Retention and Attrition Among College Hispanic Freshmen at Border Institutions

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Abstract
Attrition rates for students of Hispanic descent at Border universities represent a long-standing dilemma. Significant social, economic, and educational effects from attrition inflict suffering, both subtle and direct, for the individual students, their families, their communities, and their institutions. In spite of many efforts to address the attrition problem, the current forecast predicts that only four of every ten entering university freshmen will eventually graduate (Cabrera, Nora & Castaneda, 1993). Obviously, the attrition problem remains as a major challenge for Border institutions with student majorities composed of “traditional minority” students.

With the end of the baby boom, a rising concern among university administrators remains at the forefront on the decreasing enrollment of the traditional eighteen-year-old college freshmen. The Carnegie Commission on Higher Education’s prediction (Lenning, Beal & Sauer, 1980) in the early 1980’s that the decrease in traditional freshmen enrollment would create a “new revolution” in academia is verified annually by initial matriculation data across the country and, particularly, on the Border. Attrition is so severe on the Border that the very survival of some institutions remains threatened. Just the “drain” of invested dollars is a critical consideration. After all, the education of continuing students is cheaper than the recruitment of brand new students. Regularly, universities direct considerable resources to recruit students: financial aid, promotion of academic reputation, student health services, student counseling services, student career selection and preparation services, campus facility usages, and other related costs (Kemerer, Baldridge, & Greene, 1982; Pascarella, Bohr, Nora & Terenzini, 1995). Such investments are made with the expectation that the student will continue until the degree has been attained. Each “dropout” represents a multileveled economic loss to the institution, in addition to the private loss in self-esteem, in economic opportunity, in social opportunity, and so on. Yet, in spite of many, many efforts to curb student attrition - many with their own special acronyms and special funding sources - attrition demands major concern (Thomas, 1994).

Obviously, a high attrition rate can exert a considerable impact upon a higher educational institution. The school in terms of financial expenditures, faculty time, student support services, campus facility usage, and other costs derives commitments based on projected enrollments. Summerskill’s (1962) review of 35 studies of student attrition completed over a 40-year period figured the median loss rate of students during a four-year
period to be 50%. Scully (1980) noted, perhaps rather unsurprisingly, that a high rate of attrition in conjunction with a tenuous new student enrollment can affect the educational quality of an institution, its financial future, and even its survival.

Studies indicate that students departing from their initial school of enrollment in higher education contribute to attrition rates from 40% to 60%, depending on whether the students were followed through one, two, three, four, or five years. Green (1983) found that nearly 50% of all students entering four-year institutions never graduate from their original place of enrollment and that approximately 30% never graduate from any college. Lenning et al. (1980) observed that over the past 50 years, only 40% of those who graduated during a four- or five-year period did so from their initial school of entrance. In their 1980 national study examining retention rates at different schools, Beal and Noel projected gloomy trends, namely, that the average graduation rates after five years from entrance varied from 46% at four-year public institutions to 65% at four-year private, selective institutions and 77% at private, highly selective institutions.

Rather surprisingly, in the face of such atrocious student attrition, and, in spite of the many efforts to combat it, universities hold few systematic published descriptions, explanations, and in-depth analyses, and interpretations of the results of those efforts. Even the attempt to obtain unpublished information from different campus officials on universities throughout this nation typically yields only vague, informal reports about program effectiveness (Pascarella, Edison, Nora, Hagedorn & Terenzini, 1996). And, of course, each institution’s particular effort/s is proclaimed successful and filed. But in the midst of the American university family, the market of free discussion, the competition among infinitude of ideas, and the bulwark of democracy, the question of attrition still hovers.

Another aspect of retention is attrition or those students who leave the university before graduation. The impacts of attrition most observed on a university are that the university loses potential graduates to the extent that the attrition certainly could adversely affect an institution’s reputation. The institution also loses because the time and effort spent on orientation, counseling, academic advising, financial counseling, and retention did not make a difference for that particular student. Furthermore, the university may develop a reputation for poor institutional effectiveness, for lack of credibility, and for a lack of concern as to how students can fit into the campus environment. The inability to retain ethnic minorities in higher education, at the state level, may be a sign of poor state planning and ignorance, or disregard of population trends. The result is the perpetuation of a less-educated work force in society, as well as ethnicity-based differences in socioeconomic status. The student, on the other hand, loses time, effort, money, confidence, self-esteem, and motivation (Aguirre & Martinez, 1993). The student is also rated as a “dropout.”

