COLLEGE STUDENT RETENTION, Vol. 3(2) 195-212, 2001-2002

THE RESPONSIBILITY FOR RETENTION: PERCEPTIONS OF STUDENTS AND UNIVERSITY PERSONNEL

R. ERIC LANDRUM
Boise State University, Idaho

ABSTRACT

A survey of 88 university personnel and 142 undergraduate students was conducted using a newly constructed Retention Questionnaire (RQ). The RQ was designed to assess the relative levels of student and university responsibilities for retention attributed by both students and university personnel. A comprehensive pool of 81 possible influences on retention were generated, and each participant rated each item with the percent of responsibility attributed to the university, and percent responsibility attributed to the student. For each item, percent of responsibility was rated for both groups, but in this study only university responsibility was analyzed. Results indicated that students and university personnel frequently differ in their perceptions of responsibility—and for some items, students expected more from the university than university officials. These patterns of results are discussed within the framework of how to address substantive retention issues on a college campus.

Two students enroll in college for the Fall semester. They graduated from the same high school, live in the same residence hall, and have the same class schedule. One student has success and continues to re-enroll semester after semester, and eventually earns a bachelor's degree. The other student experiences frustration, and after one semester no longer registers for classes. Retention, the continued enrollment of a student from semester to semester, describes the first student. Attrition, the process of discontinuing or "stopping out," describes the second student. Current statistics indicate that 26.4 percent of students who enroll as

freshmen do not re-enroll as sophomores (Chronicle of Higher Education, 1999); further, in 1997, only 52.1 percent of students who started their college careers five years prior had graduated (ACT, 1999). What, if anything, can colleges and universities do to retain students and help them achieve their goals? This is a well-studied question, and the answers are complex and intricate.

Retention to graduation is an important issue. One of the goals of the modern university is to prepare students to become part of a well-rounded, educated citizenry. What is the magnitude of this issue? Considering the most recent data, the pattern is clear—just over half of the students who enroll in higher education earn a degree in five years. Who is responsible for retention? When examining potential initiatives to help students achieve their goals, it is necessary to know whether the causes of attrition are primarily student-oriented or university-oriented. If these causes reside primarily with the student, the university may not have many options to help the student persevere. If the causes of attrition are mainly due to university policies, procedures, and allocation of resources, the university may have better recourse in trying to aid students. The present study was designed to examine the perceived levels of responsibility attributed by students and university personnel to a comprehensive listing of possible factors in attrition.

OVERVIEW AND MODELS OF RETENTION

The study of retention has generated an impressive amount of research dedicated to understanding the process of why students leave the university. A review of the literature indicates that a number of variables have been studied. Mohr, Eiche, and Sedlacek (1998) list some of those variables: alienation, loneliness, emotional adjustment, self-confidence, community involvement, race, social/familial support, contact of faculty, availability of mentors, encouragement of goal commitment, orientation programs, social integration into campus life, employment, financial support, living arrangements, and social encouragement. Much of this research has been influenced by the work of Tinto (1975, 1982, 1993). For instance, Tinto (1975) developed an explanatory model containing four types of variables: 1) background characteristics of enrolled students, 2) integration level of students into the academic environment, 3) integration of students into the social environment, and 4) persistence toward the degree, or goal commitment. Others have been influenced by this model and have tested components of it. For instance, Braxton, Duster, and Pascarella (1988) examined the role of institutional commitment, and Schurr, Ruble, Palomba, Pickerill, and Moore (1997) found that the chief causes of attrition were low grade point average (GPA), academic preparation, residence during college, participation in campus activities, and field of study. Dunwoody and Frank (1995) also conclude that the secret to retention is the willingness of institutions to involve themselves in the social and intellectual development of students. Zea, Reisen, Beil, and Caplan (1997) found that coping

with college, self-esteem, academic integration, identification with the university, and the experience of disrespect were related to intention to remain at the university.

