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DETERMINANTS OF CUSTOMER PERCEPTIONS OF QUALITY SERVICE FOR BUSINESS EDUCATION IN NEW ZEALAND

by

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ABSTRACT

Quality means different things to different people. Academics in the area of philosophy, economics, marketing, and operations management have explored this concept, but each group sees it from a different point of view. In the marketing area, perceived quality is one of the most subjective dimensions of quality. Particularly as it relates to a service, customers often do not have all, or enough information about a service's attributes. When this situation occurs, customers usually use indirect measures for comparing services. It is then perceptions of quality become critical.

This study has developed a model that identifies key determinants of perceived quality in the New Zealand tertiary educational sector. These determinants influence the student's evaluation of service quality in education. A review of the literature, exploratory focus groups, and a mail survey were used to gather data to develop and test the model. Based on the information obtained, strategies have been generated to allow New Zealand educational institutions to provide quality services, and in doing so, make them more competitive.

Chapter one of this thesis provides a brief overview of the topic, including the problem statement, importance of the research, and the proposed methodology. Chapter two deals with Tertiary Education in New Zealand. This chapter offers a brief discussion of the changes in the New Zealand Tertiary Education system, and of the competitive environment that currently exists. Chapter three discusses the marketing of education as a service; a review of the literature in the areas of Service Marketing and Marketing of Education is provided. This chapter also identifies the customers of an educational institution. Chapter four examines the conceptual understanding of service quality and its role in consumer decision making. A literature review of the area of Service Quality is furnished to define quality, and emphasise the importance of the determinants of quality, and how customers evaluate it. This chapter also explores the relationship between perception of quality, and customer choice. From the literature, the researcher has developed a Service Quality model for education. Chapter five discusses the Research Methodology utilized in this thesis, the different data collection methods used to develop the model; the instrument to test the model is provided. This chapter also reports the preliminary results of the focus group interviews. Chapter six provides the analysis of results. Detailed statistical analysis of the information obtained, and the major findings are discussed. Chapter seven provides a discussion of the major findings in relation to the research objectives, and the strategies suggested to assist New Zealand educational institutions to become more competitive. This chapter also discusses suggestions for future research.

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CHAPTER ONE

BACKGROUND TO THE RESEARCH TOPIC

1.0 Chapter Introduction

This chapter provides background information to the research project. The first part of the chapter will discuss the importance of this topic from an academic and practical point of view. This will be followed by the problem statement, importance of the research, objectives, structure and presentation.

1.1 Key Background Issues

The concept of quality goes back to the late eighteenth and early nineteenth centuries when skilled craftsmen performed their tasks under the watchful eyes of trade masters who acted as informal quality control inspectors (Garvin, 1988). In those days, to maintain high quality, goods were produced in small volumes and every care was taken to ensure that the items produced were close to perfection. Craftsmen were responsible for maintaining their own quality standards.

The industrial revolution in the early 1900's produced a more formal quality control process. As demand for products increased the concept of craftsmanship was not practical due to its high cost and low production rate. Companies turned towards mass production; which was achieved by the introduction of machines that could perform interchangeable functions. In order for this

process to work, formal quality inspections were crucial, and this responsibility was undertaken by management (Hutchins, 1985).

There are several ways of defining quality, and these will be discussed in detail in a later chapter. However, the definitions provided by Garvin (1988, p.40) will provide a brief introduction to the concept. According to Garvin there are five definitions of quality:

* Transcendent: Defines quality as a mark of uncompromising standards and the achievement of excellence.

* Product-based: Views quality as a precise and measurable variable.

* User-based: Assumes that consumers have different wants or needs, and the goods that best satisfy those needs are the ones considered of the highest quality.

* Manufacturing-based: Focuses on engineering and manufacturing practices. In this context quality is achieved when requirements have been met.

* Value-based: Quality is defined in terms of costs and prices. A quality product is one that provides performance at an acceptable price or cost.

The importance of quality is an emerging consumer trend of the 80's and 90's (Garvin, 1988). Consumers are now demanding higher quality for both the products and services they receive. It is important for institutions to satisfy their customers because a satisfied customer is a loyal customer and a source of future revenues (Fornell, 1992). In the past, efforts in defining and measuring quality have been largely limited to the product sector; maybe because service quality is more difficult to evaluate.

Service quality is different from product quality, and the three major characteristics of services must be understood before attempts can be made to measure and understand service quality. The three characteristics are (Bateson, 1989):

* Intangibility: Services are performances rather than objects. They cannot be stored and their quality cannot be assessed before delivery.

* Heterogeneity: Refers to the potential for variance in the performance of a service. For example, more than one employee may be in contact with the customer, and this might be cause of inconsistency in the delivery of the service.

* Inseparability: Refers to the highly interactive nature of the production and consumption of a service.

Service quality has in the past been discussed by a limited number of researchers like Gronroos (1982), Lehtinen and Lehtinen (1982) and Parasuraman et. al (1985). In their research three major themes have developed:

* Evaluating product quality is much easier than evaluating service quality.

* Service quality perceptions are caused by the differences between consumer expectation and actual service performance.

* The evaluation of the whole process of service delivery determines the perception and not the actual outcome of the service.

Keeping in mind the service characteristics that make service quality hard to evaluate, it is the intention of this study to investigate the New Zealand education sector and develop a model to evaluate service quality.

Changes have occurred in the education sector in New Zealand over the past few years. The present government is following the New Zealand Treasury's stance expressed in a 1987 document called Government Management: brief to the incoming government. Vol 2 Education Issues. In this document the Treasury modified the notion that education is a public good and introduced the concept that education should be more of a commodity that can be traded in the marketplace. This meant that although the Government

would still subsidize fees, students would have to pay a much higher amount than previously. It will be argued that since students have become more discerning customers, demanding better value for their money with higher quality educational services. It can also be argued that as the result of the new fees policy, students are becoming more selective in choosing an institution for further education. It could be claimed that this will force educational institutions to improve the quality of the education they offer, and to become more marketing oriented.

According to Porter, Crocombe and Ewright (1991), New Zealand has an educational system that has not been designed to train people in economically useful skills. The researchers believe that the lack of management training is one of the factors that have contributed to New Zealand's low level of labour productivity. Behrman and Levin (1984) have studied the causes of lack of success of the United States in world markets and they concluded that some of the responsibility may lie with the graduates of business schools. If this assertion is to be accepted, it represents a challenge for New Zealand providers of management education. They will be obliged to supply quality education that will prepare people for the challenges of a more competitive world market.

A major difficulty educational institutions face is dealing with their different "publics". According to Saunders and Walker (1991), there are four different sets of customers in tertiary education that must be satisfied at the same time. These are:

the government, the employers, the parents and the students. Kotler (1982), has a more complete list of "publics" with which educational institutions must deal with. These are: prospective students, current students, parents of students, alumni, faculty, staff, local business firms and local government agencies. However, there is no unanimity in the literature on what constitutes customer groups in the education sector.

1.2 Problem Statement

The government's policy for tertiary education has changed over the past few years. Dr Lockwood Smith, Minister of Education, explained his government's plans for tertiary growth in his address to the Profitable Education Conference, Wellington (1992). He stated that growth in this sector cannot be achieved solely pouring more money into universities and polytechnics. The government's commitment to the growth of tertiary education is based on four factors:

1. Increase in Government funding
2. Students making a greater contribution to costs
3. Enterprises funding education and training for their employees
4. Making sure all expenditure is made effectively

Based on these factors the Government has required tertiary institutions to make efficiencies, and for students to bear a larger share of the costs of their education.

Using the above mentioned policy as a basis, it can be assumed that it is the Government's intention to create a competitive environment for educational institutions. However, not all institutions offer the same programmes. This results in competition only in limited areas, such as Arts and Commerce. For overseas students, competition is not restricted to New Zealand but includes education providers from around the world. Institutions can distinguish themselves by competing on the basis of the perceived quality of education provided.

Very limited research has been carried out in New Zealand to study the perceived quality of the services provided by tertiary institutions. Customers use various cues or types of information when evaluating a service, such as service characteristics, institutional image, and price, to differentiate among services provided, and to form impressions of the quality of the service (Monroe and Krishnan, 1985, p.209). The above researchers also state that it is important for a service provider to understand how customers perceive the cues, because the cues that are not considered important will have little, if any, influence over customers' decision making. Therefore it is considered that a study is warranted to determine and understand what factors influence customer perceptions of quality in educational institutions. It is expected that this will help the educational sector in New Zealand evaluate the quality of service provided to its customers.

