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Closing the gaps: An analysis of graduate students' perceived expectations and perceptions of services at a private historically Black College/University's School of Business

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ABSTRACT

EDUCATIONAL LEADERSHIP

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CLOSING THE GAPS: AN ANALYSIS OF GRADUATE STUDENTS’ PERCEIVED
EXPECTATIONS AND PERCEPTIONS OF SERVICES AT A PRIVATE
HISTORICALLY BLACK COLLEGE/UNIVERSITY’S
SCHOOL OF BUSINESS

Advisor: Dr. Sheila Gregory
Dissertation date July 2008

Satisfaction is the customers’ evaluation of a product or service in terms of
whether that product or service has met their needs and expectations. Failure to meet
needs and expectations is assumed to result in dissatisfaction with the product or service.
Evidence also have shown that customer satisfaction and service quality perceptions
affect consumer intentions to behave in other positive ways—praising the firm (school),
preferring the company (university) over others, increasing their volume of purchases
(recommending/encouraging others to attend), or agreeably paying a price premium
(Zeithmal & Bitner, 2000). Zeithmal and Bitner, in their research, cited a study that
found there to be strong links between service quality and other behavioral intentions of
strategic importance to a university such as students saying positive things about the
school, planning to contribute money to the class pledge upon graduation and planning to recommend the school to employers as a place from which to recruit.

This research examines the gaps of students’ perception to their expectations by analyzing the correlations between five dimensions (independent variables), mean gap scores and the overall satisfaction of the students surveyed. Also, the mean gap scores and students’ intentions to behave particularly related to the recommendation of the business school to others is also examined. Additionally, the paper discusses how the school’s leadership, faculty, and staff can promote and continue to improve quality services to its students and a recommendation for the approach for improvement.
CLOSING THE GAPS: AN ANALYSIS OF GRADUATE STUDENTS’ PERCEIVED EXPECTATIONS AND PERCEPTIONS OF SERVICES AT A PRIVATE HISTORICALLY BLACK COLLEGE/UNIVERSITY’S SCHOOL OF BUSINESS

A DISSERTATION
SUBMITTED TO THE FACULTY OF CLARK ATLANTA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF EDUCATION

BY

MICHAEL WILLIAM HINES

DEPARTMENT OF EDUCATIONAL LEADERSHIP

ATLANTA, GEORGIA

JULY 2008
ACKNOWLEDGMENTS

This work is dedicated to my brother Gregory (1971 - 1988) and my grandmother Elizabeth Hines (1932 - 1990) who never had the opportunity to see me through my higher education experiences, but I know both were always there watching over me. This dissertation is in honor of my mother, Rosemary Hines, and my family who have always lifted me up and wished me the best by words and actions.

I am fortunate to have worked with a team of people who were positive influences on the direction of my goals. I want to thank my committee for their dynamic contribution. I am deeply grateful for my committee Dr. Trevor Turner, Dr Mosses Norman and my chair Dr. Shelia Gregory for your encouragement and consistent support, invaluable assistance and extreme patience. Special thanks Mrs. Bettye Cook for your assistance, patience, and flexibility. Additionally to those faculty members who were employed at the University in the beginning of this journey, Dr. Robert Dixon, Dr. Leslie Fenwick and Melanie Carter, whom have moved on to other opportunities which I am sure has enhanced their careers, and the lives of the individuals they have encountered. Thanks go to Dr. Edward Davis, Interim Dean of the School of Business; he has never wavered on his commitment to the students at CAU in the School of Business nor the School of Business itself. A very special thanks to Dr. Bennie L. Harris for providing me with the inspiration to conduct this study and your dedicated assistance throughout the process. And most of all, I thank God who is the foundation of my existence.
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CHAPTER I

PROBLEM IN CONTEXT

Statement of the Problem

Higher education leaders have had a false sense of security, which was embodied in the principle thought that little attention need be given to the delivery of services to students. Quality academic programs were obviously a goal of many campus leaders. Faculty in higher education are increasingly sensitive to matters of teaching quality and has depended heavily on end-of-term student evaluations of teaching (Fortson & Brown, 1998). However, according to Braskamp, Bradenburg, Kohen, and Ory (1984), many institutions adopt and use student evaluations of teaching with little evidence that the form of procedure actually measures or contributes to teaching quality.

Because of an increase in consumer sensitivity, a public demanding a clear purpose of existence, an intensification of competition and an increasing emphasis on accountability by the governing bodies of colleges and universities, professional service quality in higher education has emerged as a subject in need of investigation. In spite of the difficulties of objectively measuring service quality, it is clear students do evaluate the quality of the professional services delivered by their institutions (Brown & Swartz, 1989; Freed, 1998). The problem addressed in this study is the fact that the business schools and Master of Business Administration (MBA) programs have not yet established a proven, generally accepted methodology for evaluating the quality of the services they
provide. Consequently, this study is designed to test the feasibility of measuring a graduate business program service quality by measuring the gaps between students’ expectations and perception of services delivered and to determine if there are correlations between these gaps and the five dimensions established by Zeithaml, Parasuraman, and Berry (1990), expressed as independent variables in this study.

Additionally, students’ intent to behave during and after their matriculation, as express in section IV in the survey and the correlation to overall satisfaction, is postulated to have a direct effect on the decline in enrollment. The total enrollment in years 2001, 2003, 2004, 2005, 2006 and 2007 showed a steady decline from 150, 121, 117, 105, 103 and 85, respectively.

Purpose of the Study

The purpose of this study is to use a service quality model to measure graduate students’ perception of service quality in a higher education setting in a school of business at a historically black private institution in the southeastern United States by determining if gaps exist in students’ expectations versus the perceptions of their actual experiences with services delivered by their academic programs. The research requires students to compare expectations with their experiences, thereby giving a measure of the customer gap in educational service quality. The gap between expectations and perceptions of customers is the general definition of consumer satisfaction (e.g., DiDomenico & Bonnici, 1996; Hampton, 1993; Parasuraman, Zeithaml, & Berry, 1985, 1988a). The gap theory method of service quality is determining the level of service quality by subtracting the perceived service score from the customer’s expected score for
each question in the SERVQUAL questionnaire. Hampton (1993) found that a positive student evaluation of service quality of an institution was reflected in a minimal size gap. For this study, it was hypothesized that the size of the expectation/perception gap would be inversely related to students’ stated overall satisfaction.

Satisfaction is the customers’ evaluation of a product or service in terms of whether that product or service has met their needs and expectations. Failure to meet needs and expectations is assumed to result in dissatisfaction with the product or service. Evidence also have shown that customer satisfaction and service quality perceptions affect consumer intentions to behave in other positive ways—praising the firm (school), preferring the company (university) over others, increasing their volume of purchases, or agreeably paying a price premium (Zeithmal & Bitner, 2000). Zeithmal and Bitner, in their research, sited a study that found there to be strong links between service quality and other behavioral intentions of strategic importance to a university such as students saying positive things about the school, planning to contribute money to the class pledge upon graduation and planning to recommend the school to employers as a place from which to recruit.

Other studies of service quality in academic environment have established differences in the way different groups of students perceive service quality. Several demographic variables examined in other studies included: ethnicity, age, gender, degree area, university attended, cumulative grade point average, class load, class level, persistence to graduation, employment status, marital status, full/part-time status, number of children age of children living at home, and traditional versus non-traditional
students (e.g., DiDomenico & Bonnici, 1996; Hampton, 1993; Kearney & Kearney 1994; Schwantz, 1996; Webb, Njokum, & Allen, 1996; Widdows & Hilton, 1990; Wolverton, 1955). It is hypothesized that students in this study would also show group differences in their perceptions of service quality when certain demographic variables are examined. Kwan (1999) found in his study of fairness regarding students’ ratings in assessing the teaching performance of university teachers that teachers of graduate courses tended to receive higher ratings than those of undergraduate courses.

Within business, customers' needs and expectations drive marketing. Hawes and Glisan (1983) said, “To the extent that students really are consumers and that their needs and wants should influence the activities of an academic department, an evaluation method is needed which takes a marketing view of academic departments and students” (p. 15).

In the business marketing literature, several authors offer ways to identify customer needs and expectations. However, in higher education, little has been done to identify the needs and satisfactions of the primary customer, the student. The literature reveals that little work within the last decade has been done that focus on student satisfaction.

Finally, the case is evident for the importance of viewing service quality from the student’s perspective. Albrecht (1998) calls one-on-one encounters of customers with service personnel “a moment of truth,” the point in which customers make judgments about the organization and the quality of its service.
Significance of the Study

Many factors have triggered the emphasis on quality and services in higher education. Increased competition from other academic institutions, scarce state resources, decreased funding and increased program and service demands, have all brought the value and quality of higher education under the scrutiny of the public eye (Cross, 1993, 2001; Koch, & Fisher, 1998; Marchese, 1993; Seymour, 1993). State budgetary crises have forced large reductions in allocations to higher education (Cross, 2001). According to Ewell (1993), higher education is “the budget balancer, the last-in-line piece of discretionary spending remaining after mandatory expenditures are accounted for” (p. 38).

According to the Association of Advance Collegiate Schools of Business (2008), faculty should establish an agreement to expectations of high quality student performance (see Appendix A). Learning goals for degree programs and course learning goals display the quality standards of the faculty. Students should be aware of program and course learning objectives. Faculty members should deliver the teaching program in such a way that students can expect to reach the learning goals through persistent and earnest effort. Additionally, the school should have a systematic program for evaluating instructional performance of faculty members. Information from instructional evaluation should be available to both faculty members and administrators. The school should use instructional evaluation as the basis for development efforts for individual faculty members and for the faculty as a whole. The school must show that students meet the learning goals for their respective degree programs. It is an obligation of the students to
meet the expectations embodied in the learning goals, and it is an obligation of the faculty members to monitor student performance to see that the learning goals are respected. The school of business went through the reaccreditation process approximately two years ago and there were no recommendations or mandates related to instruction.

By examining the gaps of students’ perception to their expectations, the researcher can analyze the correlations between the mean gap scores and students’ intentions to behave particularly related to the recommendation of the business school to others. Since the researcher’s matriculation at the school of business less than seven years ago and for the past five years, the enrollment numbers for the graduate school has declined. It is expected that there will be a significant percentage, greater than 25% of the current students who will state that their decision to attend the business school was made at least in part by the recommendation of alums of the graduate program or school of business.

Additionally, within the past year, there has been an increase in enrollment since the previous year. Another significant occurrence is the change in deanship over the past 12 months. The researcher believes that the expectation of the accessibility of the dean will be exceeded.

Marketing research has shown that it costs more to find new customers than to keep old ones. According to Zeithaml and Bitner (2000), it has been found that attracting a new customer is five times as costly as retaining an existing one. They claim that depending on the industry, companies can increase profits from 25% to 85% by retaining just 5% more of their customers. In addition, customers who leave a service provider
from another provider are usually unhappy, and unhappy customers tell other people about their dissatisfaction (Spector & McCarthy, 1995). From a customer/student retention standpoint, it makes very good sense for higher education leadership to upgrade service delivery specifications and set high employee performance standards to improve service quality. However, before creating any new programs to improve the quality of services delivered to students, higher education administrators should learn more about the expectations and perceptions of their students.

Despite the importance of measuring service quality in today’s marketplace, little empirical research has been conducted in the delivery of professional services to business school graduate students in higher education. This research is an effort to gain insight into the expectations and perceptions of students in a graduate business program.

How service quality is measured. There are three underlying principles that are used to establish a construct by which to evaluate service quality.

1. Service quality is more difficult for the consumer to evaluate than the quality of goods.

2. Service quality is based on consumers’ perception of the outcomes of the service and their evaluation of the process by which the service was performed.

3. Service quality perception result from a comparison of what the consumer expected prior to the service and the perceived level of service received.

(Kurtz & Clow, 1998)
One way to discriminate among competitors in a service environment is service quality. Quality has always been an important consideration in the purchase of goods and services. Service marketing differs from traditional goods marketing in number of ways. Goods are tangible; they can be seen, held and touched. In contrast, services are intangible. Higher Education is one of those intangible services. Measuring quality of services is different than measuring the quality of goods. The quality of goods can be measured objectively by using indicators such as durability of products, elasticity of products, and number of defects incurred during production. Because of factors unique to services and to the delivery of services, the measurement of service quality has proven to be more difficult (Flazon, 1990). However, proven service quality measurement methods are beginning to emerge as more research occurs in the field. The most widely used measure of service quality was developed through the combined efforts of Parasuraman, Zeithaml, and Berry (Fisk, Grove, & John, 2000). According to Zeithaml, Parasuraman, and Berry (1990), customers evaluate service encounters and the process of service delivery to form perceptions of service quality.

Based on the focus groups interviews in Parasuraman, Zeithaml, and Berry’s (1985) original service quality research, it was found that consumers clearly supported the notion that the key to ensuring good service quality is meeting or exceeding what consumers expect from the service. In a 1990 book, Paasuraman, Zethaml, and Berry wrote:

It was clear to us that judgments of high service and low service quality depend on how customers perceive the actual service performance in the
context of what they expected. Therefore service quality, as perceived by customers, can be defined as the extent of discrepancy between customers’ expectations of desires and their perceptions. (p. 19)

Based on the above conceptual definition of service quality, Parasuraman et al. (1988b), developed a service quality model that resulted in SERVQUAL, a scale designed to measure customer perceptions of service quality along five key dimension:

- **Tangibles**—appearance of physical facilities, equipment, personnel and communication material;
- **Reliability**—ability to perform the promised service dependably and accurately;
- **Responsiveness**—willingness to help customers and provide prompt service;
- **Assurance**—knowledge and courtesy of employees and their ability to convey trust and confidence;
- **Empathy**—caring, individualized attention the firm provides its consumers.

(p. 26)

Parasuraman, Zeithaml, and Berry’s (1988) Gaps Theory approach to service quality with the use of the SERVQUAL instrument suggested that a customer perceives service quality as the difference between expectations and actual performance. The SERVQUAL instrument measures both customer expectations and perceptions of the organization’s actual performance along the five dimension of service quality.

The development of SERVQUAL centered on the construct of perceived quality. Perceived quality, and defined by Zeithaml (1988), is the consumer’s judgment about an entity’s overall excellence of superiority. Perceived quality differs from objective quality
(as defined by Garvin 1988 & Hjorth-Anderson, 1984) in the perceived quality is a form of attitude, related but not equivalent to satisfaction. It results from a comparison of expectations with perceptions of performance.

An equally important contribution of Parasuraman, Zeithaml, and Berry's (1985) work is their conceptualization of service quality as the gap between customer expectations and perceptions of performance. According to their research, five major discrepancies in service systems contribute to this quality gap. These discrepancies involve problems regarding the communication, design and delivery of services. Gap 1 is the difference between what the customer expects and what the management perceives that the customer expects: Gap 2 occurs in the translation of management perceptions of customer expectations in the service design; Gap 3 is the service provided to the customer; Gap 4 is the difference between the service provided and the service portrayed in various forms of marketing communication; and Gap 5 is the difference between the service expected and actually received, resulting in customer dissatisfaction. Service quality as perceived by the consumer depends on the size and direction of Gap 5 which, in turn, depends on the nature of the gaps associated with the design, marketing, and delivery of services: \( Gap 5 = f(Gap 1, Gap 2, Gap 3, Gap 4) \) (Parasuraman, Zeithaml, & Berry, 1985).

There are a number of models, which seek to measure service within an academic setting (Barrett & Greene 1994; Cadotte, Woodruff, & Jenkins, 1983). Brown and Swartz (1989) suggested that a similar model is appropriate when measuring educational service quality. Their model measures only expectations versus experiences. Hampton
(1993) asserted that it is appropriate to measure only the gap between student expectations and experiences because it is the most important gap in the service quality model.

However, these models tend to handle one encounter at a time (Didomenico & Bonnici, 1996). Didomenico and Bonnici (1996) believe that models that measure only one encounter at a time are unrealistic to the extent that colleges tend to deliver several services simultaneously.

Berry et al. (1988a, 1988b) went a step further and developed a gap analysis model, which takes several service dimensions into account. As a result, their model provides an objective measurement of service quality by analyzing what consumers expect against what they perceive about current services.

