"Chain Enrollment" and College "Enclaves": Benefits and Drawbacks for Latino College Students

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Abstract

While Latino college enrollments have risen in recent decades, degree completion continues to lag. This study uses interviews with 33 students (including 17 Latino/as), as well as a survey of nearly 4,400 students at 14 two-year colleges in a major metropolitan area to examine the factors influencing Latino college enrollment and retention. Person and Rosenbaum employ theoretical frameworks from studies on immigrant communities to analyze the effects of "chain enrollment" and Latino student "enclaves" at some colleges. They find that social networks help Latino students to enroll in college and support them during their studies. At the same time, however, students relying on family and friends for information on college enrollment tend to rely exclusively on this information, without considering further options. Once in college, Latino students report having less information about college requirements than other students, but the effect is true only for Latinos in schools with relatively low levels (0 to 14 percent) of Latino enrollment. They conclude by suggesting that college administrators need to recognize and support the role of social networks in Latino students' college experience and to enhance Latino students' information about college.

In an era of rising educational attainment in the United States, attainment among Latinos has continued to lag relative to other racial and ethnic groups, especially whites (National Center for Education Statistics 2003). Even among students who do enter college, African-Americans and Latinos are most likely to leave school without having earned a degree (NCES 2003). While encouraging college enrollment among Latinos is clearly important, increased enrollments alone will not close the attainment gap. As research on student persistence shows, college success requires a certain degree of alignment between the student's attributes and goals, and the institutional environment of the college (Bean 1982; Cabrera, Castañeda, Nora, and Hengstler 1992; Hurtado and Carter 1997; Tinto 1994). Informed enrollment choices by students may be a first step toward this kind of alignment (Hamrick and Hossler 1996). Moreover, information is critical to students' success once they are enrolled in college, from accessing financial aid, to selecting a major and choosing appropriate coursework, to meeting myriad institutional requirements for graduation. It is important then for scholars and policy makers to understand better whether and how students are getting the information they need for college access and success.

This study examines enrollment decisions among two-year college students—who are disproportionately African-American and Latino—as well as the relationship between enrollment decisions and students' later experiences at college. We find that Latinos, in particular, are apt to rely on strong social ties, including family and friends, in choosing a college. Theoretical considerations and empirical observations, however, indicate that relying on close contacts for information about college may have both positive and negative implications. Our findings suggest that reliance on family and friends is associated with limited information about college choices before entry, and with less social integration after

students begin college. Latino students, in particular, also report having less information

about college requirements during their postsecondary studies. Nevertheless, our findings

also indicate that institutional context matters, and perhaps colleges can take steps to reduce

Latino students' information difficulties.

MODELS OF COLLEGE CHOICE

The decision to enroll in college has the potential to change an individual's life

dramatically and it is an important policy issue, yet research has not thoroughly examined the

processes that influence this decision among many groups of students. Typical stage models

of college choice (Hamrick and Hossler 1996; Hamrick and Stage 1996; Hossler and

Gallagher 1987) focus on students' aspirations or predisposition toward postsecondary

education, their search activities, and their eventual selection of a school. While these models

are certainly useful, they assume that students, first, perceive college as a realistic option, and

second, that they have enough resources to be able to engage in search and selection activities.

Such assumptions may be problematic, especially for students with low high-school

achievement and/or few resources (including time and information, as well as income).

Indeed, most studies of college enrollment have focused on students who have arrived

at the twelfth grade, who are considering universities, and who are disproportionately white

and middle- to upper-class (Hurtado, Inkelas, Briggs, and Rhee 1997; McDonough 1997;

Tinto 1994). Hurtado and her colleagues (1997) offer a notable exception in their study of

college choice and enrollment among different racial and ethnic groups. Using nationally

representative data, these authors find significant group differences in college preparation and

selection behaviors. They criticize college choice models that employ statistical controls and

"assume… that 'all things are equal' when, in fact, they are not" (63), given that nearly half of

Latino and African-American high-school seniors do not even apply to college during the

twelfth grade (including about a quarter of high-achievers among these groups). This echoes

Nora's (2003) concern that the low high-school graduation rates of minority and especially

Latino students serve as a "beginning source of misinformation" (48) in enquiries into post-

secondary access among these groups. Clearly there are large numbers of minority and low-

income students whose educational experiences are not captured accurately in research on the

transition to higher education. Yet these students are precisely those who might benefit most

from assistance in such a transition.

Even by focusing only on those students who have reached their senior year of high

school, Hurtado et al. (1997) show that different ethnic groups pursue different preference-

based strategies in choosing a college, which may not be reflected in the overwhelmingly

quantitative research on college choice (McDonough 1997). For example, the preference for

a receptive social atmosphere is associated with higher numbers of college applications

among Whites, whereas African-Americans with such a preference apply to fewer schools,

indicating different attitudes about and strategies for arriving in a friendly college climate

(Hurtado et al. 1997). Among Latino high-school students, Hurtado et al. show that

preference for a good college reputation and participation in a vocational program are strongly

associated with the submission of more college applications, whereas both of these factors

have either a negative or a much smaller positive influence for students of other ethnicities.

Hamrick and Stage (2004) also find differential patterns of influence on students'

predisposition toward college among different ethnic groups. Drawing from prior economic

models of college choice, as well as qualitative studies, the authors use student background,

achievement, and community involvement variables, along with parent characteristics and

expectations, to predict students' predisposition to attend college. Analyzing different ethnic groups separately, the model is much more successful in explaining the variance in White students' college predisposition (about 60%) than for African-Americans (about 20%) or Hispanics (about 40%). Moreover, they find that among Latino high school students, young men and women exhibit different patterning in the predisposition to attend college.