1.3 Importance of the Research

Tan (1986) reviewing the literature on the assessment of quality in higher education, identified three types of studies: reputational, objective indicator, and correlate. Reputational studies are based on the subjective opinions of administrators who are not familiar with the academic environment of the institution. As a consequence, institutions with high perceived reputational quality might not actually deliver high quality services.

Objective indicator studies are those based on indicators such as faculty research productivity, student characteristics or available resources. The problem with these studies is that the indicators chosen to measure the quality of educational service do not necessarily reflect teaching excellence or ability to communicate with students.

Quantitative correlate studies identify variables that correlate with factors associated with reputable programmes, such as student/faculty ratios, graduation rates and student performance. Like the reputational and objective studies, these fail to assess the perception of the customers.

A major shortcoming of the above mentioned studies is that none of them concentrate on what customers expect. There are two aspects to be taken into consideration when evaluating the quality of an educational programme; content and delivery. It

could be argued that students are in the best position to evaluate the quality of delivery, while faculty and other customer groups such as employers are the best judges of the content of a programme. However, this thesis will concentrate on the student customer group, as this is consistent with the Government's policy that ties funding to the number of students an institution attracts (For details, see Chapter 2, section 2.2.3). It could be argued that this is a shortsighted approach because it ignores other customer groups, but it is considered that without the primary customer group, namely the students, an educational institution's fundamental reason for operating disappears. Nevertheless, this study recognizes that there are other "publics" or constituencies that an educational institution must deal with. As discussed earlier, customer orientation must become part of an educational institution's culture, and as such it is considered that a study of this nature is warranted.

According to Garvin (1988), one of the definitions of quality is the user-based approach. This definition starts from the premise that quality "lies in the eyes of the beholder"; which implies that this is a highly subjective view of quality. Quality is person-specific and difficult to evaluate.

Zeithaml (1988), states that several researchers emphasize the difference between objective quality and perceived quality. Objective quality is defined by these researchers as the actual technical superiority or excellence of the products while

perceived quality is based on the consumer's judgement about the superiority or excellence of a product or service.

As discussed earlier, perceptions of quality vary from person to person. It is proposed that without having knowledge of how customers evaluate the quality of the service they receive, a customer orientation cannot be achieved.

This thesis will attempt to determine whether a link can be established between actual quality and perception of quality and how it relates to customer satisfaction in the higher education service industry. This linking will also be done as a means of helping educational institutions to improve the quality of their services.

1.4 Aim

The overall aim of this thesis is to develop a model to measure customer perceptions of quality in higher education in New Zealand with a view to developing strategies to achieve market leadership.

This thesis also aims to contribute to the local literature on service quality in education, which has been found to be limited.

1.4.1 Objectives

This study will attempt to:

1.Identify the criteria students use to evaluate the quality of the service provided by a tertiary institution.

2.Develop a model that accommodates the quality factors that influence the customers' decision making process.

3. Develop a survey instrument to measure service quality in education.

4. Determine if cost is an important factor that influences a student's evaluation of service quality in education.

5. Examine the extent to which students are generally satisfied with their overall educational experience.

1.5 Research Methodology Overview

An instrument will be constructed to test the Service Quality model developed. The instrument will be developed based on information obtained from relevant literature and by conducting a number of focus group interviews with different student groups.

The information obtained deals with what Davis and Ostrom (1987, p 96) call the cognitive, affective and conative responses to the

attitude object, in this case service quality in higher education. Cognitive responses are those that reflect the premises of the attitude object; affective responses are the evaluation of and feelings towards the object, and conative responses are the intentions and actions towards the object.

Once the instrument has been constructed, it will be tested on a larger sample of students. Descriptive statistics, factor and gap analysis will be used to analyze the data and determine the validity of the instrument to measure perceptions of service quality in education. For a full discussion on research methodology see Chapter 5.

1.5.1 Data Gathering

This study will be based on primary and secondary data collected from the following sources:

1. A detailed literature review will be conducted to gain insights to this topic.

2. The initial gathering of primary data will be based on focus group interviews with final year undergraduate business students with the view to determine what factors should be considered when evaluating service quality in an educational setting.

3. Based on the information obtained through the literature and the focus groups, an instrument will be developed. This

instrument will be administered to a large sample of business students across seven New Zealand universities to test the validity of the model developed.

1.6 Limitations and Key Assumptions

The limitations for this study are as follows:

* A relatively small number of undergraduate business students from selected universities will be surveyed for this study.

* This study will only look at the perception of the service provided and not at the content of the courses involved in the program.

* Lack of local literature on the topic.

A key assumption is that the primary customer group for education is the student group, as without them an educational institution's fundamental reason for operating disappears.

1.7 Contribution to Knowledge

The contribution to knowledge that this research provides could be divided between theoretical and practical contributions. On the theoretical side, there is a lack of local literature on this topic and this research provides a framework that could be utilized for the further development of this area of study in New

Zealand. The existing literature on this topic approaches the subject using the expectancy/disconfirmation paradigm (See Section 4.3.1), however, this thesis argues that this paradigm is not applicable for education. The development of a **Service Quality Model** that accommodates the key determinants of perceived quality in education and that of an instrument to measure service quality in education, has been achieved by using the importance/performance paradigm and is another theoretical contribution of this research. On the practical side the model developed through this research provides a framework that could help in the development of strategies by education administrators. Another practical contribution is a list of the most important service quality determinants in education. This can be used by educational institutions to determine whether they are allocating their efforts in the areas that are considered important by the student group. The third practical contribution is the potential use of the survey instrument developed, to track the performance of an institution over a period of time. In addition, strategies will be developed to help New Zealand educational institutions gain a competitive advantage in the marketplace.

1.8 Chapter Summary

This study represents a first step in exploring the issue of service quality in education in New Zealand. This study contributes to the limited local literature on this topic. In addition, the development of a Service Quality model for

education and an instrument to measure it, provides the potential for developing strategies that could create a competitive advantage in the education sector.

CHAPTER TWO

TERTIARY EDUCATION IN NEW ZEALAND

2.0 Chapter Introduction

The purpose of this chapter is to describe the history of changes that have taken place in the New Zealand Tertiary Education system since 1984, and to demonstrate how and why the New Zealand tertiary education situation has become more competitive. The importance of marketing for educational institutions to deal with this new competitive environment is also discussed. This knowledge will give greater understanding of the need for this thesis in the present circumstances in tertiary education.

2.1 Background Issues

Ginsberg et.al (1991) and Lawson (1992) state that educational reforms have been taking place in a number of countries since the early 1970s. Different reasons have been given to explain educational changes, but according to Gordon (1992) the main themes or explanations used by various nations involved in this process are the issues of accountability, efficiency, managerialism, and the arrival of monetarist economic policies which advocate the commodification of education.

The relationship between economic and educational change is present in the New Zealand tertiary reforms. The Learning for Life: Two (Ministry of Education, 1989) document outlines the

policies for reforming the tertiary sector. The document asserts that there is a need for change because the present system was developed "for different times and different circumstances". According to Jury (1993, p.5) examples of this change in circumstances are:

> "...the mismatch between occupational skills needed by industry, and the skills available, changes in the economy over the past ten years resulting in a changing labour market and employment patterns, i.e. slow rate of economic growth, competition for jobs, unemployment and increasing part-time work..."

In relation to the issues of accountability, efficiency and managerialism, Boston (1991) argues that these themes run across the reforms of the entire public sector, not only education. He associates three forces with the reforms taking place throughout the public sector, these are fiscal responsibilities, an ideological move to the right which drives privatization and commercialism, and more emphasis placed on accountability and performance.

In summary, the reform of the tertiary sector can be seen from a broader perspective taking into consideration international trends, the recognition of the needs of a changing society, an ideological move to the right and the influence of the Treasury which will be discussed later in this chapter.

2.2 The New Zealand Experience

Recent reform of tertiary education in New Zealand was started by the fourth Labour Government. In its 1984 manifesto, the Labour Party spelled out its intentions towards education. It expressed this commitment: to secure students access to universities and other tertiary institutions regardless of their ability to pay; that the courses offered at universities should meet the needs of the community, and that the policy of open entry to university should continue (New Zealand Labour Party, 1984).

In 1987 the Labour Party won the general election with an increased majority. In the run-up to this election, much emphasis was placed upon education and the Prime Minister took the Education portfolio. In its 1987 manifesto, the Labour Party restated its 1984 commitment to education. In particular: promised to improve the staff/student ratio, a system that would support Maori, women and mature students, and, that students would not be required to make a higher contribution towards their education than they were at that time (New Zealand Labour Party, 1987).