Differences or gaps between the customer's expectations and the perceptions of services actually experienced are the basis for the gap analysis methodology. The SERVQUAL model for measuring consumer perceptions of service quality is generally recognized as the predominate work in this field. The initial research conducted by Parasuraman et al. (1985) for their SERVQUAL service equality model supported the hypothesis that service quality is an overall evaluation by the consumer. The service quality research literature shows that subsequent research has reached similar conclusions. These conclusions suggest that service quality is a relatively global value judgment and that consumers used the same general criteria, regardless of the type of service, in making an evaluation of service quality (e.g., Parasuraman, Zeithaml, & Berry 1988a; 1994; Zeithaml, Berry, & Parasuraman, 1990).
CHAPTER II
LITERATURE REVIEW

This chapter reviews literature relevant to the study. This review concentrates on four areas. The first is the implementation of Total Quality Improvement (TQI) principles by U.S. businesses and as applied in many educational institutions. The review of TQM includes a brief history, the basic tenants of TQM, and then its application in education. The review demonstrates that the focus of TQM is the customer, a focus that has not been amply investigated in higher education. The second part of the view takes into account service quality and its relationship to the quality movement. Important to this review is philosophical and methodological contributions to the field of service quality measurement by Parasuraman, Zeithaml, and Berry (1985, 1988, 1990, 1993, 1994) and their development of the SERVQUAL instrument. The third part of the literature review describes the gap analysis of the study of service quality. The final part of their view focuses on the findings of studies in higher education that utilized gap analysis methodology and/or the SERVQUAL model.

Quality and Total Quality Management

Any number of quality improvement titles and acronyms has been used to describe the principles that have evolved from Walter Shewart of Bell Laboratories in the early 1920s. Terms such as Quality Improvements (QI), Total Quality Management
(TQM), Continuous Quality Improvement (CQI), all have their origin in Shewhart's work. Shewhart believed that manufacturing would be improved though a focus on identifying and correcting problems during the manufacture of products. As Deming (1982) put it, "An improvement in the processes would improve the product" (p. 88). Shewhart (as cited in Seymour, 1992) developed the concept of improving quality by improving processes. Shewhart employed statistical methods to investigate problems of quality in manufacturing processes.

Several decades later the terms total quality control, which originally coined by A.V. Feigenbaum in 1951 came into focus (Sherr & Lozier, 1991). Out of the same school of thought of Shewhart came W. Edwards Deming. Because of Deming's successes in Japan and throughout U.S. industry, he is considered the preeminent 20th century authority on quality and quality improvement in both the manufacturing and service industries (Stamatis, 1996). Deming taught statistical control to engineers and inspectors, based on Shewhart's concepts but with several improvements. After the war, Deming unsuccessfully promoted his ideas about quality to American businesses. After receiving little acceptance of his ideas on total quality in America, he found that Japanese society welcomed his contributions to quality control.

Deming's contributions are important in his creation of the Deming's fourteen Principles of Total Quality Management which provided the foundation for a philosophy of quality improvement that has transformed American business (Deming, 1986). Dill (1992) grouped Deming's 14 principles into six basic themes:
1. It is imperative to practice continuous quality improvement if an enterprise is to hold or enhance its place in the market;

2. the emphasis on obtaining consistent quality in incoming resources through careful management of suppliers;

3. the active participation of all members of an organization's productive workforce in the improvement of quality;

4. the importance of meeting customer needs as the fundamental basis for the improvement of goods and services;

5. The need for cooperation and coordination as the basic way in which an enterprise can improve its quality;

6. Quality improvement comes not from inspection but from design, that is the establishment of procedures which make it impossible for bad quality to be undetected and encourage the primary aim of continuous quality improvements. (p. 42-43)

The theories of Juran, Crosby, Ishikawa, Imai, and Taguchi (as cited in Cornesky, McCool, Byrnes, & Weber, 1991; Merrick, 1990) have also made notable contributions to the application of quality concepts to the service industry. All shared common themes such as managers having the primary role of being facilitators, doing a process right the first time, and evaluation and improvement of processes.

Definitely the obvious motivation prompting interest in quality improvement is that survival is the first order of business for any organization. In the 1980s, American firms began to respond to the Japanese domination of the markets (Marchese, 1991).
Marchese quotes Feigenbaum as saying that the American corporate philosophy had been to make it quick and cheaper, finance it cleverly, and sell it hard. The value of “making it better” was left out. [Now] firms have to march to an entirely new drumbeat: quality.

Quality Improvement in Higher Education

According to Marchese (1993), a few campuses led the way and began their TQM effort in the 1980s. Most of the universities involved in TQM began their involvement during the 1991-92 academic year. By 1993, Marchese found that most campuses had someone trying to understand and implement TQM or elements of quality. A 1993 Business Week survey reported 61% of college presidents reflecting some type of involvements in Total Quality (Ewell, 1993). By the time the American Association of Higher Education held its first Assessment and Quality Conference in 1993, the quality management workshops were extremely popular among members of the conference (Seymour, 1994). As the quality movement emerged on more campuses, in 1993 two prestigious higher education journals, Educational Record and Change, devoted entire issues to the subject of quality improvement in higher education.

Each year, Quality Process conducts a survey to assess the number of educational institutions that are implementing the principles and tools of total quality. Educational institutions implementing total quality increased from 92 participants in 1991 to 312 in 1998 (Johnson, 1996; Miller & Daniels, 1998). The 1998 “Quality Progress” survey showed that an increasing number of educators are attending quality improvement activities and are involved in state and community quality initiatives.
As a result of increased public interest in the quality of higher education institutions, several publications publish a variety of rankings and evaluations of U.S. colleges and universities. Typically these rankings of institutional “quality” are determined by one of three approaches: reputation approach, resources approach, or value-added approach (Nodryall & Braxton, 1996).

*U.S. News and World Report* publishes a widely read, yet controversial college guide that annually ranks colleges and universities in the United States. *Money* magazine use to publish a similar ranking of colleges and universities. Both *Time* and *Newsweek* have their own version of a college guide. All of these rankings have been criticized as being unreliable and arbitrary. The subjective nature of the reputation section in the *U.S. News and World Report* survey draws most of the criticism. Other criteria, such as alumni giving, have been criticized as having very little to do with quality of the educational experience at an institution (e.g. Crissey, 1997; Geraghty, 1997; Rothkopf, 1996; Sanoff, 1998).

Lindahl (1995) recommended a different set of criteria to measure the quality of colleges and universities. Lindahl suggested the following criteria: (a) how students rate the quality of instructions; (b) students’ overall satisfaction with the education they are getting; (c) achievement of learning outcomes; (d) whether they would recommend their university to others; (e) graduates’ pass rates on licensing and professional exams; (f) admissions to graduate and professional schools; and (g) the findings of alumni surveys.
Universities often struggle with a definition of quality for higher education. What is it and how should it be measured? Bogue and Saunders (1992) stressed the importance of designing a quality system and adopting a philosophy of quality that will involve the active participation of administrators, faculty, and staff of an institution. Sharples, Slusher, and Swain (1996) asserted that TQM would work in higher education. According to Sharples et al., it must become a part of the strategic planning process. However, it is the element of customer service that drives TQM. Marchese (1991) stated the cardinal rule of TQM is to identify explicitly who your customers are, know their needs systematically, and commit to meeting those needs.

In 1987, Congress established the Malcolm Baldrige National Quality Award to award excellence in quality management. The purpose of the award is to promote quality among American firms, to publicize quality strategies, and to push U.S. firms toward high quality standards. Seymour (1994) believes that the Baldrige Award will soon come to higher education. He stated that the judges of the Baldrige Award stood for customer-driven quality, and "That quality is directed toward customer retention and, demands constant sensitivity to emerging customer and market requirements" (p. 17).

A focus on principals of TQM would greatly assist many of the challenges in higher education. Institutions of higher education are under tremendous pressure to provide a high-quality education at affordable prices. To be competitive, it would seem reasonable that colleges and universities should know how well they are doing in their core areas. Kuh (1981) suggested that the press for quality in higher education has been
influenced by at least four societal trends: (a) declining enrollments; (b) changing student characteristics; (c) changing societal expectations for higher education; and (d) national and local economies. These influences have forced colleges and universities to become better and more competitive at what they do.

Hence, continuous quality improvement (CQI) is being adopted by an increasing number of non-business organizations, including a growing number of U.S. institutions of higher education (Fram & Camp, 1995). Measurement of process characteristics is well accepted as one of the basic tenets of quality improvement. However in education, it is often difficult to decide what to measure (Freed & Klugman, 1997).

In higher education’s efforts to implement and measure service quality, it has become evident that existing management systems in higher education can no longer ensure success in an increasingly competitive environment (Freed & Klugman, 1997; Tuttle, 1994). The implementation of a quality improvement program into a college of university can be extremely difficult. Successful quality improvement efforts require a change in the culture of an organization and usually occur over a long period of time (three to five years). The organizational structure and culture of colleges and universities have made it difficult to develop a long term, focused, institution-wide policy of continuous improvement, particularly in academic areas (Lewis & Smith, 1994).

As colleges and universities deal with decreasing state funding, slow enrollment growth while experiencing escalating costs and increasing competition, higher education leaders must call for more accountability as they experience an increasing sense of consumerism from students and parents. To help meet these internal and external
demands for change, institutions of higher education area turning to the principles, techniques, methods of TQM and service quality improvement (Berry, 1995). The benefits of applying quality improvement principles and techniques to products have been well documented (Stamatis, 1996); however, proven service quality improvement methods are still emerging as more research occurs in the field. Thus, two premises shaped the primary rationale for the current study: (a) customers do evaluate service encounters and the process of service delivery to form perceptions of service quality, ultimately, organizational quality, and (b) services are definable, measurable, and improvable (Parasuraman et al., 1985)

Service Quality

Services are now the dominant economic activity in developed countries around the world. In the United States more than 70% of the labor force is employed in service occupations (Fisk, Grove, & John, 2000). Education is a service that is uniquely different than goods such as automobiles, furniture, and other tangible items. Service performance is basically intangible (Lovelock, 1991). Kotler and Andreasen (1996) defines services as any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product. Lovelock created several classifications of services and services fields. The tangibility spectrum shown in Figure 1 captures the distinction between physical goods and services along a continuum from intangible dominant service to tangible dominate physical goods.
The work of Parasuraman et al. (1985, 1988a; 1988b; 1991) significantly advanced the concepts and principals of service quality measurement. Parasuraman et al. identified three underlying themes in service quality:

1. Service quality is more difficult for the consumer to evaluate than goods quality.

2. Service quality perceptions result from a comparison of consumer expectations with perceptions of actual service performance.

3. Quality evaluations are not made solely on the outcome of a service; they also involve evaluations of the process of service delivery. (p. 42)

Parasuraman et al. (1985) identified service quality as an area where few academic researchers had attempted to define and model quality because of the difficulties involved in delimiting and measuring the construct (p. 41).
Because the literature on service quality was not yet rich enough to provide a sound conceptual foundation for investigating service quality, Parasuraman et al. (1985) conducted an exploratory qualitative investigation to establish a construct for measuring service quality. Parasuraman et al. conducted focus group interviews with consumers and in-depth interviews with executives to develop a conceptual model of service quality. They found consistent patterns that emerged from the four sets of executive interviews. In analyzing the executives’ responses, they found the most important insight to be:

A set of key discrepancies or gaps exists regarding executive perceptions of service quality and the tasks associated with service delivery to consumers. These gaps can be major hurdles in attempting to deliver a service with consumers would perceive as being of high quality. (p. 44)

As a result of their preliminary research, Parasuraman et al. identified five potential gaps or discrepancies associated with the delivery of a service:

(Gap 1) Consumer expectations—the difference between customer expectations and management perceptions of those expectations;

(Gap 2) Management perception—the difference between management perceptions of consumer expectations, and actual consumer expectations;

(Gap 3) Service Quality Specification—the difference between service quality specification and actual service delivery;

(Gap 4) Service Delivery—the difference between service delivery and what is communicated about the service to consumers; and

(Gap 5)—the difference between customer expectations and their perceptions.
As diagrammed in Figure 2, these gaps reflect problems regarding the communication, design, and delivery of services. The gaps (i.e. Gaps 1, 2, 3, and 4) on marketer or service provider side impede delivery of services that consumers perceive to be of high quality. Gap 5 is perceived service quality which is defined as the difference between consumer expectations and perceptions, which depends on the size and direction of the four gaps associated with the delivery of service quality on the marketer’s side. The identification and measurement of gaps became the foundation of Parasuraman’s et al. (1988a; 1988b) later research into service quality. Parasuraman et al. (1985) hypothesized that the perceived quality of a service was a function of the size and direction of the expectation/perception gap of the consumer. Furthermore, the presence or absence of Gap 5 (the difference between expected and perceived service quality) depends on the size and directions of the first four gaps (Gap 5 = the sum of Gap 1, Gap 2, Gap 3, and Gap 4).

To evaluate the quality of service, consumers will compare the service they received with the service they expected, i.e. P-E with P being the consumer’s perceived level of service received and E being consumer expectation prior to the service encounter. A negative number would indicate that expectations were not met. A zero would indicate consumer expectations were met. A positive number would indicate consumer expectations were exceeded (Kurtz & Clow, 1998, p. 110).

The benefits sought by the money, time, and energy invested by customers during service transactions are achieved when the service is delivered by the service provider
Figure 2. Conceptual Model of Service Quality

(Source: Parasuraman, Zeithaml, & Berry, 1985)
with competence, convenience, respect, care, and integrity (Berry, 1995). Berry stated that organizations should set high service quality goals that achieve "great service" and not just "good service." He wrote:

Good service isn’t good enough to insure differentiation from competitors, to build sold customer relationships, to compete on value without competing on price, to inspire employees to what to become even better at their work and at their lives, to deliver an unmistakable financial dividend.

(p. 4)

Factors that Influence Customer Expectations of Service

Expectations play such a critical role in a customer evaluation of services. Customer service expectations can be categorized into five overall dimensions: reliability, tangibles, responsiveness, assurance, and empathy (Parasuraman, et al., 1991). Kurtz and Clow (1998) developed a model that identified three primary areas where antecedents of consumer expectations are developed. Those areas include internal factors, external factors, and firm-produced factors. They encompass the following:

1. Internal factors include the consumer’s personal needs, level of involvement, and past experience;

2. External factors include competitive options, social context, and word-of-mouth communications;

3. Situational factors include reason for purchase, the consumer’s mood, the weather, time constraints, and whether the service is an emergency.
Antecedents of consumer’s expectations are numerous. However, there are several factors that shape consumers’ expectations. As much as possible, marketers like to control these factors, but many of the forces that influence customer expectations are uncontrollable. According to Davidow and Uttal (1989):

Service expectations are formed from many uncontrollable factors, from the experience of customers with other companies and their advertising to a customer’s psychological state at the time of service deliver. Strictly speaking, what customers expect is as diverse as their education, values, and experience. The same advertisement that shouts ‘personal service’ to one person tells another that advertiser has promised more than it can possibly deliver. (p. 85)

Zeithmal et al. (1988) in their service quality model, honed in on three primary areas: personal needs, word-of-mouth communication, and past experiences. Zeithmal and Bitner (2000) define personal needs as those states or conditions essential to the physical or psychological well being of the customer. Personal needs can fall into many categories, including physical, social, psychological, and functional. Personal needs are based on Maslow’s (1970) Hierarchy of Needs model. According to Maslow, lower-order needs must be fully or at least partially satisfied in a sequential order before higher-order needs could affect human behavior. Basic needs are physiological needs, safety needs, and social-belongingness needs. Maslow further states that two higher-order needs of self-esteem and self-actualization are tougher to satisfy.
A second influencer of expectations is word-of-mouth communication. Word-of-month communication in shaping expectations of service is well documented (Davis, Guiltina, & Jones, 1979; George & Berry, 1981). The personal and sometimes non-personal statements made by parties other than the organization convey to customers what the service will be like and influence both predicted and desired service (Zeithaml et al., 2000). Word-of-month communication carries particular weight as an information source because it is perceived as unbiased. Word-of-month tends to be very important in services that are difficult to evaluate before purchase and direct experience of them. Murray (1991) suggests that word-of-mouth is the strongest source of information used by consumers in forming expectations. Experts (including Consumer Reports, friends, and family) are also word-of-month sources that can affect the levels of desired and predicted service.