PREDICTORS OF RETENTION

A number of studies have attempted to make predictions about who is retained to the next semester or to graduation (i.e., retention) and who is not (i.e., attrition). These variables tend to be grouped into categories such as demographic factors, academic factors, financial factors, and social factors (Braunstein & McGrath, 1997; Payne, Pullen, & Padgett, 1996). Many of the factors that influence a student's choice to leave the institution are external to the institution (Gold, 1995). For instance, Payne et al. (1996) found that students left the university most often to be closer to home or to resolve family or personal problems. House (1992) found that academic self-concept (a student's perception of his or her academic abilities, which is continuously modified on the basis of school performance) was a good predictor of persistence. McGrath and Braunstein (1997), in a study of freshmen who voluntarily withdrew from college, found that socioeconomic status, high school GPA, combined scholastic aptitude test (SAT) scores, first semester college GPA, financial aid, impressions of college and impressions of other students were predictors of retention, and they report that the best predictors were first semester GPA and student impressions of other students—a chord that resonates within Tinto's idea of social integration. Other studies conducted in an attempt to predict retention have focused primarily on demographic factors such as race (Bennett & Okinaka, 1990; Gosman, Dandridge, Nettles, & Thoeny, 1983; Mallinckrodt, 1988). Mallinckrodt (1988) found that minority student retention was best predicted by non-cognitive variables such as student involvement in student organizations and support from the student's family to stay in school.

The goal of the present study is not to add to these lists of variables that influence a student's choice to leave the university, but rather to examine the relative levels of responsibility of students and university personnel toward those variables. This strategy may provide some insight in how to approach campus retention issues.

TOWARD THE PRESENT STUDY

The majority of studies conducted in the student retention field focus on the identification of variables that are influential in the decision-making process of retention or attrition, and the relative predictive power of those variables. It seems clear by now that when considering why students drop out, some of those factors are influenced by (student) internal conditions, some factors are influenced by (university) external conditions, and other factors are a mix of both student and

university influence. The goal of the present study was to ascertain the perceptual differences between students and university personnel on the relative responsibility of students and the university on these retention factors. Said another way, do students and university personnel agree when assessing the responsibility of what causes students to drop out of college?

Very little attention has been given to this approach in the published literature. For instance, Dunwoody and Frank (1995) echo Tinto's interactive view of retention in that professors need to be aware of student's reasons for dropping out a particular course. Braunstein and McGrath (1997) conducted a small qualitative study of 8 administrators and 6 faculty members and found that faculty and administrators differ on how to approach retention issues. The current study is a larger-scale quantitative study that examined the responses of university personnel (faculty, staff, administrators) *and* students regarding the relative levels of responsibility associated with factors that may lead to attrition.

When looking at the responsibility for student retention, how do students and university personnel see their roles? Do university personnel take too much responsibility for retention, or do students take too little responsibility for retention? Of particular interest are the matches and mismatches in perceptions—that is, if university personnel assign themselves too much responsibility, how might that influence student behavior? If students assign more responsibility to the university for a factor compared to the university personnel, might that highlight an area of attention for those personnel interested in retention issues? The present study attempted to test the viability of this approach in examining retention issues.

METHOD

Participants

This study was conduced at a public, western metropolitan university that enrolls over 16,000 undergraduate students. University personnel were surveyed at an all-campus planning session in May 1998. From the 108 session participants, 88 (or 81.5 percent) voluntarily completed the retention questionnaire. A number of demographic questions were asked of participants. From those 88 participants providing a response, 61.3 percent were male, 38.8 percent were female, 41.3 percent were faculty, 26.3 percent were staff, and 31.3 percent were administrators. The average number of years employed at the university was 11.8 (SD = 7.07). Of those responding, 0.0 percent were American Indian/Alaska Native, 1.4 percent were Asian American/Pacific Islander, 1.4 percent were Black/African American, 2.7 percent were Hispanic, and 94.5 percent were White/Caucasian.