In addition to being of limited value in explaining college enrollment of diverse student populations, most choice models end with the students' eventual selection of a postsecondary institution. If fit is an important component of college persistence, it may be helpful to consider students' college choice and enrollment and their eventual college experiences as part of a continuum in the transition to higher education. Hamrick and Hossler (1996) take an important step in their paper examining the information-gathering activities of college-bound high school students. The authors find a significant positive relationship between more diverse information gathering and students' later satisfaction with the college where they enroll. Still, Hamrick and Hossler (1996) focus solely on students who are planning to attend college, *and* who have actually engaged in minimal search activities as of the fall of their senior year. As Nora (2003) notes, large numbers of minority students, and especially Latinos, have already left high school before the fall of senior year; and as Hurtado et al. (1997) show, even those who make it that far may not apply to any college.

This study focuses on two-year colleges, which tend to enroll students who are disproportionately low-income and ethnic minorities. Moreover, given their relatively open and often rolling admissions policies, two-year institutions also enroll large numbers of students with poor academic histories, as well as students whose college choices would be relatively constrained, in any case, whether by finances, family, or work obligations. We

examine two types of two-year colleges: community colleges and "occupational colleges."

Community colleges are low-tuition public institutions. They offer many electives and

program options, including occupational programs. We also study a group of private colleges

that offer accredited Associate's degrees in occupational fields, which we call "occupational

colleges." Using rich qualitative data, we examine the information-gathering and college

enrollment processes among a diverse group of students. Then we use a survey of students at

these two-year colleges to analyze students' information issues once students are enrolled.

THEORETICAL FRAMEWORK

Poor and minority students must often cross social and cultural divides when they

decide to enroll in college. Similarly, they are apt to experience a great deal of social distance

from other students, as well as faculty and staff, when they enter "mainstream" postsecondary

institutions. Research on immigrant communities can inform the study of college enrollment,

even as it encourages the researcher to examine enrollment and persistence as part of a

continuous process. The immigrant experience does not end upon entry into the receiving

community, and the processes that brought the newcomer are likely to bear upon his or her

experiences in the new locale.

Sociologists and anthropologists studying the influence of social networks on

immigration patterns have described the phenomenon of "chain migration," whereby kinship,

friendship, and client ties result in migration to the same destination by network members

(MacDonald and MacDonald 1974). According to this model, migrants may experience chain

migration in at least three ways: network members precede them to the destination; they travel

in the company of fellow network members; and they are received and assisted at the

destination by members of the chain (Choldin 1973: 165). Applied to the decision to enroll in

college, we expect students to consider colleges where a primary social contact is or has enrolled; they may enroll together with members of their network; and they will be assisted upon enrollment by those contacts who preceded them in entering the college.

If students continue to rely on their prior ethnic contacts once they are in school, or if the college environment is not receptive to the group, the result may be an "enclave" of sorts at the destination college. Prior research on ethnic enclaves has, of course, focused primarily on labor markets (e.g., Bailey and Waldinger 1991; Portes and Manning 1986; Sanders and Nee 1987; Waters and Eschbach 1995; Wilson and Portes 1980), emphasizing the benefits to both workers and employers who participate in such networks. With respect to colleges, we conceptualize the enclave somewhat differently, since the roles of college students and staff do not mirror those of enclave employee and employer. Rather, we focus on the mutual obligations and support that bind network members to each other in the college context. In this sense, our understanding of college enclaves is more like Briggs' (1998) use of the term with respect to neighborhoods, which draws on Coleman's (1988) notions of social capital: Isolated from the dominant culture, students in a college enclave will rely on each other for information and support.

Similarly to the ethnic enclaves discussed in the economic literature, we expect both positive and negative effects for participants in the system. While the enclave may provide information channels and reduce the risks of entry into unfamiliar territory for newcomers (Bailey and Waldinger 1991), it may also provide limited or faulty information and serve to isolate members socially, limiting their opportunities for mobility and chances for success in the new environment (Sanders and Nee 1987).

DATA SOURCES

Our sample includes fourteen schools, including seven public community colleges and seven private occupational colleges. This latter group is comprised of private post-secondary institutions that offer accredited Associate's degrees in career and technical programs. Four of the seven occupational colleges are for-profit; the other three are non-profit. All schools are located in a large Midwestern city and its surrounding suburbs. The schools were systematically selected, based on the comparability of their two-year, accredited occupational programs, including programs like business, accounting, computer information systems (CIS), computer-aided drafting (CAD), paralegal and court reporting, office technology, electronics, engineering, and a variety of health programs. All schools and programs have relatively large proportions of low-income and racial minority students, as well as students with low high-school achievement, though the occupational schools have somewhat larger numbers of most of these groups. We administered a survey to 4,365 students in comparable classes in the 14 institutions.

[Insert Table 1 about here.]

Our research also used qualitative methods, including one-hour, semi-structured interviews with 33 students from seven of these colleges (three community colleges and four occupational colleges). Students were selected based on criteria to ensure comparability across institution types. As they are the focus of this study, Latino students were over-sampled (N = 17). Non-Latinos included Whites (N = 5), African-Americans (N = 7), Asians (N = 2), and two other immigrants (from Iraq and Ghana). Students were asked to self-identify their racial or ethnic membership. Those who indicated specific sub-group membership are identified as such in this paper; those who did not (i.e., those responding Latino/a or Hispanic) are referred to with the more general term (i.e., Latino/a). Interviewers

did not specifically ask for a student's immigrant status, or parents' national origin, but

several respondents offered such information, which is noted in the text of our analyses.