Finally, past experience is third influencer of expectations in Zeithmal et al. (1988) service quality model. The customer’s previous exposure to service that is relevant to the focal service, is another source in shaping predictions and desires. The service relevant for prediction can be previous exposure to the focal firm’s service. Cadotte, Woodruff, and Jenkins (1987) stated that past experience may incorporate previous experience with the focal brand, typical performance of a favorite brand, experience with the brand last purchased or the top-selling brand, as well as the average performance a customer believes represents a group of similar brands.
Marketers and many authors tend to use the terms satisfaction and quality interchangeably, but researchers have attempted to be more precise about the meanings and measurement of the two concepts, resulting in considerable debate (Parasuraman et al., 1994; Swartz, Bowen, & Brown, 1994). It is basically accepted that the two concepts are fundamentally different in terms of their underlying causes and outcomes. Satisfaction is generally viewed as a broader concept while service quality assessment focuses specifically on dimensions of services. Parasuraman, Zeithaml, and Berry (1985, 1988) hypothesized that service quality is an antecedent of customer satisfaction. Based on this view, perceived service quality is a component of customer satisfaction, and purchase intentions. They established three propositions for their study which stated:

1. Customer satisfaction is an antecedent of perceived service quality.
2. Consumer satisfaction has a significant impact on purchase intentions.
3. Perceived service quality has a significant impact on purchase intentions.

In this question, Cronin and Taylor (1992) sought to consider the causal order of the consumer satisfaction and service quality relationship. Further they sought to establish the effect of consumer satisfaction on purchase intentions and the effect of service quality on purchase intentions. The results of their study found that propositions one and two have a significant effect on consumer satisfaction and purchase intentions, respectively. However, proposition three was found that service quality does not have a significant impact on purchase intentions. It is important to note that Cronin and Taylor
used their SERVPERF model to test the above propositions and not SERVQUAL. Satisfaction is the consumer’s fulfillment response. Satisfaction is the customers’ evaluation of a product or service in terms of whether that product or service has met their needs and expectations. Failure to meet needs and expectations is assumed to result in dissatisfaction with the product or service.

Evidence also have shown that customer satisfaction and service quality perceptions affect consumers intentions to behave in other positive ways—praising the firm, preferring the company over others, increasing their volume of purchases, or agreeable paying a price premium (Zeithmal & Bitner, 2000). Cronin and Taylor (1992) as well as several other researchers looked only at overall benefits in terms of purchase intention rather than examining specific types of behavior intentions. Zeithmal and Bitner stated (in a study by Boulding, Staelin, Kalra, & Zeithaml, 1993) in their text that in one study involving university students, strong links between service quality and other behavioral intentions of strategic importance to a university were found, including saying positive things about the school, planning to contribute money to the class pledge upon graduation, and planning to recommend the school to employers as a place from which to recruit.

Using SERVQUAL to Measure Service Quality

SERVQUAL is a two-part instrument, with 22 items measuring expectations of customers and 22 similarly worded items measuring perceptions or experiences of customers to measure service quality. It is a multiple-item scale for measuring consumer perception of service quality (Parasuraman et al., 1985; 1988a; 1988b; 1991).
SERVQUAL is designed as a diagnostic instrument to assess where strengths and weakness of service lie within a business or institution. The first part of the questionnaire asks customers to indicate the level of service they would expect from a company. The second part of the questionnaire asks customers to evaluate the service performed by a specific service company.

The final instrument was a result of several studies conducted over a period of years. The initial process began with focus group interviews, conducted by Parasuraman et al. (1985). The original SERVQUAL instrument reflected the criteria used by customers in assessing service quality fit 10 dimensions: tangibles, reliability, responsiveness, communication, credibility, security, competence courtesy, understanding/knowing the customer, and access. These criteria found form their exploratory research served as the foundation for the SERVQUAL instrument (Parasuraman et al., 1988). The development of the final instrument resulted from numerous revisions and extensive use of factor analysis to determine the five distinct dimensions of quality service as offered by Parasuraman et al. (1985, 1988, 1990 1991). The five dimensions (independent variables) are:

1. Tangibles—physical facilities, equipment, and appearance of personnel/employees (faculty and staff members of the school of business).
2. Reliability—ability to perform the promise service dependably and accurately;
3. Responsiveness—willingness to help customers (students) and provide prompt service;
4. Assurance—knowledge and courtesy of employees (staff and administration) and their ability to inspire trust and confidence;

5. Empathy caring—individualized attention the firm provides its customers.

Each of the five distinct dimensions is represented in the 22-item SERVQUAL scale. The dimensions, Tangibles, Responsiveness, and Assurance, have four items each, and the other two dimensions, Reliability and Empathy, have five items each. Additionally the instrument also contains a section designed to ascertain customers’ assessment of the relative importance of the five dimensions. The researchers’ initial study of the SERVQUAL dimensions found that users considered all five dimensions to be critical (Parasuraman et al., 1988). Parasuraman et al. have used SERVQUAL with service companies in banking, credit cards, product repair, insurance and telephones. The authors found SERVQUAL to be reliable, exhibiting high internal consistency. In their research, Parasuraman et al. (1988b) discovered that Reliability was the most critical dimension, regardless of the service being studied. A factor analysis of the SERVQUAL instrument resulted in a scale reliability of approximately .90. They have claimed that the five dimensions of service quality as they have defined them are fairly consistent across their studies, as determined by factor analyses. The SERVQUAL instrument was judged to have content validity by examining the extent to which the items represented the construct’s domain. Convergent validity was examined by contrasting SERVQUAL scores to responses to a question about overall quality ratings (Parasuraman et al., 1991). Further, high regression scores supported their claims for construct validity.
Parasuraman et al. (1988b, 1991) have used SERVQUAL to study the quality of services in a variety of service companies, including banking, credit card, and product repair, insurance, and communication companies. Other researchers have used the SERVQUAL instrument to study service quality in variety of settings, such as securities broker, hospital physician’s offices, dental school patient clinic, business school placement center, tire store, acute care hospital, public recreation programs, real estate brokers (Brown, Churchill, & Peter, 1993). Pitt, Oostuizen, and Morris (1992) supported SERQUAL reliability, content validity and convergent validity. They suggested that the five dimensions are not as generic as proposed and SERVQUAL may need modifications in certain applications. Bresniger and Lambert (1990) found SERVQUAL generalize in business-to-business services. Carman (1990) suggested minor customizing of SERVQUAL by rewording and/or augmenting items under each of the five dimensions to make them more germane to the context in which the instrument is being used.

The correct use of SERVQUAL requires some modifications of the instrument to fit the specific industry for which it is being used, and interpretation must be within the context of comparing a specific service firm with the ideal service firm in the industry, which may or may not actually exist. Kurtz and Clow (2000) suggest preventing instrument biases from interfering with the gap scores; consumer expectations should be measured prior to the service and service perceptions after the service.

**Criticism of SERVQUAL**

Despite the extensive use and numerous citations in service quality related literature of SERVQUAL, there are researchers in the field who have criticized the
instrument. Some of the critics of SERVQUAL, such as Carman (1990), argued that
SERVQUAL needed to be customized to the specific service and that more replication
and testing of the SERVQUAL dimensions and measures are needed before accepting it
as a valid generic measure of perceived service quality that can be used in any retailing or
service situation. Carman conducted a study that replicated SERVQUAL dimensions and
measures. Carman found that SERVQUAL to be consistent in many areas but needed
some changes in adapting the instrument to a particular setting.

Cronin and Taylor (1992) criticized SERVQUAL based on conceptual,
methodological, analytical, and practical issues, which were demonstrated using a survey
of customers in the banking, pest control, dry cleaning, and fast food industries. They
questioned the necessity of measuring customer expectations in service quality research.
They raised concerns about the specification of service quality as the gap between
customers' expectations and perceptions. Also, they raised questions about SERVQUAL
as a two-part instrument for measuring service quality. Cronin and Taylor (1992, 1994),
Brown, Peter, Churchill, and Teas (1993) questioned the use of differences scores, and
more specifically, the merit of using expectations as a comparison standard in measuring
service quality. Brown et al. (1993) criticized the use of difference scores (expectations
minus perceptions) to create a separate variable, which in turn serves as the overall
measurement of service quality, which is Gap 5 of the SERVQUAL instrument. Cronin
and Taylor (1992) suggested that measuring perception was sufficient; however, Tease
questioned the interpretation of the expectations standard.
Brown et al. (1993) investigated responses from undergraduate students enrolled in business courses at a single university. They administered two surveys, a difference score questionnaire and a non-difference score questionnaire. Brown et al. described three instances where the use of difference scores to measure service quality can lead to psychometric problems. Those instances included reliability, discriminate validity, and errors induced by variance restriction. The authors contended that because of a positive correlation between the component scores, the reliability of the resulting difference score was intensified. Brown et al. also asserted that “a measure with low reliability may appear to possess discriminate validity simply because it is unreliable” (p.130). Brown et al. (1993) also reported that variance restriction occurs when expectations component scores used to calculate the difference score is consistently higher than the experiences component. Variance restriction can create a problem in types of statistical analyses that require equality of variance. A second problem identified in the Brown et al. study was that the five dimensions of the SERVQUAL instrument did not replicate. The researchers found the instrument to have less than five dimensions and in fact might represent a “unidimensional” construct, which is a similar compliant of Cronin et al. (1992). Brown et al. concluded that a non-difference score version of the SERVQUAL scale could serve as a useful starting point for the measurement of service quality.

Responses to Criticisms of SERVQUAL

Parasuraman et al. (1993; 1994) published two responses to criticisms of their SERVQUAL model. In their 1993 response they specifically addressed questions that Brown et al. (1993) raised concerning the appropriateness of the instrument. In their
1994 article they addressed criticism articulated by Carman’s 1990 article and Cronin and Taylor’s 1992 study of the SERVQUAL instrument.

Parasuraman et al. (1993) concluded that the primary focus of Brown et al. (1993) criticism of SERVQUAL is the difference-score (i.e., perception minus expectation) to make service quality operational. In their response they addressed the psychometric concerns about the SERVQUAL conceptualization. Parasuraman et al. (1993) set aside the allegations of Brown et al. concerning high correlation and low reliability of the SERVQUAL instrument as not being a serious threat, particularly since the construct being manipulated is an expectation minus perception difference score. Parasuraman et al. reported a moderate correlation between the SERVQUAL’s experience and perception scales. Similarly, Brown et al. reported a relatively moderate correlation of .34 between the two components of SERVQUAL (.94 for expectations and .96 for perceptions). In addressing the problem of an inflated discriminate validity as a result of low reliability, Parasuraman et al. stated that the fact that the reliability of the SERVQUAL instrument has been shown to be consistently high makes this a non-issue. Parasuraman et al. acknowledged that variance restriction is a legitimate concern given the high mean value and low standard deviation for the expectations component of SERVQUAL relative to the perceptions component. However, this concern is not relevant if the difference scores are used only for diagnostic purposes.

In response to Cronin and Taylor’s (1992) study, Parasuraman et al. (1994) emphasized that their previous research (e.g., 1985; 1988; 1990) provided strong supporters defining service quality as the discrepancy between customers’ expectations
and perceptions. As sited in Parasuraman et al., (1994), the conceptual work in the service quality literature (Gronroos, 1982; Lehtine & Lehtine, 1982; Sasser, Olsen, & Wyckoff, 1978) supports the disconfirmation of expectations conceptualization of service quality. Further, Bolton and Drew (1991) supported the findings of Parasuraman et al. concerning the importance of the gap between performance and expectations in determining overall service quality perception as a precursor of customer satisfaction. Parasuraman et al. rejected Cronin and Taylor’s claim that the SERVQUAL model is flawed and that a performance-based measure is superior to the SERVQUAL measure.

In response to Carmen’s (1990) criticism of SERVQUAL that questioned the universal applicability of the instrument, Parasuraman et al. (1994) argued that the SERVQUAL items do represent core evaluation criteria for the measurement of service quality. However, they did agree that the individual SERVQUAL items should be viewed as a basic “skeleton” that should be supplemented with content-specific items when necessary.

*Measuring Service Quality in Higher Education*

Higher education possesses all the fundamental characteristics of a service industry. Educational services are intangible, heterogeneous; inseparable from the person delivering it, simultaneously produced and consumed, perishable and the customer (student) participates in the process. Colleges and universities are increasingly finding themselves in an environment that is favorable to understanding the role and importance of service quality (Shank, Walker, & Hayes, 1995). The majority of service quality research has been conducted in fields outside education, and were undertaken to verify
the use of the SERVQUAL instrument in measuring service quality. Allen and Davis (1991) conducted a study to link service quality of a MBA program to recommendation, donation and identification behaviors of graduate students and alumni.

In the original design of the SERVQUAL instrument, Parasuraman et al. (1998) collected data from respondents in five service categories—appliance repair and maintenance, retail banking, long distance telephone, securities brokerage, and credit cards. In their research, they concluded that SERVQUAL can be adapted or supplemented to fit the characteristics of specific research needs of a particular organization.

SERVQUAL has been successfully adapted to serve in different service settings. Through extensive exploratory work, Pritchard (1993) developed PHARM-SERVQUAL, a 26-item, three dimensional instrument to measure the quality of service as assessed by retail pharmacy patrons and retail pharmacists.

Anci du Toit (2003) employed the SERVQUAL model/instrument, originally developed to measure satisfaction in the services industry, to ascertain the perceptions of students at the Rand Afrikaans University regarding their experience. It required the respondents to indicate their expectation as well as their real experience regarding attributes (as formulated in statements). The difference between the expectations of a service and the perceived value of the service represents a gap that may either be positive or negative. The diagnostic ability of the instrument allows one not only to gauge the overall level of student satisfaction, but also to identify dimensions where experience transcends expectations (best practice), dimensions where experience is equal to
expectations, and dimensions where experience falls short of the expectations. In identifying where gaps exist, it is thus possible to reveal specific areas where improvements can be made to raise the level of student satisfaction.

Boulding, Staeling, Kalra, and Zeithaml (1993) employed a modified SERVQUAL instrument of 36 items to study expectations and perceptions associated with the delivery of services in an educational setting. The expectations scale of the researcher’s instrument was altered to reflect either what a student expects “will” happen or what a student expects “should” happen during the delivery of professional services in the educational process. Boulding et al. (1993) also asked the responding students how likely they would be to recommend their school or to donate money in the future. Boulding et al. concluded that the greater the students’ perceptions of a university’s overall service quality, the more likely these students would recommend their school and or donate money in the future.

When contrasting what a student believes a university will provide with what it should provide, Boulding et al. (1993) found that “increasing customer expectations of what a firm will provide during future service encounters actually leads to higher perceptions of quality after the customer is exposed to the actual service, all else being equal” (p. 40). Boulding et al. also concluded that students with higher perceptions of a university’s overall service quality were more likely to recommend their university to others and to contribute money to the university.

Chen (1994) conducted a study applying a modified SERVQUAL instrument to the Minnesota Extension Service. Chen found that the modified SERVQUAL instrument
was well received by the Extension Service clientele and employees. Schwantz (1996) used a modified SERVQUAL instrument to compare traditional and non-traditional students’ views of service quality at the one higher education institution. Schwantz studied responses from traditional undergraduate students (age 25 and over). The researcher asked students to compare service quality (expected and received) from support staff with that from faculty.

Schwantz (1996) found, regarding service quality, no significant difference \((p = .669)\) in the expectations or perceptions of traditional versus non-traditional students. There was no significant difference \((p = .901)\) in students’ expectations of support staff versus faculty. However, there was a significant difference \((p < .001)\) in the students’ perceptions of support staff versus faculty, with staff scoring below faculty in every area measured in the instrument.

Also, Hampton (1993) used a gap analysis approach based on the SERVQUAL model to research college student satisfaction with professional service quality. Hampton applied the gap methodology (expectations minus experiences) to examine students’ perceptions of service delivery. Based on the results of Hampton’s, the author wrote that “One should note that gaps between actual experiences and expectations of clients are the general definition of consumer satisfaction” and that “perhaps university education is one of those services where satisfaction and service quality are one and the same” (p. 116-117). Hampton’s questionnaire contained 45 attributes, which were similar in format to the SERVQUAL model. The survey’s 45 statements were grouped into seven factors: (a) Quality of Education Here, (b) Teaching, (c) Social Life—Personal, (d) Campus
Facilities, (e) Effort to Pass Courses, (f) Social Life—Campus, and (g) Student Advising. Each item was measured on two separate scales, Expectations and Experiences. The questionnaire contained one additional item on overall satisfaction. Survey participants were randomly selected from 53 classes from a single university.

