Chicano student achievement remains low at virtually all stages of the educational pipeline but the low rates of postsecondary matriculation and persistence are especially alarming. Tinto (1993) has described student persistence in higher education as a longitudinal process of interaction between an individual student and his/her institutional environment that is driven by the degree of congruence between student and institution. The registrar's office at three institutions, California State University, a California Community College, and the University of California, provided a list of randomly selected students who self-identified as Chicanos. Each student was mailed a questionnaire near the end of a quarter or semester to obtain responses reflecting a minimum of one entire academic year. The students' responses indicated a high degree of biculturalism (comfort and proficiency in both Chicano and U.S. cultural domains) and that their ethic identity as Chicano was salient. There was also a dominant response pattern in the student's perceptions of their institution's commitment to Chicanos. Students had high, positive perceptions of their institutions on only a few variables, mainly admissions policies and support services. Responses were neutral in areas of cultural democracy including support for Chicano organizations and support for affirmative action. Also, students reported high levels of stress in personal, family, and financial areas. (Contains 41 references.) (JLS)
RESISTING THE NORMATIVE IMPLICATIONS OF TINTO:
STUDENT AND INSTITUTIONAL CHARACTERISTICS
SUPPORTING THE PERSISTENCE OF CHICANOS
IN HIGHER EDUCATION

BY

Patrick M. Velásquez, Ph.D.
Office of Academic Support &
Instructional Services
University of California, San Diego

Paper presented to the
Association for the Study of Higher Education
Memphis, Tennessee
October 31, 1996

The author may be reached:

OASIS, 0045
University of California, San Diego
9500 Gilman Drive
La Jolla, CA  92093-0045
(619) 534-1467
pvelasquez@ucsd.edu
fax:  (619) 534-0679
This paper was presented at the annual meeting of the Association for the Study of Higher Education held in Memphis, Tennessee, October 31 - November 3, 1996. This paper was reviewed by ASHE and was judged to be of high quality and of interest to others concerned with higher education. It has therefore been selected to be included in the ERIC collection of ASHE conference papers.
INTRODUCTION

This paper utilizes the process of theory integration (Sullivan, 1995) to identify and explain conditions of postsecondary institutions that support the persistence and development of Chicano students (i.e., U. S. residents of Mexican heritage). Those institutional conditions interact with the dominant characteristics of Chicanos, i.e., their sociopolitical status and cultural responses, to affect the longitudinal process of student persistence described by Tinto's (1993) theoretical model. Thus, a primary objective of this paper is to examine the relationship between student and institutional variables in order to more fully explain the process of persistence in higher education among Chicano students.

Chicanos have been described as a sociopolitically subordinate group in the United States, subjected to school practices that have undermined their achievement (Darder, 1991; Ogbu and Matute-Bianchi, 1986). In states such as California, Chicanos are rapidly becoming a larger portion of both the school-age population and the labor force. Some demographers and social scientists (Hayes-Bautista et al., 1988) have described the threat to those states' social fabric if this young, growing population, on which the burden of producing public revenue from labor force participation is also increasing, continues to occupy a subordinate position in a societal structure that drives stratified educational achievement (Persell, 1977).
While Chicano student achievement remains low at virtually all stages of the educational pipeline, their relatively low rates of postsecondary matriculation and persistence are especially alarming (Carter and Wilson, 1994). Aguirre and Martinez (1993) have described the lack of success in higher education among Chicanos and their subsequent inability as a group to impact public policy. They also emphasized the impact of higher education for a subordinate group such as Chicanos, who face the imperative to analyze critically the conditions of their community as a means to self-determination and the alleviation of their subordinate status.

The examination of the institutional conditions that facilitate Chicano students' persistence and development in higher education has critical implications for public policy geared to provide equitable educational outcomes. Such a critical focus necessitates consideration of the variables (and their relationship) that impact the experiences and adjustment of Chicanos in higher education.

THEORETICAL FRAMEWORK

Rocco (1984) suggested the need for a critical theoretical approach to the study of Chicanos and other subordinate groups. Such methodology seeks to avoid reductionism through an examination of the environmental conditions of the group under study; it also emphasizes the historical context in the study of subordinate group experiences. A critical examination of Chicanos' postsecondary persistence is historically lacking. In their comprehensive review of over 2,500 recent contributions to the literature on student outcomes in higher education, Pascarella and
Terenzini (1991) referred to the study of nonwhite students' postsecondary development as "a glaring and embarrassing gap in our theoretical knowledge" (p. 59).

Thus, a critical study of Chicanos in higher education can be established through the process of theory integration, beginning with Tinto's (1993) seminal theory of persistence in higher education. Tinto describes such persistence as a longitudinal process of interaction between an individual student and his/her institutional environment that is driven by the degree of congruence between student and institution. Although the student's precollege characteristics (e.g., prior academic preparation, level of parents' education, etc.) are relevant, the most salient aspect of the persistence process lies in the degree to which the congruence between student and institution are manifest in the students' academic and social integration within the institution. Such integration, which is impacted heavily by a student's interactions in the formal and informal dimensions of both academic and social domains, in turn contributes significantly to the students' commitment to the institution and subsequent persistence. The process described by Tinto, including its key variables, has been largely validated by empirical research on diverse populations (Pascarella and Terenzini, 1991; Cabrera et al., 1992).