Student participants were recruited from a departmental subject pool comprised of students enrolled in General Psychology and received course credit for participating. One-hundred and forty-two students completed the retention

questionnaire. A number of demographic questions were asked of participants. Of the 142 participants providing a response, 33.8 percent were male, and 66.2 percent were female. The average number of years the university was 1.2 (*SD* = 1.09). Of those responding, 1.5 percent were American Indian/Alaska Native, 5.1 percent were Asian American/Pacific Islander, 0.0 percent were Black/African American, 5.8 percent were Hispanic, and 87.6 percent were White/Caucasian.

Materials

Based on a review of the literature, previous studies, and unpublished research, a comprehensive listing of 81 potential reasons or factors for a student to withdraw from the university was generated. All participants were asked to assess the level of responsibility that the university and the student has for each of the 81 factors. For instance, participants were asked to complete the question "who is responsible for a student's ability to find and use campus resources?" Respondents then assigned a percentage of responsibility for each item to both an individual student and the university as a whole. Thus, a participant may have responded that a student's ability to find and use campus resources is 40 percent the responsibility of the university, and 60 percent the responsibility of the student. These percentage responses are the unit of measure throughout the present study. The percentages for each item do not need to sum to 100 percent because other factors outside of the student and the university may be operating. If an item was unclear, respondents were instructed to leave that item blank.

For university personnel only, two forms of the Retention Questionnaire (RQ) were used, manipulating the order of response on the questionnaire. Thus, 49 of the 88 (55.7 percent) university personnel were asked to list the student percentage first then the university percentage. The remaining 39 participants were asked to respond to the same questions with the categories in reverse order (university percentage then student percentage), and students responded in this manner as well.

Procedure

University personnel who completed the RQ had an entire afternoon to complete the instrument, but most completed the task in about 25 minutes. University personnel were instructed about the nature and purpose of the research prior to administration. Students completing the RQ provided their informed consent simultaneously. Students were provided 50 minutes to complete the RQ, but most completed the task in 25-30 min. Afterwards, students were debriefed as to the nature of the study and thanked for their participation.

RESULTS

The present study yielded an enormous amount of valuable data concerning the relative levels of responsibility attributed to students and the university on factors that influence retention and attrition. These results are organized in the following sections: reliability and validity of the RQ, order effects, and differences between students and university personnel on the attribution of responsibility. Also, it should be noted that the unit of analysis for all the results reported here is the *percentage of responsibility attributed to the university.* It would have been just as easy to report the percentage of responsibility attributed to the student, but to report both seems redundant, for in almost all cases did the sum of the percentage attributed to both university and student total 100 percent. Table 1 presents a descriptive picture of the patterns of outcomes at the top and bottom of the distribution. That is, the items that students and university personnel attribute most responsibility to the university, and least responsibility to the university (most responsibility to the student).

Reliability and Validity of the Retention Questionnaire

Reliability was assessed by calculating the inter-item Cronbach's α coefficient for the 81 "university" items. Cronbach's $\alpha = 0.9123$, indicating excellent inter-item reliability for the RQ.

Validity was assessed by conducting a factor analysis on the 81 retention items. Using a varimax rotation, eigenvalue = 2.0 or greater, and factor loadings > .50, 7 factors were extracted explaining 41.4 percent of the variance. These factors, as labeled by the author, emerged in this order: (a) student skills, (b) university obligations, (c) student choices, (d) supportive infrastructure, (e) a student's external forces, (f) remediation opportunities, and (g) student maturity. More details about these factors and some of the items that contribute to each factor are presented in Table 2. These results indicate good first evidence in support of content and construct validity.

