude of population composition and unequal intergenerational transmission rates in maintaining Hispanic-white college enrollment disparities, we decompose the gap into its main components.

Decomposition of the ethnic gaps in college destinations

We first assess what part of the gap can be attributed to differences in parental education levels and what part to differences in transmission rate (i.e. left unexplained). In essence we compare the observed matriculation rates for white and Hispanic students with two simulated alternatives. The first estimates Hispanic college enrollment if their parents' education matched that of white parents, assuming no change in the intergenerational transmission of educational status. The second simulates Hispanic college enrollment patterns if the distribution of parental education remained unchanged, but Hispanic parents converted their educational assets at the same rate as whites.

[Table 3 about Here]

The results reported in Table 3 show observed ethnic enrollment gaps range from 8 to 17 percentage points across the cohorts compared. The first simulation reveals the relative influence of parental education on offspring' postsecondary enrollment. Assigning parental education of white students to Hispanic high school graduates boosts overall college enrollment rates for all cohorts, and notably so for the 1992 national cohort and the 2002 Texas cohort. Specifically, over 70 percent of 1992 Hispanic high school graduates and nearly 80 percent of 2002 Hispanic high school graduates from Texas would have enrolled in college if the their parents' education was comparable to that of their white counterparts. This compares with actual enrollment rates of 66 and 67

percent, respectively. Overall, parental education explains between a quarter to one-third of the Hispanic-white enrollment gap in 1982 and 2004, respectively, while it accounts for most of the gap in 1992 and Texas 2002 (73 and 84 percent, respectively).

Yet, parental education contributes less to explaining qualitative gaps. For all national cohorts, ethnic differences in parental education explained not more than a quarter of the ethnic enrollment gap at 4-year institutions or at the more competitive institutions. In Texas, Hispanic parents' educational assets account for about half of the ethnic college enrollment gap at 4-year institutions and almost 40 percent of the average disparity in selective college enrollment. Mass migration of unskilled immigrants from Mexico is implicated in the results for Texas, which we consider next. Yet, even in Texas, most of the qualitative gaps in college attendance are not accounted for by parental educational resources, suggesting that unequal transmission rates also foment the Hispanic-white college gap.

The simulation that assigns whites' transmission rates to Hispanics reveals that at all levels of institutional selectivity, part of the Hispanic-white enrollment gap results from Hispanic parents' lower success in transmitting their education status to their offspring compared with similarly credentialed white parents. Equalizing intergenerational transmission rates would reduce qualitative enrollment gaps by boosting Hispanics' access to baccalaureate institutions. Specifically, in 1982 and 2004 Hispanics' simulated enrollment rate at four-year institutions is 10 percentage points higher than the observed share, and 4 percentage points higher in 1992 and 2002 Texas. The simulations reveal that the ethnic gap in enrollment at 4-year and competitive colleges and universities would be substantially reduced if educational transmission rates of Hispanics

and whites were similar. Thus, parents' ability to transmit status advantages can reduce qualitative educational inequality by increasing the share of Hispanic youth that attend baccalaureate institutions. In sum, our temporal perspective reveals that Hispanics lagging postsecondary attendance is more than a temporary lull due to changing population composition, but also stems from unequal transmission rates.

To further unpack the Hispanics college puzzle we assess how much immigration contributed to the rising disparities by changing the educational composition of Hispanic parents, and whether native- and foreign-born parents are equally successful transmitting status advantages to their children. Using the Texas data, Table 4 repeats the simulations reported in Table 3 by disaggregating Hispanic students according to their parents' birthplace.[17] The top panel reports the simulation for Hispanic students with U.S.-born parents and the lower panel repeats the exercise for Hispanics with foreign-born parents.

[Table 4 about Here]

In 2002 Hispanic Texas public school graduates with native-born parents were 11.5 percentage points less likely than white students to enroll in any college, 16 percentage points less likely to enroll in 4-year colleges, and 19 percentage points less likely to enroll in a competitive 4-year college. Consistent with national data, they were *more* likely than whites to enroll in 2-year institutions. The college enrollment gap for Hispanic graduates with foreign-born parents was larger still—18.4 points overall. Moreover, their enrollment at four-year institutions was 27 percentage points below that of white Texas students

[17] We are unable to directly assess parents' immigration status in the national data because these samples lack sufficient numbers of Hispanic high school graduates with college-educated parents who were also born abroad.

