

## INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

**The quality of this reproduction is dependent upon the quality of the copy submitted.** Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

ProQuest Information and Learning  
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA  
800-521-0600

UMI<sup>®</sup>



## **NOTE TO USERS**

**Page(s) not included in the original manuscript are unavailable from the author or university. The manuscript was microfilmed as received.**

**17-19**

**This reproduction is the best copy available.**

**UMI<sup>®</sup>**



An Empirical Study of Service Quality in Part-time MBA  
Programs in Private and Public Universities in Thailand

by

Napaporn Khantanapha

A DISSERTATION

Submitted to

Wayne Huizenga Graduate School of Business and

Entrepreneurship

Nova Southeastern University

In partial fulfillment of the requirements

For the degree of

DOCTOR OF BUSINESS ADMINISTRATION

2000

UMI Number: 3011850

Copyright 2001 by  
Khantanapha, Napaporn

All rights reserved.

UMI<sup>®</sup>

---

UMI Microform 3011850

Copyright 2001 by Bell & Howell Information and Learning Company.

All rights reserved. This microform edition is protected against  
unauthorized copying under Title 17, United States Code.



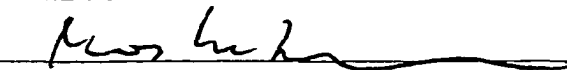
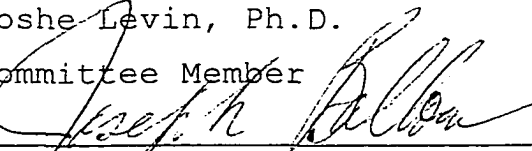
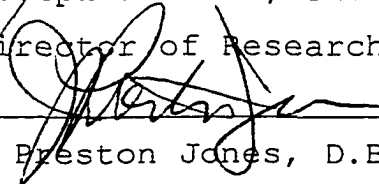
---

Bell & Howell Information and Learning Company  
300 North Zeeb Road  
P.O. Box 1346  
Ann Arbor, MI 48106-1346

A Dissertation  
entitled  
An Empirical Study of Service Quality between Part-time MBA  
Programs in Private and Public Universities in Thailand  
by  
Napaporn Khantanapha

We hereby certify that this Dissertation submitted by  
Napaporn Khantanapha conforms to acceptable standards, and  
as such is fully adequate in scope and quality.

It is therefore approved as the fulfillment of the  
Dissertation requirements for the degree of Doctor of  
Business Administration.

 _____ Barbara Dastoor, Ph.D. Chairperson	Approved:  Date	<u>9/12/00</u>
 _____ Pedro F. Pellet, Ph.D. Committee Member	Date	<u>9/12/00</u>
 _____ Moshe Levin, Ph.D. Committee Member	Date	<u>9/15/00</u>
 _____ Joseph Balloun, Ph.D. Director of Research	Date	<u>9/20/00</u>
 _____ J Preston Jones, D.B.A. Associate Dean, Wayne Huinzenga Graduate School of Business and Entrepreneurship	Date	<u>9/26/2000</u>

Nova Southeastern University

2000

CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions or writings of another.

Signed *N. Khantanapha*

Napaporn Khantanapha



## ABSTRACT

AN EMPIRICAL STUDY OF SERVICE QUALITY IN PART-TIME MBA  
PROGRAMS IN PRIVATE AND PUBLIC UNIVERSITIES IN THAILAND

by  
Napaporn Khantanapha

This study investigated the differences in expectations and perceptions of service quality of MBA programs in both public and private universities in Thailand. It also examined demographic variables (gender, income level and employment status). Respondents included part-time MBA students in public and private universities in Thailand. The questionnaire developed for this study was based on the SERVQUAL and QUALED and the input of a panel of business school professors with teaching experience in Thailand. It was named EDSERVQUAL. A pilot study resulted in revisions to the EDSERVQUAL. Validation procedures and the resulting five dimensions are described in this study.

A total of 824 part-time MBA students from public and private universities returned completed questionnaires. Results indicate that there were significant differences in expectations and perceptions of service quality between public and private universities. There were differences in expectations and perceptions of service quality for men and women and among income levels. Recommendations are made for extending the study of service quality in educational settings outside of Thailand and for further examination of the psychometric qualities of the EDSERVQUAL.

## ACKNOWLEDGEMENTS

It was very long process to finish this dissertation. It involved valuable contributions of many people. I consider myself fortunate to be associated with the following list.

First of all I would like to express my sincere gratitude to Dr. Barbara Dastoor, my dissertation committee chair, who contributed to my dissertation tremendously. Without her patient, helpful and understanding guidance, my achievement would not have been realized. To Dr. Moshe Levin, I owe enormous thanks for his assistance and close attention to my work since the very beginning. To Dr. Pedro Pellet, I am profoundly grateful for his guidance, constant encouragement and wonderful networking.

Second, I wish to express my deepest thanks to Dr. and Mrs. Sungkhawan for their inspiration and encouragement and their help in so many ways, enabled me to complete this long journey.

Third, appreciation is also extended to the faculty and MBA students in public and private universities in Thailand and also my friend, Ivelisse Medina, who participated in this research.

Finally, I wish to express my greatest thanks to my husband, Associate Professor Kriengsak Khanthanapha, for his love and encouragement, his coaching and endless patience throughout all the tough times.

## TABLE OF CONTENTS

	Page
List of Tables	IX
List of Figures	XI
Chapters	
I. INTRODUCTION _____	1
Objective of the Study _____	1
Background of the Study _____	1
Theoretical Basis for Study _____	3
Definition of Terms _____	4
Research Questions _____	5
II. REVIEW OF LITERATURE _____	7
Introduction _____	7
Quality and Service _____	7
Service Quality _____	11
Perceived Service Quality _____	13
Expectation of Service Quality _____	16
Perceptions of Service Quality _____	17
The Gap Model of Service Quality _____	18
SERVQUAL _____	23
Extensions of Service Quality _____	24
Service Quality in Higher Education _____	30

III. METHODOLOGY _____	37
Target population _____	37
Sampling _____	37
The EDSERVQUAL Instrument _____	39
Pilot Study _____	40
Factor Analysis _____	40
Research Questions and Hypotheses _____	44
Data Collection Procedure _____	47
Statistical Analysis Procedure _____	48
IV. ANALYSIS AND PRESENTATION OF FINDINGS _____	50
Sample Description _____	50
Assessments of the Measures _____	53
Hypothesis Testing _____	55
V. SUMMARY AND CONCLUSION _____	67
Summary and Discussion _____	67
Discussion of Findings _____	71
Limitations _____	73
Recommendation for Future Research _____	73

APPENDICES

A. The SERVQUAL Instrument _____	75
B. The QUALED Instrument _____	78
C. The EDSERVQUAL Instrument _____	88
D. Questionnaire Cover Letter _____	99
E. Five-Factor Matrix for Principle Components for Expectations of Service Quality _____	101
F. Five-Factor Matrix for Principle Components for Perceptions of Service Quality _____	103
G. Factor Matrix for Principle Components with Varimax Rotation for Expectations of Service Quality _____	105
H. Factor Matrix for Principle Components with Varimax Rotation for Perceptions of Service Quality _____	107
REFERENCES _____	109
BIBLIOGRAPHY _____	114

## LIST OF TABLES

Table	Page
1 Rotated Component Matrix _____	41
2 Service Quality Dimensions Identified by Principle Components _____	42
3 Summary of Reliability of the Five Dimensions of Perceived Service Quality _____	43
4 Frequency and Percentage of Men and Women Respondents _____	51
5 Frequency and Percentage of Age Categories of Respondent _____	51
6 Frequency and Percentage of University _____	52
7 Marital Status _____	52
8 Number of Respondents for the Expectations and Perceptions Scales by Type of University _____	53
9 Means, Standard Deviations, Minimums and Maximums for the Expectations and Perceptions _____	53
10 Analysis of Variance for Expectations and Type of University _____	56

11 Analysis of Variance for Perceptions and Type of University_____	58
12 Analysis of Variance for Expectations and Gender__	59
13 Analysis of Variance for Perceptions and Gender___	60
14 Analysis of Variance for Expectations and Employment Status Categories_____	62
15 Analysis of Variance for Perceptions and Employee Status Categories_____	63
16 Analysis of Variance for Expectations and Income Level_____	64
17 Analysis of Variance for Perception and Monthly Income level_____	66
18 Summary of Hypothesis Testing Results_____	72

LIST OF FIGURES

Figure	Page
1 Gronroos' Service Quality Model _____	14
2 The SERVQUAL Model _____	21
3 A Relationship between Ten and Five Dimensions of SERVQUAL _____	22



## CHAPTER I

### INTRODUCTION

#### Objective of the Study

The purpose of this study was to investigate the differences in service quality between part-time MBA programs in private and public universities in Thailand and to analyze the differences in expectations and perceptions of service quality within and between public and private universities. The objective was accomplished by measuring MBA students' expectations and perceptions using the instrument EDSERVQUAL, developed for this study with items from other service quality surveys and the generation of additional items.

#### Background of Study

Thailand's economy grew rapidly until the economic downturn of the late 1990s. Yet, graduate schools of business continued to expand in order to meet the ever-increasing demand for MBA degrees. In many service industries purchasing power in the marketplace has shifted dramatically from a seller's market to a buyer's market. The nature of services in higher education is quite complex due to the length of the process and variety of variables

affecting it. The level of quality of such a service is important since it contributes to the perceptions of the quality of the total educational experience. Therefore, it was deemed important to examine MBA service quality.

In the past few years graduate schools of business in Thailand have expanded by adding many programs. Additional formats now supplement the traditional MBA programs, for example, Young Executive MBA, Executive MBA, Part-time MBA, and the Weekend MBA. They are located at both centralized and regional campuses. And there is growing competition for students as more players enter the expanding market.

To gain a competitive advantage among local and foreign universities requires greater focus on service quality. Therefore, the universities seek to examine their strategic positions by evaluating existing services, and adapting to customers' perceptions, to enhance their leadership position. Another strategic environmental influence is the trend toward privatization of public organizations (including universities) which will be enforced by the government of Thailand in the near future. Private and public universities, therefore, must become even more competent than before in order to provide excellent education services to students.

Service quality perceptions of MBA students in Thailand had not been examined previously. In US schools, there was

only one study of service quality perceptions and that involved international students. The results suggested that US business schools' service quality was rated high by foreign students (Tomovick, Jones, Al-Khatib & Baradwaj 1996).

What is an established standard of service quality in the US may be viewed as an innovative strategy in Thailand, especially in the education sector. Specific aspects of service quality which apply in one culture may not be appropriate in other countries, especially in Thailand, which where there is a very high standard of respect for the professor and the university.

#### Theoretical Basis for Study

The base theory for service quality derives from the work of Parasuraman, Zeithaml, and Berry (1988) which, in turn, relies on an extensive theoretical base. They also provided a reliable approach for measuring service quality. Their scale, SERVQUAL, is a well-documented, multidimensional approach for measuring service expectations and perceptions using a difference score approach. The dimensional structure of SERVQUAL included five dimensions (tangibility, reliability, responsiveness, assurance and empathy). The instrument contains twenty two parallel and

similarly-phrased items in two sections: expectations and perceptions.

### Definition of Terms

The terms below are frequently utilized in this study. The definitions are as follows:

Graduate School of Business:	Refers to public and private universities in Thailand which provide the MBA program.
Customer:	Stands for the students in graduate schools of business.
Expectations:	Stand for "desires or wants of consumer, i.e., what they feel a service provider should offer rather than would offer" (Parasuraman, Zeithamal, & Berry, 1988, p.17).
Perceptions:	Describes customer beliefs concerning the service received (Parasuraman, Zeithamal, & Berry, 1980) or experienced (Brown & Swartz, 1989).

Perceived service

Quality:	The technical measurement by SERVQUAL (Parasuraman, et.al.,1988).
Services:	Stand for any activity offered to a customer, that is simultaneously consumed as it is produced (Kothari, 1988)
Service Quality	Describes the long-term component of service satisfaction which measure of how well a delivered service meet customer expectations (Webster, 1991)
Part-time MBA Programs:	Denotes evening or weekend programs

### Research Questions

The six research questions examined in this study are the following:

1. How different are the expectations of service quality of MBA students in public universities and in private universities?
2. How different are the perceptions of service quality of MBA students in public universities and in private universities?

3. Are there differences in expectations of service quality between men and women MBA students in public and private universities?
4. Are there differences in perceptions of service quality between men and women MBA students in public and private universities?
5. Are there differences in expectations of service quality among employment status of MBA students in public and private universities?
6. Are there differences in perceptions of service quality among employment status of MBA students in public and private universities?
7. Are there differences in expectations of service quality among income levels for MBA students in public and private universities?
8. Are there differences in perceptions of service quality among income levels for part-time MBA students in public and private universities?

To answer these questions, the researcher surveyed MBA students in public and private graduate schools of business in Thailand.

## CHAPTER II

### Literature Review

#### Introduction

This study examines the differences in service quality between MBA programs in private and public universities in Thailand. This review of literature begins with definitions of quality and service quality. Then follow descriptions of service quality's dimensions identified by Pasuraman, et al. (1988) and related research in other areas and in graduate schools of business.

#### Definitions of Quality

Awareness of the importance of quality is everywhere today because it can be the difference between success and failure in this competitive world. Quality is definitely here to stay. As Born (1994) stated, quality is a technical discipline, which is now at the top of the management agenda. It is one of the key issues for competitiveness in the 1990s. Pirsig (1974) stated that, from a philosophical view, the term quality is a characteristic of thoughts and statements believed to be taken for granted or self-evident.

Because definitions are the result of abstract and formal thinking, quality cannot be defined. Pirsig added that we know what quality is, even though we cannot define it. In his opinion, it is impossible to define quality, because it is not an independent entity; it exists only in relation to what is perceived. According to Juran (1988), "Quality is fitness for use, the extent to which the product successfully serves the purpose of the user during usage. Crosby (1982) stated "Quality is conformance to requirements." Parasuraman, Zeithamal and Berry (1985) stated" Quality is zero defects - doing it right the first time". Parasuraman, Zeithamal and Berry (1990) defined quality as" exceeding what customers expect from the service".

#### Five Approaches to Quality

Quality can be viewed from the perspective of many disciplines, economics, marketing, psychology or operations research. Garvin (1988) formulated five approaches that differ strongly in their definitions of quality.

The transcendent approach (psychology) claims that quality cannot be defined precisely. A product-based approach (economics); maintains that differences in quality



are caused by the quantity of features or attributes of a product, according to Abbot (1955) and Garvin (1988).

A user-based approach (marketing and operational management) views quality as customer determined. The customer's judgement is always right, because every user has different thoughts and ideas about what quality is. In this approach, quality corresponds with Juran's definition; "Quality is fitness for use." This approach coincides with a marketing philosophy, with its strong customer focus).

The manufacturing-based approach (operations management) views quality from the supply-side point of view and mainly concerns conformance to requirements. Quality in service industries utilizes Total Quality Control (TQC) and defines it as an efficient system to integrate the efforts of several groups within an organization to develop, maintain and improve quality.

In a value-based approach quality is considered in relation to cost and price. Product quality is only considered good if the price is acceptable for (potential) buyers or costs are low.

A fifth approach is Total Quality Management (TQM) as a strategy. Fisher (1992) described this as quality management in place. Productivity will improve when wastage is reduced. Poor quality management often results in unavoidable costs

such as wastage, poor use of materials due to poor design and inefficient business process. TQM is the measurement system is included to gauge performance.

### Service Defined

While the definition of service quality describes it in terms of degrees of existence, service describes the phenomenon itself. Thomas (1978) described services via strategic management needs observed that generally service businesses evolved along the spectrum from people-based such as professional services to equipment-based such as dry cleaning services.

Shostack (1977) noted that the reality of service varies according to the thoughts of the beholder. It is obvious then, that one individual's perception of service quality may differ from another's perceptions. Service quality is often looked upon as experience and credence qualities where customers may need to accept in good faith, professional advice, because services do not possess easily observed attributes such as color or hardness (Zeithaml, 1981).