The most recent edition of Tinto's theoretical work (1993) places increased emphasis on the experiences of Chicanos and other subordinate groups. However, his construct of congruence between student and institution promotes for some (Tierney, 1992) a normative interpretation, i.e., that Chicanos and other subordinate ethnic groups
should conform to the conditions and characteristics of higher education institutions in order to achieve integration and persistence. Thus, the need arises to engage theory integration (Sullivan, 1996) to apply Tinto's theory of persistence in higher education to Chicanos and other groups situated similarly in terms of cultural, sociopolitical, and historical contexts. Such a process seeks to expand and connect Tinto's theoretical framework to other theories that address the dominant characteristics of Chicano students and postsecondary institutions, respectively, as both student and institutional characteristics impact critically the subsequent degree of congruence, integration, and persistence. By so doing, theory integration counters the normative interpretation of Tinto's construct of congruence, particularly as applied to the persistence of subordinate groups in higher education.

Tinto's construct of postsecondary congruence between student and institution makes the responsibility of each explicit. Thus, the dominant characteristics of both Chicano students and postsecondary institutions become salient to their degree of congruence and subsequent persistence.

**Chicano Student Characteristics**

The characteristics of Chicano students emanate from both their sociopolitical status and cultural responses. The sociopolitical status of Chicanos must be examined through their historical experiences as a subordinate group in the United States. Those experiences, which featured their military conquest and subjugation, administration of their community's critical institutions by non-Chicanos, cultural imperialism,
and racism, have been described as internal colonialism (Barrera, 1979; Barrera et al., 1972; Muñoz, 1983), which intersects with a class hierarchy in the U.S (Persell, 1977; Ogbu and Matute-Bianchi, 1986).

Such historical conditions reduced the Chicano community largely to a source of relatively inexpensive labor. In turn, oppressive educational practices (Darder, 1991; Acuña, 1988; Weinberg, 1977) continued to maintain Chicanos in a subordinate status throughout the twentieth century. According to Ogbu and Matute-Bianchi (1986), Chicanos represent a "caste-like minority," which has had little opportunity to develop a "folk theory of success" that encourages educational achievement as a means to socioeconomic mobility. Instead, a number of Chicano students develop an "oppositional consciousness" that provides resistance to oppression through behavior that contradicts the norms expected by most school personnel, e.g., good attendance, strong study habits, school work ethic, respect for instructors, etc. (Ogbu and Matute-Bianchi, 1986).

The effects of such conditions are made more complex by the pattern of immigration to the U.S. by Mexicanos, which contributes to a rich degree of cultural variability within the Chicano community. The study of such variability reveals a complex process of cultural development and responses that occur along several dimensions (e.g., language, values, social affiliations, family relations, etc.), most of which exist in both a Mexicano (primary, subordinate culture) and U.S. (secondary, dominant culture) domain (Buriel, 1994; Padilla and Keefe, 1987; Ramirez, 1984).
Likewise, the cultural development process for Chicanos includes a cognitive "product" referred to as ethnic identity (Phinney, 1993, 1991, 1990, 1989; Hurtado et al., 1994; Treviño, 1994) with significant implications for the degree to which Chicano students enact a collective approach to the alleviation of their community's subordinate status. The literature that examines the process of cultural development among Chicanos consistently indicates that the response pattern described as biculturalism (or cultural negotiation; Darder, 1991), i.e., a cultural response pattern featuring a blending within various dimensions (e.g., values) of both the Mexicano and U. S. cultural domains, as well as contextual "switching" between the two domains in other dimensions (e.g., language), is the most functional, adaptive, and empowering cultural response by Chicanos (Darder, 1991; La Fromboise et al., 1993; Ramirez, 1991, 1984; Buriel, 1994, 1984).

Thus, the characteristics of Chicano students in higher education are likely to feature a historically subordinate sociopolitical status with strong elements of resistance, as well as a complex process of cultural development with responses that manifest both Mexicano and U. S. cultural domains along a "sphere of biculturalism" (Darder, 1991) that includes a functional, bicultural option. The framework of postsecondary persistence described by Tinto (1993) would indicate the need for institutional recognition of and sensitivity to such student characteristics as part of the critical conditions necessary to facilitate the degree of congruence that maximizes academic and social integration, and subsequent persistence.
Institutional Characteristics

Tinto's theory emphasizes that each institution of higher education manifests a particular culture, which is reflected in its mission and subsequent policies and practices. Therefore, constructing enabling conditions for Chicanos in institutions of higher education generally involves a restructuring of values (and subsequent policies and practices) embedded in their institutional culture. Historically, according to Persell (1977; Darder, 1991), the values of educational institutions in the U. S. have been driven by their relationship to structures of dominance (i.e., racism, classism, and sexism) that are reinforced and legitimated by ideology and hegemony. Thus, subordinate groups such as Chicanos are regarded as a low priority by most postsecondary institutions (Aguirre and Martinez, 1993).