During the fourth Labour Government a plethora of reports that reviewed and proposed changes to the tertiary sector were written by various bodies - government agencies, committees, and task forces; for example the Hawke Report, Learning for Life and Learning for Life: Two, as detailed below.

2.2.1 The Hawke Report

The Hawke Report, which was delivered in 1988, had as its major task to review all the previous reports on education and training and to develop a framework that would form the basis for the government's reforms of the tertiary sector. This report made the following recommendations (Patterson, 1991):

* The Post Compulsory Education and Training system should remain public but there should be an increase in the non-public funding (user-pay system).

* There should be more decentralised decision-making; and institutions should be given more autonomy in dealing with public assets and funds.

* More accountability should be expected from those managing public assets and funds.

* The Ministry of Education should be responsible for policy formation and implementation for the whole field of education.

* Abolishment of the Vocational Training Council, the Authority for Advanced Vocational Awards, the Trades Certification Board, the University Entrance Board, the University Grants Committee and the National Council for Adult Education.

* Each institution must have a negotiated charter supported by a management plan.

* A system of national education qualifications should be formed.

* The Treaty of Waitangi must be respected. This means that the education system must be one in which Maori have equal outcomes to the rest of the community in terms of participation and success. In addition, the revitalisation of the Maori language as a living language, through a Maori-medium education system should be supported.

* Equity objectives must be pursued

* A scholarship and research fund should be formed comprising of one-third of university funds, to be available to researchers on a competitive basis.

The recommendations were subsequently adopted by the Government, with the exception of the last due, to opposition from the universities, and the Science and Technology Advisory Committee.

Significantly, this report was the first to introduce the concept of students paying a higher share of their fees by making available loans that would be repaid when the students were subsequently employed. This report also defined the terms "university" and "degree" and stated that the granting of degrees did not have to be restricted to universities, and that the term

"university" need not be restricted to the present universities (Patterson, 1991).

2.2.2 Learning for Life and Learning for Life: Two

The "Learning for Life" and "Learning for Life: Two" reports delivered the government's decisions on the organisation and delivery of post-compulsory education and training (Jury, 1993).

These reports were based on the recommendations from the Hawke Report but the major deviations from the Hawke Report were (Patterson, 1991):

* A funding mechanism of weighting for different course costs was created.
* The centralised agency for the control of research funds was abandoned.
* Educational Institutions' councils should be made up of 12-20 members.
* Review and audit requirements were increased.
* A loan-scheme either government-funded or supported was introduced.
* Powers were transferred from the University Visitor to the Ombudsman.
* Industrial relations reforms were introduced that made the State Services Commission the "employer" in disputes of interest.

2.2.3 The National Government

Following the election defeat of Labour in 1990, many of the key issues from Labour's public sector policies were continued by the National Government when it came to office. The reform of the education sector has been driven by the Treasury and the State Services Commission, both of which supported the concept that education should be viewed as a commodity that can be traded in the marketplace. Both believed that for educational institutions to achieve efficiency they must compete for finance and customers (Kelsey, 1993). The Treasury in the 1987 document entitled, Government Management: brief to the incoming government. Vol 2 Education Issues, proposed a model for education reform which was broadened by a 1987 Business Roundtable report on education. The model divides university roles into three different areas: education, research and entrepot (storehouse of knowledge). Even though it could be argued that research is part of education, this model views research as a separate role of universities. Because this model is seen as the basis of educational reform, this study accepts the premise that education, research and entrepot are the different functions performed by universities. This thesis will deal only with the education function of tertiary institutions.

The above mentioned model advocates the funding of the education function from two sources: the Government and the consumer. This funding has taken the form of (Kelsey, 1993):

* Equivalent Full-time Student (EFTS) funding: This ties funding to the number of students an institution attracts. This encourages institutions to compete to maintain market share. The government has also allowed tertiary institutions to set their own fees to encourage further competition and efficiency.

* Study Right: This is a scheme which provides institutions with a 95% subsidy for the first three years of study for a student that is under 25. This subsidy changes to 75% (1994 figure) for those students over 25 or in the fourth year of study.

* Student loans: This programme started in December 1992. The amount students are able to borrow is restricted to the amount necessary to cover their fees, $100 for books and other materials, and up to $4500 for living expenses. These loans must be paid through a 10% tax on all income over $13,104.

* Targeted benefits: These allowances are available to students under 25 in relation to their parents' income and to students over 25 or married students based on their own and their spouse's income.

The issue of competition is an important one, especially the education sector. "Traditional" providers, such as universities and polytechnics, are having to compete with private providers who do not seem to be affected by the same reforms. A case in point is the capital charge on tertiary institutions' assets made possible by the Education Amendment Act 1990. The Government

claims that this would lead to more efficient utilization of property, decrease the competitive advantage of capital rich institutions and create a more level playing field for private providers(Kelsey, 1993).

Importantly, the New Zealand Qualifications Authority (NZQA) was created under the Education Amendment Act 1990. Part of this institution's role is to authorize the use of the term "university" by private providers and to award existing non-university institutions the right to confer degrees. According to Kelsey (1993), most interest has been in the area of commerce, where the number of providers of business degrees has increased from 7 to 15 since 1990.

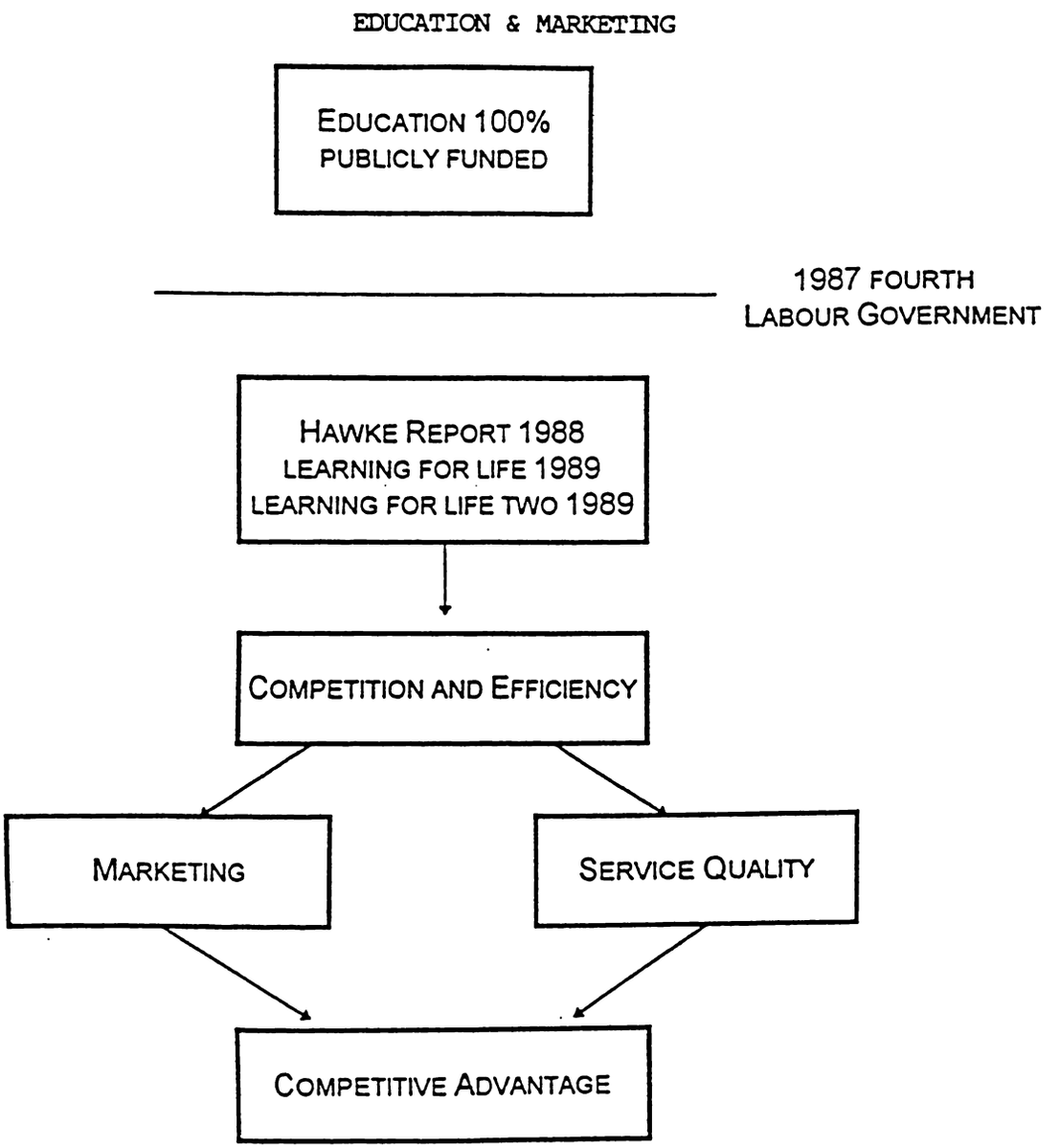
In the international scenario, the Education Amendment Act has given educational institutions the opportunity to market their courses overseas. However, New Zealand has only been able to attract 1% of an estimated $40 billion industry worldwide (Scott, 1993). Clearly, New Zealand's main competitors in this sector are British, Australian, US and Canadian tertiary institutions who have been attracting overseas students to their campuses for a long time. An example of this is Korea, where 46% of those eligible for tertiary study cannot get a place in their local university. But their parents are willing to make sacrifices to send their children to a US or Canadian university (Scott, 1993).

