

Edith Cowan University

Research Online

---

EDU-COM International Conference

Conferences, Symposia and Campus Events

---

1-1-2008

## Measuring Service Performance, Student Satisfaction and its Impact on Student Retention in Private, Post-Secondary Institutions

Leo Z. Archambault  
*Mount Ida College*

Follow this and additional works at: <https://ro.ecu.edu.au/ceducom>

 Part of the [Education Commons](#)

---

### Recommended Citation

Archambault, L. Z. (2008). Measuring Service Performance, Student Satisfaction and its Impact on Student Retention in Private, Post-Secondary Institutions. Retrieved from <https://ro.ecu.edu.au/ceducom/2>

EDU-COM 2008 International Conference. Sustainability in Higher Education: Directions for Change, Edith Cowan University, Perth Western Australia, 19-21 November 2008.  
This Conference Proceeding is posted at Research Online.  
<https://ro.ecu.edu.au/ceducom/2>

**Archambault, L.Z., Mount Ida College, USA**  
**Measuring Service Performance, Student Satisfaction and its**  
**Impact on Student Retention in Private, Post-Secondary Institutions**

Leo Z. Archambault

School of Design  
Mount Ida College, USA,  
E-mail: lzarchambault@mountida.edu

**ABSTRACT**

With an ever growing assortment of educational options, students seek institutions that will provide for them a unique educational experience that they will remember for a life time. In addition, the present student is a customer seeking an educational program that will prepare him/her for a successful career and gainful employment. Since institutional budgets are developed based upon projected enrolments, it is becoming crucial for private institutions to retain the students they recruit. This situation has created a need for continued research in the area of student satisfaction and student retention. A reduction in student numbers, therefore, leads to a reduction in budgeted funds available to operate, maintain, and grow a private institution.

The purpose of this study is to add additional contributions to the body of work on service quality, satisfaction, and student retention in higher education. This study attempts to show the relationship between service expectations, service performance, student satisfaction, and salient student retention constructs hoping to shed new light on the research question: Is there a significant relationship between service quality, student satisfaction and student retention in higher education? The results show that there are significant relationships between service performance and student satisfaction that will aid private, post-secondary institutions to predict and measure student satisfaction and retention.

**INTRODUCTION**

As academic and educational options increase, students seek institutions that will provide them with unique, memorable, and personal educational experiences. Also, today's student is a customer seeking an educational program that will prepare him/her for a successful career and gainful employment. Because institutional budgets are developed based upon projected enrollments, it is becoming crucial for private institutions to retain the students they recruit. In fact, studies have shown that decreased budgets can have an effect on student retention (Ryan 2004). An institution's inability to maintain its enrollment numbers impacts its graduation and retention rates – indicators of performance for higher education institutions (Titus 2004). This research examines students' expectations and the service performance that they perceive within their respective college or university and its impact on student satisfaction and retention. Past research (Parasuraman et al. 1990; Cronin and Taylor 1992) has shown the importance of knowing what the customer expects is the first step in delivering service quality and satisfaction. Adherence to that principle would result in increased satisfaction and increased retention. Increased retention will allow an institution to realize substantial savings (Sydow and Sandel, 1998).

Higher Education has experienced some dynamic changes over the last twenty years. In addition to the number of non-profit institutions that offer a myriad of degree programs and levels of instruction, virtual institutions, such as the University of Phoenix, and for-profit institutions, such as Argosy University, have entered into this competitive environment vying for the diminishing pool of students and resources needed to implement effective academic programs (Sevier 1998; Breneman 2005). A large amount of a college admissions budget is spent to recruit freshmen, and therefore, it has become necessary to retain these freshmen through their graduation/ degree completion as dictated by the

standards of academic progression for the institution (Lau 2003). While many strategies have been developed and used by both administration and faculty, attrition levels have grown over the years in higher education (Tinto 1987; Sydow and Sandel 1998; Braunstein et al. 2006). This situation has created a need for continued research in the area of student satisfaction and student retention.

Since many private institutions do not enjoy access to large endowments, they are driven by tuition revenue (Kyle 2005). A reduction in student numbers, therefore, leads to a reduction in budgeted funds available to operate, maintain, and grow a private institution. This situation has led to the eventual closing of some private liberal arts colleges as well as program retrenchment in many private and public institutions of higher learning (Gumpert 1993). This creates not only an economic impact, but it also reduces the amount of institutional options for the student (Kyle 2005). Now, more than ever, higher education institutions have embraced the marketing concept and the idea of the student as consumer, the customer who is involved in the purchase of higher education programs and services (Kotler and Levy 1969; Conway, Mackay and Yorke 1994; Kyle 2005).