Hampton (1993) found a negative correlation ($p < .001$) between the gap scores and overall satisfaction. This finding supported the research’s hypothesis that as the gap increases overall satisfaction decreases. Hampton (1993) concluded that there was a significant relationship between students’ perceptual gaps and their evaluation of service quality. Hampton also concluded that expectation/experience gaps could be measure of service quality for the professional services delivered by institutions of higher education.

Several other studies have been conducted in higher education using Gap Analysis methodology. Kearney and Kearney (1994) used the Gap Analysis to study how the gap between transfer student expectations and perceptions was related to: (a) persistence at their present university, (b) graduation from their present university, (c) dropout from their present university, and (d) academic performance at their present university. The study was conducted of undergraduate college students who transferred to a large public Midwestern University. Students who had graduated or had enrolled in classes during the previous year were classified as “persisters,” and students who had not enrolled at their present university during the previous year were classified as “non-persisters” by the researchers. The researchers conducted an initial investigation and follow up investigation.
Kearny and Kearny's (1994) research objective was to explore how gap between students’ initial expectations (1989 survey) and later perceptions (1993 survey) were related to persistence and graduation. The researchers used a gap analysis model to examine the changes in perceptions of transfer students concerning the 12 institutional characteristics addressed on both the 1989 and the 1993 surveys. Based on the results of their study, Kearney and Kearney (1994) concluded that the experiences of multiple transfer students did not measure up to initial expectations. The respondents were particularly dissatisfied with the university’s academic characteristics, which had been the most important factors to them when they matriculated. Kearney and Kearney also suggested that colleges and universities take steps to "temper" student’s expectations by improving their communication with prospective and newly admitted students. However, the authors pointed out the importance for colleges and universities to do institution-specific studies to assess expectation gaps on their own campuses before attempting to implement programmatic initiatives.

DiDomenico and Bonnici (1996) conducted a study at a single university formed on the construct of the original 1985 study by Parasuraman et al. that included 10 service dimensions: Responsiveness, Reliability, Tangibles, Communication, Competence, Access, Credibility, Courtesy, Understanding/knowing the customer, and Security. A gap analysis method was use to measure the university along all Parasuraman et al. 10 original dimensions. They had students compare the level of current service provided to an ideal level of service. DiDomenico and Bonnici (1996) reported differences between the expectations scores as a gap score. Scores below zero meant that the students’
perceptions of their university services were below expectation. Positive scores meant that the services provided by the institution were higher than they expected. The investigation found that tangibility was the only dimension that surpassed students’ expectations all the other variables scored in the negative. The lowest scores were for Reliability, followed by Responsiveness and Competence. Based on their study, DiDomenico and Bonnici concluded that:

Outstanding service quality, as perceived by the customer, can give any organization a competitive advantage. In order to acquire and maintain this competitive advantage, universities must determine where they stand in the eyes of the students. Facing escalating tuition costs, students are increasingly selective about what they are receiving for their hard earned money. Besides, the demographic squeeze at the traditional student age is increasingly converting education into buyer’s market. In order to survive the competitive rivalry within higher education, universities need to provide better service to the students; hence the need for service measurement. (p. 356)

Wolverton (1995) took different approach by conducting a qualitative study of existence of gaps in organizational communication that influence stakeholder expectations and perceptions of quality. The researcher interviewed current doctoral students, program faculty, administrators, and recent program graduates at a single university. The researcher also interviewed prospective employers (school superintendents), and current students in another university’s educational administration
program. In Wolverton’s revised gap analysis model, five areas were incorporated in the study. The areas were Internal information, External information, Vision, Education performance, Communication, and Quality. As a result of the investigation, Wolverton (1995) found gaps in all five areas of the organizations internal and external communications systems. The differences were evident in the following areas:

1. Students expectations and faculty perceptions of student expectations;
2. Practitioner expectations and program faculty and administrator perceptions of practitioner expectations;
3. Administrator expectations for the program and faculty perceptions of administrator expectations;
4. The education program students, faculty, and administrators would like to see delivered and each group’s perceptions of program which is actually delivered;
5. The Program and what is communicated about the program.
6. Wolverton (1995) concluded that the SERVQUAL model held potential as a diagnostic tool for assessing education programs and systematically identifying areas where program change could have the greatest impact on program quality.

Summary

Zeithaml (as expressed in Zeithaml, et al, 1985) stressed the importance of measuring the perceptions of students because they usually participate in producing the service, thereby affecting the performance and quality of the final service. Seymour
(1992) wrote that service quality is a perception, and that perception then becomes the user's reality. Colleges and universities contend with the perceptions of a number of stakeholders such as students, faculty, staff, administrators, state legislators, school boards, parents, state regulatory agencies, and accrediting agencies. Therefore, understanding service quality in terms of the perceptions of the various stakeholders is a difficult problem for colleges and universities.

User satisfaction is often used synonymous with service quality. Satisfaction may be the most important element of a program of service quality improvement. Satisfaction in terms of service quality can be evaluated by assessing the expectations and perceptions of current and potential customers. Neglecting this step can result in wasted efforts and can lead to the failure of any service quality improvement initiative.

Based on the research and studies cited in this chapter, the researcher determined that: (a) the expectation/perception gap can be appropriately used to identify service areas in need of improvement (b) gap analysis methodology can be a useful diagnostic tool in efforts to understand customer (student) satisfaction; (c) SERVQUAL, with adaptations, may be a valid and reliable instrument for the measurement of service quality in higher education. These three conclusions formed the basis for this study.
CHAPTER III
THEORETICAL FRAMEWORK

The theoretical framework focuses on the variables that include: behavior intentions, tangible expectations and perceptions, reliability expectations and perceptions, responsiveness expectations and perceptions, assurance expectations and perceptions, and empathy expectations and perceptions. These variables were examined for their relationship to the dependant variable of service satisfaction. This variable speaks to the overall satisfaction of students and is used in the analyses of data in testing research questions which will form the null hypotheses for this study. The assumption is: There is a significant correlation between the sum gap scores and service satisfaction. The perception that a student has received satisfactory service can be determined by evaluating the gaps in expectation vs. perception of the following elements:

- Tangibles
- Reliability
- Responsiveness
- Assurance
- Empathy

Service Satisfaction may be influenced by SERVQUAL five dimensions. SERVQUAL is an empirically derived method that may be used by a services
organization to improve service quality. The method involves the development of an understanding of the perceived service needs of target customers. These measured perceptions of service quality for the organization in question, are then compared against an organization that is "excellent." The resulting gap analysis may then be used as a driver for service quality improvement. The definitions of all variables as they relate to Service Quality and student are discussed and research questions are presented.

Education is a service directly impacted on by the provider, and it is only as effective or inadequate as the quality of both the academic and non-academic services delivered. Higher Education institutions are increasingly placing greater emphasis on meeting students' expectations and needs.

Student satisfaction is furthermore important in the Higher Education sector due to its role in competing for a high caliber of students and in the retention of students. It is also important to the referral of prospective students and often receives prominence in strategic mission statements and objectives. The contribution to costs by students/parents makes additional demands on the quality of the service delivered.

As universities continue to become more student oriented, student perceptions of higher educational facilities and services are becoming more important. It is absolutely critical therefore, that universities develop some form of evaluating, tracking and managing the student perceptions of service quality.
Definition of Variables

**Dependent Variable**

*Service Satisfaction:* What is the perceived student satisfaction of service quality at the University? This variable speaks to the overall satisfaction of students and is used in the analyses of data in testing the research question; “Is there a significant relationship between stated overall satisfaction with services and the summed gap scores?”

**Independent variables**

*Tangibles:* This variable speaks to the students’ expectation of the buildings, classrooms, faculty and staff physical appearance. This variable is an observation of the physical appearances at the University.

*Reliability:* This variable speaks to the students’ reliability expectation of the services and actions received by the faculty and staff at the University. The variable speaks to the performance level of the university’s faculty and staff.

*Responsiveness:* This variable speaks to the students’ responsiveness expectation of the staff and faculty’s willingness to help students and provide prompt service. (the expectation that things will be completed in a timely manner)

*Assurance:* This variable speaks to the students’ assurance expectations of the staff and faculty knowledge and courtesy and their ability to convey trust.

*Empathy:* This variable speaks to the students’ empathy expectation of the university personnel’s ability to provide care and individualized attention to its students.

*Behavior Intentions:* This variable speaks to how students are committed to the institution based on their satisfaction of service quality and will be used in the analyses of
data in testing the research question; “Is there a significant relationship between overall satisfaction with services and students commitment to the institution?”

Demographics: Selective demographic variables of ethnicity, gender, year of study, and concentration/degree program

Figure 3 shows the relationship among the variables.

Research Questions

The following questions will form the null hypotheses for this investigation.

RQ1: Is there a significant relationship between students’ satisfaction of services and Tangibles (physical appearance of facilities and personnel)?

RQ2: Is there a significant relationship between students’ satisfaction and students’ responsiveness expectation of the staff and faculty’s (willingness to help students and provide prompt service)?

RQ3: Is there a significant relationship between students’ satisfaction and students’ reliability expectation of the services and actions received by the faculty and staff at the university?

RQ4: Is there a significant relationship between students’ satisfaction and students’ assurance expectations of the staff and faculty knowledge, courtesy, and their ability to convey trust?

RQ5: Is there a significant relationship between students’ satisfaction and students’ empathy expectation of the university personnel’s ability to provide care and individualized attention to its students?
Figure 3. Relationship among the Variables
RQ6: What is the relationship between stated overall satisfaction with services and the total summed gap scores?

RQ7: What are the relationships between summed gap scores and overall satisfaction with services and students intentions to behave?

RQ8: Are there differences among the ways in which students perceive service quality based on their year of study in school, i.e. first year, second year and Program for Working Professionals?

Additionally, for the purpose of this study, the researcher constructed questions directly related to the dean, department chairs, faculty, and instruction (E13, E14, E25, E26, and E27). The findings related to questions specific to the dean, department, chairs, faculty, and instruction are detailed in Chapter IV of this study. As in previous studies in educational settings and as expressed by Parauraman et al. (1988), SERVQUAL can be adapted or supplemented to fit characteristics of specific research needs of a particular organization.
CHAPTER IV
RESEARCH METHODOLOGY

This study is designed to use a service quality model to investigate graduate students’ perception of service quality in a higher education setting in a school of Business at a historically black university by determining if gaps exist in students’ expectations versus the perceptions of their actual experiences with services deliver by their academic programs. In addition, this study was to examine the relationship of selected demographic characteristics with any such gaps. The principal method used in the collection of data was a modified version of the SERVQUAL survey instrument. Also, interviews were conducted ad hoc with current students and alumni of the school of business. Descriptive statistics include analysis of variance, Pearson’s r, and Cronbach’s alpha. Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data. Various techniques that are commonly used are classified as: (a) Graphical description in which we use graphs to summarize data, (b) Tabular description in which we use tables to summarize data, and (c) Summary statistics that calculate certain values to summarize data. Analysis of the variance is used to test for differences among two or more independent groups. Typically, however, the One-way ANOVA is
used to test for differences among at least three groups, since the two-group case can be covered by a T-test. When there are only two means to compare, the T-test and the F-test are equivalent; the relation between ANOVA and "t" is given by $F = t^2$. The correlation between two variables reflects the degree to which the variables are related. The most common measure of correlation is the Pearson Product Moment Correlation (called Pearson's correlation for short). When measured in a population the Pearson Product Moment correlation is designated by the Greek letter rho ($\rho$). When computed in a sample, it is designated by the letter "r" and is sometimes called "Pearson's r." Pearson's correlation reflects the degree of linear relationship between two variables. It ranges from +1 to -1. A correlation of +1 means that there is a perfect positive linear relationship between variables. Cronbach's alpha measures how well a set of items (or variables) measures a single unidimensional latent construct. When data have a multidimensional structure, Cronbach's alpha will usually be low. Technically speaking, Cronbach's alpha is not a statistical test—it is a coefficient of reliability (or consistency). The researcher required students to compare their perceptions with their expectations, thereby giving a measure of gaps in educational service quality. Gap scores were computed by subtracting a student's perception score on an item from his or her expectation score on that item. This chapter consists of descriptions of the population and sample, the research design, the instrument, the data collection procedures, the hypotheses, and the data analysis methods used in the study.
Population and Sample

The population consisted of all graduate students, enrolled in historically black university school of business administration during the spring semester for year 2008. This population of students was a representative sample of typical students enrolled in similar programs. The accessible population was students enrolled during the spring 2008 semester of course work. The population based on degree programs is reflected in Table 1.

Table 1

*Degree Program Grouping—Population and Sample*

<table>
<thead>
<tr>
<th>Degree Program</th>
<th>N Sample</th>
<th>% of Sample</th>
<th>N Population</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>2</td>
<td>4%</td>
<td>10</td>
<td>10.5%</td>
</tr>
<tr>
<td>Decision Science</td>
<td>4</td>
<td>8%</td>
<td>10</td>
<td>10.5%</td>
</tr>
<tr>
<td>Finance</td>
<td>26</td>
<td>48%</td>
<td>42</td>
<td>45.0%</td>
</tr>
<tr>
<td>Marketing</td>
<td>21</td>
<td>40%</td>
<td>32</td>
<td>34.0%</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>100%</td>
<td>94</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 2 shows that females represented 54% of the population and 55% of the sample; males represent 46% of the population and 44% of sample.
Table 2

**Gender Population**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Sample N</th>
<th>% of Sample</th>
<th>Population N</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>24</td>
<td>45%</td>
<td>43</td>
<td>46%</td>
</tr>
<tr>
<td>Female</td>
<td>29</td>
<td>55%</td>
<td>51</td>
<td>54%</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>100%</td>
<td>94</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows that African-Americans represented 86% of the population and 89% of the sample, and other represented 14% of the population and 11% of the sample. The school of business administration at the university’s other population consisted of 10 African, 1 Bahamian, 1 Trinidadian, and 1 Jamaican student.

Table 3

**Ethnicity—Population and Sample**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Sample N</th>
<th>% of Sample</th>
<th>Population N</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American</td>
<td>47</td>
<td>89%</td>
<td>81</td>
<td>86%</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>11%</td>
<td>13</td>
<td>14%</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>100%</td>
<td>94</td>
<td></td>
</tr>
</tbody>
</table>

The size of the population consisted of 94 students, which represented the Spring 2008 Semester school of business graduate enrollment. The population in terms of graduate enrollment according to year of study is displayed in Table 4.
Table 4

*Classification—Population and Sample*

<table>
<thead>
<tr>
<th>Classification</th>
<th>N</th>
<th>% of N</th>
<th>N</th>
<th>% of N</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year MBA Class of 2009</td>
<td>21</td>
<td>40%</td>
<td>32</td>
<td>34%</td>
</tr>
<tr>
<td>Second Year MBA Class of 2008</td>
<td>18</td>
<td>34%</td>
<td>34</td>
<td>36%</td>
</tr>
<tr>
<td>Weekend MBA</td>
<td>14</td>
<td>26%</td>
<td>28</td>
<td>30%</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>100%</td>
<td>94</td>
<td>100%</td>
</tr>
</tbody>
</table>

A proportionate stratified sample of 53 students where surveyed which is approximately 57% of the population. This sampling should provide a good reflection of the total population. According to Floyd J. Fowler, Jr., (1990), stratification increases the precision of estimates of variables to which the stratification variables are related. A sample size was 57% of the population and proportionate to the enrollment of graduate students in the various concentrations/majors. The sample consisted of students from each of the concentrations of the graduate program.

As reflected in Table 4, the population consisted of 34% (32) First Year graduates, 34% (36) Second Years, and 30% (28) of students in the Program for Professionals. Table A shows that of the 53 sample, 21 majored in marketing, 26 in finance, 4 in Decision Science, and 2 in accounting.

