# Academic Achievement and Retention at a Non-Traditional University: A Study of Factors that Affect College Retention

Kang Bai, Troy State University Dothan

This study was conducted to examine if academic commitment and achievement were significant in the retention of first-time freshmen at non-traditional institutions. Findings indicated that while taking about the same course load, students who continued to their sophomore year had significantly better academic performance than those who dropped out within the first year of enrollment, thus confirming that as in traditional institutions, academic commitment and achievement are key factors contributing to student retention.

Retention is a major indicator of institutional effectiveness. A college committed to institutional effectiveness is always committed to student retention. In particular, at a time when enrollment is affected by high costs of a college education and limited student resources, student retention is even more important and arouses even more attention on the part of college administrators. In order to succeed in offering a college education, while making efforts to recruit more students, an institution must find ways to best meet student needs so as to retain them through matriculation.

At a university where most students are non-traditional, retention is an even more important issue for college administrators. Such an institution often implements an open admissions policy and applicants who meet minimal admissions criteria can be admitted. Although an open admissions policy can attract more students, it yields a series of problems, including poor academic achievement, across the board education quality in the classroom, and could result in higher levels of attrition.

Based on the assumption of lack of academic commitment and low academic achievement contributing significantly to student attrition, the current study was conducted to further confirm the findings of previous research on factors that influence a student's decision to leave or stay in college, particularly at a non-traditional studentcentered institution. The purpose for conducting the study was to determine if academic commitment and achievement played a significant role in retaining students by comparing the first term GPA and second term cumulative GPA of the first-time freshmen who dropped out and of those who continued after the first academic year. A comparison was also made between those two groups of students to see if there was a significant difference in the credit hours they completed in their first term.

### **Related Literature**

Various research in the past examined patterns of student retention and factors that

**Kang Bai**, Ed.D., is the Coordinator of Institutional Effectiveness at Troy State University-Dothan in Dothan, AL. His primary research areas are faculty development, orientation, and transition.

have affected student retention. Although many factors were found to be closely related to student retention, academic commitment and social integration in the first year are considered the two major factors that contribute to students' continuation in college through graduation.

Relevant literature has attached great importance of the first-year study to a student's successful completion of an undergraduate degree. Tinto (1987) found that approximately 75% of the students who dropped out would leave during their first two years, and the majority in the first year of their first enrollment. Likewise, White and Mosely (1995) noted that 75% of the students who completed their sophomore year without interruption would complete all four years of college without interruption. McGrath and Braunstein (1997), in their study to predict college freshmen attrition, found that students' first semester grade point average was one of the factors that had the greatest influence on student voluntary persistence behavior. Other research findings have confirmed the importance of retaining students within the first year of enrollment, and that success in retention during this period of time has significant impact on matriculation.

Research on retention has theoretically suggested that academic achievement is the strongest predictor for completion of a bachelor's degree, and has indicated through practice that academic and social integration consistently have positive effects on persistence and completion of a degree (Pascarella, Smart, & Ethington, 1986). Bean (1985) found that low GPA's during the freshmen and sophomore years had a greater impact on a student's decision to leave than in the junior and senior year. Tinto (1993), in his model to address college student attrition, posited that the student integration into the academic and social communities was critical in determining commitment to remain at or leave an institution. Similarly, Johnson (1997) suggested that academic achievement could be the strongest predictor for completion of a bachelor's degree. In an ethnic minority setting, in particular, academic achievement had a much stronger impact than social integration on the commitment of students to stay and that minority student departure was increased when academic performance was low (Getzlaf, Sadlaced, Kearney, & Blackwell, 1984; Zea, & Reisen, 1997).