Since our information on immigrant status is not systematic, we cannot speak to the patterning

that may occur based on it. Interviews were typically about an hour in length, were tape

recorded and transcribed verbatim. Researchers coded interviews both deductively and

inductively, first coding for responses to specific questions, then for emergent themes. The

research team also conducted extensive review of college materials (including, for example,

program guides, course schedules, internet sites, etc.) and made repeated observations of

campus activities, taking detailed field notes.

Like most qualitative studies, we do not seek to prove typicality of our cases. But our

community colleges are similar to others in the state with respect to the proportion of students

enrolled in transfer programs, which is 50% (IBHE 2001: table VI-2); though our focus is on

occupational students. The demographic composition of the survey sample is also close to the

respective institutions' student bodies as a whole. Our occupational colleges are *not* typical.

They were selected to be comparable to community colleges, offering accredited Associate's

degrees of similar quality and in the same occupational fields. These colleges are different

from the vast majority of private occupational schools, which offer no more than a certificate

(Apling 1993), and may therefore be considered an ideal type. While tuition is substantially

higher at these occupational colleges, they aggressively utilize state and federal financial aid,

so they actually enroll the same kinds of working-class students as community colleges (Deil-

Amen and Rosenbaum 2003). Occupational colleges, on the whole, are also more apt than

community colleges to engage in marketing and aggressive recruiting of students. This

provides us with a potentially important point of contrast when considering the influences on college choice and enrollment.

QUALITATIVE FINDINGS

Chain Enrollment

Interview data indicate that Latino students are more likely than their non-Latino counterparts to report primary social contacts—i.e., family and/or friends[1]—attending an institution as a reason for their own enrollment at that school. While well over half of Latino students in our interview sample (ten of 17) cited family or friends' attendance in their choice of a particular school, less than 15% (two of 16) of non-Latino students made such reports (a White woman and an Iraqi man). Beyond the focus on the family, Latino students' responses to questions about college enrollment choices closely resemble other students. Common influences cited by both Latinos and non-Latinos include convenient locations, the availability of programs, simple admissions and enrollment processes, and cost.

Primary social contacts who are enrolled at a school act in ways that mirror early migrants in a chain: They provide for the newcomer information about the school and its programs; they assist and may even accompany the student during the application and enrollment processes; and they support the new student upon arrival at the school. Herman[2], a CIS student and the son of Puerto Rican and Guatemalan parents, reports that his older brother helped him to enroll in an occupational college, encouraging him, "Just come to [my school], bro!" Later, he explains, "When I started, it was like, 'Whoa!' Because I didn't know nothing of computers... And I was like, 'I don't know if I can do this.' And I was talking to my brother, [and he said], 'Don't worry. I was like that too.' …Now, I'm pretty

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[1] Family members are presumed to be of the same ethnicity as the student respondent. The ethnicity of the friends was clearly the same as the student (i.e., Latino) in all but one case, where it was undetermined.

confident about being there in front of computers." Lisette, a young Puerto Rican woman

majoring in Business Administration at a different occupational college, similarly reports how

prior social contacts at the school reduce the risks of enrollment. "It makes it more

comfortable to me, my sister's going to be there with me," she explains, "we'll be in some

classes together and then I have a friend. It's not like just getting thrown into a totally all new

environment with all new people."

Such reports certainly highlight the advantages of chain enrollment, where information

on the destination is provided by prior entrants, who also support the newcomers upon their

own entry. Their help is often instrumental—e.g., assistance with filling out forms and

choosing classes. But it may also be socio-emotional—e.g., offering encouragement and

companionship as the student enters college.

Yet further interview reports indicate that this pattern of enrollment may also have

disadvantages. In coding interviews, we looked for the degree to which students were

informed about college options. We considered a student well informed if he or she had

actively investigated any other school prior to enrolling in their own (e.g., visiting the

campus, speaking to a representative, reading college materials), and could offer some

reasonably accurate assessment of the other school. Of those 12 students (ten Latinos and two

others) who cited family and friends at the school as influential in their enrollment there, just

three were well informed about college options (all Latinos). In contrast, among students who

did not cite family and friends at the school as influencing their enrollment, over half (11 of

21) were well informed about college options. Apparently, when college enrollment depends

on family and friends who attend an institution, students' seek little alternative information,

and Latino students are particularly apt to engage in this pattern of college search and

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[2] All names are pseudonyms.

selection.

One Latina student, in a typical response to the question of college options, illustrates how even when students consider other colleges, they may obtain meager information. Lorena's sister encouraged her to enroll in the occupational college where the sister herself attended at the time. Lorena began to investigate alternatives, "just looking through a phone book, and getting all the numbers that had paralegal [programs]… [Then] I got in here and I liked it. I just wanted to throw myself in a college." So she enrolled, having made just one other phone call, to a school without the program. Similarly, David—another Latino, whose cousin attends his school—typifies the cursory consideration of options that many students report: "Yeah, I wanted to go to [another school] for a minute there… It's nice, but I don't like it. I was like, it's too far, and I'm a city boy, and I can't be over there [in the] cornfields, I don't think so." David had information to compare locations, but none to compare programs, costs, or other important factors. In contrast, Raquel—a Latina studying Business Administration at an occupational college—chose the school based on just such information. Comparing her school to two universities, she explains, "[It was] the fast program… That's what made up my mind. And then, that it's a smaller school—not a big campus of thousands of students. And you can talk to the teachers. That made my decision." She knew this after reviewing various college materials and making a campus visit. In sum, students relying on trusted family and friendship ties for enrollment appear to have little impetus to gather information about other options, whereas students who did not rely on strong social ties gathered more diverse information in their search.