The simulations reveal that if U.S-born parents of Hispanic students had the educational resources of whites, the Hispanic-white college enrollment would be virtually eliminated. This finding regarding *quantitative* inequality provides strong support for the status attainment explanation of Hispanic-white educational inequality. Yet, the status attainment explanation does not square with the experience of students with foreign-born parents, nor does it explain qualitative inequality between the groups. If immigrant parents had the same educational resources as whites, they could only halve the overall enrollment gap. Moreover, parental education does not entirely account for *qualitative* differences in college destinations between Hispanics and whites, irrespective of their birthplace. For Hispanic students with native-born parents, parental education accounts for 60 percent of the gap in attendance at 4-year colleges, but only for 35 percent among their counterparts with immigrant parents. The explanatory power of parental education for enrollment at competitive institutions is lower still, accounting for 41 and 33 percent of the ethnic disparities among Texas high school graduates with native- or foreign-born parents, respectively.

To illustrate the implications of these findings the second simulation demonstrates that equalizing intergenerational transmission would not close the overall ethnic college enrollment gap either for Hispanics with U.S.- or foreign-born parents, but it could considerably alter their college destination, from 2-year colleges to 4-year institutions including the most selective ones. The magnitudes of the gap reductions are larger for students with foreign-born parents, affirming that immigration depresses the ability of Hispanic educated parents to transmit their assets to their children.

Findings for Texas cannot be generalized to the U.S. as a whole, partly because the State's postsecondary system includes a larger share of 2-year institutions compared to the national average and partly because over half of Texas's college-age population is minority (Tienda, 2006). Yet, they are instructive in affirming that both foreign- and native-born college-educated Hispanic parents are handicapped in their ability to transmit their educational advantages to their children compared with white parents. Hispanics' intergenerational transmission handicap is most pronounced for access to competitive post-secondary institutions, particularly among students with immigrant parents. The simulations for Texas cement our claims that both changing population composition due to immigration of low education parents and unequal ability to confer status advantages to offspring are responsible for the growing Hispanic-white enrollment gap.

Inequalities in college completion

Hispanic-white disparities in postsecondary enrollment and college destination are the precursors to observed gaps in degree attainment. The process of differential asset conversion may continue through college, possibly widening disparities in graduation rates, even at 4-year schools or at the most selective institutions in the nation. To assess this claim we analyze the BA degree completion odds of students who attended the most selective institutions in 1989 based on the College and Beyond (C&B) study. After estimating the college graduation odds of all C&B students (Panel A in Table 5), we disaggregate the sample by institutional selectivity. Specifically, we compare BA attainment odds at the most selective institutions in American higher education, where the average SAT score is 1250 or higher (Panel C), with the BA attainment at less selective institutions (Panel B).

[Table 5 about Here]

The first model of Table 5 reveals that Hispanic C&B students, even those with college-educated parents, are less likely than whites to have earned a BA within six years of enrollment. This generalization obtains both for the most selective institutions as well as those designated highly selective (Models 3 and 5). Yet, controlling for test scores, and high school ranking, Hispanic students with college educated parents who attended less selective C&B institutions are no less likely to earn a BA than white enrollees (Model 4). Substantively, these results indicate that Hispanic-white gap in BA attainment is partly a function of ethnic inequalities in high school achievement that determines college readiness, even among students whose parents hold BA degrees. Yet, at the nation's most elite colleges and universities Hispanic students with college-educated parents are significantly *less* likely than their white counterparts to complete a BA degree, even after equalizing their academic preparation. This suggests that highly qualified Hispanic students who attend the most selective universities face academic and other challenges compared with their white peers with highly educated parents. Available data do not permit further probing of this result, such as comparing the graduation rates of students whose parents have post-graduate degrees or who themselves graduated from elite institutions, but this is an area deserving further investigation.

Conclusions

This study investigates the Hispanic college puzzle, namely, that Hispanics have fallen further behind whites in their postsecondary enrollment and BA attainment levels even as their college enrollment and graduation rates reached an all time high. This

stylized fact is all the more important because Hispanics surpassed blacks as the largest national minority in 2003 and are projected to grow at a rapid clip through 2030 (Tienda and Mitchell, 2006). Although the surge in low-skill immigration from Latin America is a popular explanation for the widened Hispanic-white college gap, we demonstrate that compositional shifts are not the only factor responsible for the growing degree attainment disparities. Group differences in parental education only partly explain the Hispanic-white gap in college enrollment, and not evenly over time. The explanatory power of parents' nativity status also is limited because all Hispanic parents are handicapped in their ability to convert their educational assets for benefit of their offspring.