Order Effects

Significant order effects on the RQ occurred for the following items: a student's ability to think and reason, a student's knowledge of how to use the library, financial aid, good teaching, helpful staff members, upgrading job skills at school, and a student's low grades. In all seven significant cases out of 81 variables, university personnel rated these items higher when they occurred first compared to when they appeared second. Because that this was a group of university personnel being asked about the level of responsibility that the university has in these issues, this order effect is not surprising. Also, it occurred in less than 10 percent of the questions asked by participants. Since the pattern of responding seems to make

Table 1. Top Ten and Bottom Ten Items by Students and University Personnel on the Responsibilities of the University

Students	Percent	University personnel	Percent
Top Ten Items—University Responsibilities (Students Least Responsible For)			
Helpful staff members	92.2	Providing faculty who are genuinely interested in students	92.8
Good teaching	91.1	Helpful staff members	92.1
Providing faculty who are genuinely interested in students	89.5	Providing faculty who are genuinely interested in research	91.6
Providing faculty who are genuinely interested in research	89.5	Good teaching	89.8
The availability of residence halls and apartments	87.4	The availability of residence halls and apartments	89.4
Poor teaching	86.3	Poor teaching	89.2
Maintaining a student health service facility	83.7	A first year orientation course for students	88.8
Providing good academic advising	83.6	The overall size of the institution	88.2
The quality of instruction	81.9	Maintaining a student health service facility	87.7
Providing quality food services	81.6	The quality of instruction	87.7
Bottom Ten Items—University Responsibilities (Students Most Responsible For)			
A student's maturity	8.4	A student's family responsibilities that become too great	9.6
A student's physical health	11.8	A student's ability to budget and manage money correctly	13.9
A student's acceptance of a full-time job	13.5	A student's acceptance of a full-time job	17.2
A student's ability to relate to others	13.6	A student's maturity	17.8
A student's family responsibilities that become too great	13.7	Unexpected expenses that may be encountered by students	18.0
Inadequate student study habits	14.5	A student's physical health	18.4
Determining the amount of time a student devotes to school	14.7	A student's desire to take a break from college studies	20.7
A student's ability to budget and manage money correctly	15.6	A student's ability to relate to others	21.7
A student's mental health	21.1	A student's mental health	25.0
The selection of a major	22.1	A student's low grades	25.4

Table 2. Factor Analysis Outcomes with Example Questions

Factors	Example questions
Factor 1: Student Skills	A student's ability to analyze and draw conclusions from data, note-taking skills, a student's test-taking skills and strategies, the development of effective oral communication skills, a student's writing skills, instilling a love of learning
Factor 2: University Obligations	Maintaining a student health service facility, providing quality food services, the availability of residence halls and apartments, student employment opportunities, providing good academic advising, cultural programs and activities for students
Factor 3: Academic Choices and Integration	The number of credits a student attempts the first semester, a student's first semester GPA, a student feeling lost or alone on campus, the selection of a major, student success in core courses
Factor 4: Supportive Infrastructure	Helpful staff members, good teaching, making tuition and fees affordable, a first year orientation course for students, a student's major not being offered, poor teaching
Factor 5: Student External Forces	Unexpected expenses that may be encountered by students, a student's desire to take a break from college studies, a student's acceptance of a full-time job, a student's family responsibilities that become too great
Factor 6: Preparedness and Remediation Opportunities	Opportunities for out-of-class projects for students, providing remediation to unprepared or underprepared student, tutorial programs for students, an orientation program for students, good career advising for students
Factor 7: Student Health and Maturity	A student's physical health, a student's ability to relate to others, a student's maturity, a student's mental health

sense and is uniformly consistent, in all analyses the university personnel data were collapsed across order.

Differences between Students and University Personnel on the Attribution of Responsibility

For each of the 81 variables, an independent means t test was conducted to evaluate differences, if any, between students and university personnel. Items

are scored on the percentage importance placed on the university's level of responsibility. The results of this analysis are presented in Table 3. In summary, the student mean score significantly exceeded the university personnel mean score in four instances, while the university personnel mean score significantly exceeded the student mean score in 36 instances.

DISCUSSION

Who is responsible for the retention of college students? Does more of the responsibility lie with the student or with the university? When students and university personnel are asked to empirically answer that question, interesting differences emerge. In general, university personnel more often attribute more responsibility to the university than students. However, this is a general trend, and there are notable exceptions where students attribute more responsibility to the university than even university personnel attribute to themselves. These patterns of responding are discussed below.