While the role of strong ties in the college enrollment process appears to be unique for Latino students, the role of weak ties is less differentiated by ethnicity. Our two-year college

students reported that high school counselors and advisors play only a minimal role in getting

students to think about and prepare for college. Since Latino and other minority students are

often concentrated in low-income communities, and are disproportionately enrolled in low-

achieving high schools, this is perhaps not surprising. Yet while our interviews did not

always ask specifically about support from high schools, to the extent that students offered

this information, Latinos do not appear to differ from other students in their access to or use

of such resources. Indeed, most students reported fairly low levels of counseling and support

from high schools. Typical statements about high-school advising include, "college wasn't

really an issue," and "college was never really… discussed."

One predictable difference among students' high-school experiences to emerge across

interviews was that students who attended suburban schools reported more access to

counseling and discussion of college than students coming from urban high schools. Both

urban and suburban students, as well as students of different ethnicities, did report

participation in college fairs at their high schools, as well as assistance with (and even

requirement of) filling out federal financial aid forms. Interestingly, among the students who

were the most well-informed about college options, high schools did not figure prominently in

providing resources. Rather, students reported searching for information on the internet,

requesting written materials directly from colleges (as well as receiving unsolicited mailings),

and speaking with college representatives.

In a few cases (five Latinos and two African-Americans) students reported teachers as

a source of encouragement in their plans to attend college. It is not always clear, however,

how much information these teachers provided. In one case, a Latino man's music teacher

actually got him a scholarship to attend a conservatory; but the student turned the offer down

because he did not want to move away from his family. The clearest example of a teacher

providing college information to students came from an African-American woman who

reported that her art teacher would periodically invite college graduates to come and speak to

classes about postsecondary options in art and design.

Similarly, the influence of college recruiters appears to be fairly even, at least across

Latinos and Blacks, with three of each group reporting that they selected their college because

they were recruited. Again not surprisingly, all of these students were recruited by

occupational colleges, which engage in much more extensive recruiting activities than

community colleges. Perhaps what is most interesting about this group is that only one of the

recruited students reported having a parent with any post-secondary education (the mother

had a certificate). Indeed, among the three Latinos who were recruited, none of their parents

had even completed high school. While these numbers are small, they do suggest that college

recruiters may be one of the few sources of college information available to students from

families with low levels of education.

College Enclaves

It is important to note that low information does not necessarily indicate that the

student has made a bad enrollment decision. On the other hand, it suggests that he or she has

made a potentially critical life choice based on what is sometimes very little information or

consideration of options. These students' decision processes are different from most choice

models, which emphasize aspirations, search behaviors, and choice as a continuum over time,

where information is gathered and evaluated before a choice is made (e.g., Hamrick and

Hossler 1996; Hossler and Gallagher 1987). Furthermore, if students participating in chain

enrollment continue to rely solely on the information provided by their prior contacts once

they begin at college, they may be ill equipped to navigate the unfamiliar terrain of

postsecondary education or to become integrated at school. Such an effect would mirror the

ethnic enclave, where the information that is shared among members may lack value in

"mainstream" contexts, and members are isolated from that context (Briggs 1998).

In fact, student interview data show that students relying on primary social contacts in

choosing a college appear to be less socially integrated at school. Indeed, half (six of 12) of

the students with prior ties at their college described low levels of social integration at the

school. They report spending little time with other students at school and engaging in few or

no college activities outside classes. In contrast, relatively few (just three of 21) students

without prior network contacts at school described such low levels of social integration.

Lisette, cited above, provides a first indication of why students who follow a pattern of chain

enrollment may eventually be isolated at school. After discussing how it makes her

comfortable to have her sister with her at school, she continues, "I have people here with me,

even if I don't have friends." Having prior network contacts may make students feel less

compelled to build new ones. Lisette and Herman (also cited above) both described their

fears about college, but explained how their siblings helped them to adjust. In contrast, a

White woman from the suburbs, Jennifer, found going to her occupational college in the city

"scary," but describes how she participated in an orientation social to meet new people, who

have since become her friends. Similarly, Jon found college to be "a shocker," but moved

into campus housing to help smooth the transition back to college after having worked full

time for several years.

Of course, as Tinto (1994) has pointed out, community colleges have difficulty

fostering social integration, since they can usually offer few extracurricular activities, little

on-campus housing, and so on. Still, Latino students in particular are apt to voice the opinion

that social integration at college is superfluous. Statements from Latino students include, for

example, "college is not a club," "I'm not here to meet friends," and "everybody here is in

there own little world, and I like that."

Academic integration—which Tinto (1994) defines in terms of students' relationships

with college faculty and staff—may also be problematic for Latino students. When asked

where they would turn for help with problems *at school*, the Latino students in our sample cite

family or friends as often as they cite instructors or other school staff. As Alberto puts it,

"I've got enough people *outside* of school to support me… [my] parents and friends" (original

emphasis). Asked about anyone at the school who might be looking out for him, he responds,

"I don't think they should be." This echoes empirical work that has found Mexican-

Americans more apt than Anglo-Americans to believe that family is the appropriate resource

for solving problems (Keefe 1984; Markides, Boldt, and Ray 1986). In contrast, non-Latino

students in our sample cite college resources about twice as often as they cite family or

friends as their source for help with problems at school. Again, relying on family for such

help is not, in itself, bad. But if such tendencies preclude students from building relationships

with instructors, advisors, and so on, it could create problems for them in the college context.