The above discussion shows that the government has changed its education policy in the attempt to introduce competition and

efficiency to the tertiary sector. It is important to note that competition has not impacted all faculties or all universities equally. The proposed thesis will only study the impact of competition on commerce schools.

Figure 2.1 depicts the changes that have occurred in the education sector and how it is envisioned that marketing, and more particularly service quality, fit into this new environment. Competition and efficiency are now part of the education sector and educational institutions must learn how to deal with this new environment. The use of marketing and service quality can provide tertiary institutions with the tools required to create a competitive advantage that will help to protect a service provider from its competitors.

Figure 2.1 EDUCATION & MARKETING



2.3 The Marketing of Education

Marketing is as important for educational institutions as for any other service organization. Institutions need to attract resources, employees and primarily students. According to Kotler and Fox (1985, p 12) marketing can be beneficial to educational institutions in four areas:

* Institutions will have greater accomplishment in fulfilling the institution's mission: Marketing will help institutions identify problem areas that need to be addressed to help them fulfill their mission.

* Marketing will assist institutions satisfy their customers: Marketing will help institutions fulfill consumer needs by ascertaining the customers' needs and how best to serve them. It also helps prevent negative word-of-mouth communication.

* It helps attract resources: Marketing helps attract key resources such as students, employees and donations.

* Improve efficiency in marketing activities: Marketing helps institutions develop strategies to market their services, and advertise and price them appropriately. It also helps the institution achieve maximum efficiency and effectiveness in their marketing activities.

Thus, until 1990, universities were the only establishments able to offer degrees, but with the advent of the education reforms, other providers such as polytechnics and private providers have been given authorization by the New Zealand Qualifications Authority to teach and confer degrees (Kelsey, 1993). This has meant that universities have had to compete more aggressively in order to maintain their market share. The University of Otago in 1992 conducted a radio campaign in Auckland and Wellington. In 1993, they used direct response television utilizing an 0800 number, so potential students could get more information about the university. According to Warwick Johnson, director of liaison services at the University of Otago, the reason for both campaigns was the need to meet government targets (Marketing Magazine, December 1993).

Since 1992, The School of Management Studies at The University of Waikato has increased its marketing activities in order to raise its public profile. The activities include school visits conducted by staff members and students in the northern half of the North Island.

In addition to the school visits, a series of public seminars targeting parents of potential students, as well as Information/Open Days for high school students have been conducted. An advertising campaign in national and regional newspapers and magazines has also been conducted. The advertisements were localized depending on the region they targeted and they portrayed a clean and safe environment that

offered up-to-date equipment and facilities available to students at all times. The advertisements also emphasized the central location of Hamilton, and its proximity to beaches, lakes and bush walks. Increased competition for tertiary students has made these kind of activities a "must" for the future survival of the School of Management Studies (Crandall,M., Public Relations Administrator, University of Waikato, 1994)

In 1994, the Waikato Polytechnic decided to hold its Open Day on a Saturday, in order to attract potential students that would otherwise not be able to attend due to week-day commitments. By doing so, the institution had the opportunity to show its facilities, get staff to meet the customers, and give them tangible cues that will allow them to evaluate the quality of the service the institution provides.

Attracting overseas students is another way of funding the educational institutions' operations. This is a fiercely competitive market contested by many hundreds of institutions globally. Overseas students pay full fees, which makes them a very attractive financial proposition. This marketing activity is being conducted by liaison officers attending career fairs held in different countries, the officers visiting high schools in several countries, organizing "twinning" arrangements with overseas institutions and by inviting delegations of government officials from different nations to visit local institutions in the hope that they will send government-sponsored students to New Zealand. At present, New Zealand institutions are primarily

focusing their efforts in Asia in general, and Malaysia in particular, where the competition for students is intense. However, several institutions are now looking towards other untapped markets, such as Latin America and Europe, to fulfill their goal of attracting full fees paying overseas students (Smith,L., International Student Manager, Waikato Polytechnic, 1994).

The above examples illustrate how educational institutions have embraced the use of marketing as a consequence of the increasingly competitive environment. The marketing of education is discussed in detail in chapter 3, section 3.4 of this thesis.

It is evident that the government expects efficiency and competition to enter the education sector. The policies they have implemented are designed to foster a market-driven environment that educational institutions have not had to face before. It is submitted that marketing, and more precisely, service quality, are tools that educational institutions could use to survive in this new environment of competition and efficiency.

2.3 Chapter Summary

The restructuring of the public sector in New Zealand was undertaken with the purpose of making it more accountable, efficient and competitive. It is important to understand the

educational reforms within this perspective, which demonstrates why education has become a marketable commodity.

The importance given to service quality in tertiary education is justified because one of the purposes of the educational reforms is to introduce competition into the sector. It was earlier proposed (Figure 2.1) that service quality is a tool that could be used to create a competitive advantage that would assist service providers in dealing with the new environment they are facing.

The above discussion demonstrates that service quality should be considered an important component for the differentiation of services provided by the various tertiary institutions. It is with this in mind that this thesis will concentrate on service quality in tertiary business education.

In chapter 3 we will proceed to explain the concept of services marketing in the context of the marketing of education.

CHAPTER THREE

MARKETING OF EDUCATION AS A SERVICE

3.0 Chapter Introduction

The purpose of this chapter is to examine the literature in the area of service marketing and assess its applicability to the marketing of education.

The service sector accounts for more than seventy percent of the gross national product in a number of developed countries such as New Zealand (Lovelock 1991). It encompasses a wide range of both public and private sector organizations. It is generally accepted that applying the marketing philosophy to services is much more complicated than to products. Hence, this issue and its application to the educational sector will be discussed in this chapter.

3.1 Education: A Product or a Service

Education has been referred to as both a product (Berry and Allen 1977, Berry and George 1975, Murphy and Mc Garrity 1978) and a service (Kotler and Fox 1985, Litten 1980). Reasons why education is considered by some to be a product include the fact that students are provided with a degree or diploma in the form of a package (ie course outline, promotional materials, etc.) and this provides the customer with the opportunity to evaluate the "product" before buying.

It is argued that what these researchers are referring to when they say that education is a product are tangible cues. These cues are what make services tangible so customers can overcome the difficulty that exists when a service must be assessed. Corporate wardrobes are an example of how banking services, among others, try to portray a specific image for their services so as to make it easier for their customers, and potential customers, to assess the quality of their services. In the case of education, course outlines and promotional materials are the tangible cues.

On the other hand, researchers such as Kotler and Fox (1985) have argued that education is a service. Their argument could be substantiated by the traditional characteristics associated with services. According to Parasuraman (1987), these traditional characteristics are intangibility, inseparability and heterogeneity . An illustration of the inseparability factor is the fact that lectures, due to their nature, are highly interactive and are both produced and consumed at the same time. The heterogeneity factor suggest that there could be a variance in the delivery of service by different providers (ie lecturers) from the same institution. Due to the people aspect of education, it is hard for providers to standardize the quality of their services. Even though efforts have been made to overcome this problem - by implementing quality assurance programmes , human nature makes the delivery of the service to vary depending on who undertakes the task. Education also possesses the intangibility factor that characterizes services.

Education is a service that cannot be judged before it is experienced and tangible cues are the ones that help customers decide upon the quality of the educational services offered by different institutions.