The large unexplained ethnic gap in access to 4-year and the more competitive institutions indicates rising *qualitative* inequality in higher education even as quantitative gaps narrowed. This, too, curbs Hispanic degree attainment because the type and selectivity level of institution attended shape students' graduation chances (Bowen and Bok, 1998; Alon and Tienda, 2005). Moreover, the ethnic transmission disadvantage persists well into college, as evident by considerable gaps in graduation rates among students attending the nation's most selective institutions.

This is not to say that changes in population composition are inconsequential for the widened Hispanic-white college gap. Children of immigrant parents face formidable barriers to college access, particularly if they are first generation college-goers. Our results confirm that Hispanic students with foreign-born parents face greater disadvantages in postsecondary destinations than their counterparts with native-born parents mainly because of their parents' lower education levels. That children of immigrants are the fastest growing segment of the Hispanic population magnifies the

social significance of these findings for the contours of future socioeconomic inequality. Our findings that immigration is not the sole factor driving the Hispanic-white college gap add a social significance to this fact.

The reasons for the unequal transmission rates are a topic of another study. Ethnic differences in high school academic preparation and college orientation may partly explain the puzzle. For example, Schneider and her colleagues (2006) finds that Hispanic students whose parents hold college degrees are significantly less likely than their white peers to take advanced math courses in high school, which is an important predictor of college enrollment (Schneider, et al., 2006). Rising income inequality coupled with soaring college costs and changes in financial aid policies may further exacerbate the ethnic gap in college destinations and graduation rates in the future (Alon, 2007; The College Board, 2005a; Morris and Western, 1999; The College Board, 2005b). Other circumstances, such as limited information about college and graduation from high schools that do not prepare them for college-level work, may further clarify the Hispanic college puzzle. Our findings should propel additional research to identify other factors responsible for the growing Hispanic-white postsecondary gaps.

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Table 1: Parental education of 1982-2004 Hispanic and White high school graduates

	No college parents	Some college/ AA parents	BA or higher parents
1982			
White	43.5	29.8	26.8
Hispanic	59.4	25.7	14.9
Ratio, White-to Hispanic	*0.73*	*1.16*	*1.80*
1992			
White	23.3	39.7	37.1
Hispanic	44.7	37.0	18.3
Ratio, White-to Hispanic	*0.52*	*1.07*	*2.03*
2004 (national)			
White	21.8	34.7	43.5
Hispanic	46.3	32.3	21.4
Ratio, White-to Hispanic	*0.47*	*1.07*	*2.03*
2002 (Texas)			
White	19.2	26.5	54.3
Hispanic	55.7	25.4	18.9
Ratio, White-to Hispanic	*0.34*	*1.04*	*2.87*

Sources:
1982: High Schol and Beyond (HS&B), weight=fu2wt;
1992: National Education Longitudinal Survey (NELS), weight= f3qwt;
2004: The Education Longitudinal Study of 2002 (ELS), weight=BYSTUWT;
2002: Texas Higher Education Opportunity Project (THEOP), weight=w2_weight.

Table 2: Degree attainment of 1982 and 1992 high school graduates by parental education

		Children's Educational Attainment					
		No College	Attended college, no degree	Certificate	AA	BA	[N]
1982							
White							
	No college parents	48.2	27	6.4	5.5	12.8	[3,199]
	Some college/AA parents	27.3	32.2	6	7.9	26.5	[2,270]
	BA or higher parents	11.8	24.9	3.7	6.1	53.5	[2,279]
Hispanic							
	No college parents	53.1	33	5.2	2.9	5.9	[1,074]
	Some college/AA parents	44.5	32.8	4.4	7.3	11	[474]
	BA or higher parents	32.1	31	1.7	8.1	27.2	[319]
W/Hispanic ratio, BA attainment for children of BA parents						*1.97*	
1992							
White							
	No college parents	31.84	41.68	11.6	9.3	17.1	[1,812]
	Some college/AA parents	16.08	43.87	8.7	9.1	31	[2,987]
	BA or higher parents	6.1	29.18	4.5	6	58.8	[2,592]
Mexican							
	No college parents	20.7	56.26	13.7	8.7	14.2	[556]
	Some college/AA parents	15.34	57.2	7.5	9.9	17.5	[476]
	BA or higher parents	9.53	51.2	7	6.2	33	[192]
W/Hispanic ratio, BA attainment for children of BA parents						*1.78*	