**Study Instrument**

A questionnaire was used in this study to measure students' expectations and perceptions of service quality at the University and a cover letter accompanied the
questionnaire (see Appendix B). The purpose of the letter was to solicit participation in the study, describe the importance of participant comments, assure participants of the confidentiality of their responses, and indicate the importance of returning the completed survey. On the instrument’s first page, participants were asked to provide the last four digits of their student identification number for the purpose of ensuring that each returned survey is not duplicated. Because the instruments did not require students to write their names on the survey instrument, respondents felt reassured that their comments were kept confidential. The questionnaire contained six parts. The first part gave the purpose of the study and directions for completion of the questionnaire and 27 statements about students’ expectations of service quality at an excellent school of education. Part two of the questionnaire asked respondents to allocate a total of 100 points among the five features according to the relative importance they placed on the five features which corresponded to the five dimensions of SERVQUAL. Part three of the questionnaire asked respondents to rate their perceptions of their school of business against 27 paired statements, which corresponded to the 27 expectation statements. Part four of the instrument contained one question on the overall satisfaction of the students’ with the school of business and three questions about the students’ behavioral intentions. Part five of the instrument contained questions concerning demographic and biographical information. As reflected in Table 5, a 7-point scale anchored by the ends by the labels “Not at all Essential/Strongly Disagree” (=1) and “Absolutely Essential/Strongly Agree” (=7), was used to generate responses for the various parts of the survey.
The instrument to be used in this study will be a modification of SERVQUAL (Parasuraman et al., 1985, 1988), which is a 44-item self-completed questionnaire that measures consumer expectations and perceptions of service quality. SERVQUAL measures expectations and perceptions of quality along five dimensions of "service quality determinants" (Berry et al., 1985). These five service quality determinants are Tangibles, Reliability, Responsiveness, Assurance, and Empathy. The instrument is in the "public domain", making it readily available to research uses.

Table 5

*Explanation of Scale*

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Not</th>
<th>Minutely</th>
<th>Neutral</th>
<th>Somewhat</th>
<th>Essential</th>
<th>Absolutely Essential</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXPECTATION SCALE</strong></td>
<td>Essential</td>
<td>Essential</td>
<td>Essential</td>
<td>Indifferent</td>
<td>Essential</td>
<td>Essential</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td><strong>PERCEPTION SCALE</strong></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Somewhat Disagree</td>
<td>Neither Agree or Disagree</td>
<td>Somewhat Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td><strong>OVERALL SATISFACTION</strong></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Somewhat Disagree</td>
<td>Neither Agree or Disagree</td>
<td>Somewhat Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

All of the respondents completed identical questionnaires.

SERVQUAL will be slightly modified in the present study to reflect the nature of business services in a school of business. Parasuraman et al. (1988) indicated that such
modifications were appropriate and do not represent difficulties related to the reliability and validity of the instrument. The revisions will include the addition of the institution's name and references to the "student" rather than to the "customer" as well as revisions suggested by the researcher's advisor, dissertation committee or panel, if applicable.

Data Analysis

The data collection instrument is a questionnaire. A descriptive research design and statistical analysis methodology will be used to address the research questions. Description research involves the collection of data to answer questions concerning the current status of a given subject. Descriptive research may involve the formation of a hypothesis and collection of data to test that hypothesis. One frequently used form of descriptive research involves assessing attitudes or opinions toward individuals, organizations, events, or procedures (Gay, 1992).

The research questions were used as a foundation for the analysis of the data to be collected. The researcher analyzed data from the study using descriptive and inferential statistical procedures from the Statistical Package for Social Sciences (SPSS).

A reoccurring issue in data analysis of Likert or semantic differential response scales is the appropriateness of certain statistical techniques. DeVellis (1991) pointed out that data collected by Likert-type scales might be considered ordinal by some researchers; yet, he also states that a wealth of accumulated experience and prevailing viewpoints support applying interval-based analytic methods to Likert scales (e.g., Brown & Swartz, 1989; Hampton, 1993; Parasuraman et al., 1988b; Schwantz, 1996). However, according to DeVellis (1991) a majority of behavioral researchers subscribed to Nunnally (1978)
suggestion that “it is permissible to treat most of the measurement methods in psychology and other behavioral sciences as leading to interval scales,” and argued that “no harm is done in most studies in the behavioral sciences by employing methods of mathematical and statistical analysis which take intervals seriously” (p. 17).

Data Collection Procedures

Initial contact was made to professors in the school of business. Most professors invited the researcher to their classes to administer the survey. Each survey was coded using the last four digits of the students identification number, i.e., XXXXX1234. The researcher requested the support of faculty to allow the surveys to be personally delivered and administered during class time. In cases where this was permitted, the researcher collected the surveys during that time. In cases where it was not possible, the faculty collected that survey and delivered the completed surveys in an envelope to the researcher. The researcher assured each respondent of total anonymity. The intended purpose of the data collection was to obtain sufficient information from the survey to reject or fail to reject the null hypotheses.
CHAPTER V

DATA ANALYSIS

The purpose of this study was to use a service quality model to investigate the gaps between expectations and perceptions of graduate students at a school of business setting in a private university in the southeastern United States, and the relationship of year of study (first year, second year, program for professionals) with any such gaps. The researcher gathered data for the study during the Spring Semester of 2008. A total of 53 useable questionnaires were returned from a target sample of 94 students, a return rate of 56.4%. The range of survey returns was reflective of the data collection procedure. Surveys were delivered to classes and students completed and returned the surveys during the same class period. The sample according to student classification is summarized in Table 4 (Chapter IV). As shown in Table 4, 40% of the respondents were First Year graduate students, 34% were Second Year graduate students, and 26% were in the Program for Professionals seeking a MBA or MA in accounting.

Demographic Data

The researcher asked students to answer several demographic questions regarding their gender, ethnicity, classification, and degree program (Table 6). As shown in Table 6, over 54.7% of the respondents were female. A majority of the respondents (88.7%) were African American. There was no majority from any particular degree program,
Table 6

Demographic Characteristics of the Sample/Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Count</th>
<th>%</th>
<th>Ethnicity</th>
<th>Count</th>
<th>%</th>
<th>Classification</th>
<th>Count</th>
<th>%</th>
<th>Degree Program Grouping</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>24</td>
<td>45.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Female</td>
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<td>55.0%</td>
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</tr>
<tr>
<td>Classification</td>
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<td></td>
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</tr>
<tr>
<td>First Year</td>
<td>21</td>
<td>39.6%</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Year</td>
<td>18</td>
<td>33.9%</td>
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<td></td>
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<tr>
<td>Program for</td>
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<td></td>
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<tr>
<td>Professionals</td>
<td>14</td>
<td>26.5%</td>
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<tr>
<td>Ethnicity</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>47</td>
<td>88.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Other</td>
<td>6</td>
<td>11.3%</td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>Degree Program</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounting</td>
<td>2</td>
<td>60.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision Science</td>
<td>4</td>
<td>8.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>26</td>
<td>7.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>21</td>
<td>7.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>100%</td>
<td>53</td>
<td>100%</td>
<td>53</td>
<td>100%</td>
<td>53</td>
<td>100%</td>
<td></td>
<td>53</td>
<td>100%</td>
</tr>
</tbody>
</table>
however, a bulk of the respondents were finance majors (48.0%). The percentages of concentration/degree program respondents were reflective of the enrollment population of the school.

Overall Satisfaction and Behavioral Intentions

The researcher also asked respondents to answer two questions regarding their overall satisfaction with their School and two questions regarding their behavioral intentions. Respondents answered the questions on a seven-point scale (strongly agree (7) to strongly disagree (1). Table 5 (Chapter IV) reflects the meaning of the numerical scale for the different parts of the survey. A rating of a 4 reflects a neutral or indifference response.

The researcher used these overall satisfaction scores and behavioral intention scores for the analyses of data in testing research questions six and seven. Means and data summaries for the two overall satisfaction scores and two behavioral intention scores are presented in Table 7.

Table 7

*Overall Satisfaction and Behavioral Intention Means for Sample*

| Q1. Overall, I am pleased with my experience at the CAU School of Business. | 53 | 4.25 | 184 | 1.343 |
| Q2. If the decision on where to attend college had to be made again, I would choose the CAU School of Business. | 53 | 3.92 | 255 | 1.859 |
| Q3. Based on services, I would recommend CAU School of Business to a friend, relative, and/or potential student. | 53 | 3.98 | 251 | 1.824 |
| Q4. In the future, I would consider making a financial donation to CAU School of Business appropriate to my ability. | 53 | 4.77 | 281 | 2.044 |
Behavioral intention question #4, “In the future, I would consider making a financial donation to CAU School of Business appropriate to my ability,” displayed the mean 4.77 of the four questions. Question #1, “Overall, I am satisfied with my experience at CAU School of Business,” displayed the mean 4.25 of the four questions. This finding generally indicated that the mean response of the students are reflective of a “middle of the road,” neither agree or disagree, however, the standard deviation of question 4 indicates that there is a tendency for students to practically strongly agree or somewhat/slightly disagree with the proposition of making a financial donation to CAU School of Business appropriate to their ability (see Table 8).

Table 8

Frequencies of Overall Satisfaction Scale

<table>
<thead>
<tr>
<th>Questions</th>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree or Disagree</th>
<th>Neither Agree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1  Overall, I am pleased with my experience at the CAU School of Business</td>
<td>4</td>
<td>1</td>
<td>7</td>
<td>15</td>
<td>18</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>N</td>
<td>7</td>
<td>5</td>
<td>19</td>
<td>0</td>
<td>16.4</td>
<td>7.5</td>
<td>11.3</td>
</tr>
<tr>
<td>%</td>
<td>16.4</td>
<td>7.5</td>
<td>11.3</td>
<td>17.0</td>
<td>15.1</td>
<td>7.5</td>
<td>0</td>
</tr>
<tr>
<td>Q2  If the decision on where to attend college had to be made again, I would choose the CAU School of Business</td>
<td>9</td>
<td>4</td>
<td>6</td>
<td>13</td>
<td>9</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>N</td>
<td>9</td>
<td>4</td>
<td>6</td>
<td>13</td>
<td>9</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>%</td>
<td>16.4</td>
<td>7.5</td>
<td>11.3</td>
<td>24.5</td>
<td>17.0</td>
<td>15.1</td>
<td>7.5</td>
</tr>
</tbody>
</table>
Table 8 (continued)

<table>
<thead>
<tr>
<th>Questions</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
<th>Neither Disagree</th>
<th>Neither Agree or Disagree</th>
<th>Neither Agree</th>
<th>Neither Strongly Agree</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3  Based on services, I would recommend CAU School of Business to a friend, relative, and/or potential students</td>
<td>9</td>
<td>4</td>
<td>4</td>
<td>12</td>
<td>13</td>
<td>8</td>
<td>3</td>
<td>17.0</td>
</tr>
<tr>
<td>Q4  In the future, I would consider making a financial donation to CAU School of Business appropriate to my ability</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>10</td>
<td>8</td>
<td>8</td>
<td>15</td>
<td>28.3</td>
</tr>
</tbody>
</table>

Relative Importance of SERVQUAL Five Dimensions

The researcher also asked respondents to allocate 100 points among five dimensions of service quality as defined by Parasuraman, Zeithaml, and Berry (1990). Definitions, without headings, were given to each dimension. Table 9 shows that the appearance of the school’s physical facilities (tangibles) and the caring individualized attention provided by the school (empathy) are of less importance than the school being reliable, responsive, and assured regarding the services being offered or promised.
Table 9

*Mean Scores for Each Dimension*

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
<th>N</th>
<th>M</th>
<th>S.E.</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangible</td>
<td>The appearance of the School of Business's physical facilities, equipment, personnel and communications materials</td>
<td>53</td>
<td>14.62</td>
<td>.960</td>
<td>9.992</td>
</tr>
<tr>
<td>Reliability</td>
<td>The ability of the School of Business to perform the promised service dependably and accurately</td>
<td>53</td>
<td>22.74</td>
<td>1.545</td>
<td>11.247</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>The willingness of the School of Business to help students and provide prompt service.</td>
<td>53</td>
<td>22.12</td>
<td>1.447</td>
<td>10.532</td>
</tr>
<tr>
<td>Assurance</td>
<td>The knowledge and courtesy of the School of Business’s employees and their ability to convey trust and confidence.</td>
<td>53</td>
<td>22.22</td>
<td>1.514</td>
<td>11.025</td>
</tr>
<tr>
<td>Empathy</td>
<td>The caring individualized attention the School of Education provides its students.</td>
<td>53</td>
<td>18.30</td>
<td>1.373</td>
<td>9.997</td>
</tr>
</tbody>
</table>

Findings Related to Research Questions

The results pertaining to the six research questions are presented in the following paragraphs.

**RQ1:** *Is there a significant relationship between students’ satisfaction of services and Tangibles (physical appearance of facilities and personnel)?*

Based upon the results of the surveys; there is no significant relationship (p = .384) between the satisfaction of services and the physical appearance of facilities and personnel. The mean (M) score for students’ expectations related to appearance of facilities and personnel is greater by approximately 2 points, 1.90, than students’
satisfaction. There is a very weak negative correlation, (Pearson’s $r = R$) of -.125. This information is displayed in Table 10.

Table 10

*Pearson’s r Correlation (Research Question 1)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$N$</th>
<th>$M$</th>
<th>$SD$</th>
<th>$R$</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>51</td>
<td>4.27</td>
<td>1.36</td>
<td>-.125</td>
<td>.384</td>
</tr>
<tr>
<td>Appearance</td>
<td>51</td>
<td>6.17</td>
<td>2.29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RQ2: Is there significant relationship between students’ satisfaction and students’ responsiveness expectation of the staff and faculty’s (willingness to help students and provide prompt service)?

Based upon the results of the surveys; there is no significant relationship ($p = .563$) between the satisfaction of services and the students’ expectation of the staff and faculty willingness to help and provide prompt service. The mean ($M$) score for students’ expectations related to the staff and faculty’s willingness to help students and provide prompt service is greater by approximately 2 points, 1.96, than students’ satisfaction. There is a very weak correlation, (Pearson’s $r = R$) of .083. This information is displayed in Table 11.
Table 11

Pearson's r Correlation (Research Question 2)

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>R</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>51</td>
<td>4.27</td>
<td>1.36</td>
<td>.083</td>
<td>.563</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>51</td>
<td>6.23</td>
<td>0.84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RQ3: Is there significant relationship between students’ satisfaction and students’ reliability expectation of the services and actions received by the faculty and staff at the University?

Based upon the results of the surveys; there is no significant relationship (p = .677) between the satisfaction of services and the students’ reliability expectation of the services and actions received by the faculty and staff at the University. The mean (M) score for students’ reliability expectation of the services and actions received by the faculty and staff at the University is greater than 2 points, 2.08, than students’ satisfaction. There is a very weak negative correlation, (Pearson’s r = R) of -.060. This information is displayed in Table 12.

Table 12

Pearson’s r Correlation (Research Question 3)

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>R</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>51</td>
<td>4.27</td>
<td>1.36</td>
<td>-.060</td>
<td>.677</td>
</tr>
<tr>
<td>Expectation</td>
<td>51</td>
<td>6.35</td>
<td>0.74</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
RQ4: Is there significant relationship between students’ satisfaction and students’ assurance expectations of the staff and faculty knowledge, courtesy, and their ability to convey trust?

Based upon the results of the surveys; there is no significant relationship ($p = .606$) between the satisfaction of services and the students’ assurance expectations of the staff and faculty knowledge, courtesy, and their ability to convey trust. The mean ($M$) score for students’ assurance expectations of the staff and faculty knowledge, courtesy, and their ability to convey trust is approximately greater than 2 points, 1.96, than students’ satisfaction. There is a very weak negative correlation, (Pearson’s $r = R$) of -.074. This information is displayed in Table 13.

Table 13

<table>
<thead>
<tr>
<th>Pearson’s $r$ Correlation (Research Question 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Satisfaction</td>
</tr>
<tr>
<td>Assurance</td>
</tr>
</tbody>
</table>

RQ5: Is there significant relationship between students’ satisfaction and students’ empathy expectation of the university personnel’s ability to provide care and individualized attention to its students?

Based upon the results of the surveys; there is no significant relationship ($p = .611$) between the satisfaction of services and the students’ empathy expectation of the university personnel’s ability to provide care and individualized attention to its students.
The mean (M) score for students’ empathy expectation of the university personnel’s ability to provide care and individualized attention to its students is approximately greater than 2 points, 1.92, than students’ satisfaction. There is a very weak negative correlation, (Pearson’s r = R) of -.073. This information is displayed in Table 14.

Table 14

*Pearson's r Correlation (Research Question 5)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>R</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>51</td>
<td>4.27</td>
<td>1.36</td>
<td>-.073</td>
<td>.611</td>
</tr>
<tr>
<td>Empathy</td>
<td>51</td>
<td>6.19</td>
<td>0.83</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RQ6: What is the relationship between stated overall satisfaction with services and the total summed gap scores?

Based upon the results of the surveys; there is a significant relationship (p < .001) between the satisfaction of services and the total summed gap scores of the student respondents. The mean (M) value for total summed gap scores is greater than 2 points, ≥-2.22 than students’ satisfaction. There is a strong negative correlation, (Pearson’s r = R) of -.630. This information is displayed in Table 15.