Another interesting area of debate relates to the role of internal marketing. Whether it is due to the realization of the importance internal marketing has in the successful delivery of a service, or because it is a necessary step in the implementation of Total Quality Management, some educational institutions are taking steps towards satisfying their internal customers. Evidence of the interest in implementing Total Quality Management in this sector, is shown by the number of participants in conferences such as the "Total Quality Management in Education" conference held in Auckland in October 1993. Even though some argue that because TQM is a concept developed in the product based industry it does not apply to services and more precisely education, several researchers (Taylor and Hill, 1993; Dale et al, 1990; Gallagher, 1991; Oakland, 1989 and Saunders and Walker, 1991) have identified three components of TQM that illustrate how this concept is applicable to the service industry. These components are:

* A focus on the customer, internal and external, and on supplying a quality product or service.
* An emphasis on teamwork, considering the organization as "all one team".

* A scientific approach to problem solving, basing decisions on hard data.

On this basis, it might be concluded that because the differences in marketing services apply to education, education is more a service than it is a product.

3.2 Services Marketing

According to McColl-Kennedy et al (1994, p 18), services marketing is the application of marketing principles to the distribution, promotion, development and sale of largely intangible tasks that satisfy buyer or user needs.

Even though the same principles apply when marketing products or services, an understanding of the differences between both is necessary for the effective application of these principles. With this in mind what follows is a discussion on the characteristics of services.

3.2.1 Characteristics of Services

The intangibility characteristics of services means that a service cannot be evaluated through touch or sight (Parasuraman 1987, Lovelock 1980, Berry 1980). Services have to be produced and consumed at the same time and thus are inseparable (Lovelock 1980, Smith 1990). Services are heterogenous (Smith 1990) meaning that providers cannot standardize their services.

Finally, services have to be consumed immediately and therefore cannot be inventoried; thus they are highly perishable (Parasuraman 1987, Sasser 1976).

Nelson (1970) classified consumer goods according to their qualities namely "search" and "experience". Search qualities are ones that can be determined prior to purchasing the product while experience qualities are ones that can be determined only after the product is purchased. Search qualities include, for example, colour, style, price, smell and hardness; while attributes for experience qualities include taste, wearability and purchase satisfaction. These two qualities could be used to isolate the differences between goods and services.

Karni (1973) added a third quality to the two way classification of Nelson, namely "credence" qualities. These are attributes that consumers cannot evaluate either prior to or after purchase. According to Sasser (1976), many researchers never really explore the characteristics that make services different from goods but simply assume that services are merely goods with odd characteristics.

Not all researchers agree with the above-mentioned classifications. George and Barry (1981), state that the major difference between services and goods is that services are performances while goods are objects. They further state that when service performances are people rather than equipment-based the quality of the service provided is closely related to the

service provider. Also in the labour intensive service sector, there exists a degree of variability in the service provided because different people have different technical and customer relations skills, while in the production of goods there exists a strong degree of standardization. This is one of the major reasons why word of mouth communication is very important for providers of services as it plays an important part when consumers select service suppliers.

George and Berry (1981) and Sasser (1976) seem to have taken a different perspective as a basis for their discussion but they seem to arrive at the same conclusion as other researchers in relation to the characteristics of services that distinguish them from products.

It is proposed that any discussion in the services area, whether it relates to evaluation, differentiation or positioning must take into consideration the intrinsic characteristics of services. Looking at education from this point of view, it can be argued that education is intangible because it cannot be evaluated through touch or sight. Educational institutions have tried to overcome this by giving customers tangible cues such as course descriptions and promotional materials to aid the evaluation of the service provided.

In relation to inseparability, the delivery of education cannot be separated from its consumption. An example of this is a

lecture that is delivered by the lecturer and received by the students.

Standardization might not be desirable in education because it could preclude institutions from customizing their services to satisfy their customers. Another reason why the delivery of education cannot be standardized is because of the "people" nature of education. Human nature is essentially unpredictable, which means the delivery of the service can vary depending on who undertakes the task.

It is believed that education is perishable when it requires the participants to be in one place at the same time. This limitation is being overcome by technology, and extramural education courses. These permit students to pursue their studies in their own time.

Based on the discussion of the inherent differences between goods and services and their applicability to education, it can be expected that services marketing is somewhat different from the marketing of products. To this end what follows is a discussion on several issues related to services marketing.

3.3 Issues in Services Marketing

Berry (1980) and Fryar (1991) raise a number of interesting points that are crucial for marketing services successfully. Some of the points include:

* Internal Marketing: Since service marketing involves a high level of contact with consumers it is important that providers of services be concerned both with internal and external marketing. Internal marketing is making sure that not only the best people are hired for the job but also they provide the best service to the company's clients.

* Customizing Service: Since the fundamental objective of a service organization is best to serve customer needs and provide what they want, providers of services should pay close attention and take seriously the customization process.

* Physical Service Environment: The physical environment in which the service is provided plays an important part in informing prospective customers that quality service is available from this location.

* Appearance of Service Provider: Another important area that could be managed to the advantage of the service provider is the appearance of the person providing the service, to portray the "best" image.

* Service Pricing: Since services cannot be felt or judged according to the material used, it is important that an appropriate price be charged for the service, as this may be used as an indicator of the quality customers can expect from the provider.

*Matching Supply and Demand: Since services cannot be inventoried, it is crucial that providers of services synchronize supply and demand of service to be able to handle the fluctuations in demand.

It is postulated that these elements must be taken into consideration when marketing educational services. Every effort should be made to satisfy both the internal and external customers by appointing the most appropriate person for every position. It can be concluded that education providers are already using these suggested elements when they customize services by designing courses to satisfy specific customer groups as well as offering evening and summer sessions to answer to customer needs and manage their supply and demand.

Berry (1987), Gronroos (1990) and Carlzon (1987) mention seven major areas that are usually neglected when practising service marketing. The seven areas are:

* Differentiation between the marketing function and the marketing department: Since marketing of services are dependent on the cooperation of all the employees in the organization, it is important that management take a decentralized approach in the running of the organization.

* Freedom to serve: Since service organizations have the opportunity to come into direct contact with their customers, it is important that the employee who has direct

contact with the customer should have the flexibility to decide how to best serve the customer.

*Marketing to internal customers: Most service organizations fail to realize that it is their employees, especially those who come into direct contact with customers, who basically make or break the organization. So it is always in the interest of the organization that they satisfy the needs of their employees before they think of looking at the wants and needs of the external customers.

* Servicing existing clients: In is important that service organizations retain existing clients; it is more expensive to attract new clients than to retain existing ones. Also, unsatisfied customers tend to express dissatisfaction by word of mouth, which is bad for business.

* Be quick to solve problems: Service quality can be seen at two levels, one being the quality level at which service is provided and the other being the quality level at which problems or complaints are dealt with.

* High Tech and personalized touch: It is important that providers of services use a combination of technology and personal touch to provide the best possible service required.

* Branding service: Even though services are intangible, providers should try to brand their service because branding provides the organization with the competitive advantage which sets the company apart from its competitors. One possible way of branding services is through a communications strategy which considers services similar to goods.

The lessons to be learned from the above description seem to point towards an overall marketing philosophy that requires the commitment and expertise of both management and staff. The concept that marketing is everyones responsibility departs from the traditional view that marketing is a role undertaken by the marketing department only. It is believed that this marketing philosophy is based on applying a customer oriented approach both internally and externally, as this seems to be the way to achieve the satisfaction of all customer groups.

Hansen and Steadman (1991) state that increasingly companies have started to realize that quality service and customer satisfaction are essential for profitability. Furthermore, they assert that customer orientation provides a means for differentiation and reduces the amount of customer defections. For a detailed discussion on customer satisfaction, see Chapter 4, sections 4.4.1 - 4.4.3.

Organizations today realize that employees play a significant role in the delivery of quality service, and ultimately customer

satisfaction. It is well known that a business that wants to satisfy its customers' needs must satisfy the needs of its employees first (Cina 1989; Hoffman & Ingram, 1992).

What follows is a discussion on the concept that allows firms to achieve the satisfaction of its internal and external customers, namely, internal marketing.

3.3.1 The Role of Internal Marketing in Service Provision

The importance of services to several businesses has heightened the concept that a well-trained and service-oriented employee is the most critical scarce resource today (Groonros, 1990).

Internal marketing starts from the premise that employees are the first, internal market for an organization. If goods, services and external communication campaigns cannot be marketed to internal customers, their success with external customers cannot be expected (Gronroos 1990, Heskett 1987, George 1984).

The actions of the employees play an important part in determining whether customer satisfaction has been achieved. The employee-customer contact is important in the delivery of quality service. With this in mind providers of services should pay close attention to the concept of internal marketing - viewing employees as internal customers, and jobs as internal products.