When examining the overall rating of scenarios and situations related to college life, there is good agreement between students and university personnel concerning what activities are mostly the responsibility of the university. The results in Table 1 indicate that from the top ten items with the highest rating, students and university agree on eight of these items (e.g., helpful staff member, good teaching, providing faculty who are genuinely interested in students and research). Two items were unique to the top ten lists for students and university personnel. For students, they rated "providing good academic advising" (83.6 percent vs. 82.1 percent for university personnel) and "providing quality food services" (81.6 percent vs. 85.9 percent for university personnel) in the top ten (these items were not in the university personnel top ten list), and for university personnel, "a first year orientation course for students" (88.8 percent vs. 79.1 percent for students) and "the overall size of the institution" (88.2 percent vs. 81.0 percent for students) did not receive a rating high enough by the students to merit top ten inclusion in the student's top ten list. While there is a great deal of agreement, these subtle differences may provide valuable insight to campus administrations and students alike about understanding the complex process of student retention.

For each of the questionnaire items, an independent means *t* test was conducted statistically comparing the ratings between students and university personnel. The detailed results of these analyses are presented in Table 3. In considering these 81 variables, 41 of the analyses indicated no significant difference between the ratings of the two groups—university personnel rated university responsibility higher than students 36 times, and students rated university responsibility higher that university personnel four times. For instance, university personnel felt that the university was significantly more responsible than students on items such as "a student's ability to think and reason," "a student's ability to analyze and draw

Table 3. Means and Standard Deviations for *t* Test Differences between Students and University Personnel on the 81 Retention Factors Rating the Percentage Responsibility of the University

Retention factors	University personnel	Students	*t* Value *df*
A student's ability to relate to others	21.7 (17.0)	13.6 (15.9)	3.52* 218
A student understanding what is gained from an education	54.7 (19.7)	19.7 (24.5)	4.57** 218
A student's maturity	17.8 (15.1)	8.4 (15.3)	4.38** 218
The development of reading skills	36.2 (22.0)	33.0 (24.7)	0.97 218
Motivating friends/peers to support the student's education	29.6 (21.6)	26.2 (22.3)	1.06 215
Motivating the student	48.1 (21.8)	42.7 (25.4)	1.59 218
A student's ability to think and reason	48.2 (18.4)	24.5 (21.8)	8.13** 217
Facilitating family support for the student to get an education	28.2 (21.7)	26.8 (23.9)	0.42 214
A student gaining admission to the university	35.0 (22.8)	37.7 (26.2)	–0.76 217
A student's knowledge of how to use the library	59.9 (19.3)	46.5 (24.5)	4.18** 219
A student's mental health	25.0 (17.2)	21.1 (21.5)	1.39 218
Teaching the student time management skills	46.8 (21.8)	42.1 (26.4)	1.36 219
Determining the amount of time a student devotes to school	27.7 (19.9)	14.7 (20.4)	4.56** 219
A student's physical health	18.4 (16.0)	11.8 (16.1)	2.95* 219

Table 3. (Cont'd.)

Retention factors	University personnel	Students	*t* Value *df*
A student's writing skills	49.3 (17.0)	41.1 (21.5)	2.88** 218
A student's ability to find and use campus resources	58.2 (18.2)	56.0 (20.8)	0.77 219
Note-taking skills	43.1 (19.5)	31.6 (21.9)	3.89** 219
A student taking only core courses during the first semester	57.6 (26.4)	37.2 (26.6)	5.26** 209
A student's test-taking skills and strategies	48.6 (20.2)	34.2 (22.9)	4.64** 218
Instilling a love of learning	55.5 (19.6)	43.4 (28.0)	3.39* 218
Information about career options	69.2 (17.3)	63.4 (25.1)	1.80 218
A student's ability to analyze and draw conclusions from data	59.4 (18.1)	41.1 (22.9)	6.06** 217
A student's memorization ability	29.6 (21.1)	24.7 (21.1)	1.62 217
The development of effective oral communication skills	52.9 (15.4)	37.2 (21.4)	5.70** 219
Students getting along with a diverse group of people	39.1 (20.7)	25.6 (24.1)	4.16** 218
Providing good academic advising	82.1 (14.2)	83.6 (22.4)	–0.55 218
Providing quality food services	85.9 (21.2)	81.6 (25.2)	1.26 214
Maintaining a student health services facility	87.7 (18.6)	83.7 (23.5)	1.29 217

Table 3. (Cont'd.)