Table 15

*Pearson's r Correlation (Research Question 6)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>R</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>51</td>
<td>4.27</td>
<td>1.36</td>
<td>-.630</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Gap Scores</td>
<td>51</td>
<td>2.05</td>
<td>1.23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
RQ7: What are the relationships between summed gap scores and overall satisfaction with services and students intentions to behave?

Based upon the results of the surveys; there is a significant relationship (p < .001) between the satisfaction of services and students intentions to behave. The mean (M) value for students intentions to behave is greater than 2 points, ≥ 2.23, than students’ summed gap scores. There is a strong negative correlation, (Pearson’s r = R) of -.597. This information is displayed in Table 16.

Table 16

*Pearson’s r Correlation (Research Question 7)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>R</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gap Scores</td>
<td>51</td>
<td>2.05</td>
<td>1.23</td>
<td>-.597</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Intentions to Behave</td>
<td>51</td>
<td>4.28</td>
<td>1.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RQ8: Are there differences among the ways in which students perceive service quality based on their year of study in school, i.e. first year, second year and Program for Working Professionals?

Based upon the results of the surveys of student respondents; there is no significant relationship (p = .130) among the ways in which students perceive service quality based on their year of study in school, i.e. first year, second year and Program for Working Professionals. The mean (M) scores for first year, second year and Program for Working Professionals students’ were 4.07, 4.12, and 5.17 respectively. There is a weak effect on
the classification of students perceive service quality, \( (\eta^2 = \eta^2) \) of .085. This information is displayed in Tables 17 and 18, respectively.

Table 17

*Descriptive Statistical Results (Research Question 8)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td>20</td>
<td>4.07</td>
<td>1.61</td>
</tr>
<tr>
<td>Second Year</td>
<td>17</td>
<td>4.12</td>
<td>1.83</td>
</tr>
<tr>
<td>Working Professional</td>
<td>12</td>
<td>5.17</td>
<td>0.99</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>4.35</td>
<td>1.62</td>
</tr>
</tbody>
</table>

Table 18

*Analysis of Variance Statistical Results (Research Question 8)*

<table>
<thead>
<tr>
<th>Sources</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>P</th>
<th>(\eta^2)</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification</td>
<td>10.53</td>
<td>2</td>
<td>5.26</td>
<td>.130</td>
<td>.085</td>
<td>.415</td>
</tr>
<tr>
<td>Error</td>
<td>113.57</td>
<td>46</td>
<td>2.47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>124.09</td>
<td>48</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

After observing a significance relationship in the sum gap scores and satisfaction, research question 6; the researcher performed an analysis to determine where the gaps exist among the dimensions (variables). Table 19 displays the means, standard error of the mean and standard deviations for each dimension of expectations and perceptions, and for each service quality question. Table 19 also displays the mean gap scores,
Table 19

Means for Expectations, Perceptions, and Gap Scores for SERVQUAL

<table>
<thead>
<tr>
<th>Item</th>
<th>Expectations</th>
<th>Perceptions</th>
<th>GAP SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive Statistics</td>
<td>M  SD</td>
<td>M  SD</td>
<td>M  SE  SD</td>
</tr>
<tr>
<td>TANGIBLE DIMENSION</td>
<td>5.82 1.33</td>
<td>3.95 1.46</td>
<td>-1.87 262 1.91</td>
</tr>
<tr>
<td>(1) Uses state-of-the-art equipment and technology</td>
<td>6.08 1.284</td>
<td>3.58 1.460</td>
<td>-2.49 255 1.857</td>
</tr>
<tr>
<td>(2) Physical facilities are visually appealing</td>
<td>5.72 1.364</td>
<td>3.40 1.459</td>
<td>-2.32 261 1.899</td>
</tr>
<tr>
<td>(3) Employees are professionally dressed</td>
<td>5.72 1.277</td>
<td>4.89 1.340</td>
<td>-0.83 241 1.759</td>
</tr>
<tr>
<td>(4) Materials associated with the service is visually appealing</td>
<td>5.79 1.392</td>
<td>3.92 1.579</td>
<td>-1.87 291 2.122</td>
</tr>
<tr>
<td>RELIABILITY DIMENSION</td>
<td>6.28 1.14</td>
<td>3.81 1.49</td>
<td>-2.47 274 1.992</td>
</tr>
<tr>
<td>(5) When promises to do something, it does so</td>
<td>6.47 1.030</td>
<td>3.19 1.520</td>
<td>-3.28 255 1.854</td>
</tr>
<tr>
<td>(6) Shows sincere interest to solve your problem</td>
<td>6.23 1.235</td>
<td>3.96 1.480</td>
<td>-2.26 274 1.992</td>
</tr>
<tr>
<td>(7) Employees perform the service right the first time</td>
<td>6.06 1.183</td>
<td>3.43 1.513</td>
<td>-2.62 282 2.050</td>
</tr>
<tr>
<td>(8) Employees provide services at the time they promise to do so</td>
<td>6.32 1.105</td>
<td>3.49 1.436</td>
<td>-2.83 239 1.740</td>
</tr>
<tr>
<td>(9) Employees maintain error-free records</td>
<td>5.92 1.412</td>
<td>3.42 1.512</td>
<td>-2.51 278 2.025</td>
</tr>
<tr>
<td>(25) Excellent Schools of Business professors have industry experience</td>
<td>6.28 1.043</td>
<td>5.09 1.456</td>
<td>-1.19 279 2.029</td>
</tr>
<tr>
<td>(26) The curriculum is modern and address current practices and challenges</td>
<td>6.47 0.922 4.09 1.536</td>
<td>-2.38 289 2.105</td>
<td></td>
</tr>
<tr>
<td>(27) There are varied and exciting course options</td>
<td>6.49 1.210</td>
<td>3.85 1.505</td>
<td>-2.64 294 2.140</td>
</tr>
<tr>
<td>RESPONSIVENESS DIMENSION</td>
<td>6.14 1.20</td>
<td>4.275 1.654</td>
<td>-1.87 257 1.870</td>
</tr>
<tr>
<td>(10) Employees tell you exactly when services will be performed</td>
<td>6.09 1.165</td>
<td>3.64 1.801</td>
<td>-2.45 252 1.835</td>
</tr>
<tr>
<td>(11) Employees give prompt service to you</td>
<td>6.36 1.155</td>
<td>3.72 1.720</td>
<td>-2.64 243 1.766</td>
</tr>
<tr>
<td>(12) Employees are always willing to help</td>
<td>6.36 1.297</td>
<td>4.25 1.670</td>
<td>-2.11 255 1.857</td>
</tr>
<tr>
<td>(13) The Dean is accessible to the graduate students</td>
<td>6.09 1.178</td>
<td>5.40 1.531</td>
<td>-0.70 265 1.927</td>
</tr>
<tr>
<td>(14) Department Chairs are available and accessible</td>
<td>6.11 1.254</td>
<td>4.66 1.577</td>
<td>-1.45 282 2.053</td>
</tr>
<tr>
<td>(15) Employees are never too busy to respond to students' requests</td>
<td>5.83 1.197</td>
<td>3.98 1.622</td>
<td>-1.85 245 1.780</td>
</tr>
<tr>
<td>ASSURANCE DIMENSION</td>
<td>6.21 1.149</td>
<td>4.36 1.569</td>
<td>-1.87 284 2.063</td>
</tr>
<tr>
<td>(16) Staff behavior will instill confidence in students</td>
<td>6.15 0.999</td>
<td>3.75 1.531</td>
<td>-2.46 268 1.935</td>
</tr>
<tr>
<td>(17) Students will feel safe in their transactions</td>
<td>6.25 1.073</td>
<td>4.23 1.577</td>
<td>-2.02 293 2.135</td>
</tr>
<tr>
<td>(18) Employees will be consistently courteous with students</td>
<td>6.09 1.160</td>
<td>4.72 1.622</td>
<td>-1.38 295 2.150</td>
</tr>
<tr>
<td>(19) Employees will have the knowledge to answer students' questions</td>
<td>6.34 1.364</td>
<td>4.74 1.546</td>
<td>-1.60 279 2.032</td>
</tr>
</tbody>
</table>
Table 19 (continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>Expectations</th>
<th>Perceptions</th>
<th>GAP SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>EMPATHY DIMENSION</td>
<td>6.10</td>
<td>1.047</td>
<td>4.468</td>
</tr>
<tr>
<td>(20) Students receive individual attention</td>
<td>5.96</td>
<td>1.103</td>
<td>4.68</td>
</tr>
<tr>
<td>(21) Operating hours are convenient to all their students</td>
<td>5.96</td>
<td>1.077</td>
<td>4.19</td>
</tr>
<tr>
<td>(22) Employees give students personal attention</td>
<td>5.79</td>
<td>1.133</td>
<td>4.85</td>
</tr>
<tr>
<td>(23) SOB have the students' best interest at heart</td>
<td>6.53</td>
<td>1.012</td>
<td>4.51</td>
</tr>
<tr>
<td>(24) Employees understand students' specific needs</td>
<td>6.26</td>
<td>.912</td>
<td>4.11</td>
</tr>
</tbody>
</table>

N = 53

standard errors and standard deviation for each item and for each dimension. Gap scores greater than 1 are large, which suggest there is a tremendous difference between the perception and expectation scores. All the scores are greater than one with the Empathy Dimension having the lowest gap which suggests respondents have less discrepancy between perceptions and expectations. The greatest disparity among the dimensions was Reliability, followed by a three way tie among Tangibles, Responsiveness, and Assurance. The questions with the greatest disparity between perceptions and expectations occurred when asked, “when your school promises to do something, it does,” -3.28 (1.85); “Employees provide services at the time they promise to do so,” -2.82 (1.74); “There are varied and exciting course options and Employees give prompt service to you,” -2.64 (2.14, 1.76 respectively); “Employees perform the service right the first time,” -2.62 (2.05); Employees maintain error-free records,” -2.51 (2.02). The questions with the lowest disparity between perceptions and expectations occurred when asked, “The Dean is accessible to the graduate students,” .70 (1.93), “Employees are professionally dressed,” .83 (1.76), “Employees give students personal attention,” .94
(1.96) and "Excellent Schools of Business professors have industry experience," 1.19
(2.03). The dimension with greatest mean gap score is reliability -2.47 (1.992) with a SE
of .274. The dimension with the smallest mean gap score is Empathy -1.63 (1.993) and a
SE of .274.

Additionally, the researcher tested the reliability of the instrument using
Cronbach’s coefficient alpha (Cronbach, 1960). DeVellis (1991) states, “A scale is
internally consistent to the extent that its items are highly intercorrelated” (p. 25).
Cronbach’s Alpha Reliability. Three of the four measured scales showed high reliability
(>.70) Questions related to Section II of the showed a moderately high reliability. This
section asked the respondents to allocate a total of 100 points among the five features
according to how important each feature is to them—the more important a feature was to
them, the more points they were asked to allocate to it (see Table 20).

Table 20

*Cronbach’s Alpha Reliability*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1 – E27</td>
<td>27</td>
<td>.751</td>
</tr>
<tr>
<td>P1 – P22</td>
<td>27</td>
<td>.928</td>
</tr>
<tr>
<td>RQ1 – RQ5</td>
<td>5</td>
<td>.593</td>
</tr>
<tr>
<td>Overall 1 – Overall 4</td>
<td>4</td>
<td>.879</td>
</tr>
</tbody>
</table>
CHAPTER VI
FINDINGS, DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study was to use a service quality model to investigate graduate students’ perceptions of service quality in a higher education setting in a school of business in the southeastern United States by determining if gaps existed in students’ expectations versus the perceptions of their actual experiences with services delivered by their academic programs. In addition, this study examined the relationship of students classification (year of attendance) characteristics with any gaps. The researcher required students to compare their perceptions with their expectations, thereby giving a measure of gaps in educational service quality. Gap scores were computed by subtracting a respondent’s perception score on an item from his or her expectation score on that item. This chapter provides general summary, conclusions, and recommendations that are based on the data analyses presented in Chapter V and the literature reviewed in Chapter II.

Summary and Discussion of Findings

Important to the construct of this study is the relative importance of the service quality dimensions to the respondents. Respondents were asked to allocate 100 points among five dimensions of service quality as defined by Parasuraman, Zeithaml, and Berry (1990). The findings indicate that the appearance of the School’s physical facilities (tangibles) and the caring individualized attention provided by the School (empathy) are
of less importance than the school being reliable (performing the promised service dependably and accurately), responsive (willingly help students and provide prompt service), and assured (knowledgeable and courteous, and convey trust and confident) regarding the services being offered or promised. However, it should be noted that when observing the mean gap scores for expectations and perceptions the Empathy Dimension possess the lowest mean gap score followed by Tangibles, Responsiveness, and Assurance; Reliability has the highest gap score of -2.47. This could suggest that Tangible and Empathy are both dimensions with the less importance in the study. This may coincide with DiDomenico and Bonnici (1996) perspective that with many of the studies using SERVQUAL, tangible gap is an area that the service organization generally surpassed students’ expectations.

Discussion of Findings Related to Research Questions 1 through 5

Research questions 1 through 5 raised the question related to the 5 dimensions; Tangible, Responsiveness, Reliability, Assurance and Empathy and if there are significant relationships between the dimensions (independent variables) and satisfaction. None of the dimensions analyzed displayed a significant relationship to students’ satisfaction. Research question 1 showed a weak negative correlation $R = -.125$, with a mean score less than the other 4 analyzed. Research question 2 showed a weak positive correlation $R = .083$, with a mean similar/equal to that of the reliability and assurance independent variable/dimension. Research question 3 displayed a weak negative correlation $R = -.060$ with a mean similar/equal to the responsiveness and assurance variables. Research question 4 displayed a weak negative correlation $R = -.074$ with a
mean similar/equal to the responsiveness and reliability variables. Research question 5 displayed a weak negative correlation $R = -0.073$ with a mean slightly higher than the Tangibles variable.

Although there were no significant differences displayed for research questions 1 through 5, the mean expectation scores are consistent with other findings in the research which shows a greater level of importance to Responsiveness, Reliability, and Assurance compared to Tangibles and Empathy to students’ responses to their expectations and the correlations they have to satisfaction.

Additionally, a Cronbach Alpha was performed to assess the reliability of the data related to this study. Data related to the expectation, perception and overall (overall satisfaction and intentions to behave) all showed strong reliability .751, .928, .879, respectively.

Discussion of Findings Related to Research Questions 6

Research question 6 raised the question related to the relationship between the stated overall satisfaction with services and the total summed gap scores. There was a significant relationship between overall satisfaction and sum gap scores ($p \leq .001$).

Additionally, there is a strong negative correlation between sum gap scores and overall satisfaction ($R = -.630$). After observing this finding, the researcher went a step further to determine where the significant gaps were within the 5 dimensions to create such a significant relationship.

There were significant gaps ($\geq 1$) among all dimensions and all gaps were negative. Although there were no significant relationship displayed between each
dimension and satisfaction, there is a significant relationship between total summed gap scores and overall satisfaction. Examining Table 19 (Chapter V), Means for Expectations, Perceptions, and Gap Scores for SERVQUAL, the following is observed: Empathy (-1.63) variable/dimension has the smallest summed gap score, Tangible, Responsiveness, and Assurance (-1.87) tied for second highest, and Reliability (-2.47) has the highest gap score. Although the overall score from Section IV of the survey was used to analyze research question 6, the computations provided in Table 19 (Chapter V) is another indicator and display that significant gaps exist, where those gaps are within the dimensions and which are more significant than others.

Discussion of Findings Related to Research Questions 7

Research question 7 raised the question related on the relationship between the stated overall satisfaction and summed gap scores to intentions to behave. There was a significant relationship between intentions to behave and sum gap scores (p ≤ .001). Also, there is a strong negative correlation between intentions to behave and sum gap scores (R = -.597). Additionally, the researcher also observed a significant relationship between intentions to behave and overall satisfaction (p ≤ .001). Also, there was strong positive correlation between intentions to behave and overall satisfaction (R = .783). It is also significant to note that the means; intentions to behave (M = 4.28), and overall satisfaction (M = 4.27) are almost identical. This suggests that the average student neither agrees or disagrees with their overall experience and is neutral about their intentions to behave one way or another. As previously stated in this document, Word-of-Month Communication, recommendations to attend by an alum of the school of
business is significant. As displayed in Table 21, 27.3% (15) of the 50 students who answered that portion of the survey stated that they attended the school through a recommendation from an alumnus.