In turn, the negative value reflected toward Chicanos is manifested in an institutional neglect of their needs in areas such as curriculum and faculty-staff hiring (Darder, 1992; Reyes and Halcon, 1988), and their exclusion from the process of determining institutional policy (Aguirre and Martinez, 1993). The result is that Chicanos remain largely marginalized from the core of institutional culture in higher education, which places them in a vulnerable position in terms of their persistence and development (Tinto, 1993).

The institutional remedy for such neglect has been described as cultural democracy (Darder, 1992, 1991; Ramirez and Castañeda, 1974). Critical to a framework of cultural democracy is an emphasis on the dynamic relationship between culture and power, both within and
outside the institution. Thus, as with Tinto's theory of postsecondary persistence, both student and institutional characteristics are salient.

Darder’s (1992) theoretical framework of cultural democracy in higher education described a spectrum of institutional responses, ranging from traditional to liberal, to multicultural, and finally, to culturally democratic. According to Darder, cultural democracy in higher education is manifested in a view of culture as an essential part of both the individual and collective experiences of people rather than a depoliticized and decontextualized phenomenon; a view of cultural differences as inherent and legitimate; and an institutional response to cultural differences as accepting of ambiguity, conflict, and uncertainty with a corresponding assessment of the respective subject position of cultural groups in the institution.

In addition, the culturally democratic institution features a dialogical, contextual perspective of working values that drives the conditions for equity and social justice, rather than an emphasis on conformity, individualism, and/or "common values;" decentralized power relations that facilitate the expression of diversity and cross-cultural dialogue; the allocation of policy-making positions on "equitable, representative, and fair terms" (Darder, 1992); emancipatory perceptions of people of color; and an institutional perspective on change that implements forceful policies to continually increase equity and raises continuous engagement with "themes of privilege, entitlement, subordination, resistance, and domination" (Darder, 1992). Thus, diversity becomes fully embedded through institutional values that drive
comprehensive campus practices. All cultural groups are represented equitably, particularly in policy-making processes, thus preventing their marginalization and alienation.

The framework of cultural democracy operationalizes the enactment of enabling conditions for subordinate, culturally diverse groups such as Chicanos. Those conditions are clearly descriptive of the institutional characteristics necessary to construct the persistence and development of Chicano students in higher education.

METHODS

This exploratory study seeks to test empirically a theoretical framework of Chicano student persistence in higher education, one that engages integration of Tinto's theory with theoretical insights on equity issues to examine the student and institutional characteristics most likely to enact congruence that facilitates authentic, emancipatory academic and social integration for Chicanos. Three public postsecondary institutions in the metropolitan border area of San Diego, a unique context in terms of the historic sociopolitical status of Chicanos, were chosen as sites for the study. The three institutions represent different levels of the California Master Plan for Higher Education, which has been criticized for its segregation of Chicanos and other subordinate groups into institutions with relatively little status and fewer resources (Gandara, 1986; Astin, 1982). Thus, the sites included a California Community College campus, a California State University campus, and a University of California campus.

The author developed and field tested a ninety-nine item questionnaire, the components of which corresponded to the study's
major concepts. Those concepts, along with the literature that operationalized them for measurement purposes, were: student characteristics (Padilla and Keefe, 1987; de la Garza et al., 1995; Phinney, 1990, 1989); institutional characteristics (Darder, 1992); external stress factors (Quintana et al., 1991; Olivas, 1986; Muñoz, 1986); demographic information; and campus integration (Tinto, 1993; Pascarella and Terenzini, 1991; Kuh, 1993).

The registrar's office at each of the three institutions provided a list of randomly-selected students who self-identified as Chicanos. The lists were distributed equally by class standing (first through fourth-year students at the two universities and first and second-year students at the community college). Each student was mailed a questionnaire along with an explanatory cover letter and a stamped, self-addressed envelope. The questionnaires were mailed near the conclusion of each institution's spring quarter or semester in order to obtain responses reflecting a minimum of one entire academic year. The response rates were thirty-two percent from both the California State University (347 responses) and the California Community College (96 responses), and forty-one percent from the University of California (243 responses), for a total of 686 responses.

RESULTS

Statistical analysis of the data was conducted through the Statistical Program for the Social Sciences (SPSS). The analyses addressed the study's research questions as indicated by its initial theoretical framework (see Figure 1). Frequencies for all variables were
Figure 1.—Conceptual Framework for Explaining Integration and Persistence of Chicano Students in Higher Education
conducted to yield descriptive statistics. Factor analysis was generated to produce factors representing the dimensions within major concepts. Tests of reliability identified weak variables within factors, which were then deleted. Finally, tests of relationships between factors were conducted to identify trends and associations.