Taking both student and institutional characteristics into consideration, lack of academic commitment and social integration was typical and was considered to account for the high attrition rate at non-traditional institutions. According to White and Bigham (1982) colleges and universities with open admissions or minimal admissions criteria experienced attrition rates from freshmen fall semester to sophomore fall registration of 40% to 60%. Hoyt (1999) found that at a non-traditional university most of those older, part-time, and married students were often working full-time while attending college. Because of work demands and frequent conflicts between academic studies and personal or family issues, they devoted a relatively limited amount of their time and efforts to their academic studies and other social activities at the institution. Lack of academic commitment and social participation revealed lowered chances of integration for those students into the academic and social environment in their colleges, leading to attrition when there are conflicts between academic studies and personal or family issues.

### Methodology

The current study was conducted at a 4-year public university in the southeastern United States. The university served the undergraduate and graduate needs, of an 50-mile radius, and most students were non-traditional, with an average age of 30.5. A recent retention study found that in the past five years, the average one-year retention rate of the first-time freshmen was about 45%. By the time those students reached their junior year, only 30% of them remained. In order to determine the possible factors that contributed to the high attrition rate, data of 171 students who enrolled as first-time freshmen at the university in Fall 1996, Fall 1997, Fall 1998, and Fall 1999 were randomly selected from the student database. Among these students, 97 (56%) dropped out within one year and 77 (44%) continued up to their sophomore year.

To compare the overall term GPA's and cumulative GPA's of the dropout and the retained and the overall credit hours of these two groups of students, two-tailed independent t-tests were conducted. Measures were also made to determine whether there were a significant differences in each of the fall cohorts between the dropout and the retained in terms of first term GPA's, second term cumulative GPA's, and credit hours taken in the first term of enrollment.

Findings could suggest that academic achievement played a significant role in college student retention and could be used as a predictor of a student's decision to stay if the mean GPA's, both term and cumulative, of the retained were found significantly higher than those of the dropout. Additionally, the comparison of the mean credit hours taken was used as a basis to posit student academic commitment. Assuming all students at about the same academic level when first admitted, there would be good reason to infer that those who dropped-out had less of a commitment to their academic studies if the retained were found to have higher GPA's than those who dropped-out, while there was no significant difference found between these two groups in credit hours taken.

#### Findings

With a 95% confidence interval and alpha level of .05, the t-tests were conducted. The findings of the data analysis indicated that there were significant differences in both overall first-term GPA's and overall second-term cumulative GPA's between the students who continued to stay and those who dropped out (P < .000). This is a strong indication that students who continued to stay had better academic achievement than students who dropped out in the first term and the second term of their academic studies (see Table 1). The findings also showed that the number of credit hours taken by students in the two groups were statistically different (P = .001).

However, further data analyses conducted over each of the fall cohorts revealed that no statistical differences existed from Fall 1996's term GPA's and in Fall 1998's cumulative GPA's, and only in the Fall 1996 cohort credit hours taken by the retained students and dropout students were significantly different. Despite the variations, the data analysis confirmed that students who continued to stay had achieved significantly higher GPA's than students who dropped out (P < .05). Additionally, the retained

students and the dropout students in the Fall 1997, Fall 1998, and Fall 1999 cohorts were taking approximately the same amount of credit hours in the first term of their enrollment (see Table 2).

#### Discussion

In order to identify whether academic commitment and achievement were potential factors that contributed to student retention at a non-traditional university, the current study was conducted. The findings of the study, consistent to those found in earlier studies at traditional institutions, indicated that while taking approximately the same amount of course load, the students who continued to their sophomore year achieved significantly higher first term GPA's and second term cumulative GPA's than those who dropped out within the first year of enrollment. Based on the findings, the study concluded that academic achievement played a significant role in student retention and lack of academic commitment and low academic achievement would inevitably lead to dropouts whether it was at a traditional or non-traditional institution.