A customer-oriented performance cannot be expected unless the organization offers the employee something in return. A job and a salary might be enough in some cases, but in some industries this is no longer true. The organization must offer its internal market an internal product which is attractive (Tansuhaj et al. 1988, Gronroos 1990, Berry 1981, Carlzon 1987).

It is apparent that the key contribution of internal marketing is a management strategy designed to develop customer-conscious employees that will act as, what Gronroos (1990) calls, part-time marketers, and designed to attract good employees. It is proposed that internal marketing is necessary for the satisfaction of both internal and external customers and that, as such, it has an impact on the generation of positive word-of-mouth. To be able to appreciate these relationships, an understanding of word-of-mouth communication is necessary.

3.3.2 Word of Mouth Communication in Service Provision

Several researchers (Keiser 1988, Richins 1983, Dichter 1966) state that customers usually talk about negative experiences rather than positive experiences with a service provider. Positive word of mouth can be an important promotional tool for the service provider, while negative word of mouth can have a disastrous effect on the organization. Keiser (1988) further discusses three strategies for developing a more customer oriented service organization, namely:

* Keeping in constant touch with customers to find out how the service provider can best serve their needs.

* Making the customer the focal point of all the activities in the organization.

* Authorizing employees to serve their customer in the best possible manner by removing all existing barriers.

The importance of word of mouth communication has also been mentioned by Haywood (1989), who said that it is extremely important to service organizations for the following two reasons. First, because of the intangible nature of services, customers have to rely on the opinion of others. Second, because services are information-driven, there is a considerable interaction between the service provider and the customer. Negative word-of-mouth communication can have a destructive effect on the company. If the service provider has an effective system to handle complaints and problems it will have a positive effect on word-of-mouth. Complaints handled on time will result in customers returning to make more purchases. Likewise, the extent to which employees are satisfied will have either a positive or negative effect on the company.

According to Haywood (1989), areas that service providers must pay close attention to are these: Deliver on promises; providers should deliver what was promised through advertisements, otherwise it will have a negative impact on future word-of-mouth

communication. Manage "after service" by considering customers as future opinion leaders and treating their views as important. Ask a regular customer to participate on panels to suggest how the service can be improved. For example, Delta Airlines believes that the customer should be treated with the care and respect they deserve; and this is achieved by providing employees with explicit directions:

* Only employees who know what they are doing should be allowed near the customer.

* Determine the amount of time employees should be working in direct contact with clients; meaning tired employees will do more harm for the company than good.

* Determining who deals with the customer.

* Rewarding good employees who provide good customer service.

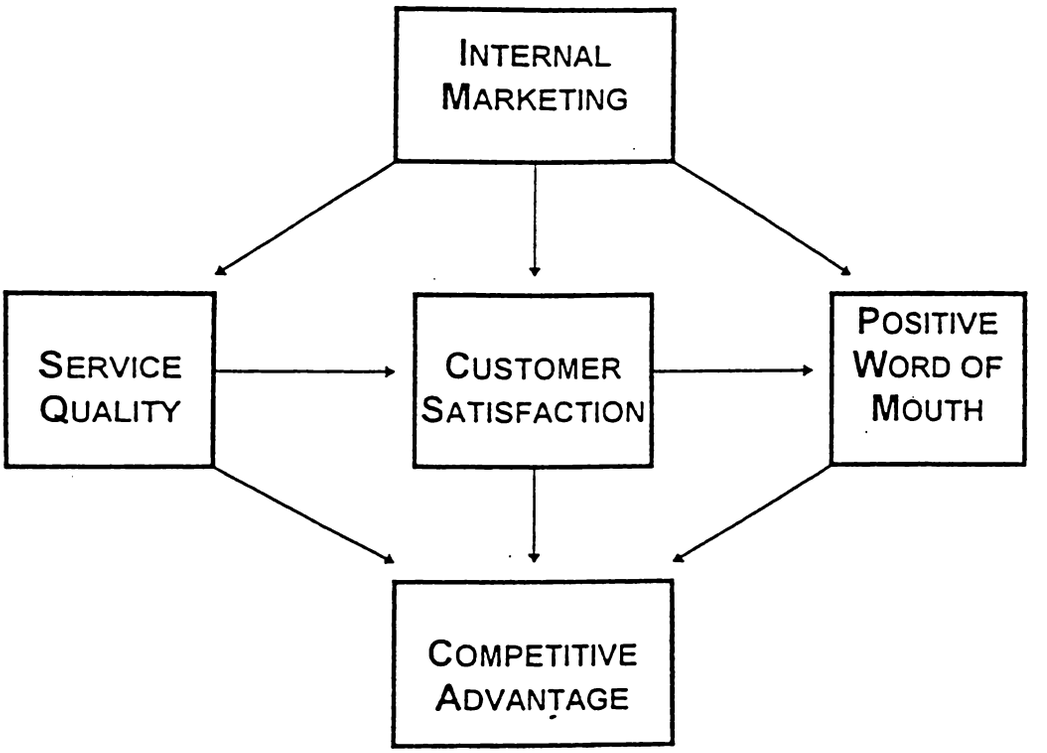
As discussed earlier, customer satisfaction could be achieved by fulfilling the needs of both internal and external customers. This should be achieved as simultaneously as possible because of the inseparable nature of services; but in order to satisfy external customers, it is necessary that the internal customers be satisfied.

The above discussion has pointed towards two elements that are crucial for the achievement of customer satisfaction: internal marketing and word-of-mouth. As already stated, it is believed that these are components of an overall marketing philosophy with customer-orientation as a high priority.

It is suggested that the above mentioned marketing philosophy which requires management and staff commitment applied to both internal and external customers will allow educational institutions to achieve the customer satisfaction and loyalty necessary to succeed in the new competitive environment in which education providers now operate.

In Chapter Two, the changes that have occurred in the education sector in New Zealand were discussed. It was concluded that the Government's intention was to introduce market-driven policies to this sector and as such, it is argued, that what educational institutions needed was to develop a competitive advantage. Figure 3.1 shows the interrelationships between internal marketing, service quality, customer satisfaction and positive word-of-mouth. These issues have been reviewed and their importance to the achievement of a competitive advantage ascertained.

FIGURE 3.1 COMPETITIVE ADVANTAGE IN EDUCATION



3.4 The Marketing of Educational Services

One of the major problems that educational institutions face when attempting to introduce marketing , is the negative attitude that some educators and members of the public have towards marketing. For example, Krachenberg (1972) stated that these people believe that marketing is only good for pushing worthless products, and manipulating people.

Kotler and Fox (1985) further add that educators have raised a number of concerns regarding the use of marketing for education. Among the concerns are:

* Marketing is incompatible with the educational mission: Many believe that marketing is inappropriate for educational institutions since the purpose of educational institutions is to impart knowledge and skills, whereas the main purpose of marketing is to make a profit.

* There is no need for marketing: Even though many administrators feel that marketing is useful in many aspects, they still believe it is unnecessary, as education is something that people want, and that there is always a demand for it.

What appears to make marketing unacceptable to some people is the belief that it is used by people with self-seeking motives. However, an alternative view is that marketing can serve society

if its true meaning is applied. According to Krachenberg (1972, p 380):

> "...marketing deals with the concept of uncovering specific needs, satisfying these needs by the development of appropriate goods and services, letting people know of their availability, and offering them at appropriate prices, at the right time and place."

If this definition is followed and understood, educators could find the use of marketing easier to accept. Although some educators may be concerned with the business orientation of marketing, this definition shows how marketing can perform a service to society.

Barnes (1988, p 127) states that marketing is a crucial tool for educational institutions because it helps in the recruiting of new students and promoting the institutions' reputation. It is important for the institution to market itself because of the competition it is likely to face in the marketplace to attract the limited number of consumers with limited resources that exist. This is important for the long term survival of the institution in the market place.

Murphy and McGarrity (1978, p 249) in their article "Marketing Universities" mention that educational institutions are using marketing to promote their establishment. The educational "product" is modified to suit the needs of the different market segments. Different media - newspapers, magazines, radio and television, are used to promote the institution. Various pricing

strategies are designed to suit different needs; and finally education is being offered using different channels of distribution such as distance education, and having the course taught at offices of companies and associations. Researchers like Berry and George (1975), Krachenberg (1978), and O'Brian (1973), mention that it is possible to successfully use marketing techniques like market research, product planning, promotion and segmentation to market educational institutions. Murphy and McGarrity (1978, p 260) further suggest that it is important for institutions to hire a senior person to "head-up" and coordinate the marketing activities of the whole establishment so that an overall marketing strategy can be developed for the institution.