**Descriptive Statistics**

Frequencies and means for major concepts (students' cultural characteristics, cultural democracy, external stress, campus integration, and demographic characteristics) were computed to indicate the dominant responses within concepts (see Table 1 and Table 2). The students' cultural characteristics (i.e., degree of biculturalism) indicated several dominant trends among the various dimensions of culture, and between the two cultural domains (primary/Mexicano and secondary/U. S.). In general, there was a high degree of bilingualism among the students, with contextual use of English and Spanish. Most students had at least one parent born in México, indicating the likelihood of a strong Mexican cultural heritage (Padilla and Keefe, 1987). In addition, the students indicated very positive perceptions of Mexican culture. Their perceptions of U. S. culture were somewhat less positive, yet high enough to indicate a reasonable comfort level. Likewise, they expressed a preference for social affiliations with other Chicanos, yet their reported behavior showed a considerable degree of social interaction with whites. The students also expressed strong perceptions of discrimination against Chicanos in the U. S., as well as a high degree of "achieved" ethic identity.
Table 1.--Overall Chicano Student Responses with Respect to Their Profile on Selected Student and Institutional Characteristics

<table>
<thead>
<tr>
<th>Construct (N = variables)</th>
<th>Dominant Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Cultural Characteristics (N = 47)</td>
<td>High</td>
</tr>
<tr>
<td>Cultural Democracy (N = 18)</td>
<td>Moderate to Low</td>
</tr>
<tr>
<td>Stress (N = 3) (Personal, Financial, Family)</td>
<td>High</td>
</tr>
<tr>
<td>Campus Integration</td>
<td></td>
</tr>
<tr>
<td>Perceptions of Campus Integration (N = 10)</td>
<td>Moderate Low</td>
</tr>
<tr>
<td>Behaviors Facilitating Integration (N =13)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Demographic</th>
<th>% No</th>
<th>% Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents Attended College</td>
<td>64</td>
<td>36</td>
</tr>
<tr>
<td>Students Worked in College</td>
<td>21</td>
<td>79</td>
</tr>
<tr>
<td>Hours Worked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 20 hours</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>Less than 20 hours</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>Year in College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshperson</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>GPA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 2.40</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Above 2.41 to 3.20</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Above 3.21</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>
Table 2.--Profile of Chicano Students' Overall Characteristics on Major Constructs

<table>
<thead>
<tr>
<th>Construct (N = variables)</th>
<th>Standard Deviation</th>
<th>Mean (Range: 1-5)</th>
<th>Degree/ Level of Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexican Cultural Orientation (N = 28)</td>
<td>.58</td>
<td>3.91</td>
<td>Strong/ High</td>
</tr>
<tr>
<td>United States Cultural Orientation (N = 19)</td>
<td>.54</td>
<td>3.48</td>
<td>Relatively Strong/ High</td>
</tr>
<tr>
<td>Biculturalism (N = 47)</td>
<td>.30</td>
<td>3.74</td>
<td>Strong/ High</td>
</tr>
<tr>
<td>Cultural Democracy (N = 18)</td>
<td>.66</td>
<td>2.88</td>
<td>Moderate</td>
</tr>
<tr>
<td>External Stress (N = 3)</td>
<td>.92</td>
<td>3.76</td>
<td>Strong</td>
</tr>
<tr>
<td>Campus Integration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceptions (N = 10)</td>
<td>.49</td>
<td>2.93</td>
<td>Moderate</td>
</tr>
<tr>
<td>Behaviors (N = 13)</td>
<td></td>
<td></td>
<td>Low</td>
</tr>
</tbody>
</table>

(i.e., high clarity and salience of ethnic identity; Phinney, 1989, 1990) as a Chicano. In summary, the students' response patterns indicated a high degree of biculturalism (i.e., comfort and proficiency in several cultural dimensions that occur in both Mexicano and U. S. cultural domains), with their ethnic identity as a Chicano very salient.

There was also a dominant response pattern in the students' perceptions of their institution's commitment to Chicanos (i.e., cultural democracy). Students had high, positive perceptions of their institutions on only a few variables, mainly the admission policies and support services, respectively. On several areas of cultural democracy, the students' dominant response was neutral, including their perception of
support for Chicano student organizations, their institution's relationship with the off-campus Chicano community, and its support for affirmative action. On over one-third of the variables of cultural democracy, the students' perceptions were generally negative, particularly for those reflecting the representation (i.e., critical mass) of Chicano faculty, staff, and students, respectively, on campus. Thus, the students' dominant response in terms of their perception of cultural democracy was low to moderate.

The students tended toward reports of high stress levels in personal, family, and financial areas. Their demographic information indicated several characteristics: approximately one-third had a parent who had attended college; sixty percent of the students were female and forty percent male; approximately eighty percent worked while in college, of whom two-thirds worked at least twenty hours per week; and eighty-four percent had a cumulative grade point average at or above 2.40.