It has long been held that brand names are valuable assets, because they project an image of quality and reliability. However, there is evidence that this

relationship may not hold for service firms (or for service activities of manufacturing firms) as brand names have not been found to be reliable indicators of service quality or customer behaviors relating to perceived quality (Fox & Day, 1988).

### Service Quality

There are three basic concepts in service quality are; customer satisfaction, service quality, and customer value (Cronin & Taylor, 1992; Oliver, 1993; Zeithamal, 1988). Customer satisfaction is a main cognitive and affective reaction to a service incident (Oliver, 1980). Satisfaction or dissatisfaction from customers' experiences occurs when they compare the difference between their perception and expectation of service quality. Service quality may be measured on a cumulative basis (Cronin & Taylor, 1992). Service quality is an important factor in that it influences customer demand. Parasuraman, et al. (1988) assumed that the user-based approach runs parallel to subjective perceived quality. Customers use basically similar criteria in assessing services regardless of the type of service. Parasuraman, et al, (1988 p.42) defined service quality as "perceptions resulting from a comparison of consumer expectations with actual service performance". Garvin (1988)

positioned the user-based approach clearly within the field of marketing theory. Kordupleski, Rust, and Zahorik (1993) gave a suitable definition of quality as the extent to which the service, the service process and the service organization can satisfy the expectations of the user.

Bitner (1992) reported that research suggests that customers rely on a variety of cues, or evidence of service, in choosing alternatives and also in judging quality. Service quality, represents the long-term component of service satisfaction. It is "a measure of how well a delivered service meets customer expectation" (Webster, 1991, p.6).

Lewis and Boom (1983), according to Parasuraman et al. (1985,p.42), defined service quality as a "measure of how well the service level delivered matches customer expectations. Delivering quality service means conforming to customer expectations on a consistent basis."

Parasuraman et al. (1985) defined the properties of services as (1) search properties that can only be done before consumption (2) experience properties that can only be evaluated during or after the consumption, and (3) credence properties that can't be directly evaluated before or after the consumption. Few search properties exist for services and credence properties are too difficult to

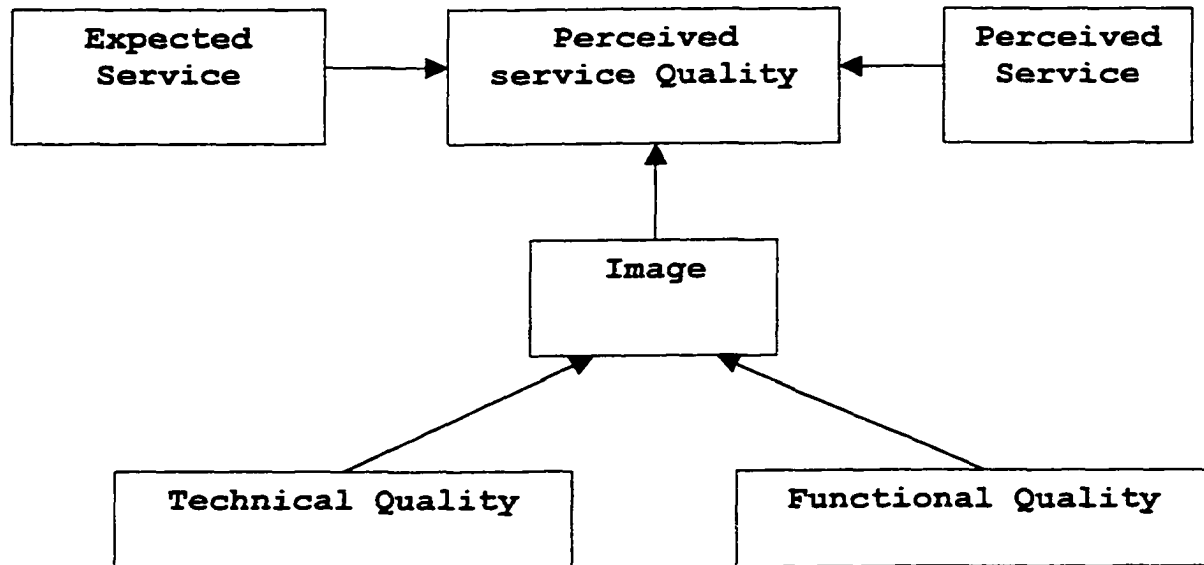
evaluation. For these reasons, consumers typically base their evaluation of service quality on experience alone.

Cronin and Taylor (1992) stated that service quality is antecedent to customer satisfaction and customer satisfaction has a significant effect on purchase intention.

### Perceived Service Quality

Gronroos (1982) defined two types of service quality; they are technical quality and functional quality. Technical quality concerns the outcome, or what the customer received from the service and can be measured similarly to the assessment of product quality. Functional quality concerns the process of evaluating the manner of delivering the service. According to his service quality model (see Figure 1), the combined of technical quality and functional quality create the construct of image. Gronroos (1984), suggested that image might be a quality dimension which effect both of expectations and perceived service quality, depending on the level of technical or functional quality present.

Figure 1: Gronroos Service Quality Model



Source: Gronroos(1984), "A Service Quality Model and its Marketing Implication", European Journal of Marketing, 18(4), p.40

Parasuraman, et al. (1985) derived a perceived service quality model from Gronroo's research based on the discrepancy between a customer's expectations and perception. They developed an instrument called SERVQUAL to measure the customers' perceptions of the service received versus their expectations, as the indicator of customer satisfaction. The difference (gap) between perceptions and expectations is a comparison to a norm, not a difference in the predicted compared to the received service quality.

Boulding, Kalra, Staelin, and Zeithamal (1993) developed a behavioral process model of perceived service quality. In this model, perceptions of service quality are a function of the customer's prior expectations of what should occur, as well as the customer's assessment of the quality of their most recent service encounter. These perceptions form the basis for an overall assessment of service quality, which then predicts behavioral intentions.

Oliver (1981) found that satisfaction is generated by the degree of surprise felt by the customer during the service encounter, which eventually becomes input to a more stable attitude. Bolton and Drew (1991a) identified the effect of service changes on service quality and the resultant effect on the customer's perception of service quality.

There is general agreement that service quality is a key to success in the formation of customer satisfaction (Anderson, Fornell, & Rust, 1997; Boulding et al., 1993; Cronin & Taylor, 1992; Parasuraman et al., 1988).

### Expectations of Service Quality

The concept of expectations has been employed extensively in studies of consumer behavior. People make demands on certain services based on their own norms, values, wishes, needs, etc., so, we know expectations are very individualistic. Therefore, expectations will be domain specific and may change in new situations. On the other hand, expectations are determined, not only by individuals themselves, but also by reference groups, external situations, norms, values, time, and service provider and the like. Expectations (E) are defined by Parasuraman, Zeithaml, and Berry (1988) as the desire or wants of consumer. The service expectations do not represent predictions about what service providers "would" offer, but rather what they "should" offer (Parasuraman, et al., 1985).

Parasuraman, et al. (1990b) used the SERVQUAL expectations measure to assess normative expectations. Berry and Parasuraman (1991) discussed two levels of expectations and concluded, "Our findings indicate that



## **NOTE TO USERS**

**Page(s) not included in the original manuscript are unavailable from the author or university. The manuscript was microfilmed as received.**

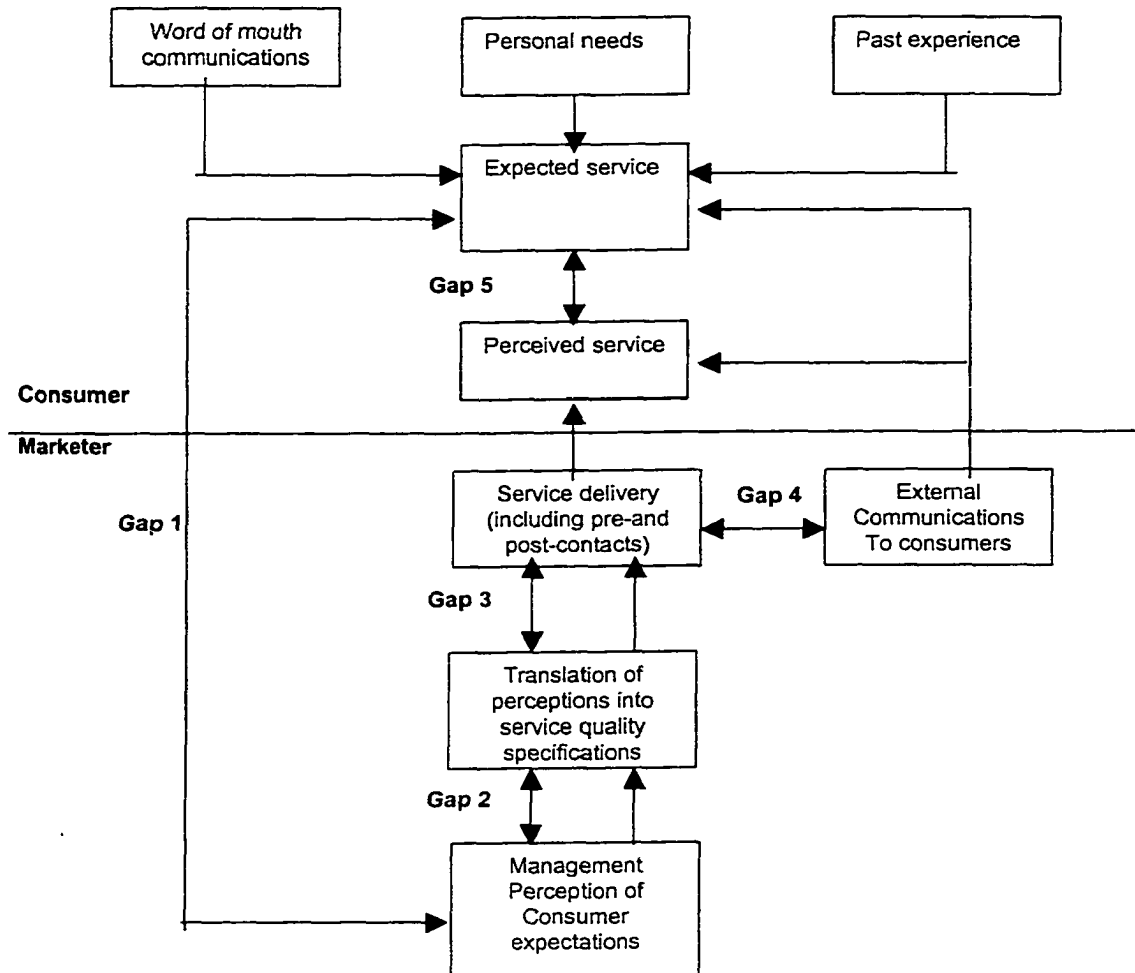
**17-19**

**This reproduction is the best copy available.**

**UMI<sup>®</sup>**

reduced, the service quality can be improved. It is, however, of major importance to examine whether the organization's opinions (employees individually or groups of employees) are in line with customers' opinions about quality. If these opinions differ widely, the company will have opinions about service quality deviating from the consumers'. This is a severe managerial problem, to be solved immediately (Zeithamal, et al., 1990, p.49).

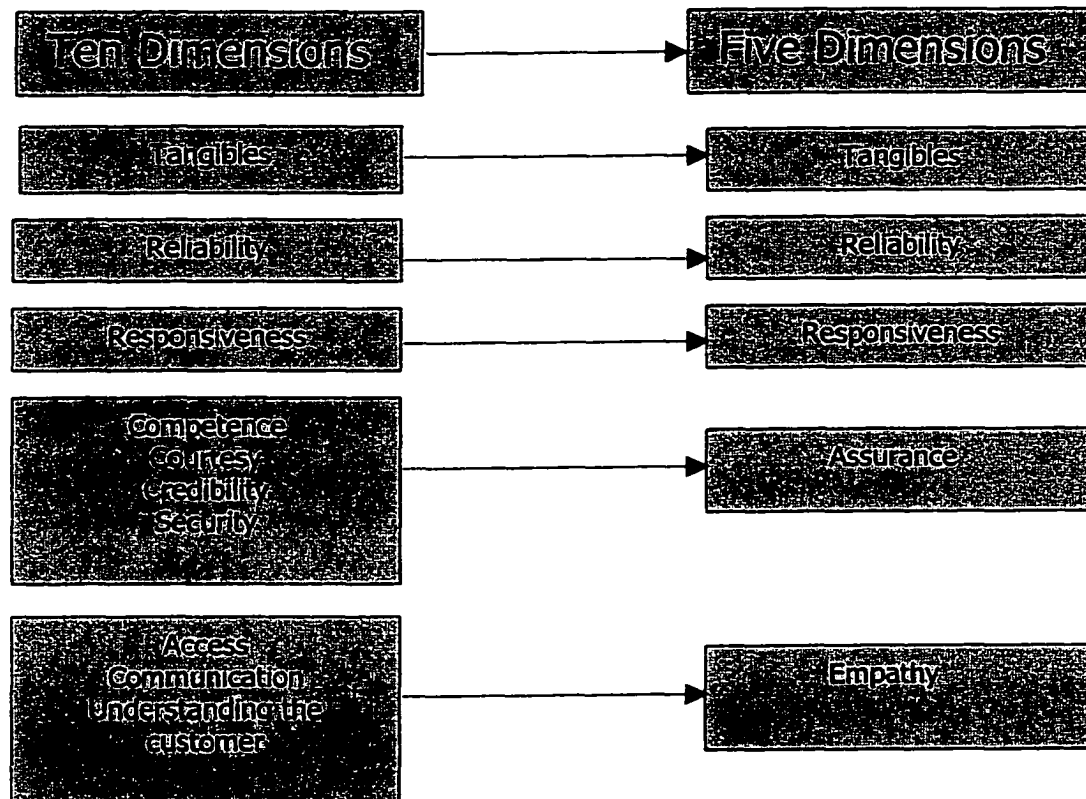
Figure 2: The SERVQUAL model



Source:

Hans kasper, Piet van helsdinge and Wouter de vries ,  
 Services Marketing Management an International  
 perspective, John Wiley & Sons Ltd, 1999, p.217

Figure 3: Ten Dimensions of Service Quality and Relationships to the Five SERVQUAL Dimensions.



Source:

Hans kasper, Piet van helsdinge and Wouter de vries ,  
 Services Marketing Management an International perspective,  
 John Wiley & Sons Ltd, 1999, p.214.

SERVQUAL

Parasuraman, et al. (1988) developed SERVQUAL, which is a multiple-item scale with good reliability and validity. There are two parts that assess service quality. (1) An expectations section containing 22 statements to measure customers' expectations of service quality. (2) A perceptions section containing a matching set of 22 statements to measure how customers perceive service quality. The items in the two parts (expectations and perceptions) use the same phrases except that one asks about what the respondent expected and the other asks about actual (perceived) service. Appendix A contains the 22-item expectation part of the SERVQUAL.

The five dimensions of service quality measured in SERVQUAL are:

1. **Tangibles:** The part of the service package that the customer can see or sometime touch, e.g. equipment or physical facilities. Examples include cleanliness of facilities, office appointments and attractiveness of credit card.
2. **Reliability:** Ability to perform the promised service dependability and accurately.
3. **Responsiveness:** Readiness to serve; it is the willingness to serve customers promptly and efficiently.

4. Assurance: The courtesy and competencies of service personnel.
5. Empathy: The willingness to understand the customer's precise needs and find just the right answer.

#### Extensions of Measures of Service Quality

All of the studies described above used SERVEQUAL to assess service quality. One extension of the instrument is SERVPERF. Joseph and Steven (1994) used Parasuraman, et al.'s (1994) approach to study the relative efficacy of performance-based and perceptions minus expectations measures of service quality. They tested a performance-based alternative by using SERVQUAL's gap formulation. The research suggested that overall service quality has a statistically significant effect on purchase intention in pest control and fast food industries while SERVPERF model had an effect on purchase intentions in banking, pest control and dry cleaning industries. This research is also hardly be surprising given that it has long been assumed that consumers do not always purchase the highest "quality" product due to cost, budget, availability, and other constraints. Finally the researcher stated that their logic misses the point of analysis, which is to compare two models that are identical except that SERVQUAL is used in one and

SERVPERF in the other. It seems that they are comparing apples to apples.