Table 21

_Word-of-Mouth Communication Frequencies and Respondent Percentages_

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents and/or Peers</td>
<td>11</td>
<td>20.0</td>
<td>22.0</td>
<td>22.0</td>
</tr>
<tr>
<td>Friend</td>
<td>10</td>
<td>18.2</td>
<td>20.0</td>
<td>42.0</td>
</tr>
<tr>
<td>Co-worker</td>
<td>1</td>
<td>1.8</td>
<td>2.0</td>
<td>44.0</td>
</tr>
<tr>
<td>College/University Counselors</td>
<td>3</td>
<td>5.5</td>
<td>6.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Professor/Teacher</td>
<td>4</td>
<td>7.3</td>
<td>8.0</td>
<td>58.0</td>
</tr>
<tr>
<td>Media</td>
<td>6</td>
<td>10.9</td>
<td>12.0</td>
<td>70.0</td>
</tr>
<tr>
<td>SOB Alumni</td>
<td>15</td>
<td>27.3</td>
<td>30.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>90.9</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

_Discussion of Findings Related to Research Questions 8_

As a result of this study, the researcher concluded from addressing research questions 8 that knowledge of a student's year of study in school, i.e., first year, second year and Program for Working Professionals is of little value in predicting perceived service quality or in predicting gap scores for that student. There was no statistical
significance found in the analysis of variance for perceived service quality. The eta-squared ($\eta^2$) value was very small which explained a small percentage of the variability in the linear combinations. There seems to be very little practical difference between the perceived service quality scores in relation to year of study or type of matriculation. However, the analyses do provide information about what is happening within each group, and are therefore worthy of being discussed.

Faculty and Instruction

The researcher conducted an analysis of the questions in the survey which related to the dean, chairpersons, faculty, and instruction (E13, E14, E25, E26, and E27). There were no significant correlations between the mean sums of these items and overall satisfaction or intentions to behave (Appendix C). However the expectations related to quality service of these items are significant/essential to the students' surveyed (> 6 on the Likert Scale). The summed mean gap score of the items combined is $M = 1.67$, which is lower that the total summed mean gap score of $M = 2.05$. The lowest mean gap score of the five items related to faculty and instruction is E13 - Excellent Schools of Business Dean is accessible to the graduate students = -.70 and the highest mean gap score of the five items is E27 - . Excellent Schools of Business have varied and exciting course options = -2.64. These findings suggests that students, on average perception of the Deans accessibility meets their expectation, however their perception that the course options are exciting and there are several to choose from did not meet their expectation. It should be noted, however, that the dean at this particular institution is a teaching dean,
within the department of Decision Science, which may have some implications to his accessibility.

Limitations

This study was conducted at a single institution and therefore the findings have limited generalizability. Schools of Business are different. This study was conducted at a Carnegie Foundation Research University—Intensive Research Activity Institution—The school of business does not have a separate designation. Larger schools may offer varying perspectives. Thus, varying samples would provide additional insights about application issues.

The use of the SERVQUAL instrument in the field of education has been very limited, as has service quality research in general. In designing the SERVQUAL instrument in measuring service quality, Parasuraman et al. (1988) collected data from five service areas—appliance repair and maintenance, retail banking, long distance telephone, securities brokerage, and credit cards. However, they concluded that SERVQUAL can be adapted or supplemented to fit the characteristics or specific research needs of a particular service organization Parasuraman et al. Nonetheless, Chen (1994) conducted a study aimed at applying a modified SERVQUAL instrument to the Minnesota Extension Service and found that the modified SERVQUAL instrument was accepted and treated by Extension Service clientele and employees with seriousness, support, and interest. In postsecondary education settings, the collective findings of various studies regarding the use of SERVQUAL provide support for the validity, reliability and predictive validity of the scale (Black, 1992; 1996; Nitecki, 1996; Christy,
However, the factor-loading patterns in the original five dimensions are inconsistent across these studies. There is little dispute regarding the usefulness of SERVQUAL as a general, broad based tool for assessing service quality with follow-up studies. Since the number of studies in higher education testing the construct of the instrument have been limited, the validity and reliability of the instrument is still questioned.

This study was conducted as an overall assessment of service quality at the school of business. However, a student’s experience in the school of business is impacted by services in the university outside of the school of business, e.g. admissions, school/registrar’s relations, graduation, and student life. Also, the school of business is a complex division with several departments and programs. A student may have entirely different perceptions depending on the service area under examination. This limitation does not mitigate the importance of an overall assessment of service quality, but rather suggests that the study of service quality by service programs and units may complement an overall assessment.

The usefulness of the results from the questionnaire depends upon respondents’ willingness to answer the items openly and candidly. While there was no evidence that these conditions were not met, there was also no assurance that they were.

Although there are many limitations, some of which could be serious, this lends credence to the exploratory nature of this study. The above limitations provide a framework for the findings already reported and the recommendations and implications that follow.
Implications and Recommendations

Practice and Policy: Implications and Recommendations

Although there were no significant relationships between the five dimensions (independent variables) and satisfaction when analyzed separately, there was significance in the overall summed gaps scores analyzed in research question six. As Deming (1982) puts it, "An improvement in the processes would improve the product" (p. 88). As a general practice and policy, changes must start from within. Barriers between departments must be broken down and employees must be trained to accomplish the transformation (Akande 1992; Bonser 1992) if service quality goals and standards are going to be achieved.

Service quality should be implemented as an organizational shared priority and documented into the schools strategic plans. Student recruitment and retention are priorities of the school; therefore, all employees should be involved in service quality management. There is sufficient evidence from the business sector to suggest that improved service quality leads to more satisfied customers who refer others, new customers, for similar service market exchanges.

Research question six results showed a significant relationship between the satisfaction of services and the total summed gap scores of student respondents with a strong negative correlation. The researcher performed a descriptive statistics analysis to examine exactly where the significant gaps were. Most of the disparity is centered in the Reliability Dimension. Related to policy and practice implications, it is suggested that employees' (faculty and staff) ability to complete tasks related to students in a timely
efficient fashion, free of errors, do not meet the students’ expectations. It is the researchers recommendation that employees should create departmental and/or school service-level agreements that are realistic and are within the control of the school of business. However, there may be some activities that the school may do to gain more control over some processes such as the rehiring or reinstitution the Director of Admissions person which can serve as a buffer between other departments such as admissions, the registrar, the registration process (for first year students), or within the academic departments of the school of business. The researcher postulates that some of the respondents’ frustrations have as its bases, the inability to adjust immediately to the level of difficulty or the volume of work administered by the faculty. Having someone such as an admission administrator within the school of business can also serve as an advocate for students facing difficulties and suggest and/or create academic services or practices which can assist students, i.e., mentors, study groups, and tutors with possible funding from work-study or other resources.

Research question seven raised the question related on the relationship between the stated overall satisfaction and summed gap scores to intentions to behave. There was a significant relationship between intentions to behave and sum gap scores (p ≤ .001). Also, there is a strong negative correlation between intentions to behave and sum gap scores (R = -.597). Related to policy and practice implications, as previously analyzed and discussed, the employees (faculty and staff) must decrease the mean gap scores and increase overall satisfaction in order to see an increase in alumni referrals, positive statements about the school from students and alumni and alumni giving. In the research
it is observed that there is indifference in the students intentions to behave. During some ad hoc interviews with students and alumni of the school of business; most individuals, independent of their satisfaction level, suggested that they would give back to the school; however, no one has asked. Additionally, they stated that they have referred friends and co-workers to the school pointing out their satisfaction with the level of instruction they have experienced and the personal attention received by the faculty. There was a sense of obligation to the school from those interviewed either based in the fact that they are or will be products of the institution or the financial benefit due to the acquisition or the acquiring (internship) of their MBA. It is the strong recommendation of the researcher that students are cultivated on the importance of giving back to the school and how they will be a living advertisement for the school and through that, they will help the school grow and prosper. Additionally, the responsibility of development should be given to someone or a position created in order to solicit funding from alumni on a consistent basis. The development plan, specifically for the school of business, should be created and incorporated into the strategic plans of the school of business.

As stated in the findings, the researcher concluded from addressing research question eight that knowledge of a student’s year of study in school, i.e., first year, second year, and Program for Working Professionals, is of little value in predicting perceived service quality or in predicting gap scores for that student. Contrary to the researcher’s expectations, year of study had no significant difference in the way students perceive service quality. Although there was an increase in the mean score of resources, first year compared to second, second year compared to the Program for Working
Professionals, respectively, there was no statistical difference. The researcher also observed a very high reliability in the data related to part three of the questionnaire which asked respondents to rate their perceptions of their school of business against the 27 paired statements, which corresponded to the 27 expectations statements (Cronbach's $\alpha = .928$). Although the researcher does not have any specific policy or practice recommendations for this finding; it is expected that a student's perceived perception would change significantly as their matriculation (time at the university) increases. Students should become more comfortable and their levels of satisfaction should increase as they become more familiar with the school and as they begin to become more involved in their chosen field of study and begin for some and conclude for others the internship and company/career selection process. The school of business staff should investigate ways to improve the students acclamation to instruction and administrative of the school of business. Students should become more comfortable and confident in the practices and operations of the school of business.

Gap analysis offers an organization a disciplined methodological approach. It allows organizations to look specifically at different components. Through this measurement, schools gain valuable information about areas that need improvement. In the current educational competitive environment, analyses of this nature could help stabilize the student base, improve institutional standing, and potentially increase enrollment declines.

Most schools of business have program and student evaluation strategies. The selection of service quality strategy for a school sends a message of values to the
stakeholders that require close conformity between policy objectives and actual service practice. So, operating policies and procedures should conform to the service quality objectives of the organization.

To incorporate an effective service quality strategy into an organization, policy decisions and procedures made prior to a strategic service quality emphasis will need to be reconsidered. This reconsideration must be done carefully and with input from all stakeholders. Policy considerations would include criteria for hiring and promoting staff, for recruiting students, for hiring and promoting faculty, for program reconfigurations or reorganizations. Because this process is difficult and time consuming, to increase the likelihood of success, non-academic services should be evaluated first for service quality measurement and evaluation. To evaluate academic services first would be time consuming and challenging, considering the domain of faculty governance, program evaluation, and accreditation agencies. In fact, Delene (1991) suggests that the success of institutions trying to adopt curricular assessment programs (one measure of instructional quality) has been mixed (Steele, 1989).

Another administrative implication for an effective service quality strategy could include the need for modification of the work structures—a greater emphasis towards teamwork and cross-functional group problem solving. Since there is discrepancy in faculty and non-faculty service quality and since both function to support the customer, creating work-teams would assist in setting service quality objectives and standards.
Research: Implications and Recommendations

This study relied on a convenience sample of student enrolled in the school during the spring 2008 semester. One interesting study might be to compare type of institutions, e.g., community colleges with university or private smaller institutions with larger state institutions.

More research should be conducted on dependent variables that give more information about predicting ‘good’ service quality and customer satisfaction. In this study, ethnicity, gender, year of study, and concentration contributed very little practical support to predicting service quality. A test re-test analysis/study should be performed in addition to the Cronbach Alpha test to assess the reliability of the data. Additionally, it is recommended that a future study be conducted which disaggregates the data further, i.e., differences in year of study and dimensions or overall satisfaction etc. to determine if a different finding will occur.

Because business students may have different expectations than students in other disciplines, future research might consider broadening the sample to enhance the generalizability of the findings. This would add to the validity and reliability of SERVQUAL in higher education settings. Is the instrument generalizable over different programs within a higher education environment?

SERVQUAL, as a model or even a different model, should be refined or revised to more specifically address the education industry. Such a model would incorporate language and experiences that are unique to higher education and provide the opportunity for researchers and administrators to determine whether current considerations about
services in higher education are documented and if not, where modifications need to be made.

Research in higher education needs to incorporate measures of service quality into program and student evaluation and other evaluation mechanism. Lindahl (1995) recommended a different set of criteria to measure the quality of colleges and universities. Lindahl suggested the following criteria: (a) how students rate the quality of instruction; (b) students’ overall satisfaction with the education they are getting; (c) achievement of learning outcomes; (d) whether they would recommend their university to others; (e) graduates’ pass rates on licensing and professional exams; (f) admissions to graduate and professional schools; and (g) the findings of alumni surveys. Incorporating service quality measures into evaluative criteria could help institutions determine what impact (if any) an institutional service quality strategy has on recruitment and development activities.

Research in higher education needs to determine if the attributes of service quality vary from academic to nonacademic units. This information would impact service design and delivery components of services in academic and nonacademic units.

What items and or activities that influence students expectations of services? We would expect that prior experiences, family, teachers, counselors, all contribute to developing expectations.

Research should also delineate the expectations and performance perceptions of different employees within an institution, i.e. faculty; student services staff, and administrators.
The findings are clear, if students are satisfied with service quality in the school of business, they will behave in a way that reflects positively towards the school. The above results suggest that the school needs to consider improving its services. The school of business needs to understand its customers’ needs. During the study, students that the researcher interacted with showed a sincere appreciation for being given an opportunity to comment on service quality through the use of this survey. Therefore, the school of business may consider organizing focus groups on a frequent basis to discuss service quality and service improvements. The focus groups should comprise the diversity that is reflective of the student population, if applicable. To complement the focus groups, surveys should be administered regularly to provide quantitative data on service quality that should be analyzed longitudinally.

The school of business in this research has a very rich history, and has been regarded highly in the business industry and in publications which measure the quality of schools and programs as expressed in this study. Although there are significant signs for improvement, the school has the ability and potential to be one of the best values with excellent quality of instruction and services in both academia and the business community in the United States and aboard.
APPENDIX A

The Association to Advance Collegiate Schools of Business

Adopted: April 25, 2003
Revised: January 01, 2004
Revised: January 01, 2005
Revised: January 01, 2006
Revised: January 31, 2007
Revised: January 31, 2008

Eligibility Procedures and Accreditation Standards for Business Accreditation

AACSB International – The Association to Advance Collegiate Schools of Business

777 South Harbour Island Blvd., Suite 750, Tampa, FL 33602-5730 USA
Appendix A (continued)

**Interaction**
A distinctive feature of higher education is substantive and substantial interaction between faculty members and students. Faculty members afford this opportunity through a variety of experiences: classroom dialogue, office hours and electronic mail responses, guidance on learning projects, and feedback on student performance. The most effective learning is highly interactive, and schools are expected to show that such interactions take place as a normal part of the learning experience of students in degree programs.

**Expectations**
As a faculty, there should be agreement to expectations of high quality student performance. Learning goals for degree programs and course learning goals display the quality standards of the faculty. Students should be aware of program and course learning objectives. Faculty members should deliver the teaching program in such a way that students can expect to reach the learning goals through persistent and earnest effort.

**Instructional Evaluation**
The school should have a systematic program for evaluating instructional performance of faculty members. Information from instructional evaluation should be available to both faculty members and administrators. The school should use instructional evaluations as the basis for development efforts for individual faculty members and for the faculty as a whole.

**Innovation**
Business education is experiencing change in content and process. The subject matter is evolving quickly with constant changes in how business takes place. Globalization and technological advances in business make changes that regularly outpace the development of teaching and learning materials. The pedagogy and delivery mechanisms of higher education also are changing rapidly with the introduction of new technology-mediated and action-learning practices. The faculty as a whole should encourage instructional innovation, and administrators should provide professional development opportunities for curricular and course innovation.

13: **Individual teaching faculty members:**

- Operate with integrity in their dealings with students and colleagues.
- Keep their own knowledge current with the continuing development of their teaching disciplines.
- Actively involve students in the learning process.
- Encourage collaboration and cooperation among participants.
- Ensure frequent, prompt feedback on student performance.

[INDIVIDUAL FACULTY EDUCATIONAL RESPONSIBILITY]

**Basis for Judgment:**

- The school has processes to encourage, support, and assess faculty members in their own knowledge development.
- The school's programs actively involve students in the learning process. Peer review teams should consider the totality of the learning experience (in-class, extracurricular,
Appendix A (continued)

technology-based, etc.). The following are examples of ways students may be involved in their education:

- Student involvement in the formulation and solution of business or management problems.
- Continuing tutorial support including frequent student recitations.
- Opportunities for continuous interaction through technology-based learning.
- Mentored reflection on problem solving and issues resolution activities.
- A pervasive commitment to two-way, interactive discussions for instruction.