**Factor Analysis**

Factor analysis was conducted to identify variables that grouped themselves around the major concepts of the study. The number of factors selected to represent each of those constructs was based on the interpretability of the eigenvalues (i.e., factors with eigenvalues over one were selected) and the factor loadings.

The factor analysis for the forty-item construct of student cultural characteristics resulted in thirteen factors, which accounted for sixty-five percent of the variance. Seven of the factors represented Mexican cultural emphases and six represented U. S. cultural emphases. Their
alphas ranged from modest to strong. There were three factors for cultural democracy, representing sixty percent of the variance, with relatively strong alphas. The construct of campus integration resulted in six factors, accounting for fifty-five percent of the variance, with relatively weak alphas; one of the six factors was deleted.

Correlations between factors indicated several positive, significant correlations between factors of biculturalism and campus integration (e.g., Mexican Historical Knowledge and Faculty Contact; correlation = .22, p<.01). Likewise, some factors of cultural democracy had positive, significant correlations with campus integration (e.g., Institutional Access and Campus Community; correlation = .43, p<.01).

**Multiple Regression**

Saldana (1995), Hurtado (1994), and Treviño (1994) suggested that multivariate regression analysis, utilizing both student and environmental characteristics, is more effective than correlational designs that do not address adequately the multiple, interactive factors that impact the postsecondary experiences of Chicano students.

A series of five multiple regression analyses was conducted, each utilizing one of the factors of postsecondary integration (Student Organization Involvement, Faculty Contact, Support Services, Social Activities, and Campus Community) as the dependent variable. In addition, a sixth regression was run utilizing all five factors of postsecondary integration combined as the dependent variable. The factors of cultural characteristics (thirteen), cultural democracy (three), external stress, and demographic variables (five), respectively, were used
as independent variables. The stepwise variable rotation technique was utilized for entry of variables in the regression equation.

The variance accounted for in dependent variables was low to modest throughout most of the regression equations. In general, however, the levels of variance reflect what might be expected in an exploratory study using a regression model to explain complex phenomena relative to the unique aspects of postsecondary experiences among Chicanos and other subordinate groups (Saldana, 1995; Hurtado et al., 1994; Treviño, 1994). Four of the six regression equations resulted in an \( r^2 \) of over ten, and will be discussed.

For the factor of Student Organization Involvement, which included participation in Chicano/Latino student organizations, the effects of independent variables accounted for approximately twelve percent of the variance (see Table 3). The main contributing variables included factors of students' cultural characteristics, such as Mexican Historical Knowledge (\( \beta = .19 \)) and Mexican Social Affiliations (\( \beta = .19 \)); one factor of cultural democracy, Chicano Access (\( \beta = .11 \)); and one demographic factor, Number of Hours Worked (\( \beta = -.14 \)). Thus, those students with higher levels of involvement with student organizations were more likely to have knowledge of Mexican history, to prefer social affiliations with other Chicanos, to have perceptions of equitable institutional access for Chicanos, and to work fewer hours.
Table 3.--Regression, Student Organization Involvement on Cultural Characteristics Factors (13), Cultural Democracy Factors (3), External Stress, Demographic Variables

<table>
<thead>
<tr>
<th>Factor-Variable</th>
<th>Beta</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexican Social Affiliations</td>
<td>.19</td>
<td>.03</td>
<td>22.77</td>
</tr>
<tr>
<td>U.S. Historical Knowledge</td>
<td>.11</td>
<td>.05</td>
<td>18.55</td>
</tr>
<tr>
<td>Hours Worked</td>
<td>-.14</td>
<td>.07</td>
<td>16.87</td>
</tr>
<tr>
<td>Gender</td>
<td>.09</td>
<td>.08</td>
<td>15.16</td>
</tr>
<tr>
<td>Chicano Access</td>
<td>-.11</td>
<td>.09</td>
<td>13.72</td>
</tr>
<tr>
<td>Mexican Historical Knowledge</td>
<td>.17</td>
<td>.10</td>
<td>12.83</td>
</tr>
<tr>
<td>Mexican Cultural Heritage</td>
<td>-.15</td>
<td>.11</td>
<td>13.07</td>
</tr>
</tbody>
</table>

Total R square=11.89, F(7,678)=13.07*

*p<.000

Variables Not in Equation:
- External Stress
- Mexican Cultural Emphasis
- Mexican Peers
- Chicano Ethnic Identity
- Perceived Discrimination
- U.S. Cultural Heritage
- White Social Affiliations
- White Peers
- U.S. Cultural Emphasis
- U.S. Language Preferences
- Chicano Representation
- Chicano Support
- Parents Attended College
- Worked During College
- Quarters/Semesters Completed
The effects of independent variables accounted for approximately twelve percent of the variance in Faculty Contact (see Table 4). The main contributing variables included the student cultural characteristics factors of Mexican Historical Knowledge (beta = .22), Chicano Ethnic Identity (beta = .10), and White Social Affiliations (beta = .10); a factor of cultural democracy, Chicano Support (beta = -.13); and a demographic factor, Number of Hours Worked (beta = -.10). The students who showed higher levels of contact with faculty were more likely to have knowledge of Mexican history, to have a well-developed Chicano ethnic identity, to be comfortable in social affiliations with whites, to perceive high levels of institutional support for Chicanos, and to work fewer hours.