Masoud and Kelly (1994) demonstrated that service quality assessment using importance-performance analysis may be a more useful strategic management tool than the gap measures recommended by Parasuraman, et al. (1998). However, they caution strategic managers and researchers to consider the previously presented evidence prior to using the SERVQUAL methodology to assess service quality. Specifically, the evidence suggests that the SERVQUAL methodology does not appear to be an appropriate conceptualization or operationalization of the service quality construct. Consideration of price performance importance relationships, or service value, should lead to a better understanding of service quality.

McAtarsney (1999) proposed that customer is perceived as the unequivocal epicenter of all organizational operations. Using the fundamental principle of Total Quality Management (TQM) any prevalent effect has a root cause. SERVQUAL identifies internal areas of improvement within the organization. Gap1 = not knowing what customers want. Gap2 = the wrong service quality standard. Gap3 = the service performance gap, lack of supervisory control systems, lack of perceived control and role conflict. Gap4 = promises do

not match delivery. The weighted scores for each dimension were determined by three elements critical to the determination of service quality: customers, management and training personnel. The true test of whether an organization can deliver service excellence is in the transformation of the virtual concept to reality and delivering the quality of service demanded and expected by customers.

Donnelly and Edward (1999) assessed service quality and its link with value for money in a UK housing authority's repairs unit using the SERVQUAL approach. They conducted a pilot study of the quality of housing repairs using the SERVQUAL methodology (22-item survey). The research yielded five dimensions by which customers evaluate service quality as tangibles, reliability, responsiveness, assurance and empathy. The research focused on the responsiveness of repair service. The council operates a multi-category repair service delivered by local repair teams. The lack of data fit to the SERVQUAL dimensions, and the prominence of the service-specific items, made the application of the SERVQUAL approach and instruments problematic. The authors concluded that it is vital to develop a survey instrument from both the deliverer and recipient perspective. Their results suggested that further confirmatory research was needed if



the approach is to be used with confidence in this service area.

Dean and Stephen (1993) studied the relationship between service quality and future consumer behavior. They adapted the SERVQUAL scale (22 items) and relied heavily on process-oriented items to measure perceived quality. By measuring pre-encounter expectations and post-encounter perceptions of outcomes at separate times, meaningful item-by-item comparisons were made that allowed microanalysis of service quality for each of the 22 items. There was a significant relationship between perceived service quality and repeat purchase, complaining behavior, complimenting behavior and switching behavior. However, given the low explanatory power of the relationship, they suggested caution in full acceptance of the results. Still, the intuitive and statistical relationships suggest that strategic decisions based on assumed connections between perceived service quality and consumer behavior in the medical service area have scientific grounds.

Johns, Nick, Tyas, Phil (1996) examined the utility of the service quality gap theory to differentiate between food service outlets. The SERVQUAL instrument (Parasuraman, et al., 1986) was employed to assess the performance of a catering service in relation to its competitors. Although

reliability criteria for the instrument were encouraging, the factor structure identified by previous researchers was not present in the catering industry. Other considerations such as food and the attitudes of staff played a more important part in the meal experience.

Walbridge and Delene (1993) assessed physician attitudes of service quality. They explored the applicability of SERVQUAL dimensions when measuring physician perceptions of service quality. Physicians rated process quality determinants, such as "Reliability", "Assurance" and "Empathy" higher in relative importance than outcome quality determinants. This research suggests that physician perceptions of the determinants of service quality in medical practice are not congruent with the findings from service quality research in other industries. Quality measures for physician services should include process-related elements as well as traditional medical outcome data.

Parasuraman, et al. (1994) conducted a reassessment of expectations as a comparison standard in measuring service quality and discussed implications for further research. They responded to concerns raised by Cronin and Taylor (1992) and Teas (1993) about the SERVQUAL instrument and the perceptions-minus-expectations specification it uses to

operationalized service quality. They respected that the validity and alleged severity of concerns with SERVEQUAL was questionable. They also provided a set of research directions to address unresolved issues and to extend the understanding of service quality assessment.

Richard and Allaway (1993) studied service quality in the home-delivery pizza market by comparing Domino's and Pizza Hut. They used the original SERVQUAL survey instrument to measure the difference between expected and perceived service quality of both companies by using five-point Likert scales (from one "Strongly Disagree" to five "Strongly Agree"). Their results suggested that there is was no significant difference between the two companies.

Douglas (1993) studied the officer club member's perception of service quality at the Nellis Air Force base. They used SERVQUAL to compare expected and achieved service quality. The results showed that the club member perceived that the service provided by the club was less than average service quality. The difference was perceived to be greater by club members than by others.

Francoise (1993) studied the quality of interlibrary borrowing services from two perspectives. The library perspective was based on fill rate and turnaround time. The customer perspective was based on expectation

disconfirmation. He used the SERVQUAL instrument to measure expectations and perceptions of service quality. Service quality was rated higher on participant expectation than was their perceptions of the quality of service received.

### Service Quality in Higher Education

In the education sector, several studies have recently focused on international students' satisfaction and dissatisfaction with selected aspects of their U.S. educational experience. Stewart and Felicetti (1991) reported that a majority of foreign students' in their study were dissatisfied with their business school for what they perceived to be insufficient orientation assistance on their arrival at the school. Similarly, Reardon (1992) suggested that, with ever increasing tuition, the perceived price-quality-value relationship for international students, with respect to the education received, was deteriorating. He warned that American business schools not only will have difficulty retaining their current students, but also will have difficulty attracting new students.

Tomovick, Jones and Al-Khatib (1996) examined the factors that influence the service quality perceptions of international students in US business schools. They adapted the SERVQUAL for an educational setting. It contained 20 of

the original 22 SERVQUAL items. They dropped, after pretesting, two items deemed inappropriate for the educational setting. They assessed both discriminant and convergent validity. But the scale they developed was not made available in their article. They kept the five dimensions of the SERVQUAL (tangibles, reliability, responsiveness, assurance, and empathy). They found that international business students considered tangibles (e.g. of appealing facilities) one of the two most important factors in their assessment of educational service quality. The other construct found to influence students' service perception was assurance. This finding suggested that a school's faculty and their ability to interact comfortably with foreign students can positively affect students' perception. Students not only expect knowledgeable and qualified faculty but also frequently need teachers or mentors who will help them with the sometimes-troublesome transition to a new school, a new country, and a new culture.

Rigotti and Pitt (1992) modified the SERVQUAL instrument for full-time and part-time MBA students in a three weeks executive development program at a business school. Questionnaires regarding management's perceptions of customer expectations were also issued to academic staff and

senior administration personnel. They reported acceptable reliability and validity of the instrument for use with education services.

Remenyi and Money (1994) conducted a study into the computer services offered at Henley Management College in the UK. They examined service quality gap and correspondence analysis as diagnostic tools. Questionnaires were distributed to users of the information system in an attempt to measure user satisfaction with the computer network, the information systems staff, and the other information system services offered by the business school. The result showed that there is indeed a problem with service provided by the business school's information systems department which suggested the ineffective employment of information resources.

McElwee and Redman (1993) developed QUALED to assess service quality in higher education. They proposed that there are three characteristics endemic to the service sector: intangibility, heterogeneity and inseparability.

Intangibility applies to higher education because most but not all of the services are courses. It is not possible to measure them precisely. They cannot be evaluated as outcomes other than in terms of course classifications or grades.

Heterogeneity refers to the diversity of services offered. For higher education institutions, the services can include postgraduate courses; vocational courses; graduate courses; miscellaneous others such research, consultancy and other support activities. According to Parasuraman, et al. (1985): "consistency of behaviour from service personnel (i.e. uniform quality) is difficult to assure because what to deliver may be entirely different from what the consumer receives " (p.42).

Inseparability, according to Parasuraman et al. (1985) described the situation when production of a service is inseparable from consumption of the service. In higher education terms it is probably widely accepted that, as yet, there is less managerial control over the actual content of course and modules. The assumption is that the people who deliver the courses have some degree of expertise and academic knowledge. Thus the monitoring of the student/lecturer teaching/learning interface is minimal. Indeed, because not all students have similar prior conception of quality, they are unable to make quality comparisons in the same way that they could they were comparing the quality of other service provision. Indeed this intangibility is perhaps the major obstacle in an effective implementation of a model. The problem is simply

diagnosed but difficult to cure; how can expectation be matched with performance?

McElwee and Redman (1993) selected nine of Parasuraman's ten dimension of service quality and dropped the security dimension as not applicable to higher education. The nine dimensions are:

**Reliability:** Involves consistency of performance and dependability. Specifically this involves performing the service at the designated time, i.e. turning up for classes etc. and keeping accurate records of student performance.

**Responsiveness** is the extent to which there is concern and willingness to provide a service. The service is not simply the service, which occurs at the teacher/student interface, it also refers to the interface between employers and higher education institutions. The emphasis is on a prompt response to both internal and external customers; students and employers.

**Competence:** means possession of the required skill and knowledge with which to provide the service. It specifically refers to the knowledge and skills of academic and support staff to engage in all the aims of higher education



institution. Arguably the student should have the right to appraise and, if necessary, veto bad practice and incompetence.

Access: occurs at a number of interfaces between the institutions and external agencies, and, of course, internally between staff and students and staff and management.

Courtesy: means politeness and respect.

Communication: simply means keeping clients and staff informed, in the organization. This means an understandable explanation of services offered and assuring clients that problems will be solved.

Credibility: implies that higher education staff are trustworthy, reliable and honest. Other factors which contribute to credibility are the academic standing of the teaching staff.

Understanding: asks whether the institution really understand the needs of all its client groups.

Tangibles: include the physical aspects of higher education institution, such as aesthetics and cleanliness.

The QUALED instrument appears in Appendix B. It has 35 items and was utilized for measuring educational service quality. While SERVQUAL was originally designed to assess the provision of services within the service sector, not all the SERVQUAL questions apply to higher education. The 35-item, QUALED developed for university personnel as respondents was not appropriate for this study. Therefore, the EDSERVQUAL (Appendix C) based on the SERVQUAL and QUALED was developed for this study. Its development and pre-test are described in Chapter III.

This chapter has reviewed the relevant literature on service quality and reported on the SERVQUAL instrument and its adaptation for educational environments, QUALED. Chapter III describes the methodology and the instrument developed for this study, EDSERVQUAL.

## CHAPTER III

### Methodology

#### Introduction

This chapter describes the methods and procedures for this study. First the target population and the sampling plan is described. The follow the process of developing the questionnaire (the EDSERVQUAL), the research questions, the hypotheses, the data collection procedures and statistical analysis techniques.

#### Target Population

Five public universities in Thailand offer part-time MBA programs and ten private universities offer such programs. The total number of students attending the public MBA programs is estimated to be 1,800. The number attending private programs is estimated to be nearly 1,540. The target population in this study includes all these part-time MBA students.

#### Sampling

Four random samples were drawn for the purposes of this study. The four samples were collected as follows: Two samples, one for expectations of service quality and the other for perceptions of service quality came from students

in public MBA programs. The other two were be similarly drawn with students in private MBA programs.

The sample size,  $n$ , is estimated according to the following expression:

$$N = t^2 s^2 / e^2 \quad (1)$$

where:

$t$  = t-statistics for 95% level of confidence.

$s$  = standard deviation of the distribution of responses per item.

$e$  = the maximum acceptable error.

For the purpose of this study the level of confidence was selected to be 95%. Since the anticipated response scale range is from 1 (strongly disagree) to 5 (strongly agree), a standard deviation of 1 would seem reasonable. The maximum error,  $e$ , was selected to be .15 which is small enough not to err by one interval unit. Applying the above numbers to equation (1) yield an approximate  $n = 160$ . A maximum error of .10 yields an approximate  $n$  of 380. Based on the above results and other practical considerations (logistics, costs, time), it was decided to obtain samples of  $n = 200$ . Altogether 800 questionnaires were administered and collected according to the sampling plan mentioned above.

### The EDSERVQUAL Instrument

The conceptual basis for developing items for EDSERVQUAL was initially SERVQUAL (Parasuraman et al. 1988). The quality of service items in SERVQUAL's five dimensions (Tangibility, Reliability, Responsiveness, Assurance, and Empathy) were modified to fit the educational process and environment in Thailand for both the expectations and perceptions parts of SERVQUAL.

Both content validation and construct validity procedures were used in developing EDSERVQUAL as a new instrument. First content validity was undertaken by three business schools professors working together to accomplish the task. They used the QUALED (see Chapter II) as another example of measuring educational service quality. The QUALED, however, was developed for university personnel (staff, administrators and others) as respondents. It could not be used for the present study in its original form. But its ideas were incorporated into the EDSERVQUAL for this study although it was also based on the five dimensions of SERVQUAL. An example of adapting items is this. Item 1 of the SERVQUAL (Appendix A) is one of four items that assess the "tangibles" dimension. It states "The technical equipment of .... is totally up to date". This was modified for item 2 on the EDSERVQUAL as "Classrooms are equipped with up to date multi-media instructional facilities". In

addition, several new items were generated to measure important aspects of service quality in higher education resulting in a 29-item scale.

### Pilot Study

The 29-item EDSERVQUAL was administered in a pilot study to two samples of 40 students each. The pre-test responses provided the basis for reliability and validity analyses described below.

### Factor Analysis

Factor analysis was conducted to identify items that measure the dimensions and to compare these dimensions with those of SERVQUAL. Table 1 presents the results of principle components analysis with a five-factor solution to be consistent with the five factors of the SERVQUAL. Inspection of the items associated with each factor revealed that the dimensions were different from SERVQUAL's dimensions. The dimensions reflect students' perception of the categories of service quality in education. The five dimensions and the items that load on each one are presented in Table 2. Inspection of the items that loaded on each factor led to new dimensions that were named as follows: administrative, faculty & support, classroom & equipment, student needs and quality instruction.

Table 1.

Rotated Component Matrix

	Component				
	1	2	3	4	5
Q1P	.179	.205	.761	7.061E-02	-1.184E-02
Q2P	1.641E-02	.219	.841	.103	.170
Q3P	-.234	.320	.722	-3.305E-02	.377
Q4P	.721	-3.140E-02	.273	.189	.281
Q5P	.259	.195	.661	.465	.154
Q6P	.335	.153	.736	7.731E-02	-7.968E-02
Q7P	.837	.185	.181	8.852E-02	-9.243E-02
Q8P	.722	.124	3.777E-02	.171	.336
Q9P	.450	.476	.301	.221	6.047E-02
Q10P	8.390E-02	.187	-4.217E-02	-.114	.628
Q11P	.371	.141	.336	.137	.681
Q12P	.127	7.670E-03	8.492E-02	.176	.765
Q13P	.293	.589	.281	-1.219E-02	.437
Q14P	.277	.585	.130	.333	.319
Q15P	.628	.467	-8.922E-02	-4.551E-04	5.663E-02
Q16P	.543	.366	.222	6.852E-02	.166
Q17P	.275	.592	.233	.110	.156
Q18P	.508	.481	.217	.111	.356
Q19P	.341	.662	.381	.141	4.227E-02
Q20P	.498	.573	.130	.179	.423
Q21P	.796	.217	5.307E-02	6.280E-02	9.990E-02
Q22P	.698	.377	.113	.132	.145
Q23P	.223	.717	.393	3.180E-02	-3.948E-02
Q24P	6.006E-02	6.169E-02	2.035E-02	.848	-1.517E-02
Q25P	.309	7.299E-02	3.482E-02	.828	.101
Q26P	.450	.454	.344	.189	.246
Q27P	7.266E-02	.611	.277	.581	9.996E-02
Q28P	.250	.494	.573	-3.755E-02	.122
Q29P	4.234E-02	.561	.355	.626	6.504E-02

Extraction Method: Principle Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

A Rotation converged in 8 iterations.