Retention factors	University personnel	Students	*t* Value *df*
The availability of residence halls and apartments	89.4 (17.3)	87.4 (21.9)	0.70 216
Financial aid	70.1 (20.7)	73.2 (27.3)	–0.85 217
Organizing and hosting campus social activities	64.1 (23.2)	66.7 (23.0)	–0.81 217
Course registration	70.5 (24.9)	62.2 (27.5)	2.21* 218
Student employment opportunities	68.7 (21.9)	66.3 (26.3)	0.69 217
The control of binge drinking	35.6 (22.5)	26.2 (26.3)	2.64* 212
The success of an honors program	67.1 (17.6)	51.7 (25.9)	4.61** 213
Cultural programs and activities for students	66.4 (14.5)	64.0 (25.2)	0.79 215
Day care	59.1 (28.9)	57.1 (31.6)	0.47 216
A student's belief that "BSU is the right place"	63.2 (20.2)	52.7 (30.8)	2.69* 217
The overall preparedness of the student to succeed at the university level	34.5 (21.7)	35.5 (26.7)	–0.27 218
The affordability of textbooks	71.5 (29.4)	76.7 (28.7)	–1.23 214
Providing faculty who are genuinely interested in students	92.8 (10.5)	89.5 (19.8)	1.34 219
Good teaching	89.8 (11.1)	91.1 (18.6)	–0.58 219

Table 3. (Cont'd.)

Retention factors	University personnel	Students	*t* Value *df*
Helpful staff members	92.1 (10.0)	92.2 (17.8)	–0.01 219
Providing faculty who are genuinely interested in research	91.6 (14.5)	89.5 (19.1)	0.85 218
A student's intention to graduate with a degree from BSU	33.0 (21.5)	25.5 (27.7)	2.06* 218
Poor teaching	89.2 (13.3)	86.3 (22.3)	1.03 218
Opportunities for out-of-class projects for students	72.9 (19.9)	64.7 (23.2)	2.59* 217
Rudeness experienced on campus	58.0 (19.7)	36.3 (24.8)	6.45** 210
A student's first semester grade point average	31.0 (17.6)	22.7 (21.3)	2.93* 219
A student feeling lost or alone on campus	51.8 (18.9)	33.4 (25.5)	5.53** 217
A student's plan to transfer from BSU to another school	37.4 (20.8)	34.9 (26.9)	0.69 215
The high school GPA required for admission	53.1 (41.6)	46.4 (39.2)	1.19 216
Extracurricular activities	47.3 (20.4)	49.3 (29.1)	–0.52 217
Upgrading job skills at school	49.1 (18.3)	58.3 (27.5)	–2.60* 214
Cluster programs for students	81.5 (19.3)	71.3 (25.6)	3.04* 214
A first year orientation course for students	88.8 (14.2)	79.1 (25.6)	3.06* 217

Table 3. (Cont'd.)