The independent variable effects accounted for over twenty-five percent of the variance in Campus Community, by far the greatest amount of variance accounted for throughout the regression tests (see Table 5). Among the main contributing variables were the cultural democracy factors Chicano Access (beta = .19), Chicano Support (beta = .19), and Chicano Representation (beta = .10); and the student cultural characteristics factors U. S. Cultural Emphasis (beta = .14), and Mexican Historical Knowledge (beta = .09). Thus, it appeared that students who tended to perceive their college or university campus as a community were also likely to have positive perceptions of their institution's sensitivity to Chicanos in equity issues such as access, support and representation. Those students were also somewhat more likely to have relatively positive perceptions of U. S. culture and to have knowledge of Mexican history.
Table 4.--Regression, Faculty Contact on Cultural Characteristics
Factors (13), Cultural Democracy Factors (3),
External Stress, Demographic Variables

<table>
<thead>
<tr>
<th>Factor-Variable</th>
<th>Beta</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexican Historical Knowledge</td>
<td>.22</td>
<td>.05</td>
<td>34.59</td>
</tr>
<tr>
<td>White Social Affiliations</td>
<td>.10</td>
<td>.07</td>
<td>25.84</td>
</tr>
<tr>
<td>Chicano Support</td>
<td>.13</td>
<td>.08</td>
<td>21.04</td>
</tr>
<tr>
<td>U.S. Historical Knowledge</td>
<td>.12</td>
<td>.09</td>
<td>18.68</td>
</tr>
<tr>
<td>Hours Worked</td>
<td>-.10</td>
<td>.10</td>
<td>16.70</td>
</tr>
<tr>
<td>Chicano Ethnic Identity</td>
<td>.10</td>
<td>.11</td>
<td>15.26</td>
</tr>
<tr>
<td>U.S. Cultural Heritage</td>
<td>.08</td>
<td>.12</td>
<td>13.70</td>
</tr>
</tbody>
</table>

Total R square=12.39, F(7,678)=13.70*  

*p<.000

Variables Not in Equation:  
External Stress  
Mexican Cultural Heritage  
Mexican Social Affiliations  
Mexican Cultural Emphasis  
Mexican Peers  
Perceived Discrimination  
White Peers  
U.S. Cultural Emphasis  
U.S. Language Preferences  
Chicano Representation  
Chicano Access  
Parents Attended College  
Worked During College  
Quarters/Semesters Completed
Table 5.--Regression, Campus Community on Cultural Characteristics
Factors (13), Cultural Democracy Factors (3),
External Stress, Demographic Variables

<table>
<thead>
<tr>
<th>Factor-Variable</th>
<th>Beta</th>
<th>$R^2$</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicano Access</td>
<td>.29</td>
<td>.18</td>
<td>151.82</td>
</tr>
<tr>
<td>Chicano Support</td>
<td>.19</td>
<td>.21</td>
<td>91.40</td>
</tr>
<tr>
<td>U.S. Cultural Emphasis</td>
<td>.14</td>
<td>.23</td>
<td>68.50</td>
</tr>
<tr>
<td>U.S. Language Preferences</td>
<td>.10</td>
<td>.24</td>
<td>53.40</td>
</tr>
<tr>
<td>Mexican Historical Knowledge</td>
<td>.09</td>
<td>.25</td>
<td>44.77</td>
</tr>
<tr>
<td>Chicano Representation</td>
<td>.10</td>
<td>.25</td>
<td>38.19</td>
</tr>
</tbody>
</table>

Total $R$ square=25.23, $F(6,679)=38.19*$

*p<.000

Variables Not in Equation:
- External Stress
- Mexican Cultural Heritage
- Mexican Social Affiliations
- Mexican Cultural Emphasis
- Mexican Peers
- Chicano Ethnic Identity
- Perceived Discrimination
- U.S. Cultural Heritage
- White Social Affiliations
- White Peers
- U.S. Historical Knowledge
- Parents Attended College
- Worked During College
- Hours Worked
- Quarters/Semesters Completed
- Gender
Table 6.--Regression, Campus Integration on Cultural Characteristics Factors (13), Cultural Democracy Factors (3), External Stress, Demographic Variables