Table 2

Service Quality Dimensions Identified by PrincipleComponents

Factor	Scale Items		%of variance explained
Administrative:	Q4P	Convenient class locate	42.93
	Q7P	Staff neatly dressed	
	Q8P	Records confidential	
	Q15P	Provides prompt responses	
	Q16P	Willingness to assist	
	Q18P	Available time to advise	
	Q21P	Polite to students	
	Q22P	Provides administrative matters	
Faculty & Support:	Q9P	Provides student feedback	9.475
	Q13P	Provides course description	
	Q14P	Improve teaching instruction	
	Q17P	Available out-of-class time	
	Q19P	Informs change in advance	
	Q20P	Easy to deal with faculty	
	Q23P	Reflects students' best interest	
	Q26P	Knows students' needs	
	Q27P	Provides financial aids	
Classroom & Equipment:	Q1P	Well prepared classroom	6.797
	Q2P	Up-to-date instructional facilities	
	Q3P	Provides attractive physical facilities	
	Q5P	Provides the latest literature of students' interest	
	Q6P	Up-to-date computing capabilities	
	Q28p	Provides service hours of learning facilities	
Student Needs:	Q24P	Provides individual attention	5.643
	Q25P	Provides personal attention	
	Q29P	Provides career planning services	
Quality Instruction:	Q10P	Reflects to understanding of students	4.388
	Q11P	Provides qualified professors	
	Q12P	Provides lecture supplementary handouts	



Table 3 presents the reliability (internal consistency) of the pilot instrument using Cronbach's Alpha for each dimension. The coefficients ranged from 0.66 (quality instruction) to 0.92 for faculty and support. The results provide initial support for the EDSERVQUAL for further research. Given the results of validity and reliability estimates, it was decided to utilize the EDSERVQUAL for the present study.

Table 3

A Summary of Reliability of the Five Dimensions of Perceived Service Qquality

Dimension	No. of items	Cronbach Alpha
Administrative	8	0.9040
Faculty & Support	9	0.9172
Classroom & Equipment	6	0.8836
Student Needs	3	0.7730
Quality Instruction	3	0.6548

### Research Questions

The following are the research questions:

1. How different are the expectations of service quality of MBA students in public universities and in private universities?
2. How different are the perceptions of service quality of MBA students in public universities and in private universities?
3. Are there differences in expectations of service quality between men and women of MBA students?
4. Are there differences in perceptions of service quality between men and women of MBA students?
5. Are there differences in expectations of service quality among the employment status of MBA students?
6. Are there differences in perceptions of service quality among the employment status of MBA students?
7. Are there differences in expectations of service quality among the income level of MBA students?

8. Are there differences in perceptions of service quality among the income level of MBA students?

Hypothesis Statement

H10 : There are no differences in expectations of service quality between students in public and private MBA programs.

H1a : There are differences in expectations of service quality between students in public and private MBA programs.

H20 : There are no differences in perceptions of service quality between students in public and private MBA programs.

H2a : There are differences in perceptions of service quality between students in public and private MBA programs.

H30 : There are no differences in expectations of service quality between men and women in MBA programs.

- H3a : There are differences in expectations of service quality between men and women in MBA programs.
- H40 : There are no differences in perceptions of service quality between men and women in MBA programs.
- H4a : There are differences in perceptions of service quality between men and women in MBA programs.
- H50 : There are no differences in expectations of service quality among students in employment status categories.
- H5a : There are differences in expectations of service quality among students in employment status categories.
- H60 : There are no differences in perceptions of service quality among students in employment status categories.
- H6a : There are differences in perceptions of service quality among students in employment status categories.

H7o : There are no differences in expectations of service quality among students in income categories.

H7a : There are differences in expectations of service quality among students in income categories.

H8o : There are no differences in perceptions of service quality among students in income categories.

H8a : There are differences in perceptions of service quality among students in income categories.

#### Data Collection

Data were collected from part-time MBA students in both public and private programs in Thailand. Data on expectations of service quality will be collected from students entering the programs while data on perceptions of service quality will be collected from students that are about to complete the programs.

In each sector, public or private, the MBA programs could be considered as clusters. Clusters will be selected at random and students within cluster will also be selected

at random to meet the sampling requirements of 800 respondents.

In each MBA program the director of the program was contacted and asked to supervise the administration of the questionnaire. An English version of the questionnaire was distributed since all students in the MBA programs have had considerable exposure to the English language. A sample of the questionnaire and the cover letter describing the purpose of the survey are presented in Appendix C & Appendix D.

The cover letter (Appendix D) describes the purpose of the study, in general, and requests the MBA students' participation. They are asked to complete the questionnaire and return them to the researcher. The questionnaire is described in above section in the EDSERVQUAL instrument.

#### Statistical Analysis Procedures

The modification of SERVQUAL to the educational environment in Thailand, and the comparative nature of the study, suggest the following statistical techniques. Factor analysis (principle components) was used to assess the dimensionality of the scale and evaluate construct validity. The data collected were used to test the hypotheses with ANOVA to compare the means in each hypothesis. In addition,

descriptive statistics (means, standard deviations) and an inter correlation matrix is presented for all variables.

## CHAPTER IV

### ANALYSIS AND PRESENTATION OF FINDINGS

#### Introduction

The purpose of this study was to investigate expectations and perceptions of service quality among part-time MBA programs in Thailand by analyzing differences between public and private universities and between men and women, as well as differences among types of employment and among income levels. This chapter reports the data analysis results in the following sections: sample description and demographic characteristics, psychometric characteristics (descriptive statistics, factor analysis, and reliability of measures), and hypotheses testing.

#### Sample Description

Questionnaires were distributed to 1,000 MBA students in four public and four private universities. Of the 1,000 questionnaires distributed, 824 usable responses were received back. Demographic data of the respondents are presented in Tables 4 through 7. They include the frequency



and percent of respondents in each category for gender, age, type of university, and marital status.

Table 4 describes gender of respondents; 48% (401 students) were male and 52% were female.

Table 4

Frequency and Percentage of Men and Women Respondents

Gender	Frequency	Percent
Male	401	48.0
Female	423	52.0
Total	824	100.0

Table 5 summarizes respondents' age by category. 32.52% of the respondents were between 20-30 years, 42.96% of the respondents were 31-40 years, 22.1% were 41-50 years, and 2.42% were 51 or over.

Table 5

Frequency and Percentage of Age Categories of Respondents

Age	Frequency	Percent
20-30	268	32.52
31-40	354	42.96
41-50	182	22.10
51 or over	20	2.42
Total	824	100.0

Table 6 presents data on whether respondents were from public (49.75%) or private (50.25%) universities. It demonstrates that public and private university students were almost equally represented.

Table 6

Frequency and Percentage by Type of University

Types	Frequency	Percent
Public	410	49.75
Private	414	50.25
Total	824	100

Table 7 presents data on marital status. 65.42%, 33.00% and 1.58% of the respondents were single, married and divorced, respectively.

Table 7

Marital Status

Status	Frequency	Percent
Single	539	65.42
Married	272	33.00
Divorced	13	1.58
Total	824	100.00

Table 8 reports the number of respondents from public and private universities and the number from each type of

university assessing Expectations (beginning students) and Perceptions (second year MBA students).

Table 8

Number of Respondents for the Expectations and Perceptions Scales by Type of University

Type of University	Expectation	Perception	Total
Public	227	183	410
Private	183	231	414
Total	410	414	824

Assessments of the Measures

Table 9 presents the means, standard deviations, the minimum and maximum, for Expectations and Perceptions.

Table 9

Means, Standard Deviations, Minimums and Maximums for the Expectation and Perception

Values	N	Minimum	Maximum	Mean	S.D.
Expectation	410	2.97	4.97	4.0216	.3497
Perception	414	1.79	4.79	3.4970	.6210

### Factor Analysis for EDSERVQUAL Dimensions

Factor analysis using principle components with varimax rotation was performed on the two scales, expectations and perceptions, using a five-factor solution. Chapter III reported the five-factor solution for the pretest data. Appendix E reports the results for the expectation scale of the EDSERVQUAL for expectations (beginning MBA students). Results were compared to the five-factor solution obtained with pretest data reported in Chapter III and Table 2. Contrary to expectations, the two analyses resulted in different sets of items loading on the five dimensions. Therefore, no adequate solution was immediately apparent.

The factor analysis results for the perceptions scale (completed by second year MBA students) with a five-factor solution, are presented in Appendix F. The results show a pattern of items associated with the five dimensions that is quite different from the results for the expectations scale (completed by beginning MBA students). Since the analyses did not lead to a clear pattern of items associated with each of the five dimensions, an alternative strategy was utilized.

Analysis without specifying the number of factors was performed on the two EDSERVQUAL scales using principle

components with varimax rotation. The results for the expectations scale (beginning MBA students) and the perceptions scale (second year MBA students) appear in Appendix G and Appendix H, respectively. The expectation scale yielded eight dimensions while the perception scale resulted in six dimensions. Once again, there was no pattern of items measuring the same dimensions in the two scales. Therefore, total scores for the two scales were utilized in hypothesis testing.

### Reliability

Internal consistency reliability was assessed using Cronbach's alpha. The resulting coefficients were 0.83 for Expectations and 0.93 for Perceptions.

### Hypothesis Testing

#### Hypothesis 1

H10 : There are no differences in expectations of service quality between students in public and private MBA programs.

H1a : There are differences in expectations of service quality between students in public and private MBA programs.

Table 10 presents the Analysis of Variance results for expectations and type of university, public or private. There are statistical differences between the two groups. The mean of 3.95 obtained for public university students' expectations is significantly lower than the mean of 4.11 for private university respondents.

Null hypotheses One (H<sub>10</sub>) stated that there are no differences between public and private university MBA students in expectations of service quality. The results in Table 10 ( $F = 20.60$ ,  $p < 0.05$ ) indicated that there are significant differences. Therefore, the null hypothesis can be rejected. There are differences in expectations on service quality. Students in private universities have higher expectations than do those in public universities.

Table 10

Analysis of Variance for Expectations and Type of Universities

Descriptives

COMPUTE MEANexp = (q1e + q2e + q3e + q4e + q5e + q6e + q7e + q8e + q9e + q10e + q11e + q12e + q13e + q14...  
(COMPUTE)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	225	3.9525	.3289	2.193E-02	3.9093	3.9957	3.07	4.93
2	182	4.1070	.3566	2.643E-02	4.0549	4.1592	2.97	4.97
Total	407	4.0216	.3497	1.733E-02	3.9875	4.0557	2.97	4.97

## ANOVA

COMPUTE MEANexp = (q1e + q2e + q3e + q4e + q5e + q6e + q7e + q8e + q9e + q10e + q11e + q12e + q13e + q14... (COMPUTE)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.403	1	2.403	20.603	.000
Within Groups	47.246	405	.117		
Total	49.650	406			

## Hypothesis 2

H20 : There are no differences in perceptions of service quality between students in public and private MBA programs.

H2a : There are differences in perceptions of service quality between students in public and private MBA programs.

Table 11 presents the Analysis of Variance results for perceptions and type of university. There are statistical differences between the two groups. The mean of 3.27 obtained for public university students' perceptions is significant lower than the mean of 3.68 from private universities respondents.

The results in Table 11 ( $F=48.52, p < 0.05$ ) indicate that there are significant differences. Therefore, the null hypothesis can be rejected. There are differences in expectations of service quality between students in public and private university MBA program.

Table 11

Analysis of Variance for Perceptions and Type of Universities

**Descriptives**

Mean of Perception

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	183	3.2708	.5562	4.111E-02	3.1897	3.3519	1.79	4.76
2	231	3.6762	.6122	4.028E-02	3.5969	3.7556	2.24	4.79
Total	414	3.4970	.6210	3.052E-02	3.4370	3.5570	1.79	4.79

**ANOVA**

COMPUTE MEANexp = (q1e + q2e + q3e + q4e + q5e + q6e + q7e + q8e + q9e + q10e + q11e + q12e + q13e + q14... (COMPUTE)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.403	1	2.403	20.603	.000
Within Groups	47.246	405	.117		
Total	49.650	406			

Test of Hypothesis 3

H30 : There are no differences in expectations of service quality between men and women in MBA programs.

H3a : There are differences in expectations of service quality between men and women in MBA programs.

Table 12 presents the Analysis of Variance results for expectations and gender. There are no differences between men and women. The mean of 4.01 obtained from men's



expectation is not difference from the mean of 4.02 for women.

The results in Table 12 ( $F = 0.032$ ,  $p > .05$ ) indicated that there are no differences between men and women MBA students in expectations of service quality. The null hypothesis can not be rejected. There are no differences in expectation of service quality between men and women MBA students.

Table 12

Analysis of Variance for Expectation and Gender

**Descriptives**

MEANEXP									
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
1	203	4.0185	.3471	2.436E-02	3.9705	4.0665	2.97	4.97	
2	204	4.0247	.3531	2.472E-02	3.9759	4.0734	3.07	4.97	
Total	407	4.0216	.3497	1.733E-02	3.9875	4.0557	2.97	4.97	

**ANOVA**

MEANEXP					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.865E-03	1	3.865E-03	.032	.859
Within Groups	49.646	405	.123		
Total	49.650	406			

Hypothesis 4

H40 : There are no differences in perceptions of service quality between men and women MBA programs

H4a : There are differences in gaps of quality of service between public and private MBA programs based on gender.

Table 13 presents the Analysis of Variance results for perceptions and genders. The mean of 3.6 obtained for men' perception is higher than the mean for women, 3.4. The results in Table 13 ( $F = 10.37$ ,  $p < .05$ ) indicate that there are significant differences in perceptions of service quality between men and women MBA students. The null hypothesis can be rejected. There are significant differences between men and women on perceptions of actual service quality.

Table 13

Analysis of Variance for Perceptions and Gender

**Descriptives**

MEANPER								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	197	3.5990	.5879	4.189E-02	3.5164	3.6816	2.07	4.76
2	217	3.4044	.6369	4.324E-02	3.3192	3.4896	1.79	4.79
Total	414	3.4970	.6210	3.052E-02	3.4370	3.5570	1.79	4.79

**ANOVA**

MEANPER					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.909	1	3.909	10.365	.001
Within Groups	155.383	412	.377		
Total	159.292	413			

### Hypothesis 5

H50 : There are no differences in expectations of service quality among the employment status categories of students in MBA programs.

H5a : There are differences in expectations of service quality among the employment status categories of students in MBA programs.

Table 14 presents the Analysis of Variance results for expectation and employment status (1 = unemployed, 2 = public service, 3 = private company, 4 = state enterprise). The results in Table 14 ( $F = 1.65$ ) indicate that there are no differences in expectations among employment status categories. Therefore, the null hypothesis can not be rejected. There are no differences in expectations among the employment status categories (1 = unemployed, 2 = public service, 3 = private company, 4 = state enterprise) of students in MBA programs.

Table 14

Analysis of Variance for Expectations and Employment Status  
Categories

## Descriptives

MEANEXP								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	39	4.0831	.3192	5.111E-02	3.9797	4.1866	3.41	4.83
2	109	3.9608	.3392	3.249E-02	3.8964	4.0252	3.07	4.79
3	220	4.0461	.3697	2.492E-02	3.9970	4.0952	2.97	4.97
4	38	3.9846	.2663	4.321E-02	3.8970	4.0721	3.41	4.52
5	1	4.2759	.	.	.	.	4.28	4.28
Total	407	4.0216	.3497	1.733E-02	3.9875	4.0557	2.97	4.97

## ANOVA

MEANEXP					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.799	4	.200	1.645	.162
Within Groups	48.850	402	.122		
Total	49.650	406			

## Hypothesis 6

H60 : There are no differences in perceptions of service quality among employment status categories of students in MBA programs.

H6a : There are differences in perceptions of service quality among employee status categories of students in MBA programs.

Table 15 presents the Analysis of Variance results for perceptions and employment status (1 = unemployed, 2=public service, 3=private company, 4= state enterprise).

The results in Table 15 ( $F = .421, p > .05$ ) indicate that there are no differences. Therefore, the null hypothesis can not be rejected. There are no differences in perceptions of service quality among the employment status categories of students in MBA programs.

Table 15

Analysis of Variance for Perceptions and Employee Status Categories

**Descriptives**

MEANPER								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	29	3.3971	.6600	.1226	3.1461	3.6482	1.79	4.66
2	73	3.4620	.5958	6.974E-02	3.3230	3.6010	2.28	4.48
3	284	3.5123	.6364	3.776E-02	3.4379	3.5866	1.97	4.79
4	28	3.5369	.4881	9.223E-02	3.3477	3.7262	2.55	4.38
Total	414	3.4970	.6210	3.052E-02	3.4370	3.5570	1.79	4.79

**ANOVA**

MEANPER					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.490	3	.163	.421	.738
Within Groups	158.802	410	.387		
Total	159.292	413			

Hypothesis 7

H70 : There are no differences in expectations of service quality among income levels of students in MBA programs.