Berry and George (1975), Berry & Allen (1977) and Kinnell (1989) further add that institutions of higher education must develop well planned marketing strategies in order to be competitive in the highly complex and changing environment. In order to be competitive, administrators must include certain key elements in their management task:

* Conduct Market Research: In order to better serve their customers, market research should be carried to find out what the needs of the customers are. Research in this area should be done on a continuous basis and the findings should be disseminated to the right people on a regular basis so that appropriate strategies can be developed.

* Market Segmentation and Product Design: In order to gain a competitive advantage, educational institutions should identify, and group people with similar needs; and tailor their marketing mix strategies to suit the needs of these segments.

* Distribution: Distribution strategies should be developed in such a way that the product will be made available at the time and location preferred by the clients.

* Promotion: Promotional strategies should also be developed so that the institution's product, distribution and pricing strategies can be conveyed to potential customers. The main idea of communication is to create awareness and interest in the institution's product.

* Price: Finally, pricing strategies should be developed so that the product available is both attractive and affordable to customers, thus resulting in the acceptance of the product. This is now possible in New Zealand because the Government has given universities the authority to decide their pricing structure (Kelsey, 1993).

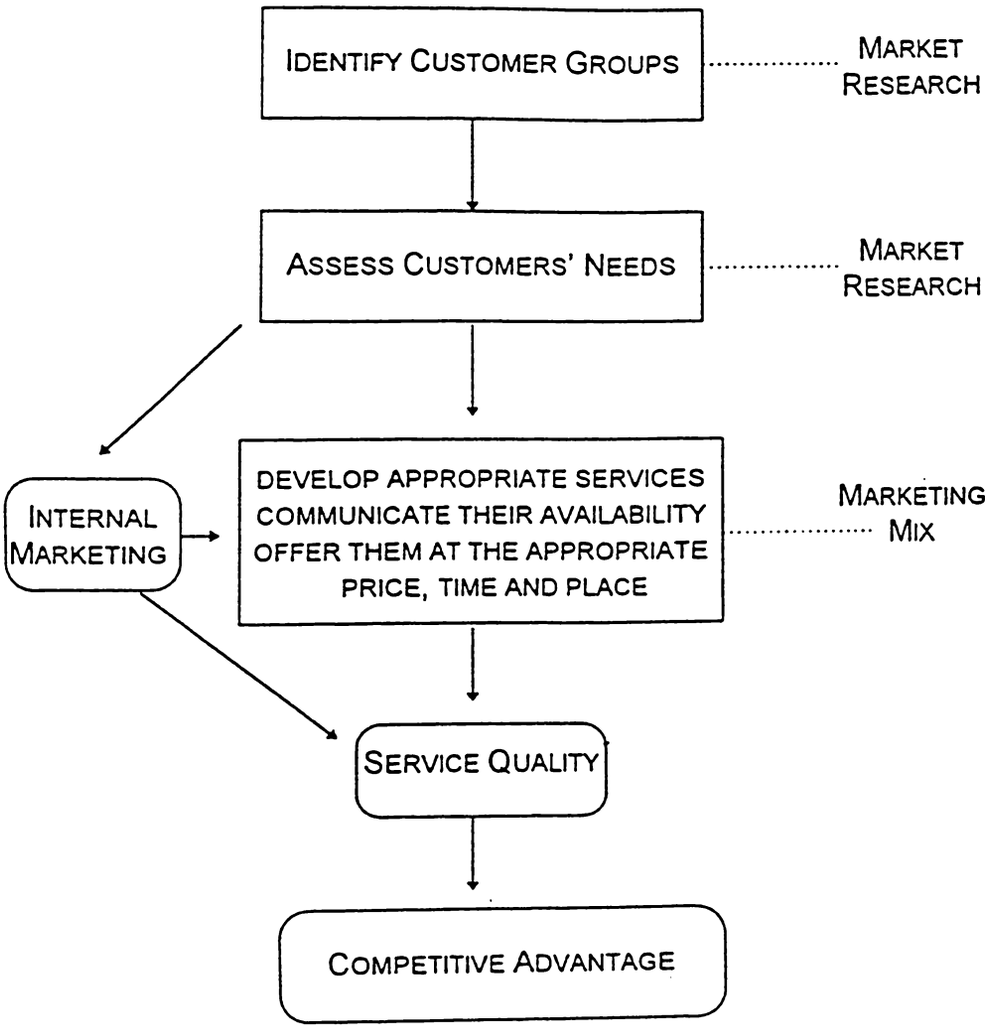
Surface (1971, p 75) mentions that several universities are trying to operate like corporations by utilizing organizational design and practices, hoping that this would help them be more successful in marketing their institutions. This transfer has not been successful because of the basic difference in goals and

objectives between universities and corporations. The main purpose of a company is to operate profitably and get a return for the shareholders' investment. On the other hand, a university is a non for profit institution, and its main aim is to disseminate knowledge to its customers. However, the same principles that apply in developing marketing strategies to product marketing applies to marketing services like education (McConkey, 1987; Lilien & Kotler, 1983; and Neidel, 1983). At the same time universities can gain a lot in terms of organizational efficiencies by applying some of the basic marketing concepts like marketing plans, advertising, pricing, and product strategies used by companies.

The above discussion has illustrated how marketing can be utilized to the benefit of education. At the heart of the marketing philosophy is customer orientation. So customer groups must be identified, their needs assessed and targeted. To this end, the identification of the various customer groups for education is necessary if any further discussion about the quality of the education services provided is to continue. This issue will be addressed in the following section of this chapter. Figure 3.2 depicts the application of marketing planning to education. It also illustrates how the appropriate use of marketing planning could lead to service quality which in turn could create a competitive advantage.

FIGURE 3.2

USE OF MARKETING IN EDUCATION



3.5 The Customers of Tertiary Education: Who Are They?

The previous discussions have concentrated on customer orientation and satisfaction, but this cannot be achieved without knowing who the customers are, and their specific needs and wants. Some, such as Tom Peters (1992), would argue that even though the idea of customer orientation is well-intentioned, the idea is going in the wrong direction. Peters (1992) advocates a concept which he calls "customerizing" intended to allow the customer to construct his/her own experience with the organization. Even though this notion sounds good in theory, it has some major drawbacks. The concept assumes that the customers know what they want, are able to explain it, and when they get what they want, they will be satisfied. According to Wyckoff (1984) because of the complexity of customers' needs and the difficulties involved in identifying them, the concept is not always true. He also states that even when customers are able to identify their needs and articulate them, this is no warranty that satisfaction will be achieved. Another problem with Peter's concept is the difficulty in applying it. In the case of education, it would imply a radical change of the "system" and even though it would be a good idea, it is seen as a long term possibility.

Several attempts have been made to identify the customer groups of education (McCullogh 1993, Taylor et al 1993, Saunders et al 1991, Brown et al 1993), but no agreement have been reached as researchers have different views as to who the customers are.

According to Saunders et al (1991), there are four different customer groups, the first one is made up of those that want the service - students and employers, those that know the service is available - teachers, parents and employers, those that pay for the service - government, students and parents, and internal customers, such as other faculty members and administration.

McCullogh (1993) provides us with a more general classification of customers for education. She classifies them into primary clients (those who benefit), secondary customers (those who pay) and tertiary customers (society). Hence, McCullogh does not see the need to include internal customers.

Brown and Gobeli (1993) define customer in the education context as "someone who receives the benefit of developing students' talents". They divide the customers into two groups: outside customers - students, employers, business, parents, taxpayers and internal customers - teachers in advanced courses, other departments on campus, central administration.

It is clear that careful attention needs to be paid to the different customer groups, and that there are difficulties involved in satisfying all customer groups at the same time. However, for the purposes of this thesis, students will be the customers on which all efforts will be concentrated. This is because Government funding is based on the number of students an institution attracts. In addition to this the other main source

of funds for the an institution is the fees the students pay; thus, attracting students should be seen as a main priority.

3.6 Chapter Summary

To achieve the satisfaction of both internal and external customers, the application of an overall marketing philosophy, which requires the commitment of management and staff, is necessary. The heart of this philosophy is a customer orientation which, if applied properly would lead to customer satisfaction.

It is clear that a distinct understanding of what marketing is and what it can do for society is necessary so that educators could find the use of marketing easier to accept. It has been demonstrated that marketing can be used by educational institutions to identify their customer groups, their needs, design the appropriate marketing mix, which, in turn would lead to service quality, customer satisfaction and the achievement of a competitive advantage.

Chapter 4 proceeds to provide a conceptual understanding of service quality and its role in consumer decision making, with particular reference to students when selecting an educational institution.