## **THEORETICAL FRAMEWORKS**

The base theory for this study is service quality and customer satisfaction integrated with salient constructs within student retention theory (Tinto, 1975, 1982, 1988, 1997; Bean, 1983, 1985). The importance of expectations in the customer's/student's evaluation of services has been acknowledged in past service quality literature (Parasuraman, Zeithaml, and Berry 1985, 1988; Cronin and Taylor 1992, 1994). Zeithaml et al. (1990) had made great progress in identifying and understanding determinants of service quality, satisfaction, and, subsequent, customer retention. They had also developed a service quality measurement instrument referred to as the SERVQUAL survey. In an academic setting, SERVQUAL has been adapted and used primarily to evaluate the service quality of college/university libraries. There is a wealth of literature that reports the invaluable information gleaned by academic libraries using satisfaction surveys to assess their services (Edwards and Brown 1995; Coleman et al. 1997). SERVQUAL has already been identified as having the potential to measure service quality in a postsecondary institution by examining the gap in student perceptions and expectations within academic environments (Hill 1995; Kerlin 2000; Ham 2003).

The major constructs that measure student retention are derived from two major theories of student retention – student integration theory and student attrition theory. Student Integration Theory is derived from the research of Vincent Tinto. Tinto (1975) created a model that sought to describe the factors that cause a student to leave a degree program before graduation. Tinto believed that student persistence/ retention is based upon the student's commitment to the goal (graduation and degree completion) and commitment to the institution (one's loyalty to the institution) coupled with the student's level of integration within social and academic elements that make up the individual student experience. Tinto suggested that goal and institutional commitment was not enough to predict dropout. Social integration is vital, but it is not just restricted to student-peer relationships. It also includes interactions with staff and faculty on campus. Another predictor of student retention, academic integration has 'varying forms' (Tinto 1975) that relate to the level of student academic engagement with faculty and fellow students as reflected in grades, intellectual stimulation, and personal intellectual development.

Student Attrition Theory is derived from the work of John P. Bean. Bean (1980, 1982, and 1985) developed his model with more focus on environmental/external factors. These factors include institutional fit which is similar to Rootman's 'person-role fit' (Bean 1985), finance attitude or the level of financial funding the student gets from the institution or from his/her family (Cabrera et al. 1993), outside encouragement which is the support and encouragement of family and friends of the student to finish the degree program, and, as Bean (1985) calls it, intent to leave. The language was altered by Cabrera et al. (1993) to imply that the lower the scores the greater intent to leave while the greater the scores the lesser intent to leave. Thus, the lesser the intent to leave, the greater is the potential for student retention.

Because of a close comparison and overlap of the two student persistence models Cabrera et al. (1993) developed an integrated model that sought to provide a ‘more comprehensive understanding of the complex interplay among individual, environmental, and institutional factors.’ Ideally, it is best to examine the present behavior as a predictor of future behavior. By creating another integrated model that combines the research of Cabrera et al. (1993) and the concepts of service quality and satisfaction, the administrators of an institution of higher learning would possess a tool to adequately measure student satisfaction and retention. This would allow the institution to adapt, change, and focus on institutional quality and, thereby, experience savings derived from student retention.

## **STATEMENT OF THE PROBLEM**

As the service sector of the United States economy continues to grow, much research is being done in the area of service quality with a focus on customer satisfaction and retention. In higher education, the student is a short-duration customer who will, hopefully, stay with his/her institutional choice for the duration of the degree program. If the institution has a graduate school, quality student experiences will beget student satisfaction creating a situation in which the student will pursue an advanced degree at the same institution. Strong customer orientation/student-centeredness will ensure strong retention numbers and nurture positive word of mouth that will bring more students. With the stakes high in the competitive higher education marketplace, it will become necessary for all institutions and their cadre of campus service providers – faculty, staff and administrators - to keep their fingers on the pulse of the students and their perceptions of the service level provided them.

## **METHODOLOGY**

The study uses quantitative research methodology that builds on previous research in service quality, student satisfaction and student retention in order to produce results that can be generalized within institutions of higher education. This methodology discussion will address the following: research design, research model, research questions, hypotheses, sampling procedures, and data collection.