Lack of academic commitment is often more obvious at a non-traditional institution. At the university in question, over two-thirds of the students exceeded 24 years of age when they first started college, over 50% of the students worked full-time while attending the university, and over 35% were working parents who came to class after work and had a family to take care of after they got home from class. Work demands on time, family responsibilities, and personal issues made it hard for these students to fully devote their time and effort to their academic pursuits. As a result, they often found it hard to have enough time to discuss academic issues with faculty or fellow students, seldom spent more time than they had to on their academic assignments and projects, rarely involved themselves in academic or social activities on campus, or participated in campus student organizations. The significantly lower GPA's for the same amount of course load when compared with those who were fully committed to their academic studies suggested a lack of academic commitment on the part of those students, which led to their poor academic performance and eventually resulted in their attrition.

Student retention not only contributes to a student's personal success but also serves as sign of an institution's quality. While so many studies have confirmed the significance of academic achievement to student retention, higher education institutions should develop an academic climate that is suitable for student learning and makes efforts to involve students actively in their academic studies and social activities. Such may include, as research suggests, developing positive student-faculty interaction, improving academic advising systems, adjusting teaching to the non-traditional student characteristics, solving students' problems in a timely manner, and increasing on-campus social and academic activities for students to participate. All of these can have a significant impact on student academic commitment, enhance academic performance, and eventually improve retention.

## References

- Bean, J. (1985). Interaction effects based on class level in an explanatory model of college student dropout syndrome. *American Education Research Journal*, 22, 35-64
- Getslaf, S. B., Sedlacek, G. M., Kearney, K. A., and Blackwell, J. M. (1984). Two types of voluntary undergraduate attrition: An application of Tito's model. *Research in Higher Education*, 20, 257-268
- Hoyt, J. E. (1999). Remedial Education and Student Attrition. *Community College Review*, 27(2), 51-72.
- Johnson, J. L. (1997). Commuter college student: What factors determine who whill persist or who will drop out? *College Student Journal*, *31*(3), 323-332.
- McGrath, M. M., & Braunstein, A. (1997). The prediction of freshmen attrition: an examination of the importance of certain demographic, academic, financial, and social factors. *College Student Journal*, *31*(3), 396-407.
- Pascarella, E. T., Smart, J., & Ethington, C. (1986). Long-term persistence of two-year college students. *Research in Higher Education*, 24(1), 751-771.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press.
- White, W. F. & Bigham, W. D. (1982). Information system approach to admissions, instruction, and retention of college students with developmental lag. *Journal of Research and Development in Education*, *15*, 16-26.
- White, W. F., & Mosely, D. (1995). Twelve year pattern of retention and attrition in a community type university. *Education*, 115(3), 400-402.
- Zea, M. C., & Reisen, C. A. (1997) Predicting intention to remain in college among ethnic minority and nonminority students. *Journal of Social Psychology*, *137*(2), 149-160.

# Independent T-test for Overall GPA's and Credit Hours Taken

		t-test for equality of means			
	t	Sig. (2-tailed)	Mean Difference	95% confidence intv. Lower/Upper	
Term GPA	-4.622	.000	7512	-1.0721/4304	
Cum GPA	-4.733	.000	6528	9258/3801	
Credits	-3.369	.001	-2.2582	-3.5815/9349	

Note: Equal variances assumed for all variables.

#### TABLE 2

## Group statistics for Cohort GPA's and Credit Hours Taken

	Term GPA Dropout/Retained	Cum GPA Dropout/Retained	Credit Hours Dropout/Retained
Fall 99 Mean	2.4*/3.1*	2.3*/3.0*	10.2/12.3
Cohort SD	1.2/0.5	0.9/0.6	4.2/3.3
Fall 98 Mean	2.5*/3.2*	2.7/3.1	12.0/12.4
Cohort SD	1.0/0.7	0.9/0.6	4.3/3.6
Fall 97 Mean	2.2*/3.1*	2.3*/3.1*	11.7/13.4
Cohort SD	1.5/0.7	1.0/0.5	5.1/3.5
Fall 96 Mean	2.7/3.4	2.3*/3.3*	5.5*/12.3*
Cohort SD	1.7/0.6	1.5/0.7	4.6/3.5

\*Note: Where a significant difference was identified between Dropout and Retained at alpha = 0.5.