Retention factors	University personnel	Students	*t* Value *df*
Conflict between demands of job and college	26.0 (17.9)	33.4 (27.0)	-2.11* 213
Making tuition and fees affordable	75.3 (23.3)	78.9 (27.6)	-0.95 212
A student's desire to take a break from college studies	20.7 (20.8)	22.5 (26.0)	-0.50 215
Class scheduling problems	66.9 (20.8)	51.6 (27.6)	4.24** 217
A student's acceptance of a full-time job	17.2 (17.7)	13.5 (21.0)	1.29 215
Unexpected expenses that may be encountered by students	18.0 (19.5)	26.0 (27.8)	-2.22* 216
A student's family responsibilities that become too great	9.6 (12.3)	13.7 (23.3)	-1.44 216
Inadequate student study habits	26.7 (17.8)	14.5 (20.3)	4.43** 218
The quality of instruction	87.7 (15.8)	81.9 (24.9)	1.87 219
A student's low grades	25.4 (17.3)	24.3 (24.6)	0.34 218
An orientation program for students	87.6 (16.8)	78.2 (26.7)	2.78* 214
A student's inability to receive financial aid	33.1 (25.0)	47.5 (36.1)	-3.06* 212
A student's major not being offered	75.6 (27.3)	81.2 (26.8)	-1.47 214
A student's ability to budget and manage money correctly	13.9 (15.7)	15.6 (21.9)	-0.61 218

Table 3. (Cont'd.)

Retention factors	University personnel	Students	*t* Value *df*
The overall size of the institution	88.2 (18.8)	81.0 (24.6)	2.19* 212
The number of conversations a student has with the faculty	53.2 (17.3)	39.5 (24.8)	4.33** 218
The number of credits a student attempts the first semester	49.2 (19.4)	28.9 (23.9)	6.43** 217
The selection of a major	33.9 (15.2)	22.1 (20.9)	4.42** 219
The formation of student study groups	38.7 (20.5)	32.1 (25.1)	1.95 217
Good career advising for students	78.9 (15.8)	77.8 (21.4)	0.40 219
Student success in core courses	39.9 (17.9)	32.2 (21.5)	2.70* 219
The retention of students from semester to semester	58.3 (17.6)	51.3 (24.2)	2.26* 215
Providing remediation to unprepared or underprepared students	64.0 (25.3)	60.2 (27.3)	0.99 210
Tutorial programs for students	75.5 (18.3)	72.6 (26.1)	0.86 215
Overall student success	44.2 (13.1)	36.4 (20.1)	3.11* 218

Note: *df* = degrees of freedom. $*p < .05$, $**p < .001$.

conclusions from data," "rudeness experienced on campus," "a student feeling lost or alone on campus," and "inadequate student study habits."

There were four occasions, however, where students significantly rated university personnel responsibility significantly higher than their own (student) responsibility: "upgrading job skills at school," conflict between demands of job and college," "unexpected expenses that may be encountered by students," and "a

student's ability to receive financial aid." Conflict between the demands of job and college is a familiar theme from the literature (e.g., Payne et al., 1996), as well as the financial constraints and burdens that students sometimes face (e.g., Mohr et al., 1998). However, an unexpected finding was that students attributed more responsibility to the university for 'upgrading job skills at school' than do university personnel. This may signal a new avenue for university officials to concentrate on as they continue to address what is within their realm of control in facilitating student retention.

Seven factors emerged from the exploratory factor analysis: 1) student skills, 2) university obligations, 3) academic choices and integration, 4) supportive infrastructure, 5) student external forces, 6) preparedness and remediation opportunities, and 7) student health and maturity. Many of these themes are not new, and have been studied in previous work, such as student skills (e.g., Schurr et al., 1997), academic choices and integration (e.g., Tinto, 1982, 1993; Zea et al., 1997), student external forces (e.g., Payne et al., 1996), and a supportive infrastructure (e.g., Gold, 1995). However, some of these factors suggest different areas of emphasis slightly different from the existing literature, such as the 'preparedness and remediation' factor found in the present study.