### **Research Design**

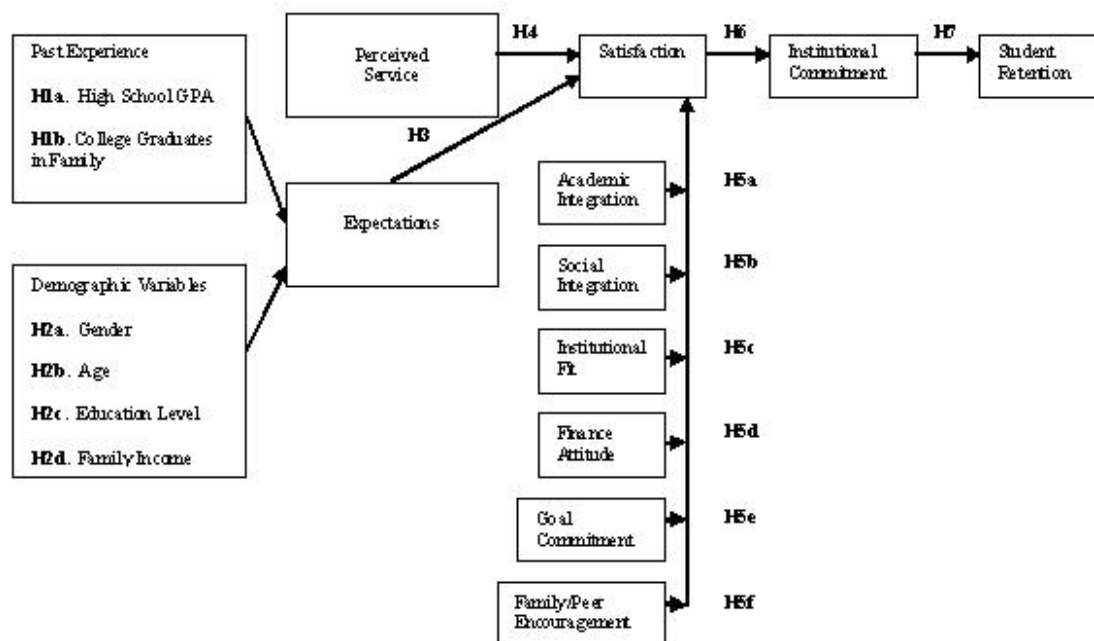
Since the focus of this study is to examine the relationships between service quality, student satisfaction and student retention, a cross-sectional survey design is used. The survey instrument includes an adaptation of the SERVQUAL survey which as Parasuraman, Zeithaml and Berry (1991) state ‘is a generic instrument with good reliability and validity and broad applicability.’ Resulting gap scores from expectancy disconfirmation could provide a measure of service quality from the student respondents, but instead service performance was measured (Cronin and Taylor 1992) and used. Much literature has suggested that service quality is an antecedent to student satisfaction (Cronin and Taylor 1992; Parasuraman, Zeithaml, and Berry 1985, 1988). The research design measures student retention constructs and their relationship to a student’s satisfaction with his/her learning environment. Therefore, the research in this study measures service quality, student satisfaction, and the behavioral intention of institutional commitment and student retention.

### **Research Model/Research Questions and Hypotheses**

The research model depicted in Figure 1 represents the hypotheses that will be tested in this study. Hypothesis one will focus on the influence that past experience has on student expectations of service quality in post-secondary institutions. Hypothesis two will focus on the impact of gender, age, educational level, and family income have on student expectations of service quality. Hypothesis three will examine the relationship between student expectations and student satisfaction levels within post-secondary institutions. Hypothesis four will address the relationship between student perceptions of service performance and student satisfaction. Hypothesis five will focus on the correlation between key student retention variables (academic integration, social integration, institutional fit, finance

attitude, goal commitment, and family/peer encouragement) and student satisfaction. Hypothesis six will focus on the influence that student satisfaction has on institutional commitment which is the level of commitment the student has for his/her institution. Finally, hypothesis seven investigates the influence that institutional commitment has on student retention in a higher education institution.

**FIGURE 1 - Theoretical Model for Service Quality, Student Satisfaction, and Student Retention**



### Sampling and Data Collection Procedures

The sample consisted of students from three institutions of higher education in New England: two private colleges and one private university. The sample size was 150 students per institution for a total of 450 students to be surveyed. The student population consisted of undergraduate students in baccalaureate programs.

Data collection for this study was gathered from survey questionnaires administered to 150 students at three private academic institutions participating in the study. As with any research study students were assured as to the confidentiality of their responses, and there was no need for the student to include a name on the survey. Professors were asked to administer the surveys during the first minutes of their class session, because based on research conducted by James et al (2005, pg.4), ‘in class survey administration has the highest response rate.’ The response rate will be usually higher, because the professor is designating time from his/her instructional time to ‘a captive audience’ in a quiet and distraction-free environment.

### RESULTS

The data reported is the result of the statistical analysis of 418 of 450 surveys (92.9%) collected from the three private, higher education institutions in New England.

## Demographic Analysis

As shown in Table 1, the age range findings show that the majority of the students surveyed (93.5%) are traditional-aged students with 27.5% being under 20 years of age and 56% being between the ages of 20 and 23 years of age. This was anticipated since day students were surveyed, and a majority of day students are traditional-aged students.

**Table 1 Gender and Age of Respondents**

### Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	152	36.4	36.4	36.4
Female	266	63.6	63.6	100.0
Total	418	100.0	100.0	

### Age Range

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Under 20	157	37.6	37.6	37.6
20-23	234	56.0	56.0	93.5
24-26	13	3.1	3.1	96.7
27-30	7	1.7	1.7	98.3
31-35	4	1.0	1.0	99.3
Over 35	3	.7	.7	100.0
Total	418	100.0	100.0	

**Table 2 – Respondents’ Financial Status (Family Income, Financial Aid, and Outside Jobs)**

**Family Income**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Under \$25,000	23	5.5	5.5	5.5
\$26 - \$50,000	65	15.6	15.6	21.1
\$51,000 - \$75,000	47	11.2	11.2	32.3
\$76,000 - \$100,000	54	12.9	12.9	45.2
Over \$100,000	118	28.2	28.2	73.4
I don't Know	111	26.6	26.6	100.0
Total	418	100.0	100.0	

**Financial Aid?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	288	68.9	68.9	68.9
No	129	30.9	30.9	99.8
3	1	.2	.2	100.0
Total	418	100.0	100.0	