Sources:

1982: High Schol and Beyond (HS&B), weight=fu2wt;

1992: National Education Longitudinal Survey (NELS), weight= f3qwt;

Table 3: Observed white and Hispanic college enrollment, and simulated Hispanic college enrollment:1982-2004

	Observed white enrollment	Observed Hispanic enrollment	Observed Difference Hispanic and white enrollment	Simulated Hispanic enrollment				
				Assuming White parental education levels[b]	% point change	*% explained by parental education*	Assuming White transmission rate[a]	% point change
1982, National								
% enrolled in any inst	52.7	35.3	-17.4	39.4	4.1	***0.24***	47.0	11.7
% enrolled in 2 yr inst	19.3	19.6	0.3	20.2	0.6	***2.00***	21.3	1.7
% enrolled in 4 yr inst	33.4	15.7	-17.7	19.2	3.5	***0.20***	25.7	10.0
% enrolled in comp 4 yr inst	24.4	11.3	-13.1	13.7	2.4	***0.18***	18.2	6.9
1992, National								
% enrolled in any inst	73.2	65.5	-7.7	71.1	5.6	***0.73***	62.7	-2.8
% enrolled in 2 yr inst	33.8	43.4	9.6	45.4	2.0	***0.21***	36.4	-7.0
% enrolled in 4 yr inst	39.4	22.1	-17.3	25.7	3.6	***0.21***	26.3	4.2
% enrolled in comp 4 yr inst	30.4	16.0	-14.4	19.5	3.5	***0.24***	19.1	3.1
2004, National								
% enrolled in any inst	81.7	70.8	-10.9	74.1	3.3	***0.30***	74.4	3.6
% enrolled in 2 yr inst	27.6	40.7	13.1	39.6	-1.1	***0.08***	34.3	-6.4
% enrolled in 4 yr inst	54.1	30.1	-24.0	34.5	4.4	***0.18***	40.1	10.0
% enrolled in comp 4 yr inst	--	--	--	--			--	
2002, Texas								
% enrolled in any inst	81.3	67.2	-14.1	79.0	11.8	***0.84***	68.0	0.8
% enrolled in 2 yr inst	30.0	35.8	5.8	36.9	1.1	***0.19***	32.7	-3.1
% enrolled in 4 yr inst	51.2	31.4	-19.8	42.1	10.7	***0.54***	35.3	3.9
% enrolled in comp 4 yr inst	48.5	25.6	-22.9	34.8	9.2	***0.40***	33.0	7.4

Sources: 1982: High Schol and Beyond (HS&B), weight=fu2wt; 1992: National Education Longitudinal Survey (NELS), weight= f3qwt;
2004: The Education Longitudinal Study of 2002 (ELS), weight=BYSTUWT; 2002: Texas Higher Education Opportunity Project (THEOP), weight=w2_weight.
Simulated enrollment probabilities derived from multinomial logistic odds-ratios.

[a] Enrollment probabilities calculated by applying white-only mlogit model to Hispanic respondents

[b] Enrollment probabilities calculated by applying white parental education distribution to Hispanic-only mlogit model

Table 4: Observed white and Hispanic college enrollment, and simulated Hispanic enrollment for students with native-born and foreign-born parents: Texas, 2002

College Enrollment Status	Observed white enrollment	Observed Hispanic enrollment	Observed difference Hispanic and white enrollment	Simulated Hispanic Enrollment				
				Assuming White parental education levels[b]	% point change	*% explained by parental education*	Assuming White transmission rate[a]	% point change
Native-born parents								
% enrolled in any inst	81.3	69.8	-11.5	81.5	11.7	***1.02***	71.3	1.5
% enrolled in 2 yr inst	30.0	34.4	4.4	36.6	2.2	***0.50***	32.7	-1.7
% enrolled in 4 yr inst	51.3	35.4	-15.9	44.9	9.5	***0.60***	38.6	3.2
% enrolled in comp 4 yr inst	48.6	29.8	-18.8	37.6	7.8	***0.41***	36.2	6.4
Foreign-born parents								
% enrolled in any inst	81.3	62.9	-18.4	72.4	9.5	***0.52***	63.1	0.2
% enrolled in 2 yr inst	30.0	38.2	8.2	38.4	0.2	***0.02***	32.9	-5.3
% enrolled in 4 yr inst	51.3	24.7	-26.6	34.0	9.3	***0.35***	30.2	5.5
% enrolled in comp 4 yr inst	48.6	18.8	-29.8	28.1	9.3	***0.33***	28.0	9.2