H7a : There are differences in expectations of service quality among income levels of students in MBA programs.

Table 16 presents the Analysis of Variance results for expectations and monthly income levels (in Baht), (1 = 9,999 or less, 2 = 10,000-14,999, 3 = 15,000-19,999, 4 = 20,000-24,999, 5 = 25,000-29,999, 6 = 30,000 or more). The results in Table 16 ( $F = 2.29$ ,  $p < .05$ ) indicate that there are statistical differences in expectations among income levels. Therefore, the null hypothesis can be rejected. There are differences in expectation among the income category of students in MBA programs.

Table 16

Analysis of Variance for Expectations and Income Level

**Descriptives**

MEANEXP									
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
1	59	4.0643	.3807	4.956E-02	3.9651	4.1635	3.28	4.97	
2	67	4.0685	.3402	4.157E-02	3.9855	4.1514	3.07	4.83	
3	72	3.9224	.3575	4.213E-02	3.8384	4.0064	2.97	4.69	
4	41	4.1161	.2926	4.569E-02	4.0237	4.2084	3.41	4.79	
5	61	3.9938	.3367	4.310E-02	3.9076	4.0800	3.07	4.97	
6	107	4.0151	.3492	3.376E-02	3.9482	4.0821	3.28	4.93	
Total	407	4.0216	.3497	1.733E-02	3.9875	4.0557	2.97	4.97	

## ANOVA

MEANEXP

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.380	5	.276	2.294	.045
Within Groups	48.269	401	.120		
Total	49.650	406			

Hypothesis 8

H80 : There are no differences in perceptions of service quality among monthly income level of the students in MBA programs.

H8a : There are differences in perceptions of service quality among monthly income levels of students in MBA programs.

Table 17 presents the Analysis of Variance results for perceptions of service quality and monthly income category (1 = 9,999 or less, 2 = 10,000-14,999, 3 = 15,000-19,999, 4 = 20,000-24,999, 5 = 25,000-29,999, 6 = 30,000 or more). The results in Table 15 ( $F = 3.2$ ,  $p < .05$ ) indicate that there are significant differences in perception among monthly income levels. Therefore, the null hypothesis can be rejected. There are differences in perceptions among the monthly income levels of students in MBA programs.

Table 17

Analysis of Variance for Perceptions and Monthly Income Level

**Descriptives**

MEANPER								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	56	3.3036	.6439	8.604E-02	3.1311	3.4760	1.79	4.66
2	58	3.3876	.6057	7.953E-02	3.2284	3.5469	2.34	4.76
3	42	3.4228	.5393	8.322E-02	3.2548	3.5909	2.34	4.48
4	43	3.4194	.6884	.1050	3.2075	3.6313	2.14	4.76
5	39	3.6587	.5012	8.025E-02	3.4962	3.8212	2.41	4.38
6	176	3.5954	.6243	4.706E-02	3.5025	3.6883	1.97	4.79
Total	414	3.4970	.6210	3.052E-02	3.4370	3.5570	1.79	4.79

**ANOVA**

MEANPER					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.003	5	1.201	3.196	.008
Within Groups	153.288	408	.376		
Total	159.292	413			

This chapter has presented the results of data analysis. It included estimates of scale validity and reliability as well as hypotheses testing. Chapter V discusses the results and presents suggestions for additional research.



## CHAPTER V

### SUMMARY AND CONCLUSIONS

#### Introduction

The content of this chapter is presented in three sections. The first section presents a summary of the study's major findings and a discussion of the results. In the second section, conclusions and implications based on the findings are discussed. Finally in the third section, pertinent recommendations for further research are suggested.

#### Summary and Discussion

The purpose of this research was to examine expectations and perceptions of service quality in MBA programs in Thailand. It investigated differences between public and private universities. It also considered the influence of demographics by focusing on gender, income levels and employment status. Moreover, it provided a major contribution by developing, pre-testing and then utilizing the EDSERVQUAL. It also investigated the applicability of the EDSERVQUAL to MBA programs in public and private universities in Thailand.

In this study the EDSERVQUAL survey instrument was shown to be effective in English for Thai MBA students. Reliabilities of 0.824 and 0.934 were found for the two scales, Expectations of Service Quality and Perceptions of Service Quality.

Content validity was initially established, as reported in Chapter III. The pilot study provided evidence of five distinct dimensions. After data collection, the factor structure of the two scales was again examined with principle components analysis. There were differences in the number of dimensions identified with pre-test (N=40) actual data collection (N=410) in the expectations portion. Therefore, the construct validity of the scales should be subject to further study.

Previous studies of service quality demonstrated acceptable levels of construct validity using principle components factor analysis. For example, the SERVQUAL which has been utilized extensively in marketing and the service industry (e.g., banking, hotels). However, in previous research, both (expectations and perceptions) scales were completed by one respondent. In this study different sets of respondents completed the expectations scale (beginning MBA students) and the perceptions scale (second year MBA students). This was done to ensure different perspectives

and more precise measures for the expectations and perceptions scales. This may explain the different number of dimensions resulting from principle components analysis, eight factors for expectations and six factors for perceptions of actual service quality. This is an area for further research.

Table 18 summarizes the results of hypothesis testing. These results are discussed below.

#### Hypothesis 1 and 2

These two hypotheses examined whether there were differences about expectations (H1) and perceptions (H2) between public and private universities. There were significant differences between two groups. Both expectations and perceptions were higher in private than in public universities. These findings reflect beliefs about service quality being better in private universities than public universities. Traditionally, public universities were perceived in Thailand as being better than private universities. There has recently intense competition between the two types of universities for MBA students. This finding appears to represent a shift in thinking about the two kinds of universities.

#### Hypotheses 3 and 4

These two hypotheses examine whether there were differences in expectations (H3) and perceptions (H4) of service quality between men and women in MBA programs. There were mixed results. There were no differences between men and women in expectations; they were the same before entering the MBA program (men = 4.02, women = 4.02). For perceptions there were significant differences between men and women (men = 3.6, women = 3.4). This finding may reflect an aspect of the Thai culture where women's role is less important than that of men.

#### Hypotheses 5 and 6

These two hypotheses examined differences in expectations (H5) and perceptions (H6) among the employment status categories of students in MBA programs. There were no differences among the employment status. These findings demonstrate that there are similarities across MBA students in business, state enterprises and government services career.

#### Hypothesis 7 and 8

These two hypotheses examined whether there were differences in expectations (H7) and perceptions (H8) among

income levels. There were significant differences for both expectations and perceptions of service quality. Table 17 summarizes the results.

### Discussion of Findings

The findings for expectations were mixed in terms of income levels. This may reflect lack of experience about the MBA programs for all beginning MBA students. It may reflect the diverse amounts of work experience among the respondents (using income level as a substitute for length of work experience). Typically, some respondents had no work experience and started the MBA programs immediately after the bachelors degree; other beginning MBA students were older and had greater work experience judging from their income levels.

The findings for perceptions of quality service by income level indicate that the higher the incomes the higher were second year MBA students' perceptions of service quality. There are at least two possible explanations for the results. One is that more work experience, associated with higher income levels, leads to a greater appreciation of the value of MBA classes. A second possible explanation is that in Thailand those who are older and in higher positions (associated with higher

income levels) are treated differently, with greater respect than those who are younger and who hold less prestigious positions.

Table 18

Summary of Hypothesis Testing Results

Hypotheses	Reject (R) Do not reject (N)	Expectation (E) Perception (P)	Finding
H1	R	E	Public < private
H2	R	P	Public < Private
H3	N	E	No differences, Men and Women
H4	R	P	Women < men
H5	N	E	No differences in Employment Status
H6	N	P	No Differences in Employment Status
H7	R	E	20M-25M > 25M-29M,
H8	R	P	30M+, 25M-29M > 20M-24M, 15M- 19M > 10M-14M, 9m or less

## Limitations and Recommendations for Further Research

### Limitations

The first limitation of this study was the target of students in MBA program. In this study only four universities were located in the Bangkok area, which the others were located at various locations in Thailand.

The second limitation was the sensitivity of the university's reputation in quality assurance.

A third limitation was the survey instrument itself. It needs further testing with university students in diverse disciplines, both business programs and other.

### Recommendation for Future Research

This study examined the service quality in higher education in Thailand, and assessed part-time MBA students in Thailand. Similar studies should include students in other countries and with students in programs other than the MBA. In addition, this research should be extended to include full-time MBA students in a variety of cultures.

A related area for future research would concentrate on examining the psychometric properties (validity and reliability) of the EDSERVQUAL survey instrument developed for the present study. Such an examination might delete

same items and then generate and examine new items. Factor analysis could more fully examine the dimensions of the two scales, expectations and perceptions of service quality in education.

Future studies could examine the comparability of using the same and different respondents (beginning MBA students and second-year MBA students for the two parts of the EDSERVQUAL).

This study collected data from two separate samples of MBA students, beginning MBA students for the expectations part and second year MBA students for the perceptions of service quality received. The results would probably be different if the same respondents provided the data for both the expectations and perceptions part of the EDSERVQUAL.

### Summary

This study developed and piloted the EDSERVQUAL to assess expectations and perceptions of service quality in higher education. This instrument was then utilized to examine differences among public and private universities, men and women and also variations among income levels and job sectors.



APPENDIX A.

The SERVQUAL Instrument

The SERVQUAL questionnaire, Zeithamal, Parasuraman and Berry (1994)

DIMENSION	QUESTION
<b>Tangibles</b>	
	1. The technical equipment of ... is totally up to date
	2. The office is attractive
	3. The employees are well dressed
	4. Tools to help perform the service are attractive
<b>Reliability</b>	
	5. Promises to perform the service within a certain time are always kept
	6. Complaints or problems solved with great concern
	7. ... delivers the service correctly at one go
	8. ... delivers the service at the agreed on
	9. The administration / order registration is never incorrect
<b>Responsiveness</b>	
(-)	10. One cannot expect ... to inform customers about the exact time of delivery
(-)	11. It is not realistic to expect immediate service delivery from ...
(-)	12. Employees of ... are not always willing to help customers
(-)	13. It is acceptable that employees are too busy to help

customers immediately

**Assurance**

- 14. The behavior of the employees of ... impresses customers with the reliability of the service
- 15. Customers feel confident when in contact with employees of ...
- 16. Employees are always friendly and courteous
- 17. Employees possess the knowledge to answer questions of customers

**Empathy**

- 18. From employees of ... one cannot expect to pay attention to each customer individually
- (-) 19. From employees of ... one cannot expect to pay personal attention to each customer
- (-) 20. It is not realistic to expect from employees of ... to understand the specific needs of customers
- (-) 21. It is not realistic to expect from employees of ... to only serve the interest of the customer
- (-) 22. One cannot expect that opening hours are appropriate for all customers

## APPENDIX B

## The QUALED Instrument

## QUALED

**QUALED is a survey about quality within ??? Business School.**

**We would be grateful if you could complete the following questionnaire:-**

### **A Directions:-**

Please show the extent to which you think the services and courses offered by ??? **should** possess the features described by each statement. Do this by picking one of the seven numbers underneath each statement.

If you strongly agree that ??? **should** possess a feature, circle the appropriate number.

If you strongly disagree that ??? **should** possess a feature, again circle the appropriate number.

If your feelings are not 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 best shows your expectations of the services which ??? offers.

### **1 ??? should have the very latest equipment**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

### **2 Students should expect prompt service from staff**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

### **3 Teaching staff should keep accurate records**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

### **4 ??? should be located on one site**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

### **5 Students should feel confident in their dealings with ??? staff**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

### **6 All staff should be polite: bad manners or ill temper should not be tolerated**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

### **7 Teaching staff should be dependable**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
-------------------	----------	-------------------	---------	----------------	-------	----------------

- 1                      2                      3                      4                      5                      6                      7
- 8        Results should not be confidential**
- Strongly Disagree    Disagree    Slightly Disagree    Neither    Slightly Agree    Agree    Strongly Agree  
1                      2                      3                      4                      5                      6                      7
- 9        Staff should not be expected to tell students exactly when their services will be performed**
- Strongly Disagree    Disagree    Slightly Disagree    Neither    Slightly Agree    Agree    Strongly Agree  
1                      2                      3                      4                      5                      6                      7
- 10       The appearance of the physical facilities of ??? should be consistent with the quality of the services provided**
- Strongly Disagree    Disagree    Slightly Disagree    Neither    Slightly Agree    Agree    Strongly Agree  
1                      2                      3                      4                      5                      6                      7
- 11       Staff should not be expected to give students individual attention**
- Strongly Disagree    Disagree    Slightly Disagree    Neither    Slightly Agree    Agree    Strongly Agree  
1                      2                      3                      4                      5                      6                      7
- 12       Staff should not be expected to give handouts to compliment lectures**
- Strongly Disagree    Disagree    Slightly Disagree    Neither    Slightly Agree    Agree    Strongly Agree  
1                      2                      3                      4                      5                      6                      7
- 13       Students should be able to trust the staff of ???**
- Strongly Disagree    Disagree    Slightly Disagree    Neither    Slightly Agree    Agree    Strongly Agree  
1                      2                      3                      4                      5                      6                      7
- 14       Communication between staff should be a priority**
- Strongly Disagree    Disagree    Slightly Disagree    Neither    Slightly Agree    Agree    Strongly Agree  
1                      2                      3                      4                      5                      6                      7
- 15       Teaching staff should get adequate support from the management of ??? to do their jobs well**
- Strongly Disagree    Disagree    Slightly Disagree    Neither    Slightly Agree    Agree    Strongly Agree  
1                      2                      3                      4                      5                      6                      7
- 16       Teaching methods should be appraised**
- Strongly Disagree    Disagree    Slightly Disagree    Neither    Slightly Agree    Agree    Strongly Agree  
1                      2                      3                      4                      5                      6                      7

- 17 When something is promised by a certain time it should always be provided by staff**
- |                   |          |                   |         |                |       |                |
|-------------------|----------|-------------------|---------|----------------|-------|----------------|
| Strongly Disagree | Disagree | Slightly Disagree | Neither | Slightly Agree | Agree | Strongly Agree |
| 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
- 18 It is unrealistic to expect staff to know the needs of every individual student**
- |                   |          |                   |         |                |       |                |
|-------------------|----------|-------------------|---------|----------------|-------|----------------|
| Strongly Disagree | Disagree | Slightly Disagree | Neither | Slightly Agree | Agree | Strongly Agree |
| 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
- 19 It is unrealistic to expect staff to have students' best interests at heart**
- |                   |          |                   |         |                |       |                |
|-------------------|----------|-------------------|---------|----------------|-------|----------------|
| Strongly Disagree | Disagree | Slightly Disagree | Neither | Slightly Agree | Agree | Strongly Agree |
| 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
- 20 When students have problems, staff should be courteous, even if not able to help**
- |                   |          |                   |         |                |       |                |
|-------------------|----------|-------------------|---------|----------------|-------|----------------|
| Strongly Disagree | Disagree | Slightly Disagree | Neither | Slightly Agree | Agree | Strongly Agree |
| 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
- 21 Students should be made aware of their course and modular requirements**
- |                   |          |                   |         |                |       |                |
|-------------------|----------|-------------------|---------|----------------|-------|----------------|
| Strongly Disagree | Disagree | Slightly Disagree | Neither | Slightly Agree | Agree | Strongly Agree |
| 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
- 22 It is not necessary for staff and students to be smartly dressed when in contact with external personnel**
- |                   |          |                   |         |                |       |                |
|-------------------|----------|-------------------|---------|----------------|-------|----------------|
| Strongly Disagree | Disagree | Slightly Disagree | Neither | Slightly Agree | Agree | Strongly Agree |
| 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
- 23 Administrative staff should not be expected to have operating hours convenient to all their students**
- |                   |          |                   |         |                |       |                |
|-------------------|----------|-------------------|---------|----------------|-------|----------------|
| Strongly Disagree | Disagree | Slightly Disagree | Neither | Slightly Agree | Agree | Strongly Agree |
| 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
- 24 Students should be encouraged to actively participate in lectures**
- |                   |          |                   |         |                |       |                |
|-------------------|----------|-------------------|---------|----------------|-------|----------------|
| Strongly Disagree | Disagree | Slightly Disagree | Neither | Slightly Agree | Agree | Strongly Agree |
| 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |
- 25 Staff should be willing to see students when required**
- |                   |          |                   |         |                |       |                |
|-------------------|----------|-------------------|---------|----------------|-------|----------------|
| Strongly Disagree | Disagree | Slightly Disagree | Neither | Slightly Agree | Agree | Strongly Agree |
| 1                 | 2        | 3                 | 4       | 5              | 6     | 7              |

**26 It is unrealistic to expect staff to inform students of their availability**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**27 When something is promised by a certain time it should always be provided by students**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**28 All physical facilities should be appealing**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**29 When students have problems staff should be helpful, even if not sympathetic**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**30 Personal details should be kept confidential**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**31 Staff should be able to impart their knowledge in a way students can understand**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**32 Staff don't have to be willing to help students during operating hours**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**33 ??? should have an effective complaint procedure for staff and students**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**34 ??? should deserve a good reputation**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**35 Original assignments should be set at all times**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7



**B Directions**

The following set of statements relate to your feelings about ??? Business School. For each statement, please show the extents to which you believe ??? has the feature described by the statement. Once again, circling a 7 means that you strongly agree that ??? has that feature and circling a 1 means that you strongly disagree. You may circle any of the numbers in the middle that show the strength of your feelings. There are no right or wrong answers. All we are interested in is a number that best shows your expectations of the services which ??? offers.