**Hours of employment per week**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid I don't have a job	137	32.8	32.8	32.8
Under 10 Hours	56	13.4	13.4	46.2
10 -20 Hours	131	31.3	31.3	77.5
21 - 30 Hours	51	12.2	12.2	89.7
31 - 40	33	7.9	7.9	97.6
Over 40 Hours	10	2.4	2.4	100.0
Total	418	100.0	100.0	

The results for gender yielded no surprises. Since there is a growing concern about the ‘missing male’ on the higher education landscape, the population for this study surveyed consists of 63.6% female and 36.4% male. The missing male concept has been tracked over the last several years by the National Centre for Educational Statistics (NCES). In a recent (2007) report, the Centre noted that women went from being a minority to the majority of the U.S. undergraduate population, increasing their representation from 42 percent to 56 percent of undergraduates (Povasnik et al., 2007). Additional data suggests that women will account for 57% of those enrolled in post-secondary programs by 2012, according to the NCES report.

Since financial support is important to a student’s retention, another demographic variable, family income was observed. Table 2 shows the family income/financial aid breakdown with 12.9% of the population surveyed had family incomes of \$76,000 - \$100,000, 28.2% with incomes over \$100,000 per year, and approximately 21.1% of the families made \$50,000 or less per year. While 41.1% of the population surveyed made an excess of \$76,000 per year, the cost of higher education has forced many to seek financial aid in order to complete a program of study at a baccalaureate institution. This is reflected in the descriptive data in Table 2 showing that 68.9% receive financial aid to continue their studies. Ancillary to financial aid is the student’s need for additional resources. According to Table 2, almost one-third of the students (32.8%) do not have an outside job. The remaining 67.2% have a desire and a need to work.

Finally, ethnic mix of the population was observed with a consideration regarding whether a student was an international student or an American student. According to Table 3, the population surveyed was 95% American students and 5% International students. When compared with the educational research of Povasnik et al. (2007), the ethnic breakdown of degrees earned at baccalaureate institutions in 2005 was similar to the overall population ethnic background of respondents in this study with some slight increases in the Caucasian and International Student populations.

**Table 3 – International Student Status and Ethnic Background of Respondents**

**International Student?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	21	5.0	5.0	5.0
	No	397	95.0	95.0	100.0
	Total	418	100.0	100.0	

**Ethnic Background**

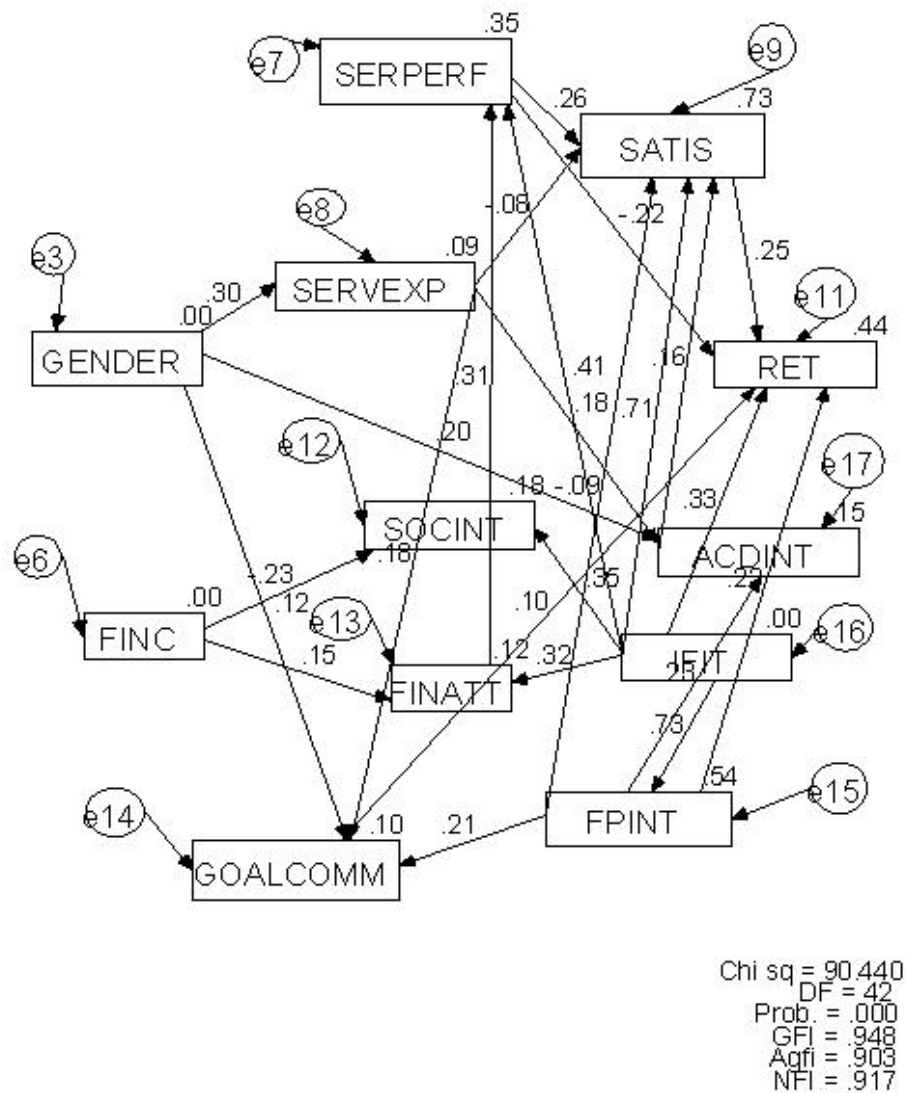
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Caucasian	353	84.4	84.7	84.7
	African	16	3.8	3.8	88.5
	Asian	24	5.7	5.8	94.2
	Native American	6	1.4	1.4	95.7
	Latino	11	2.6	2.6	98.3
	Other	7	1.7	1.7	100.0
	Total	417	99.8	100.0	
Missing	System	1	.2		
Total		418	100.0		