And if parents have little exposure to college themselves, their information may be lacking

(Tomás Rivera Policy Institute 2002).

At the same time, it is important to consider the college context and its reception of

Latino students. It is, of course, possible that some Latino students view the college climate

as hostile and, therefore, are reluctant or even opposed to becoming integrated. Indeed, many

scholars have been critical of Tinto's (1994) retention model precisely because of its emphasis

on integration—which could be viewed as a sort of acculturation by minority students, in

particular (Braxton, Sullivan, and Johnson 1993; Hurtado and Carter 1997). Hurtado and

Carter (1997) suggest that students' subjective sense of integration, or "sense of belonging," is

critical, especially for Latino students' adaptation to college.

In addition to asking students whom they would turn to for help, we also asked them

about their level of comfort or discomfort at their college, whether or not and how they "fit

in" at college, and whether they had experienced any conflict there. Respondents of all

ethnicities were overwhelmingly positive about their level of comfort and fitting in; and very

few reported any experience of conflict. These responses suggest that Latino and other

students have a more or less equally strong sense of belonging at college; although it is also

possible that respondents were hesitant to address such sensitive issues in a face-to-face

interview. Because of Latino students' strong tendency to rely on family and friends for

information and support, and given the risks associated with such behavior, we wonder how

Latino students fare with regard to information and support once enrolled in college. In order

to examine whether Latino students are less informed about college after enrollment, and

whether or not this is linked to isolation from the school's mainstream, we turn to our student

survey.

QUANTITATIVE FINDINGS

As noted, we surveyed 4,365 students in comparable occupational classes at the 14

two-year colleges in our sample. The survey asked about students' family background, their

high school performance, their experiences at college, and their expectations for the future.

We asked students three questions about information important to their success at college.

We asked whether they (1) were "certain which courses I need for my degree;" (2) "know

which courses give credit toward my degree;" and (3) "have enough information about requirements and prerequisites." Responses were given on a Likert scale, with 0 = "strongly disagree" and 4 = "strongly agree." We then summed these responses to create a single information variable, with a minimum of 0 and a maximum of 12 (_ = .87). As Table 2 shows, Latino students are, indeed, the ethnic group that is least informed about college requirements. Whites report the highest mean levels of information, followed by Asians, African-Americans, then Native Americans.

[Insert Table 2 about here.]

Yet simple means can be misleading. Using ordinary least squares (OLS) regression[3], with information about college requirements as the dependent variable, we test whether the association between information and race holds when other factors are held constant. In order to control for potentially important individual characteristics that could impact reported information levels, we include student sex and age (as well as age-squared, to capture non-linear effects) as covariates, along with self-reported prior achievement (high school grades). Given the importance of family background to students' school success, we also control for parent education and income (retrospective student reports). Finally, we control for college type, given the different approaches to information documented at occupational colleges (Person and Rosenbaum 2004).

Table 3, Model 1 shows that older students report better information than younger students; although the effect is non-linear, as the negative coefficient for age-squared shows, with age benefits gradually declining after the mid 30s. Not surprisingly, high-school grades are positively associated with information levels, as is parent income. Other than age, the

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strongest predictor of information is occupational college type ($\_$ = .155; p < .001). This is

not surprising, given that these schools offer fewer and more highly structured programs

(Person and Rosenbaum 2004).

Despite controls for all these factors, Table 3 (Model 1) shows that Latino students

still have significantly less information about college requirements (b = -.442; $\_$ = .076; p <

.001) than their White counterparts (the reference category). In contrast, students from other

ethnic groups do not differ from Whites with respect to information. While students in all

ethnic groups report lower mean levels of information than Whites (Table 2), these

differences disappear for blacks, Asians, and Native Americans, once individual and family

characteristics are held constant.

[Insert Table 3 about here.]

In order to test whether Latino students' lower levels of information are related to a

perceived lack of support at college, we add three covariates for academic and social

encouragement (Table 3, Model 2). We asked students the extent to which they felt

encouraged or discouraged to stay in school by college teachers, college staff, and fellow

students, respectively (responses ranged from 0 = strongly discouraged, to 4 = strongly

encouraged). As Table 3, Model 2 shows, encouragement from teachers, staff, and students

are all associated with significantly higher levels of information; but the negative association

between Latinos and information still holds, and is virtually unchanged. (It is interesting to

note that addition of the encouragement covariates actually brings the negative association

between information and African-American ethnicity to a statistically significant level. The

effect is small, however, and our sample size is large, so we hesitate to make much of the

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[3] Given the nature of the dependent variable, ordered-logistic regression may be more appropriate than OLS. We
conducted the same analyses using o-logit and results were consistent with those reported here. For ease of

finding. It could suggest, however, that encouragement plays a different role vis-à-vis

information for African-American students.) In any case, with respect to Latinos, these

findings suggest that it is not a lack of academic or social support alone that keeps Latino

students from obtaining information about college requirements.