**36 ??? has the very latest equipment**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**37 Students get prompt service from staff**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**38 Teaching staff keep accurate records**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**39 Duel location of ??? is a problem**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**40 Students feel confident in their dealings with ??? staff**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**41 All staff are polite**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**42 Teaching staff are dependable**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**43 Results are not confidential**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**44 Staff do not tell students exactly when their services will be performed**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**45 The appearance of the physical facilities of ??? is consistent with the quality of the services provided**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**46 Staff do not give students individual attention**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**47 Staff do not give handouts to compliment lectures**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**48 Students are able to trust the staff of ???**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**49 Communication between staff is priority**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**50 Teaching staff get adequate support from the management of ??? to do their jobs well**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**51 Teaching methods are reviewed regularly**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**52 When something is promised by a certain time it is always provided by staff**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**53 Staff do not know the needs of every individual student**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**54 Staff have students' best interests at heart**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**55 When students have problems, staff are friendly, even if not able to help**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**56 Students are made aware of their course and modular requirements**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**57 Staff and students are not smartly dressed when in contact with external personnel**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**58 Administrative staff do not have operating hours convenient to all their students**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**59 Students actively participate in lectures**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**60 Staff are willing to see students when required**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**61 Staff timetables are not readily available to students**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**62 When something is promised by a certain time it will always be provided by students**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**63 All physical facilities are visually appealing**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**64 When students have problems staff are helpful, even if not sympathetic**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**65 Personal details are kept confidential**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**66 Staff impart their knowledge in a way students can understand**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**67 Staff are not willing to help students during operating hours**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**68 ??? has an effective complaints procedure for staff and students**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**69 ??? deserves a good reputation**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

**70 Original assignments are set at all times**

Strongly Disagree	Disagree	Slightly Disagree	Neither	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

Finally a few personal questions

Are you?

Male \_\_\_\_\_

Female \_\_\_\_\_

What is your position within ???

Dean \_\_\_\_\_

Ass. Dean \_\_\_\_\_

Reader \_\_\_\_\_

P/Lecturer \_\_\_\_\_

S/ Lecturer \_\_\_\_\_

Lecturer \_\_\_\_\_

How many years have you been in your current post?

\_\_\_\_\_

How many years full or part time work experience do you have in higher education in total?

Teaching \_\_\_\_\_

Non Teaching \_\_\_\_\_

Thank you for your assistance in completing this questionnaire, your response is very appreciated.  
All information will remain confidential.

## APPENDIX C

## The EDSERVQUAL Questionnaire

## EDSERVQUAL

### A SURVEY OF THE SERVICE QUALITY OF YOUR MBA PROGRAM

#### PERCEPTIONS

**Directions:**

This survey deals with your opinions on the services of your MBA Program. Please show the extent to which you think your Program's services possess the features described by each statement. Do this by circling one of the 5 numbers underneath each statement. Generally, if you strongly disagree the program should possess a feature, record a "1". If your feelings are not strong, record any of the numbers in the middle. "5" should be circled if you strongly agree with the statement. However, for some statements the numbering is reversed. So, please read each statement carefully. There are no right or wrong answers. All we are interested in is numbers that best show your perceptions of the services provided by the MBA Program.

1. Classrooms provide for comfortable learning experience.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

2. Classrooms are equipped with up-to-date multi-media instructional facilities.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

3. The Program physical are attractive.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

4. Classes are conveniently located for all students.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

5. Library has the latest literature in your area of interest.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

6. The computer lab provides up-to-date computing capabilities.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

7. Staff is neatly dressed.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

8. Student records are kept confidential.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

9. Student complaints are dealt with great concern by staff.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

10. Professors adjust difficult lecture material to the level of understanding of students.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

11. Courses are taught by highly knowledgeable professors.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

12. Supplementary handouts are given by professors to enable better understanding of lecture material.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

13. Course syllabus and assignments are sent to students in advance of first class.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

14. Teaching evaluations of professors by students improve instruction.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

15. Administrative staff are too busy and do not respond to student requests promptly.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

16. Administrative staff are always willing to help students.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1



17. Professors are always available to students out of class.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

18. Professors have convenient office-hours to advise students.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

19. Students are informed of changes in schedules in advance.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

20. Students feel comfortable when dealing with faculty.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

21. Administrative staff are friendly and polite.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

22. Administrative staff have the knowledge to help students in Program administrative Matters (registration, learning material, Xerox, etc.).

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

23. Program has students' best interest as a major objective.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

24. Students receive individual attention from faculty.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

25. Administrative staffs provide personal attention to every student.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

26. Faculty understands the specific needs of students.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

27. The Program arranges for financial aid (loans, scholarships) for students.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

28. Service hours of learning facilities accommodate all students.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

29. Program provides career planning services.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

**TELL US SOMETHING ABOUT YOURSELF**

Please mark the appropriate box

1. Gender             Male         Female
2. Marital Status:    Single     Married    Divorced    Widowed
3. Age category:     20 or less    21-30     31-40     41-50  
                          51 or older
4. Your income per month:         ₱ 9,999 or less         ₱ 15,000-19,999  
    ₱ 10,000-14,999     ₱ 20,000-24,999  
    ₱ 25,000 or more
5. Employment Situation             Part - Time (less than 30 hrs. a week).  
    Full - Time (30 hrs. or more a week).  
    Unemployed

## EDSERVQUAL

### A SURVEY OF THE SERVICE QUALITY OF YOUR MBA PROGRAM

#### EXPECTATIONS

##### Directions:

This survey deals with your opinions on the services of your MBA Program. Please show the extent to which you think your Program's services should possess the features described by each statement. Do this by circling one of the 5 numbers underneath each statement. Generally, if you strongly disagree the program should possess a feature, record a "1". If your feelings are not strong, record any of the numbers in the middle. "5" should be circled if you strongly agree with the statement. However, for some statements the numbering is reversed. So, please read each statement carefully. There are no right or wrong answers. All we are interested in is numbers that best show your expectations of the services provided by your MBA Program.

1. Classrooms should provide for comfortable learning experience.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

2. One cannot expect classrooms to be equipped with up-to-date multi-media instructional facilities.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

3. The Program's physical facilities should be attractive.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

4. It is unrealistic to expect that classes be conveniently located for all students.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

5. Library should have the latest literature in your area of interest.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

6. One cannot expect the computer lab to provide up-to-date computing capabilities.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

7. Staff should be neatly dressed.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

8. Student records should be kept confidential.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

9. Student complaints should be dealt with great concern by staff.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

10. One cannot expect that professors will adjust difficult lecture material to the level of understanding of students.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

11. Courses should be taught by highly knowledgeable professors.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

12. Supplementary handouts should be given by professors to enable better understanding of lecture material.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

13. Course syllabus and assignments should be sent to students in advance of first class.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

14. It is not realistic to expect that teaching evaluations of professors by students should improve instruction.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

15. It is acceptable that administrative staff could be too busy and not respond to students' requests promptly.

Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
5	4	3	2	1

16. Administrative staff should be always willing to help students.

- |                |       |         |          |                   |
|----------------|-------|---------|----------|-------------------|
| Strongly Agree | Agree | Neither | Disagree | Strongly Disagree |
| 5              | 4     | 3       | 2        | 1                 |
17. Professors should not be expected to always be available to students out of class.
- |                |       |         |          |                   |
|----------------|-------|---------|----------|-------------------|
| Strongly Agree | Agree | Neither | Disagree | Strongly Disagree |
| 5              | 4     | 3       | 2        | 1                 |
18. Students should expect professors to have convenient office-hours to advise students.
- |                |       |         |          |                   |
|----------------|-------|---------|----------|-------------------|
| Strongly Agree | Agree | Neither | Disagree | Strongly Disagree |
| 5              | 4     | 3       | 2        | 1                 |
19. Students cannot expect to be always informed of changes in schedule in advance.
- |                |       |         |          |                   |
|----------------|-------|---------|----------|-------------------|
| Strongly Agree | Agree | Neither | Disagree | Strongly Disagree |
| 5              | 4     | 3       | 2        | 1                 |
20. Students should feel comfortable when dealing with faculty.
- |                |       |         |          |                   |
|----------------|-------|---------|----------|-------------------|
| Strongly Agree | Agree | Neither | Disagree | Strongly Disagree |
| 5              | 4     | 3       | 2        | 1                 |
21. Administrative staff should be friendly and polite.
- |                |       |         |          |                   |
|----------------|-------|---------|----------|-------------------|
| Strongly Agree | Agree | Neither | Disagree | Strongly Disagree |
| 5              | 4     | 3       | 2        | 1                 |
22. Administrative staff should have the knowledge to help students in Program administrative matters (registration, learning material, Xerox, etc.).
- |                |       |         |          |                   |
|----------------|-------|---------|----------|-------------------|
| Strongly Agree | Agree | Neither | Disagree | Strongly Disagree |
| 5              | 4     | 3       | 2        | 1                 |
23. Students should expect the Program to have their best interest as a major objective.
- |                |       |         |          |                   |
|----------------|-------|---------|----------|-------------------|
| Strongly Agree | Agree | Neither | Disagree | Strongly Disagree |
| 5              | 4     | 3       | 2        | 1                 |
24. Students cannot expect individual attention from faculty.
- |                |       |         |          |                   |
|----------------|-------|---------|----------|-------------------|
| Strongly Agree | Agree | Neither | Disagree | Strongly Disagree |
| 5              | 4     | 3       | 2        | 1                 |
25. Administrative staff should provide personal attention to every student.
- |                |       |         |          |                   |
|----------------|-------|---------|----------|-------------------|
| Strongly Agree | Agree | Neither | Disagree | Strongly Disagree |
| 5              | 4     | 3       | 2        | 1                 |
26. It is not expected of faculty to understand the specific needs of students.

- |  | Strongly Agree<br>5 | Agree<br>4 | Neither<br>3 | Disagree<br>2 | Strongly Disagree<br>1 |
|--|---------------------|------------|--------------|---------------|------------------------|
| 27. The Program should arrange for financial aid (loans, scholarships, etc.) for students.       |                     |            |              |               |                        |
| 28. Students cannot expect the service hours of learning facilities to accommodate all students. |                     |            |              |               |                        |
| 29. Students should expect the Program to provide career planning services.                      |                     |            |              |               |                        |

**TELL US SOMETHING ABOUT YOURSELF**

Please mark the appropriate box

1. Gender             Male         Female
2. Marital Status:    Single     Married    Divorced    Widowed
3. Age category:     20 or less    21-30     31-40     41-50  
                          51 or older
4. Your income per month:         \$ 9,999 or less         \$ 15,000-19,999  
    \$ 10,000-14,999     \$ 20,000-24,999  
    \$ 25,000 or more
5. Employment Situation             Part - Time (less than 30 hrs. a week).  
    Full - Time (30 hrs. or more a week).  
    Unemployed



APPENDIX D

Cover Letter

Napaporn Khantanapha  
35/170 Soi 7/16 Mooban Ladawal,  
Srinakarin Road, Samutrprakarn 10540  
Thailand

May 9, 2000

Subject: Request for completing the questionnaire

Dear Students,

I would like to request your participation in surveying the service quality in MBA program. The collection of this information has been approved by Nova Southeastern University, Fort Lauderdale, Florida, U.S.A., where this research is being conducted as part of my Doctoral Dissertation. Your participation is very important for the success of the study and the possible improvement of the quality of service at all the MBA programs in Thailand.

**The study is completely anonymous. Neither the students completing the questionnaire nor the university can be identified by the researcher.** The questionnaire has not been coded in anyway. The survey will take approximately 15 minutes to complete. Please return the completed questionnaire to the distributor.

I appreciate your time and support of this project, and thank you for your participation.

Dr. Barbara R. Dastoor  
(Chairperson)

Very truly yours,

Napaporn Khantanapha

Dr. Moshe Levin  
(Committee Member)

Dr. Pedro F. Pellet  
(Committee Member)

## APPENDIX E

Five-Factor Matrix for Principle components with Varimax  
Rotation for Expectations of Service Quality

Five-Factor Matrix for Principle Components with Varimax  
Rotation for Expectations of Service Quality

	Component				
	1	2	3	4	5
Q1E	-7.01E-02	.154	.254	.546	-.140
Q2E	.457	-7.15E-02	3.896E-02	.600	-6.09E-04
Q3E	4.945E-02	.104	9.960E-02	.686	.291
Q4E	.598	-2.46E-02	-3.99E-02	.235	.163
Q5E	.186	-1.33E-02	.333	.283	1.050E-02
Q6E	.631	-3.77E-02	6.567E-02	.396	-8.77E-02
Q7E	-1.01E-02	5.448E-03	.551	-5.11E-02	.228
Q8E	-6.53E-02	-1.54E-02	.568	-5.75E-02	.210
Q9E	.125	4.943E-02	.556	.148	7.378E-02
Q10E	.542	-9.09E-04	4.752E-02	-6.46E-02	4.969E-02
Q11E	-4.05E-02	6.212E-02	.657	3.316E-02	-6.07E-02
Q12E	.105	.157	.565	.219	-.185
Q13E	-4.25E-03	.224	.438	.108	-9.84E-02
Q14E	.543	-2.02E-02	9.001E-02	.215	-.221
Q15E	.478	3.336E-02	-4.06E-02	8.294E-02	.305
Q16E	.149	.167	.480	.154	.171
Q17E	.720	2.673E-02	.142	-.131	2.431E-02
Q18E	.299	.247	.405	-.257	7.424E-02
Q19E	.560	6.827E-02	.129	.229	-.294
Q20E	8.292E-02	.663	.286	.152	5.966E-02
Q21E	-7.11E-03	.828	.128	9.792E-02	5.741E-02
Q22E	1.526E-02	.809	.111	5.112E-02	.129
Q23E	8.416E-02	.729	6.688E-02	-2.67E-02	1.382E-02
Q24E	.558	.259	-6.25E-02	-.154	.327
Q25E	7.256E-02	.367	-4.86E-02	-.168	.436
Q26E	.495	.409	2.491E-02	-9.94E-02	.225
Q27E	6.889E-02	3.789E-02	.126	5.522E-02	.681
Q28E	.607	.112	5.494E-02	7.350E-03	8.997E-02
Q29E	9.139E-02	.123	.225	.121	.590

## APPENDIX F

Five-Factor Matrix for Principle Components with Varimax  
Rotation for Perceptions of Service Quality

Five-Factor Matrix for Principle Components with Varimax  
Rotation for Perceptions of Service Quality