### Results of Hypotheses Testing

In order to test the hypotheses, structural equation modelling (SEM) was used. The model developed is shown in Figure 2 and standardized regression weight estimates in the model are shown in Table 4. The model included all of the significant links from the initial theoretical model. The variables that had been trimmed from the structural equation model are high school GPA, parental college attendance, age, education/class level, and institutional commitment. As the paths were trimmed, the chi square difference and the goodness of fit indices were observed and provided an improved model for the study. The resulting path diagram was the most parsimonious model and worked well. The relative likelihood ratio (chi square/ degree of freedom) of 2.15 (90.440/42) is acceptable. Due to the size of the sample, the p values are less than 0.05. Other important considerations that support the present structural equation model are the goodness of fit index (GFI) of 0.948 and the normed fit index (NFI) of 0.917. With the AGFI of 0.903, it is suggested that the lower measure might indicate some over fitting in the hypothesized model.



**Figure 2 – Structural Equation Model for the Study**



The coefficients presented in Table 4 are derived from the structural equation model and show the relationship between the key variables in the model. The critical ratios (C.R.) shown are like t-values. The C.R. values that are greater than 2 show the significant links in the path diagram at the  $p < 0.05$  level. Therefore, all links left in the structural equation model (SEM) are significant.

### Hypothesis 1

Since these variables were removed from the model, the null hypothesis, H1a<sub>0</sub>, there is not a significant difference in student expectations of service quality by the student’s high school GPA, fails to be rejected. For the same reasons the other null hypothesis, H1b<sub>0</sub>, there is not a significant difference in student expectations of service quality by the number of college graduates in the student’s immediate family, fails to be rejected. These findings contradict the theories of Tinto (1975). Over the last decade, secondary students have received a great deal of information about the college experience through options such as ‘kids to college’ programs and dual enrolment opportunities derived from post-secondary/secondary educational partnerships. Therefore, today’s student knows what to expect in a college environment.

## Hypothesis 2

Hypothesis 2 examined the relationship between student demographic factors and the students' expectations of service quality. Results of these hypotheses are shown in Table 4. The SEM results (CR = 5.102;  $p < 0.05$ ) indicate that the null hypothesis, H2a, there is not a significant difference in student expectations of service quality by the student's gender, is rejected. This confirms the findings presented in Kerlin (2000) and shows evidence that females have higher expectations than males, and this was indicated in their individual mean scores.

**Table 4 - Structural Equation Model Results and Regression Weights**

		Estimate	S.E.	C.R.	P
SERVEXP	<---GENDER	.568	.111	5.102	.000
FPINT	<---IFIT	.731	.042	17.505	.000
FINATT	<---IFIT	.321	.058	5.513	.000
FINATT	<---FINC	.088	.034	2.598	.009
SERPERF	<---IFIT	.384	.048	7.947	.000
SERPERF	<---FINATT	.286	.048	6.007	.000
ACDINT	<---GENDER	.379	.110	3.441	.000
ACDINT	<---FPINT	.214	.053	4.058	.000
ACDINT	<---SERVEXP	.177	.058	3.061	.002
SATIS	<---SERPERF	.277	.039	7.096	.000
SATIS	<---SERVEXP	-.085	.034	-2.532	.011
SATIS	<---ACDINT	.169	.035	4.783	.000
SATIS	<---IFIT	.698	.049	14.157	.000
SATIS	<---FPINT	-.090	.046	-1.945	.052
GOALCOMM	<---SERVEXP	.152	.052	2.927	.003
GOALCOMM	<---GENDER	.202	.099	2.039	.041
GOALCOMM	<---FPINT	.170	.047	3.585	.000
RET	<---IFIT	.644	.183	3.523	.000
RET	<---FPINT	.453	.132	3.428	.000
RET	<---GOALCOMM	.247	.111	2.219	.026
RET	<---SATIS	.492	.167	2.938	.003
SOCINT	<---IFIT	.358	.057	6.321	.000
SOCINT	<---FINC	-.134	.033	-4.068	.000
RET	<---SERPERF	-.463	.121	-3.838	.000

The next hypothesis, H2b<sub>o</sub>, there is not a significant difference in student expectations of service quality by the student's age, was not used in the SEM which suggests that we accept the null hypothesis. This confirms the research results of Ham (2003).