While support and isolation are certainly inversely related, they are not precise

conceptual opposites. Indeed, our theoretical foundations suggest that the enrollment chain

would help Latino students to find a niche in college; but if enrollment is into a predominantly

non-Latino college, where diverse student needs are not a major concern, the student could

well remain isolated in an enclave of sorts. As such, we conducted separate analyses of

students at colleges with different percentages of Latinos enrolled. While such categorization

is inevitably somewhat arbitrary, we chose the cut-offs to represent, roughly, either less than

(0-14%), equal to (15-29%), or more than (30% +) the aggregate Latino population of the

metropolitan area from which our sample is drawn.[4]

Table 4 shows that Latino students' information is significantly lower than their White

counterparts only in the schools with the fewest Latino students (0-14%). In schools with

15% or more Latino enrollments, there are no significant differences between ethnic groups

with respect to information about college requirements. It should also be noted that the highly

significant negative association between Latino ethnicity and information is found, despite a

Latino sample size of just over 100 students at these predominantly White schools, while it is

not found with samples ranging from about 400-500 at the other institutions. An important

characteristic of these schools, in addition to their small Latino populations, is that they all

enroll large majorities (between 65% and 75%) of White students. In contrast, in the schools

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discussion, we report OLS findings.

with more Latinos, there are also more students from other minority groups, and

correspondingly lower numbers of Whites (ranging from about 20-50%). This suggests that

in colleges with large majority White enrollments, Latinos are indeed isolated, as in an

enclave. In contrast, where Latinos numbers are larger, they actually form part of the

mainstream, and no enclave exists.

Table 4 (Models 2, 4, and 6) also shows that the coefficient for Latino students again

remains virtually unchanged by the addition to the model of the covariates for encouragement

by teachers, staff, and faculty. This suggests that a lack of support alone does not explain

Latino students' information problems at these colleges. What is more, when the same

analysis (not reported here) is conducted for African-American students at colleges with

different levels of African-American enrollments, we find no significant association between

African-American ethnicity and information levels, further diminishing alienation as a

potential explanation. Given the patterns of information gathering reported by Latino

interviewees, as well as theoretical thinking on enclaves, we believe that the low levels of

information among Latinos at schools with few Latino students results from access to limited

and isolated ethnic networks, which Latino students uniquely rely on for college information.

Since our information measure is based on student perceptions, a potential

shortcoming of these analyses is that we do not know whether less information is actually a

problem for students. But in a separate analysis (not reported here), we find that Latino

students who have taken a remedial class are significantly more likely than otherwise similar

Whites to mistakenly believe that the course will give them college credit. Such

misinformation will almost certainly require that students take more classes than they had

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[4] Changing the cut-offs—for example using thirds or quartiles—does very little to alter the results. The
consistent finding is that information suffers for Latinos enrolled at colleges with fewest Latinos.

expected to need, increasing both costs and time spent on the degree.

Discussion and Conclusion

Our analyses yield several findings that may be important for scholars, college administrators, and policy makers who wish to improve Latino students' college access and success. Interview data show that Latino students are more likely than non-Latinos to report family and friends as a reason for enrolling in a particular college. Relying on such strong ties for college enrollment is, however, associated with having more limited information about college options. Moreover, after arriving at college, students gathering information and choosing a college through family and friends tend to be less socially integrated at school (spending less time with other students at school and/or becoming involved in fewer college activities). Moreover, Latinos are less likely than other students to rely on college resources for help with problems in school.

Analysis of a survey of about 4,400 students finds that Latinos have significantly less information about college requirements than Whites, and this gap remains after controls for student and family attributes, as well as academic and social supports (by teachers, college staff, and fellow students). However, further analyses reveal that this gap is confined to colleges with a low proportion (0-14%) of Latino students.

These findings reflect research on chain migration and immigrant enclaves, and they exemplify more general phenomena noted in discussions of social capital. Social capital has mixed effects: It provides information, but it may also limit the breadth of information and activities. Latinos seem to experience some of these benefits and costs. Contacts provide a dependable source of easily obtained information and are real assets for Latino students; but where networks are limited or isolated, they may provide narrow or less salient information

and support. This finding suggests that institutions seeking to improve degree completion among Latino students need to recognize how these students use their social networks, and identify the potential limitations for students who may rely exclusively on family and friends for advice and support.

Interestingly, our finding of institutional differences in the information gap for Latinos may suggest that some institutions are taking steps to address Latino students' information needs. Data from the broader study from which these analyses were drawn show that some of the colleges with higher Latino populations have key staff members who are themselves Latino (e.g., an admissions counselor and the director of advising services), while others have very proactive administrators, who seem to know their students by name, and even to have some knowledge of their families. Moreover, four of the nine schools with 15% or more Latino enrollments are members of the Hispanic Association of Colleges and Universities, an organization with the express mission to support Latinos in higher education. Whether the diminished gap at colleges with moderate and high proportions of Latinos is due to the student proportions (e.g., larger, more diverse ethnic networks that actually form the mainstream) or to the specialized services and attention prompted by those proportions, we cannot tell. If it is the latter, this suggests the possibility that institutions can take appropriate actions to address Latino students' information needs. The question for policy is how such actions can be promoted, and whether colleges with low Latino enrollments can mobilize similar services.

REFERENCES

Apling, Richard N. 1993. "Proprietary Schools and Their Students." *Journal of Higher Education* 64: 379-416.

Bailey, Thomas, Norena Badway and Patricia J. Gumport. 2002. *For-Profit Higher Education and Community Colleges*. Retrieved April 30, 2003, from the Columbia University Community College Resource Center website (http://www.stanford.edu/group/ncpi/documents/pdfs/forprofitandcc.pdf).