<table>
<thead>
<tr>
<th>Factor-Variable</th>
<th>Beta</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexican Historical Knowledge</td>
<td>.23</td>
<td>.04</td>
<td>25.44</td>
</tr>
<tr>
<td>Hours Worked</td>
<td>-.17</td>
<td>.06</td>
<td>20.23</td>
</tr>
<tr>
<td>U.S. Historical Knowledge</td>
<td>.12</td>
<td>.08</td>
<td>18.84</td>
</tr>
<tr>
<td>Chicano Support</td>
<td>.12</td>
<td>.09</td>
<td>17.16</td>
</tr>
<tr>
<td>Mexican Cultural Heritage</td>
<td>-.15</td>
<td>.10</td>
<td>15.77</td>
</tr>
<tr>
<td>Mexican Social Affiliations</td>
<td>.12</td>
<td>.11</td>
<td>14.45</td>
</tr>
<tr>
<td>U.S. Language Preferences</td>
<td>.09</td>
<td>.12</td>
<td>13.24</td>
</tr>
</tbody>
</table>

Total R square=12.03, F(7,678)=13.24*

*p<.000

Variables Not in Equation:
- Mexican Cultural Emphasis
- Mexican Peers
- Chicano Ethnic Identity
- Perceived Discrimination
- U.S. Cultural Heritage
- White Social Affiliations
- White Peers
- U.S. Cultural Emphasis
- Chicano Representation
- Chicano Access
- External Stress
- Parents Attended College
- Worked During College
- Quarters/Semesters Completed
- Gender
The regression analysis using all five combined factors of Campus Integration as the dependent variable indicated that the independent variables accounted for approximately twelve percent of the variance (see Table 6). The most significant contributing variables included factors of students' cultural characteristics, such as Mexican Historical Knowledge (beta = .23), Mexican Cultural Heritage (beta = -.15), and Mexican Social Affiliations (beta = .12); one factor of cultural democracy, Chicano Support (beta = .12); and one demographic factor, Number of Hours Worked (beta = -.17). In general, the students with relatively higher rates of campus integration had greater knowledge of Mexican history, preference for social affiliations with other Chicanos, and have at least one parent born in the U. S. They also had more positive perceptions of their institution’s support of Chicanos and they worked fewer hours.

ANOVA

A series of ANOVA's was conducted in order to identify significant differences in major constructs across the three institutions. The results, as shown in Table 7, indicate significant differences among the institutions in students' cultural characteristics (i.e., degree of bicultural proficiencies), cultural democracy (i.e., institutional conditions supporting Chicanos), external stress (from family, personal, and financial sources), and in three of the five factors of postsecondary integration: Student Organization Involvement, Faculty Contact, and Campus Community.

Students attending the California State University tended toward the highest amount of bicultural proficiencies, followed by the students
from the California Community College and the University of California, respectively. Students from all three campuses had mean scores for Cultural Characteristics that were relatively high. However, there was a significant difference between the California State University and the UC campuses (p = .05).

Table 28.--Anova, Comparison of Constructs by Institution

<table>
<thead>
<tr>
<th>Construct</th>
<th>df</th>
<th>F</th>
<th>P</th>
<th>Institution</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Characteristics</td>
<td>685</td>
<td>7.48</td>
<td>.0005</td>
<td>SDSU</td>
<td>3.77a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SDCCC</td>
<td>3.71</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>UCSD</td>
<td>3.68a</td>
</tr>
<tr>
<td>Cultural Democracy</td>
<td>682</td>
<td>60.08</td>
<td>.0000</td>
<td>SDCCC</td>
<td>3.32ab</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SDSU</td>
<td>2.96bc</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>UCSD</td>
<td>2.58ac</td>
</tr>
<tr>
<td>External Stress</td>
<td>684</td>
<td>3.06</td>
<td>.0472</td>
<td>UCSD</td>
<td>3.85a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SDSU</td>
<td>3.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SDCCC</td>
<td>3.58a</td>
</tr>
<tr>
<td>Student Organization</td>
<td>685</td>
<td>4.86</td>
<td>.0080</td>
<td>UCSD</td>
<td>2.50a</td>
</tr>
<tr>
<td>Involvement</td>
<td></td>
<td></td>
<td></td>
<td>SDSU</td>
<td>2.34b</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SDCCC</td>
<td>2.25ab</td>
</tr>
<tr>
<td>Campus Community</td>
<td>683</td>
<td>21.52</td>
<td>.0000</td>
<td>SDCCC</td>
<td>3.71ab</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SDSU</td>
<td>3.39bc</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>UCSD</td>
<td>3.08ac</td>
</tr>
</tbody>
</table>

Note: A significant difference (p<.05) between groups is indicated by the same subscript letter within each construct.

Several significant differences were found between all three campuses in the students' collective perceptions of cultural democracy at their institution. The highest mean was found among the California Community College students, followed by the California State and UC campuses, respectively. In fact, there was an obvious, inverse relationship between the students' perceptions of cultural democracy and
their reported external stress. Students from the University of California gave their institution the lowest ratings for cultural democracy and also reported the highest levels of stress. On the other hand, the community college students had the most positive perceptions of their institution’s sensitivity to Chicanos and they reported the least amount of stress.

There were also significant differences among students by institution in two factors of campus integration. Students from the UC campus showed higher levels of involvement in student organizations. However, they were less likely to perceive their campus as a community than the students from the other two institutions. The community college students had the most positive perceptions of their campus as a community. Their reported levels of Student Organization Involvement, however, were the lowest among the three institutions. As with perceptions of cultural democracy and external stress, the California State University students were at the mid-point among the institutions in terms of campus integration.