The retention rates of students at Texas colleges and universities have become an increasing concern for educators. In light of tying legislative funding to retention rates and declining enrollments, each university component searches for data to justify its programs. The State of Texas Coordinating Board and the Texas Education Agency created a Task Force on Retention and Graduation. Its purpose was to develop information and policy recommendations concerning the improvement of retention and baccalaureate graduation
rates at Texas colleges and universities. In their April 15, 1998 report, the Task Force data revealed that of those students who entered Texas public colleges or universities for the first time in 1990, only 40% graduated with an associate degree, and 30% graduated with a baccalaureate degree. More than 40% were no longer enrolled and had not graduated. One of the Task Force recommendations was continued research to “strengthen statewide analysis of factors that influence the retention and graduation rates of Texas public college and university students.” (Texas Higher Education Coordinating Board, 1998).

The major problem of this study was freshman attrition and retention at United States border institutions of higher learning where the Hispanic population was the majority. Specific concerns were factors that contributed to student attrition and retention at an institution of higher learning where a minority population was the majority population.

**Purpose**

Specific purposes of this study were as follows:

1. To determine whether students show any preference in reasons given for choosing to attend Texas A&M International University/ University of Texas- Pan American.
2. To determine whether students show any preference when choosing to attend Texas A&M International University/ University of Texas- Pan American taking into consideration their participation in high school extracurricular activities.
3. To determine whether students show any preference in reasons given for returning or not returning to Texas A&M International University/ University of Texas- Pan American after the first semester.
4. To determine whether persisting at or dropping out of Texas A&M International University/University of Texas- Pan American is independent of employment status.
5. To determine whether persisting at or dropping out of Texas A&M International University/ University of Texas- Pan American is independent of gender.
6. To determine whether persisting at or dropping out of Texas A&M International University/ University of Texas- Pan American is independent of high-school academic performance.
7. To determine whether persisting at or dropping out of Texas A&M International University/ University of Texas- Pan American is independent of levels of parents’ education.
8. To determine whether persisting at or dropping out of Texas A&M International University/ University of Texas- Pan American is independent of participation in extracurricular activities.

**Method**

Attrition and retention studies generally date back to the 1920’s and reflect a number of findings and ways in which to examine and understand the problem. The research has been inconsistent, uneven, or limited in attempts to explain the dropout rate of students. Although many of the studies have been conducted at single institutions, presenting the obvious limitations to generalize the findings, it is well known that to “cut across” many
institutions tends to seriously mask individual differences that are critically important in responding to the problem. Realizing the fact that all institutions are not similar due to varying demographics, specific practices, programs, and procedures, there is a need for information at the local level.

The Student Information Questionnaire was administered in the spring of 2003 to a 35% random sample of first-time-college freshmen students at Texas A&M International (TAMIU), Laredo, Texas and the University of Texas-Pan American (UTPA), Edinburg, Texas. Using SPSS, a table of random numbers with uniform distribution was used to select the sample of freshmen students.

In the fall of 2001, a total of 422 freshmen enrolled for the first time at TAMIU. Of these, 374 or 88.63% returned for the spring 2002 semester and 48 or 11.37% failed to return to the university for the spring 2002 semester. In the fall of 2001, a total of 4,035 freshmen enrolled for the first time at UTPA. Of these, 3,307 or 81.96% returned for the spring 2002 semester and 728 or 18.04% failed to return to the university for the spring 2002 semester.

The population for the study group was first-time college freshmen. A one-third sample of 140 students was selected at random from the students enrolled for the first time at TAMIU, and a one-third sample of 1,091 students was selected at random from the students enrolled for the first time at UTPA for a total of 1,231. The respondents totaling 261, or 21.20% of the random sample, were divided into two categories. The return group (RG) consisted of 237 students and the non-return group (NRG) had 24 students.

The instrument used in this study was an adaptation of the SIQ (Gonzalez, 1987). The instrument, specially created to aid in the objective assessment of knowledge relating to the subject of student attrition and retention, was the most current and applicable tool available for this study. As defined by Borg and Gall (1979), content validity is “the degree to which the sample of test items represents the content that the test is designed to measure”. A panel of four validators was asked to determine the content validity of the adapted SIQ. The validators were selected based on meeting two of the following criteria: having expertise in the area of higher education; having at least two years experience interacting with college or university students; having knowledge of research instrumentation; and having held the rank of associate professor or higher.

The SIQ was mailed to first-time freshmen enrolled in the fall of 2001. A nonparametric chi-square test was conducted to examine any possible differences between initial college experience and retention or attrition with the minimum acceptable level at .05 for determining statistically significant differences.

Two sources of data were collected to fulfill the data requirements of the research. The Registrar’s Office and the Office of Enrollment Services provided information on returning and non-returning first-time-college freshmen that enrolled during the Fall Semester, 2001. Each list included the names, student identification numbers, addresses, telephone numbers, ethnicity, Scholastic Aptitude Test scores, and fall semester grade point averages.