Bailey, Thomas and Roger Waldinger. 1991. "Primary, secondary, and enclave labor markets: A training systems approach." *American Sociological Review* 56:432-445.

Bean, John P. 1982. Student attrition, intentions, and confidence: Interaction effects in a path model. *Research in Higher Education, 17*, 291-320.

Braxton, John M., Anna S. Sullivan, and R. M. Johnson. (1997). "Appraising Tinto's theory of college student departure." Pages 107-164 in *Higher Education: Handbook of Theory and Research*, Vol. 12, edited by John C. Smart. New York: Agathon Press.

Briggs, Xavier de Souza. 1998. "Brown kids in white suburbs: Housing mobility and social capital." *Housing Policy Debate* 9: 177-221.

Bulcroft, Richard A., Dianne Cyr Carmody, and Kris Ann Bulcroft. 1996. "Patterns of Parental Independence Giving to Adolescents: Variations by Race, Age, and Gender of Child." *Journal of Marriage and the Family* 58: 866-883.

Cabrera, Alberto F., Maria B.Castañeda, Amaury Nora, and Dennis Hengstler. 1992. The convergence between two theories of college persistence. *Journal of Higher Education, 63*, 143-163.

Choldin, Harvey M. 1973. "Kinship Networks in the Migration Process." *International Migration Review* 7: 163-175.

Deil-Amen, Regina and James E. Rosenbaum. 2003. "The social prerequisites of success: Can college structure reduce the need for social know-how?" *Annals of the American Academy of Political and Social Science* 586: 120-143.

Dougherty, Kevin. 1994. *The Contradictory College: The Conflicting Origins, Impacts, and Futures of the Community College*. Albany, NY: State University of New York Press.

Hamrick, Florence A., and Don Hossler. 1996. "Diverse information-gathering methods in the postsecondary decision-making process." *The Review of Higher Education* 19: 179-198.

Hamrick, Florence A. and Frances K. Stage. 2004. "College predisposition at high-minority enrollment, low-income schools." *The Review of Higher Education* 27: 151-168.

Hossler, Don, and Karen S. Gallagher. 1987. "Studying student college choice: A three-phase model and the implications for policy-makers." *College and University*, 2: 201-221.

Hurtado, Sylvia, and Deborah Faye Carter. 1997. "Effects of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging." *Sociology of Education, 70*, 324-345.

Hurtado, Sylvia, Karen Kurotsuchi Inkelas, Charlotte Briggs, and Byung-Shik Rhee. 1997. "Differences in college access and choice among racial/ethinic groups: Identifying continuing barriers." *Research in Higher Education*, 38: 43-75.

Keefe, Susan. 1984. "Real and ideal extended familism among Mexican Americans and Anglo Americans: On the meaning of 'close' family ties." *Human Organization* 43:

        65-70.

MacDonald, John S. and Leatrice D. MacDonald. 1974. "Chain Migration, Ethnic
        Neighborhood Formation, and Social Networks." Pp. 226-236 in *An Urban World* by
        Charles Tilly. Boston: Little, Brown and Company.

Markides, Kyriakos S., Joanne S. Boldt, and Laura A. Ray. 1986. "Sources of helping and
        intergenerational solidarity: A three generations study of Mexican Americans."
        Journal of Gerontology 41: 506-511.

McDonough, Patricia. 1997. *Choosing Colleges: How Social Class and Schools Structure
        Opportunity*. Albany: State University of New York Press.

National Center for Education Statistics. 2003. *Status and Trends in the Education of
        Hispanics*. Retrieved April 30, 2003, from the NCES website
        (http://nces.ed.gov/pubs2003/2003008.pdf).

Nora, Amaury. 2003. "Access to Higher Education for Hispanic Students: Real or Illusory?"
        Pages 46-68 in *The Majority in the Minority*, edited by Jeanett Castellanos and Lee
        Jones. Sterling, VA: Stylus.

Nora, Amaury, and Alberto F. Cabrera. 1996. "The role of perceptions of prejudice and
        discrimination on the adjustment of minority students to college." *Journal of Higher
        Education*, 67: 119-148.

Person, Ann E., and James E. Rosenbaum. 2004. "Student information and planning
        problems in different college structures." Unpublished manuscript, revised and
        resubmitted to *Teachers College Record*.

Portes, Alejandro, and Robert D. Manning. 1986. "The Immigrant Enclave: Theory and
        Empirical Examples." Pages 47-68 in *Competitive Ethnic Relations*, edited by Susan
        Olzak and Joane Nagel. Orlando FL: Academic Press.

Sanders, Jimy and Victor Nee. 1987. "Limits of Ethnic Solidarity in the Enclave Economy."
        American Sociological Review 52: 745-753.

Tinto, Vincent. 1994. *Leaving college: Rethinking the causes and cures of student attrition*
        (2nd ed.). Chicago: University of Chicago Press.

Tomás Rivera Policy Institute. 2002. College Knowledge: What Latino Parents Need to
        Know and Why They Don't Know It. Downloaded March 3, 2003 from the TRPI
        website at http://www.trpi.org/press/071102.htm.

Waters, Mary C. and Karl Eschbach. 1995. "Immigration and Ethnic and Racial Inequality in
        the United States." *Annual Review of Sociology* 21: 419-446.

Wilson, Kenneth L. and Alejandro Portes. 1980. "Immigrant Enclaves: An Analysis of the
        Labor Market Experiences of Cubans in Miami." *American Journal of Sociology* 86:
        295-319.