Since the variable student education level is not included in the SEM due to its impact on fit indices, the result for the next hypothesis, H2c<sub>o</sub>, there is not a significant difference in student expectations of service quality by the student's education level, indicates that the null hypothesis fails to be rejected. This also confirms Ham (2003). Although it is present in the model, the variable family income (FINC) corrupted the model when a path was linked to service expectations (SERVEXP). Therefore, the next hypothesis, H2d<sub>o</sub>, there is not a significant difference in student expectations of service quality by the student's family income level, fails to be rejected. Although Tinto (1975) stressed this as an important factor, Ishitani and DesJardins (2002) suggest that the issue of family income changes on an annual basis and rely on the individual grade levels of the students. The closer the student is to graduation, the lesser the impact of family income. However, the model in this study shows that family income has a strong relationship with the student's finance attitude and the student's level of social integration.

### **Hypothesis 3**

This study investigated the relationship between students' expectations of service quality and student satisfaction. The results shown in Table 4 (C.R. = -2.532;  $p < 0.05$ ) suggest that the null hypothesis is rejected and that there is a relationship between student expectations of service quality and student satisfaction. This finding contradicts those who place satisfaction before service quality (Athiyaman 1997; Parasuraman et al. 1988), but it confirms the research of Brady and Robertson (2001) and the better model fit for the service quality → satisfaction path in their study.

### **Hypothesis 4**

This study examined the relationship between perceived service performance and student satisfaction. The null hypothesis, H4<sub>o</sub>, states that there is not a significant correlation between service performance and student satisfaction in a four-year, post-secondary institution. The results of the study in Table 4 (C.R. = 7.096;  $p < 0.05$ ) suggest that the null hypothesis should be rejected and there is a significant correlation between service performance and student satisfaction in a four-year, post-secondary institution. This result was confirmed in the findings of Brady, Cronin, and Brand (2002) and their replication of previous studies by Cronin and Taylor (1992).

### **Hypothesis 5**

This study investigated the relationship of salient student retention variables and student satisfaction. The null hypothesis, H5a<sub>o</sub>, there is not a direct relationship between academic integration and student satisfaction, was rejected (C.R. = 4.783;  $p < 0.05$ ). This is confirmed in the work of Bean and Bradley (1986). Since the linkage was omitted to improve model fit, the null hypothesis H5b<sub>o</sub>, there is not a direct relationship between social integration and student satisfaction, fails to be rejected. This contradicts the findings of Bean and Bradley (1986). The next null hypothesis H5c<sub>o</sub>, there is not a direct relationship between institutional fit and student satisfaction, was rejected based upon the results in Table 4 (C.R. = 14.157;  $p < 0.05$ ). This confirms the results of the research of Bean and Bradley (1986). Null hypothesis H5d<sub>o</sub>, there is not a direct relationship between academic finance attitude and student satisfaction, failed to be rejected due to its poor fit in the SEM path diagram. Null hypothesis H5e<sub>o</sub>, there is not a direct relationship between goal commitment and student satisfaction, was accepted, because the linkage was excluded due to its impact on the SEM fit indices. Finally, the null hypothesis, H5f<sub>o</sub>, there is not a direct relationship between family/peer encouragement and student satisfaction, yielded the results in Table 4 (C.R. = -1.945;  $p > 0.05$ ) suggesting that the null hypothesis failed to be rejected. This contradicts the findings of Bean (1985).

### **Hypothesis 6**

The sixth hypothesis looks at the relationship between student satisfaction and the student's level of institutional commitment. The null hypothesis states that there is not a positive relationship between student satisfaction and student's institutional commitment to the post-secondary institution. The structural equation model developed for this study has to be trimmed of institutional commitment for reasons of optimal goodness of fit, and, therefore, the null hypothesis fails to be rejected.

### **Hypothesis 7**

Hypothesis 7 examined the relationship between the student's level of institutional commitment and student retention. Again, the need to trim out institutional commitment in the SEM suggests that the null hypothesis, H7<sub>o</sub>, there is not a positive relationship between the student's institutional commitment and student retention, fails to be rejected. Institutional commitment plays a major role in retention for previous models (Bean & Bradley 1986; Cabrera et al. 1993), but it did not fit in the integrated model for this study.

### **Summary**

The research findings provide some insight into the relationship between service quality, satisfaction, and student retention at four-year, baccalaureate degree granting institution. The findings also show some significant relationships between salient student retention-related constructs and the student's

level of satisfaction with his/her post-secondary institutions. It is important to note that student satisfaction has a positive impact on student retention (C.R. = 2.938;  $p < 0.003$ ) and needs to be examined and reviewed on a consistent basis to ensure optimal enrollment management. Additionally, this analysis also shows support for previous studies that had found support for the positive relationships between service quality performance and satisfaction, and satisfaction and student retention.

## **DISCUSSION**

Just as businesses rely on customer satisfaction to remain successful and profitable, colleges and universities must discover ways to address the needs and wants of their major customers, their students. Students as customers seek to receive the ultimate satisfaction as well as career opportunities upon graduation. Since the student is presented with many choices in the marketplace, many institutions conduct open houses and exploration days for the students to get a preliminary idea of what life within the institution is like. Once the student is recruited it is up to the institution to manage the students' expectations. Hopefully, this leads to service quality, satisfaction, a positive representation of the institution, and student retention.