	Component				
	1	2	3	4	5
Q1P	.180	.400	.166	.640	2.328E-02
Q2P	.126	8.881E-02	-5.51E-02	.721	.267
Q3P	.195	.348	.109	.682	.110
Q4P	.104	-.360	.145	.462	.445
Q5P	.320	.372	.330	.482	.103
Q6P	8.577E-02	8.672E-02	.314	.655	.268
Q7P	.410	2.398E-02	.499	.226	-2.31E-02
Q8P	.261	.277	.547	7.635E-02	.142
Q9P	.488	.471	.246	.249	8.697E-02
Q10P	1.306E-02	9.066E-02	6.408E-02	.272	.554
Q11P	9.400E-02	.578	.144	.368	.120
Q12P	.102	.677	6.892E-02	.277	.190
Q13P	.252	.605	.294	2.252E-02	8.197E-02
Q14P	8.705E-02	.390	.286	.135	.398
Q15P	.557	4.323E-03	5.492E-02	-2.03E-02	.305
Q16P	.758	.203	.142	.285	2.205E-02
Q17P	.223	.411	4.555E-02	8.408E-02	.625
Q18P	.347	.558	.314	.111	.357
Q19P	.416	.284	-4.29E-02	.218	.483
Q20P	.494	.394	.328	.230	.188
Q21P	.848	.183	.110	.123	7.718E-02
Q22P	.760	.300	.182	.169	8.382E-02
Q23P	.355	.345	.403	.222	.175
Q24P	.191	-.111	.439	3.972E-02	.527
Q25P	.545	-.126	.398	-7.96E-03	.285
Q26P	.254	.144	.419	6.929E-02	.561
Q27P	8.307E-02	.188	.798	.111	.153
Q28P	6.731E-02	.263	.203	.218	.596
q29e	7.202E-02	.340	.663	.161	.234

## APPENDIX G

Factor Matrix for Principle Component with Varimax Rotation  
for Expectations of Service Quality

Factor Matrix for Principle Component with Varimax Rotation  
for Expectations of Service Quality

	Component							
	1	2	3	4	5	6	7	8
Q1E	.159	.166	-.227	.342	-4.99E-02	7.162E-02	.471	6.705E-03
Q2E	.607	-1.30E-02	.116	-4.80E-02	2.854E-04	6.384E-02	.440	.253
Q3E	.146	.106	9.958E-02	.168	.225	3.909E-02	.681	.102
Q4E	.586	1.900E-02	.298	-.201	5.482E-02	.254	.190	-4.84E-02
Q5E	.272	6.215E-02	4.956E-02	9.403E-02	9.623E-03	.192	.130	.503
Q6E	.739	6.640E-03	9.803E-02	5.196E-02	7.338E-02	-5.14E-02	.158	9.617E-02
Q7E	3.787E-02	8.232E-02	-5.57E-02	.138	.119	.776	5.345E-03	-1.24E-02
Q8E	-.132	2.324E-02	.154	.246	-9.50E-03	.618	1.570E-02	.261
Q9E	2.415E-02	1.658E-03	.233	.660	7.281E-02	.101	8.368E-02	.171
Q10E	.502	-9.20E-03	.113	.106	.153	.161	-9.54E-02	-.534
Q11E	7.307E-02	.138	-.179	.376	.122	.260	-.171	.489
Q12E	.225	.171	-.177	.608	1.094E-02	.160	7.082E-02	-6.73E-03
Q13E	1.322E-02	.191	-2.58E-02	.545	-.108	.265	.137	-.230
Q14E	.675	2.045E-02	-5.11E-02	.101	1.372E-02	-3.23E-02	-1.05E-02	-7.05E-02
Q15E	.178	-2.83E-02	.707	4.240E-02	1.627E-02	-1.81E-02	.137	.127
Q16E	8.411E-02	.148	.151	.540	.326	-6.00E-02	-2.50E-03	.243
Q17E	.550	2.016E-02	.399	.123	7.693E-02	2.463E-02	-.283	-2.15E-02
Q18E	.254	.310	5.124E-02	.107	.224	.241	-.430	.191
Q19E	.582	6.533E-02	.166	.238	-.170	-.154	-2.02E-03	.128
Q20E	.105	.700	5.475E-02	.135	5.986E-02	.163	6.917E-02	.175
Q21E	-2.63E-02	.823	4.995E-02	.154	5.396E-02	9.985E-03	9.235E-02	-5.77E-02
Q22E	-2.81E-02	.814	8.876E-02	8.058E-02	.112	3.059E-02	4.797E-02	-1.26E-02
Q23E	3.547E-02	.739	9.290E-02	3.147E-02	1.408E-02	-2.28E-02	-6.36E-02	4.059E-02
Q24E	.271	.213	.576	-5.07E-02	.126	.149	-7.22E-02	-.291
Q25E	-.203	.328	.486	-.127	9.530E-02	.226	3.883E-02	-9.47E-02
Q26E	.239	.360	.503	.110	.158	-6.70E-02	-.124	-9.99E-02
Q27E	3.043E-02	8.587E-02	6.759E-02	-9.66E-02	.794	.137	2.367E-02	2.022E-02
Q28E	.405	7.678E-02	.478	.147	7.769E-02	-.134	-.111	7.352E-02
Q29E	8.118E-03	.119	.123	.220	.741	-1.26E-02	7.185E-02	-4.35E-02



## APPENDIX H

Factor Matrix for Principle Components with Varimax  
Rotation for Perceptions of Service Quality

Factor Matrix for Principle Components with Varimax  
Rotation for Perceptions of Service Quality

	Component					
	1	2	3	4	5	6
Q1P	.198	.719	.228	.166	-1.00E-02	5.669E-02
Q2P	.106	.722	-.128	7.965E-02	.211	.266
Q3P	.195	.785	.109	.144	.127	5.199E-02
Q4P	8.685E-02	.119	6.929E-02	4.205E-02	.140	.817
Q5P	.326	.551	.361	.196	.118	6.214E-02
Q6P	8.119E-02	.543	.294	.128	.139	.446
Q7P	.425	7.118E-02	.556	-1.26E-02	-4.01E-02	.316
Q8P	.269	6.527E-02	.594	.249	.108	.107
Q9P	.502	.377	.307	.293	8.944E-02	-9.79E-02
Q10P	1.955E-02	.111	7.276E-02	.460	9.677E-02	.525
Q11P	.122	.519	.241	.405	-1.38E-02	-9.07E-02
Q12P	.139	.452	.195	.555	-4.39E-02	-.126
Q13P	.277	.209	.396	.429	3.749E-02	-.245
Q14P	9.730E-02	.158	.328	.512	.144	.150
Q15P	.530	-2.32E-02	-2.58E-02	.150	.310	9.799E-02
Q16P	.770	.277	.189	9.582E-02	2.285E-02	9.796E-02
Q17P	.233	9.365E-02	7.964E-02	.714	.184	.231
Q18P	.367	.197	.394	.593	.127	3.401E-02
Q19P	.402	.283	-8.51E-02	.440	.298	.115
Q20P	.496	.320	.350	.296	.192	-8.65E-03
Q21P	.849	.147	.126	.120	.116	2.225E-02
Q22P	.768	.222	.222	.197	9.788E-02	-5.72E-03
Q23P	.361	.263	.438	.278	.143	6.877E-02
Q24P	.109	6.927E-02	.196	8.619E-02	.741	.137
Q25P	.479	1.321E-02	.209	-6.05E-02	.587	5.520E-02
Q26P	.191	.169	.238	.293	.680	5.062E-02
Q27P	5.676E-02	.147	.742	9.479E-02	.359	4.260E-02
Q28P	3.595E-02	.281	.111	.465	.448	.161
q29e	5.210E-02	.260	.626	.250	.354	-1.85E-02

## References

- Abbot, L. (1955). *Quality and Competition*. New York: Columbia University Press.
- Anderson, E. W., Fornell, C., & Rust, R. L. (1997). Customer satisfaction, productivity, and profitability: differences between goods and services. Marketing Science, 16(2), 129-145.
- Babakus, E., & Boller, G.W. (1992). An Empirical Assessment of the SERVQUAL scale. Journal of Business Research, 24, 253-268.
- Berry, L. L. Parasuraman, A., & Zeithaml, V. A. (1989). The service quality puzzle. Business Horizons, 31, 33-43.
- Bitner, M.J. (1992). Evaluating Service Encounters: The effects of physical surroundings on customers and employees. Journal of Marketing, 56, 57-71.
- Bolton, R. N., & Drew, J. H. (1991a). A longitudinal analysis of the impact of service changes on customer attitudes. Journal of Marketing, 55(6), 1-9.
- Boulding, W., Kalra, A., Staclin, R., & Zethaml, V. A. (1993). A Dynamic process model of service quality: from expectations to behavioral intentions. Journal of Marketing Research, (30) February, 7-27.
- Brown, S. W., & Swartz, T.A. (1989). A gap analysis of professional service quality. Journal of Marketing, 53(2), 92-98.
- Carman, J.M. (1990). Consumer perceptions of service quality: An assessment of the SERVQUAL dimensions. Journal of Retailing, 66(1), 33-35.
- Cronin, J. J., Jr., and Taylor, S, A. (1994). SERVPERF versus SERVQUAL: Reconciling performance-based and perceptions-minus-expectations measurement of service quality. Journal of Marketing, 58 (January), 125-131.

- Crosby, P. B. (1982). The management of quality. Research Technology Management, 15(4), 10-12.
- Donnelly, M. & Edward, S. (1999). Assessing service quality and its link with value for money in a UK local authority's housing repairs service using the SERVQUAL approach, Total Quality Management (Abingdon), 10(4-5), 498-506
- Douglas, C. B. (1993). Members' Perception of Service Quality at the Nellis Air Force Base Officers' Open Mess (Nevada). Las Vegas: University of Nevada, Department of Business Administration.
- Francoise, H. (1993). The Quality of Interlibrary Borrowing Services in Large Urban Public Libraries in Canada. University of Toronto.
- Fisher, C. D. (1980). On the dubious side of expecting satisfaction to correlate with performance. Academy of Management Review, 5(4), 607-612.
- Garvin, David A. (1988). Managing quality: the strategic and competitive edge, New York: Free Press.
- Gronroos, C. (1982). Strategic management and marketing in the service sector. Helsingfors, Finland: Swedish School of Economics.
- Gronroos, C. (1984). A service quality model and its marketing implications. European Journal of Marketing, 18(4), 36-44.
- Hans kasper, Pier van helsdinge & Wouter de vries. (1999). Service Marketing Management an International Perspective, John Wiley & Sons Ltd.
- Headley, D. E. & Miller, S. J. (1993) Measuring service quality and its relationship to future consumer behavior, Marketing Health Services, 13(4) Winter, 32-47.
- Hemmasi, Masoud & Strong, Kelly C. (1994). Measuring service quality for strategic planning and analysis in service firms. Journal of Applied Business Research, 10(4), 24-34

- Johns, N. & Tyas, P. (1996) Use of service quality gap theory to differentiate between foodservice outlets, The Service Industries Journal (London), 16(3), 321-336.
- Juran, J. M. (1988). Juran's quality control handbook (4<sup>th</sup> ed.). New York: McGraw-Hill.
- Kordupleski, R. E., Rust, R. T., & Zahorik, A. J. (1993). Why improving quality doesn't improve quality (or whatever happened to marketing?). California Management Review. 35(3), 82-95
- Kothari, V. (1988). Strategic dimensions of global marketing and services. Journal of Professional Services Marketing. 3(3-4), 209-229.
- Lewis, R. & Booms, B. (1983). The Marketing aspects of service quality. In Emerging Perspectives on Services Marketing by Barry, Leonard; Shastack, Lynn; & Upah, Gregory, Eds. Chicago: American Marketing Association, Granroos, 1982
- McAtarsney, D. (1999) Review, critique and assessment of customer care, Total Quality Management (Abingdon), 10(4-5) 636-646.
- McElwee, G. & Redman, T. (1993). Upward appraisal in practice: an illustrative example using the QUALED model, Education and Training, 35(2), 27-31.
- Oliver, R. L., (1980). "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decision". Journal of Marketing Research, 17(November), 406-9.
- Oliver, R. L. (1981). Measurement and evaluation of Satisfaction processes in retail setting. Journal of Business Research, 24, 253-268.
- Olson, J.C., & Dover, P. (1979). Disconfirmation of consumer expectations through product trail. Journal of Applied Psychology, 64 (April), 179-189.

- Parasuraman, A., Berry, L. L. & Zeithaml, V. A. (1985). A conceptual model of service quality and its implications for future research. Journal of Marketing, 49(4), 41-50.
- Parasuraman, A., Berry, L. L. & Zeithaml, V.A. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. Journal of Retailing, 64(1), 12-40.
- Prisig, R. M. (1974). Zen and the art of motorcycle maintenance: An inquiry into values. New York: Bantam.
- Reardon, M. S. (1992). The Tuition crunch: internationals pay more. International Student, (Spring) 16-18.
- Remenyi, D S J, Money, A.H., (1994). "Service quality and correspondence analysis in determining problems with the effective use of computer services," European Journal of Information Systems. 3 (1), 2-12
- Richard, M. D. & Allaway, A. W. (1993). Service quality attributes and choice behavior. Journal of Service Marketing. 7(1), 59-68.
- Rigotti, S., Pitt, L. (1992). "SERVQUAL as a measuring instrument for service provider Gaps in business school," Management Research News. 15 (3),9
- Schiffman, L. G. & Kamik, L. L. (1987) Sales by the slice, Marketing (London) May, 35-37
- Shostack, G. L. (1977) Breaking free from product marketing. Journal of Marketing. (41) April, 73-80
- Stewart, K. & Felicetti, L. (1991). Marketing a public university to international students, Journal of Professional Service Marketing, 7(1), 67-74.
- Tea, R. K. (1993). Expectations, performance evaluation and consumers perceptions of quality. Journal of Marketing, (57) October, 18-34

- Tomovick, C, Jones, S, Al-Khatip, J, Baradwaj, B. G, (1996). "An assessment of the service quality provided to foreign students at U.S. business school". Journal of Education for Business, 70, 130-137.
- Walbridge, S. W. & Delene, L. W. (1993). Measuring physician attitudes of service quality, Marketing Health Services, 13(1) Winter, 6-20.
- Zeithaml, V. A. (1981) How consumer evaluation process differ between goods and services. In Donnelly and George eds, Marketing of Services. Chicago, Ill. American Marketing Association
- Zeithaml, V., Berry, L., & Parasuraman, A. (1993). The Nature and determinants of customer expectations of a service, Journal of the Academy of Marketing Science, 21(1), 1-12

## Bibliography

- Anderson, E. W., Fornell, C. & Rust, R. L. (1997). Customer satisfaction, productivity, and profitability: Differences between goods and services. Marketing Science, 16(2), 129-145.
- Babakus, E. & Boller, G.W. (1992) An empirical assessment to the SERQUAL scale. Journal of Business Research, 24, 253-268.
- Babakus, E., Reminton, S. J., Lucus, Jr., G.H., & Camell, C. G. (1991, September)
- Berry, L. L. Parasuraman, A., & Zeithaml, V. A. (1989). The service quality puzzle. Business Horizons, 31, 33-43.
- Berry, L. L., Zeithaml, V.A. & Parasuraman, A. (1990). Five Imperatives for Improving Service Quality. Sloan Management Review, 31 (Summer), 29-38.
- Biddle, B.J. (1986). Recent Developments in Role Theory. Annual Review Of Sociology, 12, 67-92.
- Bitner, M. J. (1992). Evaluating service encounters: The effects of physical surroundings on customers and employees. Journal of Marketing, 56, 57-71.
- Bitner, M.J., Booms, H. B., & Mohr, Lois A. (1994). Critical Service Encounters: The Employee's View Point. Journal Of Marketing, 58 (October), 95-106.
- Bolton, R. N., & Drew, J. H. (1991). A longitudinal analysis of the impact of service changes on customer attitudes. Journal of Marketing, 55(6), 1-9.
- Boulding, W., Kalra, A., Staelin, R., and Zeithaml, V.A. (1993). Dynamic Process Model of Service Quality: from Expectations to Behavioral Intentions, Journal of Marketing, 33(4).