Vega, William A. "Hispanic Families in the 1980s: A Decade of Research." *Journal of
        Marriage and the Family* 52, 1015-1024.

TABLE 1:
Descriptive statistics of student survey sample

	Community Colleges	Occupational Colleges
Male	47.8%	48.3%
White	48.4%	31.2%
African-American	13.1%	27.6%
Latino	22.3%	31.0%
Asian	16.1%	9.9%
HS grades C or below	24.7%	27.9%
Parent education HS or less	48.1%	57.7%
Parent income $30K/yr or less	40.9%	45.3%
Mean age	25	24
N	1,562	2,803

TABLE 2:
Mean levels of student information about college requirements

	N	Mean	SD
White	1,376	9.17	2.55
Asian	444	9.11	2.23
African-American	835	9.03	2.56
Native American	11	9.00	3.55
No race reported	560	8.90	2.49
Latino/a	1,042	8.59	2.49
Total	4,268	8.96	2.51

TABLE 3:
OLS Regression: Student information about college requirements regressed on student, family, and support covariates

	Model 1		Model 2	
	Unstandardized Coefficients	Standardized Coefficients	Unstandardized Coefficients	Standardized Coefficients
	b (SE)	Beta	b (SE)	Beta
Male	-.017 (.080)	-.003	-.004 (.078)	-.001
Sex not reported	-.182 (.171)	-.017	-.158 (.167)	-.015
Age	.184*** (.030)	.529	.203*** (.029)	.584
Age-squared	-.002*** (.000)	-.435	-.003*** (.000)	-.481
High school grades	.217*** (.054)	.061	.197*** (.053)	.055
Parent education (truncated)	.052 (.031)	.028	.052 (.030)	.028
Parent income (truncated)	.087* (.035)	.041	.084* (.034)	.039
African-American	-.201 (.113)	-.032	-.279* (.110)	-.044
Asian	-.007 (.137)	-.001	-.036 (.134)	-.004
Native American	-.330 (.742)	-.007	-.534 (.725)	-.011
Race not reported	-.308* (.127)	-.041	-.268* (.124)	-.036
Latino	-.442*** (.109)	-.076	-.448*** (.107)	-.077
Occupational College	.813*** (.081)	.155	.614*** (.080)	.117
Student encouraged by college teachers			.129* (.057)	.046
Student encouraged by college staff			.336*** (.056)	.123
Student encouraged by fellow students			.253*** (.048)	.089
(Constant)	4.611		2.441	
R-Squared	.050		.094	

N = 4,268
Source: Authors' data. * $p \le .05$; ** $p \le .01$; * $p \le .001$.

TABLE 4:
Separate OLS Regressions by Level of Latino Enrollments: Student information about college requirements regressed on student, family, and support covariates

	Colleges with 0-14% Latinos		Colleges with 15-29% Latinos		Colleges with 30%+ Latinos	
	Model 1 b (SE)	Model 2 b (SE)	Model 3 b (SE)	Model 4 b (SE)	Model 5 b (SE)	Model 6 b (SE)
Male	-.083 (.159)	-.102 (.156)	.019 (.117)	.033 (.115)	-.080 (.152)	-.038 (.147)
Sex not reported	.108 (.337)	.114 (.330)	-.002 (.247)	-.015 (.242)	-.758* (.337)	-.659* (.326)
Age	.113* (.054)	.131* (.053)	.125** (.044)	.151*** (.044)	.345*** (.065)	.353*** (.063)
Age-squared	-.001 (.001)	-.002 (.001)	-.002* (.001)	-.002** (.001)	-.005*** (.001)	-.005*** (.001)
High school grades	.273* (.107)	.253* (.105)	.234** (.080)	.245** (.078)	.096 (.104)	.021 (.101)
Parent education (truncated)	-.048 (.059)	-.038 (.058)	.133** (.046)	.125** (.045)	.052 (.061)	.047 (.059)
Parent income (truncated)	-.031 (.075)	-.049 (.074)	.095 (.050)	.101* (.049)	.153* (.065)	.140* (.063)
African-American	-.387 (.318)	-.477 (.312)	-.213 (.169)	-.273 (.166)	.208 (.236)	.209 (.228)
Asian	-.221 (.233)	-.284 (.229)	.079 (.222)	.072 (.218)	.095 (.278)	.060 (.269)
Native American	-1.617 (1.404)	-1.772 (1.374)	.897 (1.210)	.648 (1.186)	-.321 (1.276)	-.566 (1.235)
Race not reported	-.479* (.219)	-.468* (.215)	-.448* (.206)	-.428* (.202)	.143 (.255)	.233 (.247)
Latino	-.630* (.260)	-.628* (.255)	-.315 (.180)	-.290 (.176)	-.284 (.192)	-.307 (.186)
Occupational College	.731*** (.162)	.488** (.162)	.982*** (.133)	.810*** (.133)	.677*** (.149)	.503** (.147)
Student encouraged by college teachers		-.125 (.123)		.221** (.082)		.175 (.102)
Student encouraged by college staff		.433*** (.122)		.313*** (.080)		.328** (.103)
Student encouraged by fellow students		.324*** (.097)		.137*** (.070)		.398*** (.091)
Constant	6.665	4.918	4.975	2.675	2.166	-.215
R-Squared	.047	.091	.052	.092	.069	.132
N	1,102		1,908		1,258	

Source: Authors' data. * $p \leq .05$; ** $p \leq .01$; * $p \leq .001$.