What are the implications of the present study? While students and university personnel do share views about the level of responsibility the university has in the retention of students, some meaningful differences do emerge. Studying these subtle differences may give universities better insight on how they can address this issue. It is promising that students are willing to accept much of the responsibility for retention rather than blame the university. Also, university personnel accepted their fair share of the responsibility for retention rather than attributing retention difficulties to unchangeable student qualities. In the present study, when differences do exist, university personnel typically attribute more responsibility to themselves and less the students. This may be a concern that professionals in academic and student affairs offices need to address. The findings in Table 1 may provide some valuable insights as to what these two groups hold to be mostly the responsibility of the university (and mostly the responsibility of the student). Based on these findings, universities may want to revisit financial aid and related issues, class scheduling to alleviate conflicts with other demands, and address the practical, applied aspects of the curriculum. Students are attributing more responsibility to university personnel concerning upgrading job skills than do university personnel. This could be an area to explore, for the perception that students hold may be true, or that the opportunities are available but no one knows about them. In this case (as in many others), perception is reality.

Perhaps one of the more promising outcomes of this work is the actual Retention Questionnaire. In the present study, this instrument demonstrated good reliability and good initial indications of validity. Continued work with this instrument in a variety of settings may lead to continued favorable outcomes with

regard to reliability and validity. Anyone interested in better understanding the complex issues surrounding college student retention is encouraged to use a similar approach, because these findings may provide avenues for future efforts to improve the re-enrollment of our students, and to improve graduation rates.

REFERENCES

ACT, Inc. (1999). National college dropout and graduation rates, 1998. Retrieved from http://www.act.org/news/04-0lb99.html on April 2, 1999.

Bennett, C., & Okinaka, A. M. (1990). Factors related to persistence among Asian, Black, Hispanic, and White undergraduates at a predominantly White university: Comparisons between first and fourth year cohorts. *Urban Review, 22,* 33-60.

Braunstein, A., & McGrath, M. (1997). The retention of freshmen students: An examination of the assumptions, beliefs, and perceptions held by college administrators and faculty. *College Student Journal, 31,* 188-200.

Braxton, J. M., Duster, M., & Pascarella, E. T. (1988). Causal modeling and path analysis: An introduction and an illustration in student attrition research. *Journal of College Student Development, 29,* 263-272.

Chronicle of Higher Education (1999). ACT reports a continuing drop in college-graduation rates. Retrieved from http://www.chronicle.com/daily/99/04/99040201n.htm on April 2, 1999.

Dunwoody, P. T., & Frank, M. L. (1995). Why students withdraw from classes. *Journal of Psychology, 129,* 553-558.

Gold, J. M. (1995). An intergenerational approach to student retention. *Journal of College Student Development, 36,* 182-187.

Gosman, E. J., Dandridge, B. A., Nettles, M. T., & Thoeny, A. R. (1983). Predicting student progression: The influence of race and other student and institutional characteristics on college student performance. *Research in Higher Education, 18,* 209-236.

House, J. D. (1992). The relationship between academic self-concept, achievement-related expectancies, and college attrition. *Journal of College Student Development, 33,* 5-10.

Mallinckrodt, B. (1988). Student retention, social support, and dropout intention: Comparison of Black and White students. *Journal of College Student Development, 29,* 60-69.

McGrath, 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,* 396-408.

Mohr, J. J., Eiche, K. D., & Sedlacek, W. E. (1998). So close, yet so far: Predictors of attrition in college seniors. *Journal of College Student Development, 39,* 343-354.

Payne, B. K., Pullen, R., & Padgett, J. (1996). An examination of student attrition at a medium-sized southern university. *Psychological Reports, 78,* 1035-1038.

Schurr, K. T., Ruble, V., Palomba, C., Pickerill, B., & Moore, D. (1997). Relationships between the MBTI and selected aspects of Tinto's model for college attrition. *Journal of Psychological Type, 40,* 31-42.

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research, 45,* 89-125.

Tinto, V. (1982). Limits of theory and practice in student attrition. *Journal of Higher Education, 53,* 687-700.

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition.* Chicago: University of Chicago Press.

Zea, M. C., Reisen, C. A., Beil, C., & Caplan, R. D. (1997). Predicting intention to remain in college among ethnic minority and nonminority students. *Journal of Social Psychology, 137,* 149-160.

Direct reprint requests to:

R. Eric Landrum
Professor
Department of Psychology
Boise State University
1910 University Drive
Boise, ID 83725