- Brensinger, R.P. & Lambert, D.M. (1990) Can the SERVQUAL scale be generalized to business-to-business service? In Knowledge Development in Marketing. 1990 AMA's summer Educators' Conference Proceedings. p. 289
- Brown, S. W., & Swartz, T.A. (1989). A Gap Analysis of Professional Service Quality. Journal of Marketing, 53(2), 92-98.
- Brown, T.J., Churchill, Jr. G.A., & Peter, J.P. (1993). Research note: Improving the measurement of service quality. Journal of Retailing, 69 (1), 127-139.
- Campbell, Donald T. (1960). Recommendations for APA Test Standards Regarding Construct, Trait, or Discriminant Validity. American Psychologist, 15 (August), 546-53.
- Carman, J.M. (1990). Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions. Journal of Retailing, 66(1), 33-35.
- Carman, M.J. and Langerd, E. (1980). "Growth Strategies of Service Firms," Strategic Management Journal, 1 (January-March), 7-22.
- Chadee, Doren, D., Mattsson, and Jan (1996). An empirical assessment of customer satisfaction in tourism. Service Industries Journal, 16(3), 350-320.
- Cronin, J. J., Jr., and Taylor, S, A. (1992). Measuring service quality: A reexamination and extension Journal of Marketing, 56, 55-68.
- Cronin, J. J., Jr., and Taylor, S, A. (1994). SERVPERF Versus SERVQUAL: Reconciling Performance-Based and Perceptions-Minus-Expectations Measurement of Service Quality. Journal of Marketing, 58 (January), 125-131.
- Crosby, Philip B. (1982). The Management of Quality. Research Technology Management, 15(4), 10-12
- Douglas, C. B. (1993). Members' Perception of Service Quality at the Nellis Air Force Base Officers' Open Mess (Nevada). Las Vegas: University of Nevada, Department of Business Administration.

- Donnelly, M. & Edward, S. (1999). Assessing Service Quality and Its Link with Value for Money in a UK Local Authority's Housing Repairs Service Using the SERVQUAL Approach, Total Quality Management (Abingdon), 10(4-5), 498-506.
- Fick, R. G., Ritchie, J. R. B., (1991, Fall). Measuring Service Quality in the Travel and Tourism Industry. Journal of Travel Research, p. 2-9.
- Fisher, C. D. (1980. On the dubious side of expecting satisfaction to correlate with performance. Academy of Management Review, 5(4), 607-612.
- Fitzsimmons, J.A. & R.S. Sullivan, (1982). Service Operations Management. NY. McGraw-Hill. Company.
- Francoise, H. (1993). The Quality of Interlibrary Borrowing Services in Large Urban Public Libraries in Canada. University of Toronto.
- Freeman & Dart, (1993): Measuring the Perceived Quality of Professional Business Services. Journal of Professional Services Marketing, 9(1), 27-47
- Gagliano, K.B. & Hathcote, J. (1994). Customer expectations and perceptions of service quality in retail apparel specialty stores. Journal of Services Marketing. 8(1), 60-69.
- Garvin, David A. (1988). Managing Quality: the strategic and competitive edge, New York: Free Press.
- Gronroos, C. (1982). Strategic management and marketing in the service sector. Helsingfors, Finland: Swedish School of Economics.
- Gronroos, C. (1984). A service quality model and its marketing implications. European Journal of Marketing, 18(4), 36-44.
- Hair, F. J. Jr., Anderson, E. R., Tatham, L. R., Black, C. W. (1995). Multivariate Data Analysis. (4<sup>th</sup> ed.) New Jersey: Printice Hall

- Hans Kasper, Pier van Helsdinge & Wouter de Vries. (1999). Service Marketing Management and International Perspective, Joh Wiley & Sons Ltd.
- Hart, C., Heskett, J. & Sasser, W.E. Jr. (1990). The Profitable Art of Service Recovery. Havard Business Review. 68(4), (July-August), 148-156
- Hartshorn, C. S. (1990). Service Quality as perceived by public, private and voluntary leisure fitness industry. (Doctoral dissertation, Indiana University, 1990).
- Headley, D. E. & Miller, S. J. (1993). Measuring service quality and its relationship to future consumer behavior, Marketing Health Services, 13(4) Winter, 32-47.
- Headley, D. E. (1989). Perceived service quality: Its measurement and relationship to consumer behavior in a medical care setting. (Doctor dissertation, Oklahoma State University, 1989).
- Hemmasi, Masoud & Strong, Kelly C. (1994). Measuring service quality for strategic planning and analysis in service firms. Journal of Applied Business Research, 10(4), 24-34.
- Hoffman, K.D. (1992). Service Provider Job Satisfaction and Customer Oriented Performance. Journal of Services Marketing. 6(2), 68-78.
- Holbrook, M.B. & Corfman, K.P. (1985). "Quality and Value in the Consumption Experience. Phaedrus Rides Again". In Perceived Quality. Eds. J. Jacoby and J. Olson (pp.311-357), Lexington. MA: Lexington.
- Issues in the practice of cosmetic surgery: Consumers' use of information and perceptions of service quality. Journal of Health Care Marketing, 1(3), 12-18.
- Johns, N. & Tyas, P. (1996). Use of service quality gap theory to differentiate between foodservice outlets, The Service Industries Journal (London), 16(3), 321-336
- Kierl, C., & Mitchell, P. (1990). How to Measure Industrial Service Quality. Industrial Marketing Digest, 15(1), 35-46.

- Kordupleski, R. E., Rust, R. T., & Zahorik, A. J. (1993). Why improving quality doesn't improve quality (or whatever happened to marketing?). California Management Marketing. 35(3), 82-95.
- Kothari, V. (1988). Strategic dimensions of global marketing and services. Journal of Professional Services Marketing. 3(3-4), 209-229.
- Langevin, R.G. (1988). "Service Quality: Essential ingredients". Review Business. Vol.9, No.3:3-5.
- Lehtinen, U. and Lehtinen, J. R. (1982). Service Quality: A study of Quality Dimensions." unpublished working paper, Helsinki: Service Management Institute, Finland OY.
- Lewis, R. & Booms, B. (1983). The Marketing aspects of service quality. In Emerging Perspectives on Services Marketing by Barry, Leonard; Shastack, Lynn; & Upah, Association, Granroos, 1982.
- McAtarsney, D. (1999) Review, critique and assessment of customer care, Total Quality Management (Abingdon), 10(4-5) 636-646.
- McDougall, G.H.G. & Levesque, T.J. (1994): A Revised View of Service Quality Dimensions: An Empirical Investigation. Journal of Professional Services Marketing, 11 (1), 189-209.
- McElwee, G. & Redman, T. (1993). Upward appraisal in practice: an illustrative example using the QUALED model, Education and Training, 35(2), 27-31.
- Mclaughlin, C. G. (1995). The role of organizational communication effectiveness in the development of service quality satisfaction. DBA. Dissertation, Nova Southeastern University.
- Miller, J. A. (1977). "Studying Satisfaction, Modifying Models, Eliciting Expectations, Posing Problems, and Making Meaningful Measurement," in Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction. Cambridge, MA: Marketing Science Institute, 72-91.

- Mohr, L.A. & Bitner, J.M. (1991). "Mutual Understanding Between Customers and Employees in Service Encounters". In Advances in Consumer Research. Vol.18, Rebecca, H., Holman & Michael, R., Solomon, eds. Provo, UT: Association for Customer Research, 611-617.
- Oliver, R. L., (1980). "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decision, " Journal of Marketing Research, 17(November), 406-9.
- Oliver, R.L. (1993a). " A Conceptual Model of Service Quality and Service Satisfaction: Compatible Goals, Different Concepts". In Advances in Services Marketing and Management, Vol.2, Teresa A.S., Bowen, E.D., and Brown, S.W., eds. Greenwich. CT. JAI Press, 65-85.
- Olson, J.C., & Dover, P. (1979). Disconfirmation of Consumer Expectations Through Product Trail. Journal of Applied Psychology, 64 (April), 179-189.
- Parasuaman, A., Berry, L.L. & Zeithaml, V.A. (1988). "SERVQUAL: A Multiple Item Scale for Measuring Consumer Perceptions of Service Quality". Journal of Retailing. Vol.64, No.1: 12-40.
- Parasuaman, A., Berry, L.L. & Zeithaml, V.A. (1990). An Empirical Examination of Relationships in an Extended Service Quality Model. Marketing Science Institute, Working Paper Series, Report no. 90-122. Cambridge, MA.
- Parasuraman, A., Berry, L. L. & Zeithaml, V. A. (1985). A conceptual model of service quality and its implications for future research. Journal of Marketing, 49(4), 41-50.
- Parasuraman, A., Berry, L. L. & Zeithaml, V.A. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. Journal of Retailing, 64(1), 12-40.
- Parasuraman, A., Berry, L. L. & Zeithaml, V.A. (1990a). Delivering Quality Service: Balancing Consumer Perceptions and Expectations. New York: The Free Press.
- Parasuraman, A., Berry, L. L. & Zeithaml, V.A. (1990b). An Empirical Examination of Relationships in an Extended Service Quality Model. Cambridge, MA: Marketing Science Institute.

- Parasuraman, A., Berry, L. L. & Zeithaml, V.A. (1991a). Understanding customer Expectations of Service. Sloan Management Review, 32(3), 39-48.
- Parasuraman, A., Berry, L. L. & Zeithaml, V.A. (1991b). Refinement and Reassessment of the SERVQUAL Scale. Journal of Retailing, 67(4), 420-450.
- Parasuraman, A., Berry, L. L. & Zeithaml, V.A. (1993). Research note: More on improving service quality measurement. Journal of Retailing, 69(1), 140-147.
- Parasuraman, A., Berry, L. L. & Zeithaml, V.A. (1994). Reassessment of expectations as a comparison standard in measuring service quality: Implications for further research. Journal of Marketing, 58(January), 111-124.
- Peter, J. P. (1981). Construct Validity: A Review of Basic Issues and Marketing Practices. Journal of Marketing Research, 18 (May), 133 - 45.
- Petty, M.M. (1984). A meta Analysis of the Relationships Between Individual Job Satisfaction and Individual Performance. Academy of Management Review, 9(4), 712-721.
- Prakash, V. (1984). "Validity and Reliability of the Confirmation of Expectations Paradigm as a Determinant of Consumer Satisfaction." Journal of The Academy of Marketing Science, 12 (4), 63-76.
- Quality Expectations. Journal of Services marketing, 3(2), 35-53.
- Reardon, M. S. (1992). The Tuition cruel: internationals pay more. International Student, (Spring) 16-18
- Remenyi, D S J, Money, A.H., (1994). "Service quality and correspondence analysis in determining problems with the effective use of computer services," European Journal of Information Systems. 3 (1), 2-13
- Richard, M. D. & Allaway, A. W. (1993). Service quality attributes and choice behavior. Journal of Service Marketing. 7(1), 59-68.

- Rigotti, S., Pitt, L. (1992). "SERVQUAL as a measuring instrument for service provider Gaps in business school," Management Research News. 15 (3),9
- Ross, E. J. (1995). Total quality management (2<sup>nd</sup> ed.) FL: St. Lucie Press.
- Sammons, G.E. (1994). A Study of the Relationship Between Service Orientation, Organizational Citizenship Behavior and Service Performance in Hotels. Unpublished Doctoral Dissertation. The Pennsylvania State University.
- Schiffman, L. G. & Kamik, L. L. (1987) Sales by the slice, Marketing (London) May, 35-37.
- Schneider, B,. (1980). "The Service Organization: Climate is Crucial". Organizational Dynamics, (Autumn), 52-65.
- Schneider, B. & Bowen, D.E. (1984), "New Services Design, Development, Implementation and the employee". In Developing New services, William R.G., and Marshall, C., eds. Chicago: American Marketing Association, 82-101.
- Schneider, B. & Bowen, D.E. (1985). Employee and Customer Perceptions of Service in Banks. Replication and Extension: Journal of Applied Psychology, 70, 423-433.
- Schneider, B. & Bowen, D.E. (1992). Personnel/Human Resources management in the Service Sector: Research in Personnel and Human Resources Management, 10, 1-30.
- Schneider, B., Parkington, J.J. and Buxton, V.M., (1980). "Employee and Customer Perceptions of Service in Banks". Administrative Science Quarterly, 25(June), 252-267.
- Shostack, G. L. (1977). Breaking free from product marketing. Journal of Marketing. (41) April, 73-80.
- Simpson, M. C., JR. (1995). International service variants: A study of airline passenger expectations and perceptions of service quality. DBA. Dissertation, Golden Gate University.
- Singh, J. (1988), "Consumer Complaint Intentions and Behavior: Definitional and Taxonomical Issues", Journal of Marketing, 52 (January), 93-108.

- Solomon, M.R.; Suprenant, C.; Czepiel, J.A.; Gutman, G.E. (1985). "A Role Theory Perspective on Dyadic Interactions: The Service Encounter". Journal of Marketing, 49 (Winter), 99-111.
- Sommemberg, K. F. (1989). "Service Quality: Forethought, Not Afterthought." Journal of Business Strategy, 10(September/October), 54-57.
- Stewart, K. & Felicetti, L. (1991). Marketing a public university to international students, Journal of Professional Service Marketing, 7(1), 67-74.
- Swan, J. E and Trawich, I. F. (1980). "Satisfaction Related to Predictive vs. Desired Expectations," in Refining Concepts and Measures of Consumer Satisfaction and Complaining Behavior. Bloomington, IN: Indiana University, 7-12.
- Swan, J. E. and Trawich, I.F. (1981). "Satisfaction Related to Predictive vs. Desired Expectations," in Refining Concepts and Measures of Consumer Satisfaction and Complaining Behavior, Bloomington, IN: Indiana University, 7-12.
- Tansik, D. (1985). Nonverbal Communication and High-Contact Employees. In J. Czepiel, M. Solomon & Suprenant (eds). The Service Encounter. Lexington, MA: D.C. Health.
- Taylor, S.A., & Bake, S.T. (1994). "An Assessment of the Relationship Between Service Quality and Customer Satisfaction in the Formation of Consumer's purchase intentions". Journal of Retailing, 70 (Summer), 163-178.
- Tea, R. K. (1993). Expectations, performance evaluation and consumers perceptions of quality. Journal of Marketing, (57) Ocotober, 18-34.
- Tomovick, C, Jones, S, Al-Khatip, J, Baradwaj, B. G, (1996). "An assessment of the service quality provided to foreign students at U.S. business school". Journal of Education for Business, 70, 130-137.
- Walbridge, S. W. & Delene, L. W. (1993). Measuring physician attitudes of service quality, Marketing Health Services, 13(1) Winter, 6-20.



- Walsh, A (1992). Customer perception of quality of service and response to the complaint-handling process of a rental car company. (Doctor dissertation. Texas Woman's University. Denton, Texas).
- Webster, C. (1989). Can Consumers be Segmented on The Basis of Their Service Quality Expectations. Journal of Services Marketing, 3(2), 35-53.
- Webster, C. (1991). Influences upon Consumer Expectations of Services. Journal of Service Marketing, 5(1), 5-17.
- Wyckoff, D. D. (1984). New Tools for Achieving Service Quality. The Cornell hotel and restaurant administration quarterly, 25(3), 78-82.
- Zeithamal, V. A. (1988). Consumer perceptions of price, quality and value: A means-end model and synthesis of evidence, Journal of Marketing, 55, 2-22.
- Zeithamal, V. A., Berry, L. L. & Parasuraman, A. (1991), "The Nature and Determinants of Customer Expectations of Service," Marketing Science Institute, working paper No. 91-113, Cambridge, MA: Marketing Science Institute.
- Zeithamal, V. A. (1981). How consumer evaluation process differ between goods and services. In Donnelly and George eds, Marketing Services. Chicago, Ill. American Marketing Association
- Zeithamal, V., Berry, L., Parasuraman, A. (1993). The Nature and determinants of customer expectations of a service, Journal of the Academy of Marketing Science, 21(1), 1-12.
- Zeithamal, V. A., Parasuraman, A. & Berry, L. L. (1990). Delivering quality service: Balancing customer perceptions and expectations. New York: The Free Press.
- Zeithamal, V.A., Berry, L.L. & Parasuraman, (1988a). "Communication and Control Processes in the Delivery of Service Quality". Journal of Marketing, 52 (April), 35-48.