## **MANAGERIAL IMPLICATIONS**

The study's findings provide several implications for higher education administrators, staff and faculty on the use of methods to measure student satisfaction and commitment to the institution. The results are consistent to previous studies that suggest that service quality perceptions are directly related to consumer satisfaction (Cronin and Taylor 1992, 1994; Teas 1993). Therefore, it is wise for the institution to be student-centered and create an organizational climate that focuses on customer service from all college/university employees.

Administrators need to be more visible and interact with the students. By becoming a greater part of the campus learning community, most administrators can build relationships with students and emerge from their perceived 'ivory towers.' The concept of a learning community is all encompassing and requires an element of participation by all constituencies on campus. On a smaller scale, in-class group assignments contribute to the creation of the learning community. Tinto (1997) suggests that this helps to improve the student's level of academic integration as well as creating more opportunities for social integration particularly for non-resident students. This research reveals that today's students expect more from their institutions. They expect appealing campus facilities, quality/modern equipment, and prompt service. The new students are part of a generation of millennials, students that tend toward group activities, possess similar values as their parents, desire structure and experiential activities, and use the Internet for school, work and leisure activities (Oblinger 2003). Oblinger (2003) suggests that this new student is comfortable with technology to the point that they are dissatisfied with what they see as an inadequate use of technology on campus. This is reflected in the results of the study showing that the respondents' expectation for a college to have modern equipment has a mean of 6.61 while the respondents' perception for their institutions actually having modern equipment has a mean score of 4.72.

The results show that today's college student wants prompt attention, and many institutions have begun to change operational procedures to accommodate these students. The registration process at some institutions has gone online to expedite class schedules and enrollments. These students also desire to stay connected and are more prone than their predecessors to call and email their professors for information and assistance. The professor's response is expected by these students on a timely basis, making this another customer service factor that needs careful and immediate consideration due to its impact on student satisfaction and retention.

In the area of financial aid, most institutions receive average grades. The study results also show that 68.9% of the respondents receive financial aid and the mean score of their rating of the level of help

from financial aid was 4.32 on a seven-point scale. Most institutions including those surveyed expressed their concern about financial aid and focus on that office's proactive execution of its duties and responsibilities.

The results of this study show that today's students are entering colleges and universities with new and different attitudes and aptitudes as a result of social and cultural changes in the United States. These changes in student expectation levels and their subsequent satisfaction with the educational environment bring new challenges to the higher education marketplace. It is becoming crucial for the private, four-year, college or university to stay in touch with and understand the wants and needs of these new students. New paradigms need to be developed to balance the opinions of the trustees, administrators, faculty and staff with the preferences of the student body in the twenty-first century.

## REFERENCES

- Athiyaman, A. (1997) Linking student satisfaction and service quality perceptions: the case of university education. *European Journal of Marketing*, 3(7), pp. 528-540.
- Bean, J. P. (1983). The Application of a Model of Turnover in Work Organizations to the Student Attrition Process,' *Review of Higher Education*, 6, pp. 129-148.
- Bean, J. P. (1985). Interaction Effects Based on Class Level in an Exploratory Model of College Student Dropout Syndrome. *American Educational Research Journal*, 22(1), pp. 35-64.
- Bean, J. P., & Bradley, R. K. (1986). Untangling the Satisfaction-Performance Relationship for College Students. *Journal of Higher Education*, 57(4), pp. 393 - 412.
- Brady, M. K., Cronin, J. J., & Brand, R. R. (2002). Performance-only measurement of service quality: a replication and extension. *Journal of Business Research*, 55(1), pp. 17 - 31.
- Brady, M. K., & Robertson, C. J. (2001). Searching for a consensus on the antecedent role of service quality and satisfaction: an exploratory cross-national study. *Journal of Business Research*, 51(1), pp.53 - 60.
- Braunstein, A. W., Lesser, M. L., & Pescatrice, D. R. (2006). The Business of Student Retention in the Post September 11 Environment-Financial, Institutional and External Influences. *Journal of American Academy of Business*, 8(1), pp. 134-142.
- Breneman, D. W. (2005). Entrepreneurship in higher education. *New Directions for Higher Education*, 2005(129), pp. 3-9.
- Cabrera, A. F., Nora, A., & Casteneda, M. B. (1993). College Persistence: Structural Equation Modeling Test of an Integrated Model of Student Retention. *The Journal of Higher Education*, 64(2), pp. 123-139.
- Coleman, V., Xiao, Y., Bair, L., & Chollet, B. (1997). Toward a TQM Paradigm: Using SERVQUAL to Measure Library Service Quality. *College and Research Libraries*, pp. 237-251.
- Conway, T., Mackay, S., & Yorke, D. (1994). Strategic Planning in Higher Education: Who are the Customers? *International Journal of Educational Management*, 8(6), pp. 29-36.
- Cronin, J. J., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, 56(3), pp. 55-68.