Sources:
2002: Texas Higher Education Opportunity Project (THEOP), weight=w2_weight.

[a] Enrollment probabilities calculated by applying results of white-only multinomial logistic model to Hispanic respondents

[b] Enrollment probabilities calculated by applying white parental education distribution to results of Hispanic-only multinomial logistic model

Table 5: Logistic regression odds of BA attainment for students who enrolled in "more competitive" colleges and universities

	Panel A: All C&B institutions (Mean SAT 1050-1600)		**Panel B: "Very/Highly Selective" C&B institutions (Mean SAT 1050-1250)**		**Panel C: "Most selective" C&B institutions (Mean SAT 1250-1600)**	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Hispanic no college parents	0.503**	0.613*	0.473**	0.561*	0.340*	0.318*
Hispanic some college parents	0.642**	0.775	0.620*	0.735	0.471*	0.465*
Hispanic college parents	0.704*	0.81	0.676*	0.776	0.581*	0.565*
White no college parents	0.555**	0.615**	0.601**	0.621**	0.685	0.666
White some college parents	0.578**	0.609**	0.640**	0.640**	0.484**	0.456**
White college parents	--	--	--	--	--	--
Student SAT/ACT scores	--	1.168**	--	1.112**	--	0.993
Student in top 10% of high school class	--	1.528**	--	1.504**	--	1.493*
Pseudo R-square	0.0179	0.0349	0.0157	0.0266	0.0277	0.0321
N	28,442	28,442	21,698	21,698	6,744	6,744

* p<.05 **p<.01 ***p<.001

Source: College and Beyond Survey, 1989 enrollment cohort
The analyses are weighted and are adjusted to account for the clustering of observations in a small number of institutions.