- The school's programs involve collaboration and cooperation among participants in the educational process (in class, in extracurricular activities, or in the on-going governance activities of the school). To assess how much collaboration and cooperation occurs in the unit, review team members should consider the following, paying special attention to their connection with the learning agenda:
  - Group-based activities assigned in classes or designed into extracurricular or governance activities.
  - Continuing informal group activities.
  - The extent to which faculty demonstrate their own commitment to learning by participating in group activities that include, or are visible to, students.

- The school's programs involve feedback: formal or informal, in class, in small group activities, or in one-on-one discussions. To assess promptness and pervasiveness of feedback for students, peer review team members should consider the following:
  - To what extent students have opportunities to understand their levels of knowledge and skills.
  - The formative content of the evaluations.
  - The extent to which students are encouraged to reflect on their performance and the feedback given on it.

Guidance for Documentation:

- Provide examples through course syllabi, course project descriptions, learning products, and other descriptive materials that demonstrate:
  - Active student involvement.
  - Collaborative learning experiences.
  - Frequent, prompt, and accurate feedback.

Maintenance of Intellectual Capital

Individual faculty members are the single most important resource for the teaching program of the school. As such they are personally responsible for bringing current and relevant intellectual resources into the teaching program. No one can maintain the currency of someone else's knowledge and skills. Each faculty member, thus, is obligated to continuously update, expand, and hone personal knowledge and skills. Without this personal commitment on the part of individual faculty members, the intellectual life of the school will stagnate, and the vitality of degree programs will quickly be lost.

Student Involvement

The most effective learning takes place when students are involved in their educational experiences. Passive learning is ineffective and of short duration. Faculty members should develop techniques and styles that engage students and make students responsible for meeting
learning goals. Many pedagogical approaches are suitable for challenging students in this way – problem-based learning, projects, simulations, etc. Faculty members should find such approaches that are suited to their subject matter, and should adopt active learning methodologies.

**Student Collaboration**
Where possible, faculty members should encourage students to collaborate. Students should have both formal and informal opportunities to develop cooperative work skills. Intellectual tasks in some parts of the program should require collaborative learning.

**Learning Feedback**
This standard sets an expectation that faculty members provide frequent and timely feedback to students. One of the most effective learning tools is performance feedback. Learning situations should provide “practice field” situations where students can take risks and then learn from their successes and failures. Individual faculty members should continuously work to improve their skills at providing feedback in ways that enable and motivate learning.

14: Individual Students:

- **Operate with integrity in their dealings with faculty and other students.**
- **Engage the learning materials with appropriate attention and dedication.**
- **Maintain their engagement when challenged by difficult learning activities.**
- **Contribute to the learning of others.**
- **Perform to standards set by the faculty.**

[STUDENT EDUCATIONAL RESPONSIBILITY]

**Basis for Judgment:**

- Syllabi, course project descriptions, and examples of student projects show how students engage in challenging learning experiences and how they satisfy learning goals.

**Guidance for Documentation:**

- Provide syllabi, course project descriptions, examples of student projects, and other materials that show how students engage in challenging learning experiences and how they satisfy learning goals.

**Engagement**
Higher education may be the ultimate service industry, which is to say that the service provided is a collaborative venture between the provider and the recipient. Students, as the recognized beneficiaries of higher education, have an obligation to actively participate in their educational experiences. Without the intentional engagement of students little, if any, learning will take place. This standard recognizes the role students play in the creation of high quality education. They cannot be passive, nor can their participation be superficial. The outcomes of the learning process in the form of projects, papers, presentations, examination performances, and other demonstrations of learning should show clear evidence of significant student engagement.
Appendix A (continued)

Perseverance
In-depth learning requires performance over time and continued accumulation of knowledge
and skills. Short-term experiences and engagement with subject matter should not make up the
whole of students’ experiences. Some program requirements should develop depth of
knowledge through extensive learning over time, and students’ records should show that they
have achieved deep learning in one or more areas; i.e., learning that includes an understanding
of context and relationships, not just applications of methods.

Collaborative Learning
Regardless of the delivery mode of the program, students should have opportunities to work
together on some learning tasks. Each student is a resource who brings unique experience and
knowledge to combined tasks. Students need to acknowledge their responsibilities to their
fellow students by actively participating in group learning experiences.

Performance to Standards
The school must show that students meet the learning goals for their respective degree
programs. It is an obligation of the students to meet the expectations embodied in the learning
goals, and it is an obligation of the faculty members to monitor student performance to see that
the learning goals are respected.
January 15, 2008

Dear Graduate Student,

The enclosed program-wide survey is being conducted as part of an effort to assess and improve service quality within the School of Business, Master of Business Administration Program. This survey should take approximately 20 minutes to complete. Please read each section carefully and complete each one. Do not write your name on the survey. Fill in the last four digits of your CAU student ID number where indicated. You are assured of complete confidentiality. No information will be given in a form in which you can be identified.

This study seeks to determine if service quality in higher education can be measured by examining gaps that exist in your expectations versus your perceptions of your experience with services delivered by your institution.

What to do:

1. The survey will be given to you at the beginning of your class period (by me) and will take approximately twenty minutes to complete.
2. Please read the survey completely and answer each question thoughtfully as possible.
3. Please use a pen to complete the survey.
4. Please detach the letter from the survey and return the survey to Ms. Tina Luster in the undergraduate School of Business Office located in Wright Hall, Room 98.

Thank you very much for your assistance in this research. If you have questions, please call me at 404-759-6827 or mhines1@student.cau.edu or mikewhines@aol.com.

Sincerely,

Michael W. Hines, MBA, Class of 2001
Doctoral Candidate – Ed.D.
School of Education – Leadership

MWH
Appendix B (continued)

This survey is designed for students currently enrolled in the Clark Atlanta University School of Business. Please take a few minutes to give your most thoughtful answers. All responses will be kept confidential.

SECTION I

DIRECTIONS: Based on your experiences as a student of the Masters of Business Administration in the School of Business, please think about the kind of School of Business that would deliver excellent quality of service. Think about the kind of School of Business with which you would be pleased to attend. Please show the extent to which you think such a School of Business would possess the feature described by each statement. If you feel a feature is not at all essential for excellent Schools of Business such as the one you have in mind, circle the number “1”. If you feel a feature is absolutely essential for excellent Schools of Business, circle “7”. If your feelings are less strong, circle one of the numbers in the middle. There are no right or wrong answers—all we are interested in is a number that truly reflects your feelings regarding Schools of Business that would deliver excellent quality of service.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1. Excellent Schools of Business will have state-of-the-art equipment and technology.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E2. The physical facilities at excellent Schools of Business will be visually appealing.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E3. Employees of excellent Schools of Business will be neat appearing.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E4. Materials associated with the service (such as brochures and letters) will be visually appealing in an excellent School of Business.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E5. When excellent Schools of Business promise to do something by a certain time, they will do so.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E6. When a student has a problem, excellent Schools of Business will show a sincere interest in solving it.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E7. Excellent Schools of Business will perform the service right the first time.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E8. Excellent Schools of Business will provide their services at the time they promise to do so.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E9. Excellent Schools of Business will insist on error-free records.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Please enter the last 4 digits of your SS#
<table>
<thead>
<tr>
<th>E10. Employees of excellent Schools of Business will tell students exactly when services will be performed.</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>E11. Employees of excellent Schools of Business will give prompt service to students.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E12. Employees of excellent Schools of Business will always be willing to help students.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E13. Excellent Schools of Business Dean is accessible to the graduate students.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E14. Excellent Schools of Business Department Chairs are available and accessible.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E15. Employees of excellent Schools of Business will never be too busy to respond to students' requests.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E16. The behavior of employees of excellent Schools of Business will instill confidence in students.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E17. Students of excellent Schools of Business will feel safe in their transactions.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E18. Employees of excellent Schools of Business will be consistently courteous with students.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E19. Employees of excellent Schools of Business will have the knowledge to answer Students questions.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E20. Excellent Schools of Business will give students individual attention.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E21. Excellent Schools of Business will have operating hours convenient to all their students.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E22. Excellent Schools of Business will have employees who give students personal attention.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E23. Excellent Schools of Business will have the students' best interests at heart.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E24. The employees of excellent Schools of Business will understand the specific needs of their customers.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E25. Excellent Schools of Business professors have industry experience.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
Appendix B (continued)

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>E26. Excellent Schools of Business curriculum is modern and addresses current industry practices and challenges.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>E27. Excellent Schools of Business have varied and exciting course options</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

SECTION II

**DIRECTIONS:** Listed below are five features pertaining to Schools of Business and the services they offer. We would like to know how important each of these features is to you when you evaluate a School of Business. Please allocate a total of 100 points among the five features according to how important each feature is to you—the more important a feature is to you, the more points you should allocate to it. Please ensure that the points you allocate to the five features add up to 100.

1. The appearance of the School of Business's physical facilities, equipment, personnel and communications materials. _______ Points
2. The ability of the School of Business to perform the promised service dependably and accurately. _______ Points
3. The willingness of the School of Business to help students and provide prompt service. _______ Points
4. The knowledge and courtesy of the School of Business's employees and their ability to convey trust and confidence. _______ Points
5. The caring individualized attention the School of Business provides its Students. _______ Points

**TOTAL POINTS ALLOCATED** _______ Points
SECTION III

DIRECTIONS: The following set of statements relate to your experiences at The Clark Atlanta University (CAU) School of Business (SOB). For each statement, please show the extent to which you believe the CAU School of Business has the feature described by the statement. Once again, circling a "1" means that you strongly disagree that the SOB has that feature, and circling a "7" means that you strongly agree. You may circle any of the numbers in the middle that show how strong your feelings are. There are no right or wrong answers—all we are interested in is a number that best shows your perceptions about your experience at The Clark Atlanta University School of Business.

| P1. The CAU School of Business has state-of-the-art equipment and technology. | Strongly disagree | Strongly agree |
| P2. The physical facilities at the School of Business are visually appealing. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| P3. Employees of the School of Business are neat appearing. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| P4. Materials associated with the School of Business, Masters of Business Administration Program (such as brochures and letters) are visually appealing. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| P5. When the School of Business promises to do something by a certain time, it does so. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| P6. When you have a problem, employees at the School of Business show a sincere interest in solving it. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| P7. The School of Business performs the service right the first time. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| P8. The School of Business provides its services at the time it promises to do so. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| P9. The School of Business insists on error-free records. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| P10. Employees of The School of Business tell you exactly when services will be performed. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| P11. Employees of The School of Business give you prompt service. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| P12. Employees of The School of Business are always willing to help you. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| P13. The Dean of the School of Business is accessible to the graduate students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
Appendix B (continued)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>P14. The Department Chairs in the School of Business are available and accessible.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>P15. Employees of The School of Business are never too busy to respond to your requests.</td>
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<td></td>
</tr>
<tr>
<td>P16. The behavior of employees of The School of Business instills confidence in customers.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>P17. You feel safe in your transactions with The School of Business.</td>
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<td></td>
</tr>
<tr>
<td>P18. Employees of The School of Business are consistently courteous with you.</td>
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<td></td>
</tr>
<tr>
<td>P25. The School of Business Professors have industry experience.</td>
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<td></td>
</tr>
</tbody>
</table>
Appendix B (continued)

SECTION IV

<table>
<thead>
<tr>
<th>OVERALL</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overall, I am pleased with my experience at the CAU School of Business.</td>
<td>1 2 3 4</td>
<td>5 6 7</td>
</tr>
<tr>
<td>2. If the decision on where to attend college had to be made again, I would choose the CAU School of Business</td>
<td>1 2 3 4</td>
<td>5 6 7</td>
</tr>
<tr>
<td>3. Based on services, I would recommend CAU School of Business to a friend, relative, and/or potential student.</td>
<td>1 2 3 4</td>
<td>5 6 7</td>
</tr>
<tr>
<td>4. In the future, I would consider making a financial donation to CAU School of Business appropriate to my ability.</td>
<td>1 2 3 4</td>
<td>5 6 7</td>
</tr>
</tbody>
</table>

SECTION V

All information provided is confidential. Please mark the appropriate choice or fill in the blank.

1. Gender: □ Male □ Female

2. Age: ____________

3. Ethnicity: □ African American □ Asian □ Hispanic
   □ White □ Other ________

4. Beginning the fall 2007 semester, what is your classification/year of study?
   □ 1st Year □ 2nd Year □ More than 2nd Year
   □ Working Professionals Program

5. What is your concentration?
   □ Finance □ Decision Science
   □ Marketing □ Accounting

6. What is your current cumulative GPA? ______
Appendix B (continued)

7. How many semester hours are you currently enrolled? ____________

8. What is your current marital status? □ Single □ Married □ Divorce

9. Do you have children living at home with you? □ Yes □ No

10. Are you a transfer student? □ Yes □ No

11. Where is your current residence? City:______________________________

12. Why are you pursuing a degree in Business?

13. How did you learn about the CAU School of Business?

14. What factors/experiences influenced your decision to attend CAU School of Business?

15. College/University Attended

______________________________________________________________

______________________________________________________________

______________________________________________________________

Degree and Dates

______________________________________________________________

______________________________________________________________

Expectations Development

1. Word-of-Mouth Communications

Where did you learn about CAU School of Business Masters of Business Administration Program?

Parents and/or Peers □ College/University Counselors □ Career/College Fair

Friend □ Professor/Teacher □ SOB Alumni

Co-worker □ Media

2. Personal Needs (Individuals believe about how services should be performed)

Who shaped your perspective on the services of Business Administration programs?

Parents and/or Peers □ College/University Counselors □ Career/College Fair

Friend □ Professor/Teacher □ SOB Alumni

Co-worker □ Media
Appendix B (continued)

3. On a scale of 1 to 5 (with 5 being more important and 1 less important) how important were the following in your decision to attend CAU SOB:

- Availability of specific programs
- Convenient
- Quality of academic facilities
- Academic reputation and quality
- Cost to attend
- Safety on Campus
- Access
- Employment Outcomes
- Students/faculty ratio
- Availability of scholarships
- Friendliness of the campus
- Business emphasis

4. Past Experience: List your previous academic experiences.
APPENDIX C

Variable Tables

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Satisfaction</td>
<td>51</td>
<td>4.27</td>
<td>1.36</td>
<td>-.027</td>
<td>.851</td>
</tr>
<tr>
<td>Faculty and Instruction</td>
<td>51</td>
<td>6.36</td>
<td>0.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expectation (E – 13, 14, 25, 26, 27)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables</th>
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<th>M</th>
<th>SD</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Satisfaction</td>
<td>51</td>
<td>6.36</td>
<td>.712</td>
<td>-.081</td>
<td>.903</td>
</tr>
<tr>
<td>Expectation (E – 13, 14, 25, 26, 27)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intentions to Behave</td>
<td>51</td>
<td>4.28</td>
<td>1.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX D

Institutional Review Board’s Approval Letter

CLARK ATLANTA UNIVERSITY
Institutional Review Board
Office of Sponsored Programs

March 19, 2008

Michael W. Hines <mikewhines@aol.com>
School of Education
Clark Atlanta University
Atlanta, GA 30314

RE: An Analysis of Graduate Students’ Expectations versus Perceptions of Services at a Private HBU’s School of Business Administration.

Principal Investigators: Michael Hines

Human Subjects Code Number: HR2008-2-248-1

Dear Mr. Hines:

The Human Subjects Committee of the Institutional Review Board (IRB) has reviewed your protocol and approved of it as exempt from full IRB review in accordance with 45 CFR 46.101b.2. You may begin your study after complying with stipulation below.

Stipulation: Your Consent Form should specify the IRB Office, Dr. Georgianna Bolden, (404) 880-6979; as additional contact official regarding questions or problems

Your Protocol Approval Code is HR2008-2-248-1/A

This approval is valid for one year from the date of this notice. This permit will therefore expire on March 18, 2009. Thereafter, continued approval is contingent upon the annual submission of a renewal form to this office. Any reaction or problems resulting from this investigation should be reported immediately to the IRB, the Department Chairperson and any sponsoring agency. If you have any questions, please contact Dr. Georgianna Bolden at the Office of Sponsored Programs (404) 880-6979 or Dr. Paul I. Musey, (404) 880-6829.

Sincerely:

Paul I. Musey, Ph.D.
Chair
IRB: Human Subjects Committee

cc. “Dr. Shelia Gregory <gregorys@cau.edu>
Office of Sponsored Programs, “Dr. Georgianna Bolden” <gbolden@cau.edu>
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Hall.

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Row.