A total of 1,231 questionnaires were mailed to students selected at random and 261 were returned. The 261 questionnaires returned represented a 21.20% rate of return. This surpassed the 20% anticipated return.
After the questionnaires were examined for all possible errors and omissions, the data were tallied, transposed into numerical values and coded. The tabulation of the data in the SIQ consisted of frequency distribution of all questions for the RG and NRG, as well as the total group. Information was gathered to ascertain reasons for choosing to attend TAMIU or UTPA based upon employment status, gender, high-school academic performance, levels of parents’ education and extracurricular activities. Further information was gathered to assess the same variables on whether first-time-college freshmen returned or failed to return the universities in the Spring Semester, 2002. Nonparametric chi-square test was used to examine all questions. The minimum acceptable level was .05 for determining statistical significance difference.

Findings

The first hypothesis was stated as follows: Students show no preference in reasons given for choosing to attend Texas A&M International University/ University of Texas- Pan American. RG and NRG students reported fourteen reasons for attending the university and indicated the following most often: “location”, “financial assistance”, and “influence of parent or relative”. Reasons presented least for attending the university are as follows in order of least importance: “not accepted by university of first choice”, “impression of students”, and “athletics.”

When examined separately, RG students reported the same three most often identified reasons for attending the university. NRG students, on the other hand, chose “influence of friends or peers” second only to the “location” of the institution. Reasons presented least for attending did not change for the NRG students. RG students, however, listed the third least selected reason for attending as “brochures and pamphlets” in place of athletics.

Of the fourteen categories, two found to be significantly different between RG and NRG students are: “less expensive than other schools”, and “brochures and pamphlets.” The analysis of data shows that more RG students reported “less expensive than other schools” more than expected. The NRG students, on the other hand, reported “brochures and pamphlets” more than expected. The hypothesis for these two categories must, therefore, be rejected.

The second hypothesis was stated as follows: Students show no preference when choosing to attend Texas A&M International University/ University of Texas- Pan American taking into consideration their participation in high school extracurricular activities. Students were able to respond more than once.

RG and NRG students reported that, of the twelve categories of extracurricular activities, they were most often involved in “athletics,” “community service,” and “music.” Students were least often involved in “None,” (no extracurricular activities), and “debate” and “political organizations” were tied.

When considering each group separately, the order of the RG did not change. The NRG only changed in that participation in “clubs” narrowly overtook participation in “music,” and participation in “religious organizations” became one of the least involved extracurricular activities.
None of the twelve categories of extracurricular activities that met the qualifications for the chi-square test for goodness of fit were found to be significantly different. Therefore, the null hypothesis is accepted.

The third hypothesis was stated as follows: Students show no preference in reasons given for choosing to return or not return to Texas A&M International University/University of Texas- Pan American after the first semester. RG and NRG students reported six reasons for returning or not returning to the university and comparisons were made between the two groups. Students were allowed to respond more than once.

The most common reason for returning was “completing their planned stay” or “completing their degree,” followed by “family or personal reasons.” The most common reason for not returning was “family or personal reasons” and “financial situation.” Only one reason, “social life” was found to be significantly different between the RG and the NRG. Therefore, the null hypothesis must be rejected for this reason.

The fourth hypothesis was stated as follows: Persisting at or dropping out of Texas A&M International University/University of Texas- Pan American is independent of employment status. Students were asked if they were employed during the Fall Semester of 2001. If they were indeed employed, they were then asked if the employment was on campus, in the local community or outside the local community. More than half of the sample reported employment during the Fall Semester of 2001. No significant difference was found between the RG and NRG. The hypothesis must, therefore, be accepted.

The fifth hypothesis was stated as follows: Persisting at or dropping out of Texas A&M International University/University of Texas- Pan American is independent of gender. Almost an equal percentage of respondents returned when comparing male and female students. There was no significant difference found between the RG and the NRG in consideration of gender. The null hypothesis is thereby accepted.

It should also be noted that a chi-square test was conducted on the total population of first-time-in-college freshmen in relation to gender and rate of retention. There was also no significant difference found, which further strengthens the representation of the sample to the population.

The sixth hypothesis was stated as follows: Persisting at or dropping out of Texas A&M International University/University of Texas- Pan American is independent of high-school academic performance. Though there was no significant difference found between the RG and the NRG based on high school performance, it is very interesting to note that 47.87% were in the first quartile of those that persisted.