DISCUSSION

This exploratory study indicates important directions for the study of the experiences in higher education among Chicanos, a sociopolitically subordinate student group whose numbers are growing on many postsecondary campuses through the sheer increase in their community's population. It is also a population that has yet to show achievement levels, in terms of persistence and graduation in higher education, comparable to whites (Tinto, 1993; Aguirre and Martinez, 1993).
Perhaps the study's most significant results were those describing the strong bicultural profile of the students who participated. Overall, and along several diverse dimensions, the students indicated high levels of proficiency in their primary (Mexicano) culture (including a robust Chicano ethnic identity), and quite comfortable levels of proficiency in the secondary (U. S.) culture. Thus, the students demonstrated relatively high levels of biculturalism, which has been described as a characteristic that contributes to adjustment and educational achievement among Chicanos (Buriel, 1994, 1984; La Fromboise et al., 1993; Darder, 1991; Ramirez, 1984). The high biculturalism found among these students is particularly poignant, for as successful college and university students, they represent a collective "success story" that is a notable exception to the general educational pipeline for Chicano students in the U. S.

Unfortunately, the study's descriptive statistics also indicated that the students' overall perceptions of their campus' institutional conditions were not equally conducive to positive student outcomes. It must be noted that such perceptions themselves are more relevant to the students' persistence and development than any so-called "objective" determinant of institutional characteristics (Tinto, 1993). Thus, it appeared that the institutions attended by these students lacked the critical, enabling conditions (i.e., cultural democracy) that respect and build upon the students positive, bicultural characteristics to maximize their persistence and development. In addition, inferential statistics indicated a significant association between the degree to which the students perceived a lack of institutional responsiveness to Chicanos,
their experiencing the campus as a community, and the amount of stress they experienced.

While the degree of variance in campus integration accounted for by the study's independent variables was relatively low, they indicated important directions as to the students' cultural characteristics and the institutional conditions that potentially impact such integration among Chicano students. Two critical aspects of integration identified by Tinto (1993), faculty contact and extracurricular involvement, were associated in the study with both Mexican and U. S. cultural proficiencies, as well as by students' perceptions of cultural democracy at their institution. Although certain elements of the students' Mexicano cultural characteristics, such as knowledge of Mexican history, were consistently identified as significant contributors to measures of campus integration, it was clear that the combination of both Mexican and U. S. cultural characteristics, i.e., biculturalism, contributed most to the students' integration. In addition, the degree to which the students perceived their campus as a community (i.e., congruence; Tinto, 1993) was impacted quite significantly by the students' perceptions of cultural democracy. Such congruence, with its subsequent impact on integration, was found by Tinto to be a major determinant of postsecondary persistence.

The directions established by this study point to a need for an empirically-based theoretical framework for the relationship between the cultural characteristics of Chicano students in higher education, the critical conditions of the institutions they attend, and the students' subsequent academic and social integration and persistence (see Figure 2). The study also has implications for higher education policy and
Figure 2: Revised Conceptual Framework for Explaining Integration and Persistence of Chicano Students in Higher Education

Parents' College Attendance
- Work During College
- Gender
- Quarters/Semesters Completed

Demographic Variables
- Ethnic Identity

Chicano Student Characteristics
- Cultural Preferences
  - Mexican Historical Knowledge
  - Mexican Cultural Emphasis
  - Mexican Social Affiliations
  - Mexican Cultural Heritage
  - Mexican Peers

   U.S. Historical-Knowledge
   U.S. Cultural Emphasis
   White Social Affiliations
   U.S. Cultural Heritage
   White Peers

Perceived Discrimination

Postsecondary Persistence (Student-Institution Congruence)

Financial
- Personal
- Family

External Stress

Institutional Characteristics
- Cultural Democracy
- Chicano Access
- Chicano Representation
- Chicano Support

Academic Integration
- Support Services
- Faculty Contact

Social Integration
- Campus Community
- Student Organization Involvement
- Social Activities
practice. It appears that considerable potential may lie in the application of theory integration to Tinto's framework of higher education in order to operationalize academic and social integration in a non-normative, emancipatory manner. Its results strongly point to biculturalism as a positive, functional attribute among Chicano students. The results also indicate that conditions of cultural democracy may validate and strengthen Chicano biculturalism, constructing congruence between institutions and Chicano students in an authentic, non-coercive manner, thereby facilitating their campus integration and persistence. Such directions are critical to public institutions of higher education that face the challenge and imperative of facilitating equitable outcomes for increasingly diverse populations that include historically subordinate groups. Likewise, the principle of cultural democracy operationalized in this study could serve colleges and universities in constructing critical, enabling conditions to maximize the persistence, development, and achievement of Chicanos and other historically subordinate groups.
References


NOTICE

REPRODUCTION BASIS

☐ This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☐ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").