Figure 1: Odds ratio plots for post-secondary enrollment

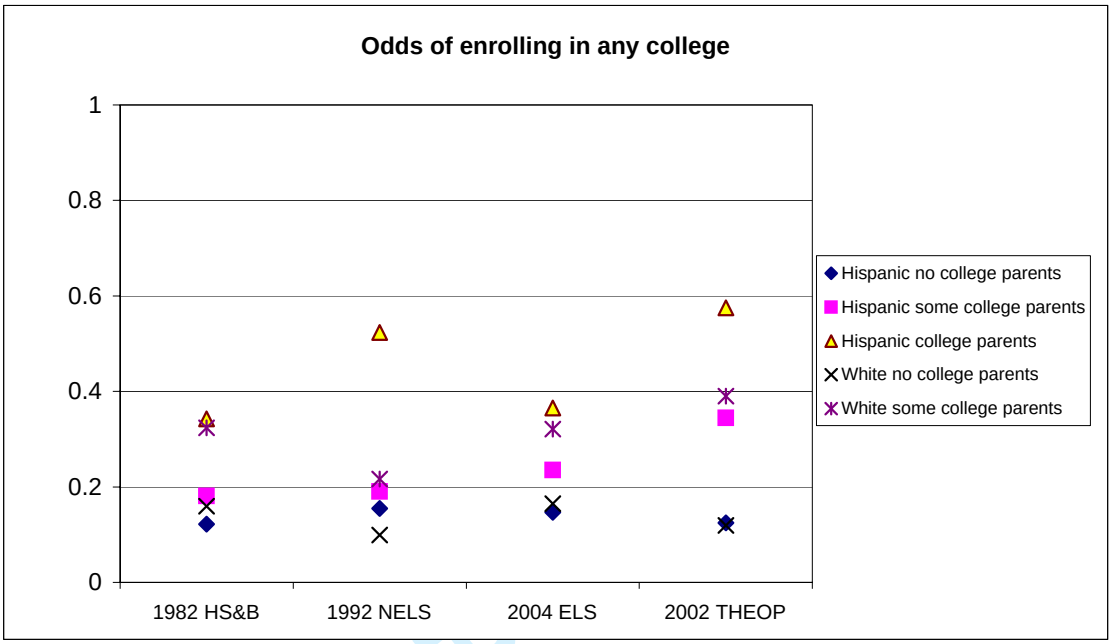
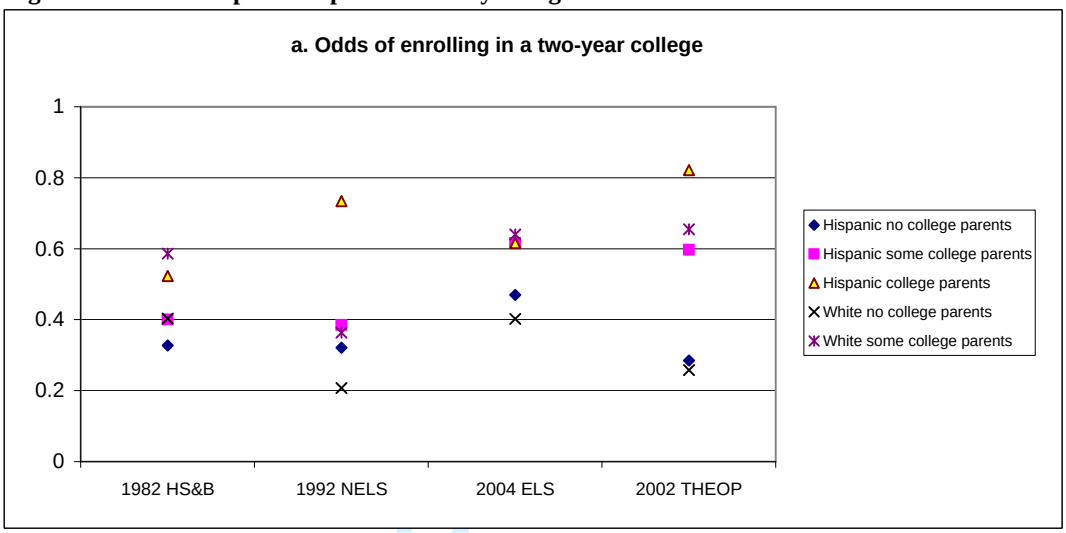
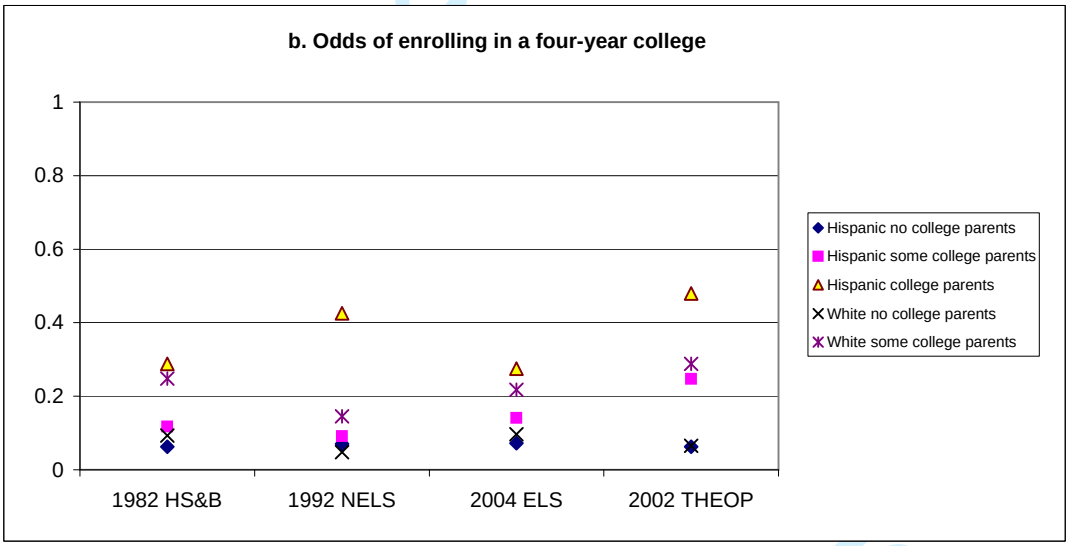
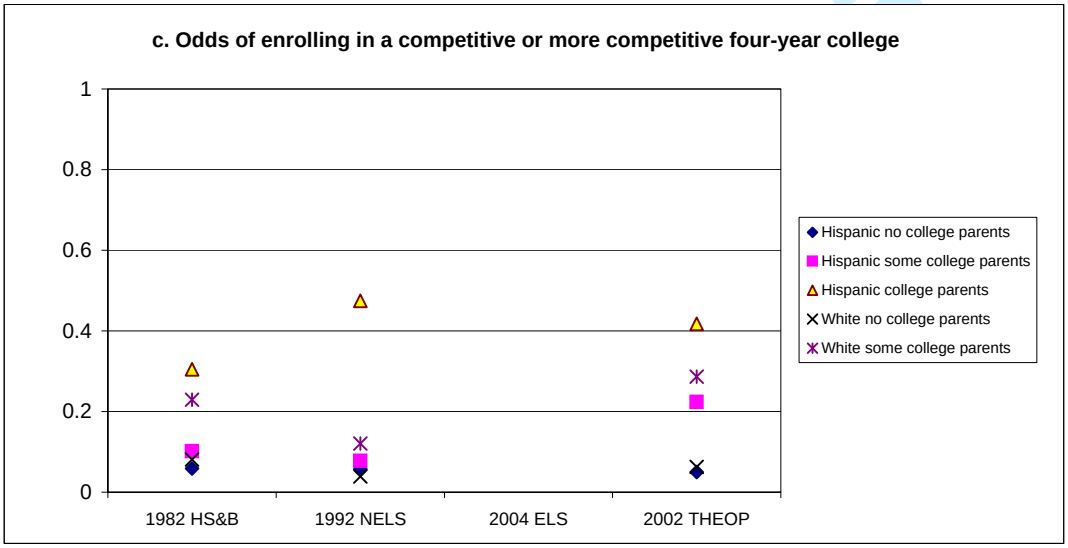