- Cronin, J. J., & Taylor, S. A. (1994). SERVPERF versus SERVQUAL: Reconciling Performance-Based and Perceptions-Minus-Expectations Measurement of Service Quality. *Journal of Marketing*, 58(1), pp. 125-131.
- DiDomenico, E. & Bonnici, J. (1996). Assessing Service Quality within the Educational Environment. *Education*, 116 (3), pp. 353-360.
- Edwards, S. & Browne, M. (1995). Quality in Information Services: Do Users and Librarians Differ in Their Expectations. *Library and Information Science Research*, 17, pp. 163-182.
- Gumport, P. J. (1993). The contested terrain of academic program reduction. (higher education faculty retrenchment). *Journal of Higher Education*, v64(n3), pp. 283 - 229.
- Ham, C. L. (2003). Service Quality, Customer Satisfaction, and Customer Behavioral Intentions in Higher Education. *Dissertation Abstracts International*, 3090234, pp. 1-165. Retrieved December 21, 2006 from <http://0-proquest.umi.com.novacat.nova.edu/login?COPT=REJTPTNiMGYmSU5UPTAmVkvSPTI=&clientId=17038>
- Hill, F.M. (1995). Managing Service Quality in Higher Education: the Role of the Student as Primary Consumer. *Quality Assurance in Higher Education*, 3, pp. 10-21.
- Ishitani, Terry T. and Stephen L. DesJardins. "A Longitudinal Investigation of Dropout from College in the United States." A paper presented at the annual meeting of the Association for Institutional Research. ERIC ED473067. 4 June 2002: pp. 1-34.
- Kerlin, C. (2000). Measuring Student Satisfaction with the Service Processes of Selected Student Educational Services at Everett Community College. *Dissertation Abstracts International*, 9961458, pp. 1-132. Retrieved December 21, 2006 from <http://0proquest.umi.com.novacat.nova.edu/login?COPT=REJTPTNiMGYmSU5UPTAmVkvSPTI=&clientId=17038>
- Kotler, P., & Levy, S. J. (1969). Broadening the Concept of Marketing. *Journal of Marketing*, 33(1), pp. 1-6.
- Kotze, T.G. and P.J. du Plessis (2003). Students as "co-producers" of higher education: a proposed model of student socialization and participation at tertiary institutions. *Quality Assurance in Higher Education*, 11(Number 4), pp.186-201.
- Kyle, K. (2005). To See or Not to See the Crisis in Academy: A Call for Action. *Social Justice*, 21(3), pp. 128-147.
- Lau, L. K. (2003). Institutional factors affecting student retention. *Education*, 124(1), 126.
- Oblinger, D. (2003, July/August). Boomers, Gen Xers, and Millennials: Understanding the New Students. Retrieved March 5, 2008, from Educause Web Site: <http://www.educause.edu/ir/library/pdf/ERM0342.pdf>quality educational experience.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*, 49, pp. 41-50.
- Parasuraman, A., Zeithaml, V. & Berry, L. (1988). SERVQUAL: A multi-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64 (3), pp. 12-41.

- Povasnik, S., Hussar, W., Snyder, T., Kena, G., Hampden-Thompson, G., Dinkes, R., et al. (2007, June). Student Effort and Education Progress. In *The Condition of Education 2007* (Section 3). Retrieved August 15, 2007, from National Center for Education Statistics Web Site: <http://nces.ed.gov/pubs2007/2007064.pdf>
- Ryan, J. F. (2004). The Relationship between Institutional Expenditures and Degree attainment at Baccalaureate Colleges. *Research in Higher Education*, 45(2), pp. 97-114.
- Servier, R. S. (1998). *Integrated Marketing for Colleges, Universities, and Schools: A Step-by-Step Planning Guide*. New York: Council for Advancement and Support of Education (CASE).
- Sydow, D. L., & Sandel, R. H. (1998). Making Student Retention an Institutional Priority. *Community College Journal of Research and Practice*, 22(7), pp. 635-644.
- Teas, R. K. (1993). Expectations, Performance, Evaluation, and Consumer's Expectation of Quality. *Journal of Marketing*, 57(4), pp. 18-34.
- Tinto, V. (1982). Limits of Theory and Practice in Student attrition. *The Journal of Higher Education*, 53(6), pp. 687-700.
- Tinto, V. (1988). Stages of Student Departure: Reflections on the Longitudinal character of Student Leaving. *The Journal of Higher Education*, 59(4), pp. 438-455.
- Tinto, V. (1993). *Leaving College: Rethinking the Causes and Cures of Student Attrition* (2nd Ed.). Chicago: University of Chicago.
- Tinto, V. (1997). Classrooms as Communities: Exploring the Educational Character of Student Persistence. *The Journal of Higher Education*, 68(6), pp. 599-623.
- Titus, M. A. (2004). An Examination of the Influence of Context on Student Persistence at 4-Year Colleges and Universities. *Research in Higher Education*, 45(7), pp. 673-699.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1990). *Delivering Service Quality: Balancing Customer Perceptions and Expectations*. New York: The Free Press.
- Zeithaml, V. A., & Bitner, M. J. (1996). *Services Marketing* (Rev. Ed.). New York, N.Y.: The McGraw-Hill Company, Inc.