The seventh hypothesis was stated as follows: Persisting at or dropping out of Texas A&M International University/University of Texas- Pan American is independent of levels of parents’ education. Students were asked to provide information in relation to their parents’ education levels. A review of the literature indicates that the parental level of education is directly related to the importance placed on education. RG and NRG students were asked to indicate the highest level of education each parent had attained.

RG and NRG students reported that a clear majority of fathers never attended college. More RG students had fathers with higher education levels than expected and fewer NRG students had fathers with higher educational levels. There was no significant
difference found between the fathers’ education level and the RG and the NRG. The hypothesis is, therefore, accepted.

As a total, RG and NRG students reported that a majority of mothers, over 59%, never attended college. More mothers, however, than fathers had completed a high school education. It is also interesting to note that the number of fathers having some college work and beyond in their education level was very similar (42.86%) compared with the same categories of mothers (41.00%).

There was no significant difference found between the mothers’ education level and the RG and the NRG. The hypothesis is, therefore, accepted.

The eighth hypothesis was stated as follows: Persisting at or dropping out of Texas A&M International University/ University of Texas- Pan American is independent of participation in extracurricular activities. Students were asked what organizations or activities they participated in during the first semester of study. Students were allowed to respond more than once. As would be expected, the participation of the students who had been involved in high school organizations and activities dropped considerably when they enrolled in college.

The total RG and NRG students reported that the most participation of organizations and activities involved “intramural sports,” “special interests,” and “community service.” RG students reported that the most participation of organizations and activities involved “special interests,” “intramural sports,” and “community service.” NRG students reported that the most participation of organizations and activities involved “intramural sports,” “Greek organizations,” and “clubs.” Only “intramural sports” proved to be significant. The hypothesis, therefore, will only be rejected for “intramural sports.”

Conclusion

Based upon the findings revealed from the analysis of data, several conclusions were reached as follows:

1. Students chose to attend Texas A&M International University/ University of Texas- Pan American primarily for its “location,” “financial assistance,” and “influence of a family member.” Only two reasons, however, “less expensive” and “brochures and pamphlets” proved to be statistically significant.

2. Though none of the high school activities proved to be statistically significant, it is important to note the difference between RG and NRG involvement. In seven of the twelve categories, the RG was more active proportionally to the NRG.

3. “Social life” proved to be statistically significant for retention or attrition of students despite the fact that “completing planned stay” and “family/personal reasons” were more often chosen.

4. While neither being employed nor not being employed proved to be statistically significant, it is interesting to note the NRG were more often employed proportionally than the RG.

5. Neither male nor female proved to be statistically significant for higher retention rates as college students.
6. This study showed there was no significant result in the Hispanic community for high school performance. However, it is very important to note that more students who graduated from high school in the first quartile remained at the university at least for another semester.

7. While no parents’ level of education proved statistically significant in this study, it is imperative to realize that a vast majority of fathers and mothers never attended college.

8. “Intramural sports” proved to be statistically significant by this study. It is critical to be aware of the fact that a large percentage of the students who were involved in high school extracurricular activities were far less likely to be involved with college extracurricular activities.

**Implications**

The following implications are the result of the findings of this study.

1. The choices of the reasons for choosing a university in the Hispanic community reflect the values of family structure and financial need. Based on this, institutions of higher learning should appeal to family and bolster scholarship availability to increase Hispanic student populations.

2. Because the majority of students that persist in college are those that were active in extracurricular activities in high school, universities should do everything in their power to encourage and support these high school extracurricular activities. This can be done through clinics, award ceremonies, and collaborative activities.

3. Respondents to the survey of this study indicated the awareness of the importance of completing a planned course of study. Universities’ recruiting efforts will be more productive if they empower students to accomplish this planned stay by recognizing their values and need for a social life.

4. It may appear that employment may provide a distraction to education as in indicated by the high percentage of NRG students. It is, however, interesting to note that 100% of the respondents indicating employment on campus were members of the RG. This should flag a proactive effort by all institutions to employ students if at all possible.

5. With the recognition of increasing female enrollments, university efforts may be two-fold. First, they appeal to the male demographic in recruiting efforts, and second, they provide for the needs of both gender interests so that retention stays high.

6. Most institutions of higher learning already have a good understanding of the fact that high academic achievers tend to persist at a higher rate than those less inclined to achieve. Institutions should continue to make every effort to bolster academic scholarships.

7. Enrollment services need to hail the fact that a large percentage of first-time-in-college Hispanic freshmen are, in fact, first-generation college students. This marketing strategy can be used for both recruitment and retention.

8. The current trend in Student Services endeavors, to include recreational sports, is on the right track with its intent to build a sense of ownership. This ownership, that will hopefully pay dividends of retention, may also pay high dividends of support through alumni in years to come.
References