Figure 2: Odds ratio plots for post-secondary college destinations







Appendix Table A-1

Panel A: Logistic regression odds of enrolling in any college or university

	1982	1992	2004	2002 TX
Hispanic no college parents	0.122***	0.155***	0.147***	0.125***
Hispanic some college parents	0.181***	0.191***	0.235***	0.344***
Hispanic college parents	0.343***	0.523*	0.365***	0.575*
White no college parents	0.159***	0.099***	0.165***	0.119***
White some college parents	0.324***	0.217***	0.321***	0.390***
White college parents		--	--	--
Black no college parents	0.135***	0.107***	0.149***	0.141***
Black some college parents	0.278***	0.185***	0.236***	0.316***
Black college parents	0.319***	0.260**	0.518***	0.474**
Asian no college parents	0.433**	0.297***	0.387***	0.257***
Asian some college parents	0.877	0.447**	0.491**	1.075
Asian college parents	1.907*	0.937	1.718*	0.745
New England	1.068	1.855**	1.053	--
Mid-Atlantic	0.941	1.799***	1.156	--
East North Central	0.978	1.361**	1.107	--
West North Central	1.034	1.273	1.129	--
South Atlantic	0.832	1.162	0.983	--
East South Central	0.908	0.994	0.874	--
West South Central	0.782	1.198	0.842	--
Mountain	0.892	0.922	0.903	--
Pacific	--	--	--	--
Pseudo R-square	0.0881	0.0969	0.0779	0.1043
N	[10,573]	[12,233]	[11,189]	[4,805]

* p<.05; **p<.01; ***p<.001

Sources:
1982: High Schol and Beyond (HS&B), weight=fu2wt;
1992: National Education Longitudinal Survey (NELS), weight= f3qwt;
2004: The Education Longitudinal Study of 2002 (ELS), weight=f2bywt
2002: Texas Higher Education Opportunity Project (THEOP), weight=w2_weight.

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Panel A: Logistic regression odds of enrolling in 2-year college or university (compared to no college enrollmen

	1982	1992	2004	2002 TX
Hispanic no college parents	0.327***	0.321***	0.469***	0.285***
Hispanic some college parents	0.400***	0.385***	0.616**	0.597
Hispanic college parents	0.523*	0.734	0.616*	0.821
White no college parents	0.403***	0.207***	0.402***	0.258**
White some college parents	0.586***	0.364***	0.640***	0.655
White college parents	--	--	--	--
Black no college parents	0.271***	0.222***	0.464***	0.235***
Black some college parents	0.508**	0.286***	0.519***	0.490**
Black college parents	0.490**	0.243**	0.779	0.556*
Asian no college parents	0.654	0.443**	0.615*	0.430*
Asian some college parents	1.325	0.737	0.87	1.724
Asian college parents	1.038	1.131	1.441	0.743
New England	0.477***	1.169	0.713	--
Mid-Atlantic	0.468***	1.283	0.819	--
East North Central	0.550***	1.056	0.741*	--
West North Central	0.568**	0.907	0.904	--
South Atlantic	0.625**	0.912	0.678**	--
East South Central	0.584**	0.866	0.676*	--
West South Central	0.452***	1.031	0.614***	--
Mountain	0.636*	0.813	0.709	--
Pacific	--	--	--	--
Pseudo R-square	0.035	0.046	0.022	0.05
N	[6,649]	[7,443]	[5,117]	[2,623]

Panel B: Logistic regression odds of enrolling in 4-year college or university (compared to no college enrollmen

	1982	1992	2004	2002 TX
Hispanic no college parents	0.063***	0.071***	0.072***	0.063***
Hispanic some college parents	0.117***	0.091***	0.141***	0.247***
Hispanic college parents	0.288***	0.426**	0.275***	0.480**
White no college parents	0.093***	0.048***	0.097***	0.065***
White some college parents	0.248***	0.145***	0.218***	0.288***
White college parents	--	--	--	--
Black no college parents	0.097***	0.051***	0.088***	0.105***
Black some college parents	0.215***	0.136***	0.165***	0.249***
Black college parents	0.274***	0.287**	0.456***	0.442***
Asian no college parents	0.395**	0.227***	0.323***	0.190***
Asian some college parents	0.851	0.300***	0.385***	0.825
Asian college parents	2.568**	0.865	1.752*	0.745
New England	2.054***	3.015***	1.842**	--
Mid-Atlantic	1.729***	2.749***	1.849***	--
East North Central	1.732***	1.953***	1.676***	--
West North Central	1.805***	1.911***	1.397	--
South Atlantic	1.162	1.677***	1.390*	--
East South Central	1.414*	1.274	1.158	--
West South Central	1.317	1.58	1.311	--
Mountain	1.257	1.074	1.065	--
Pacific	--	--	--	--
Pseudo R-square	0.146	0.1891	0.142	0.1772
N	[8,535]	[8,089]	[8,077]	[3,328]

Panel C: Logistic regression odds of enrolling in more a competitive or more competitive 4-year college or univ college enrollment)

	1982	1992	2004	2002 TX
Hispanic no college parents	0.059***	0.057***	--	0.050***
Hispanic some college parents	0.101***	0.077***	--	0.224***
Hispanic college parents	0.305***	0.475*	--	0.418**
White no college parents	0.081***	0.038***	--	0.062***
White some college parents	0.229***	0.120***	--	0.287***
White college parents	--	--	--	--
Black no college parents	0.055***	0.027***	--	0.066***
Black some college parents	0.158***	0.076***	--	0.218***
Black college parents	0.185***	0.156***	--	0.343***
Asian no college parents	0.381**	0.220***	--	0.159***
Asian some college parents	0.909	0.315**	--	0.679
Asian college parents	2.861**	0.91	--	0.697
New England	2.077***	3.324***	--	--
Mid-Atlantic	1.871***	3.427***	--	--
East North Central	1.349*	2.269***	--	--
West North Central	1.32	1.781**	--	--
South Atlantic	0.953	1.779***	--	--
East South Central	0.687	1.162	--	--
West South Central	0.532**	1.425	--	--
Mountain	0.832	1.15	--	--
Pacific	--	--	--	--
Pseudo R-square	0.1848	0.2369	--	0.1967
N	[7,538]	[6,919]	--	[2,980]

* p<.05; **p<.01; ***p<.001

Sources:
1982: High Schol and Beyond (HS&B), weight=fu2wt;
1992: National Education Longitudinal Survey (NELS), weight= f3qwt;
2004: The Education Longitudinal Study of 2002 (ELS), weight=f2bywt
2002: Texas Higher Education Opportunity Project (THEOP), weight=w2_weight.