CHAPTER FOUR

SERVICE QUALITY AND ITS ROLE IN CONSUMER DECISION MAKING

4.0 Chapter Introduction

This chapter aims to provide a conceptual understanding of service quality and its impact on the students' decision-making process. The issue of customer satisfaction is also addressed. This will supply an appropriate framework around which this research can be usefully organised.

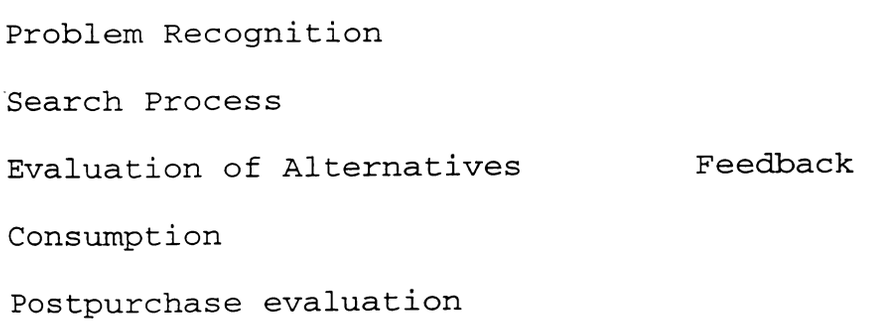
4.1 The Consumer Decision Making Process in Education

To be able to market educational services effectively, there is a need to understand how students choose between the different services offering and how they evaluate these services once they have experienced them.

The study of consumers has evolved into a distinct discipline with psychologically oriented viewpoints offered to describe and explain consumer behaviour. This contemporary perspective is different from earlier models that concentrated on economic theory and ignored the consumer decision process and other mental activities consumers undertake regarding their purchase of a specific product or service (Loudon and Della Bitta, 1988).

Several decision-making models have been developed that have various degrees of scope and sophistication (Kotler, 1965, Howard and Sheth, 1969; Schewe, 1973; Nicosia and Wind, 1977; Zaltman and Wallendorf, 1979; Engel et al, 1986). The strength of these contemporary models is in the elaborate perspective they give of consumers and their decision-making process. The literature on consumer behaviour points towards a framework that represents the major steps that have been identified as the most important general influences on the consumer decision making process (see Fig 4.1).

Fig 4.1 **Decision Making Process**



Source: Engel, James; Robert Blackwell and Paul Miniard (1986), Consumer Behaviour, 5th Edition, CBS.

When the decision making process was investigated from the education view point, Tierney (1983) and Church and Gillingham (1985) concluded that students go through three stages:

1. The decision whether to attend an educational institution
2. The decision as to which institution to apply
3. The decision to enrol at the institution that has accepted

the student (assuming the student was accepted in more than one institution).

A number of researchers like Kotler (1976), Chapman (1981 & 1984), Hossler and Gallagher (1987) and Kuntz (1987) have developed various models to understand the student decision process. The above researchers have identified four stages in the decision making process, namely: search, application, choice and matriculation.

It is considered that a major weakness of the educational perspective is the lack of a postpurchase evaluation phase (For further discussion please refer to section 4.4). This is the phase where consumers/students determine whether they are satisfied or dissatisfied with their choice of service provider. The literature concludes that customer satisfaction creates positive word-of-mouth communication, whose importance to a student's choice of college (tertiary institution) is well documented (Chapman, 1981). For further discussion on this topic see section 4.2.

Bateson (1992) looks at this process from the context of services. He asserts that the service purchase process is made up of three stages. Stage one is the Prepurchase stage that encompasses the first steps of the above mentioned process- problem recognition, search process, and evaluation of

alternatives. The objective of this stage is to understand why a consumer chooses to use a specific service being offered. The search, application and choice phases identified by Kotler (1976), Chapman (1981 & 1984), Hossler and Gallagher (1987) and Kuntz (1987) fulfill the same objectives as those identified for the prepurchase stage.

The objective of the consumption stage (stage two) is to understand how customers evaluate the services, which is the same objective of the matriculation phase (education decision process). The objective of the last stage (postpurchase evaluation) is to understand the sources of customer satisfaction and dissatisfaction (Hill and Neeley, 1988; Bateson, 1992).

It is considered that the consumer behaviour literature supports Bateson's decision-making process for services because even though different researchers adopt different perspectives in the discussion of this topic, all of them identify steps that pursue the same objectives (See Table 4.1). As such, the Bateson model (Fig 4.2) will provide the framework for a review and discussion of the literature as it relates to student consumer decision-making in education.

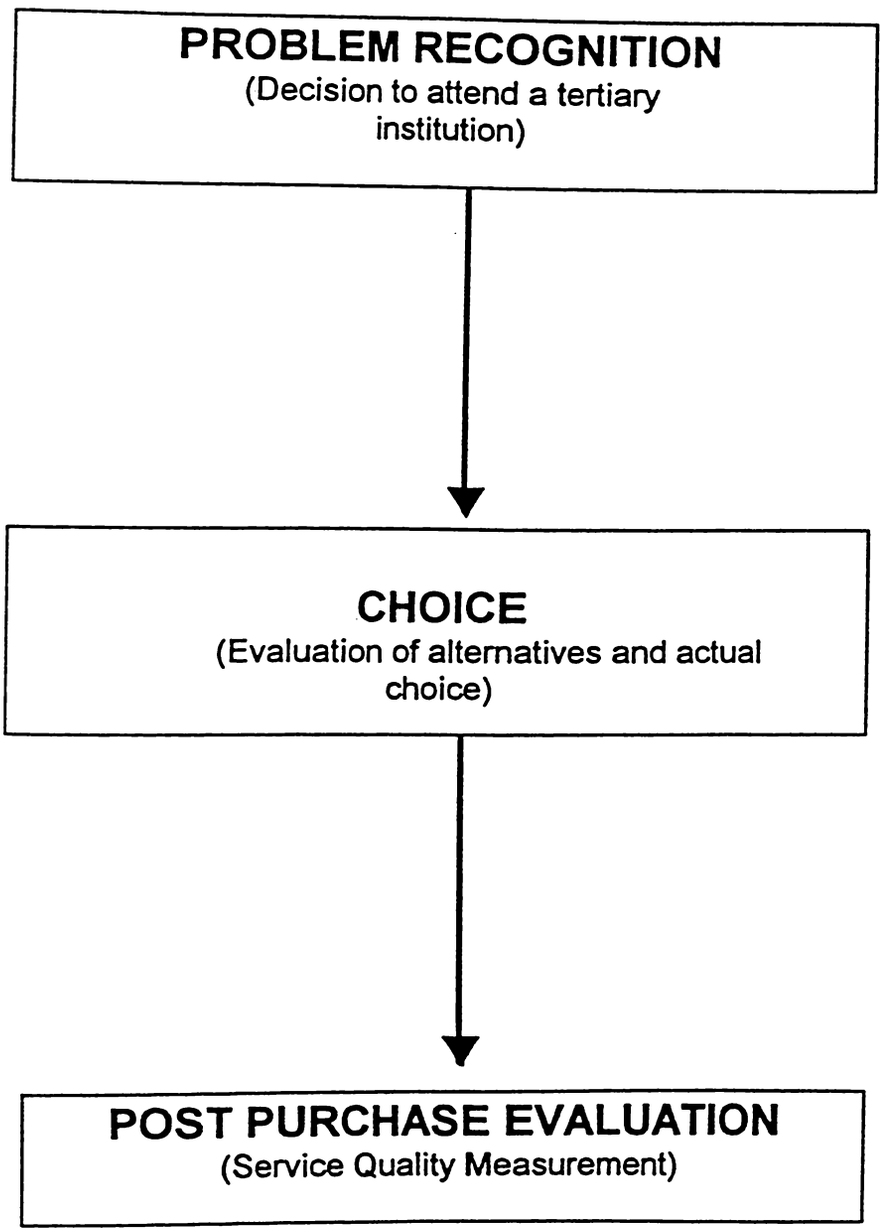
TABLE 4.1

DECISION MAKING PROCESSES

Kotler (1965) Howard et al (1969) Nicosia & Wind (1977) Schewe (1973) Zaltman et al (1979)	Bateson (1992)	Kotler (1976) Chapman (1981 & 1984) Hossler et al (1987) Kuntz (1987)	Tierney (1983) Church et al (1985)
PROBLEM RECOGNITION	PREPURCHASE	SEARCH	DECISION TO ATTEND
Search Process		APPLICATION	APPLY
Evaluation of Alternatives		CHOICE	
Consumption	CONSUMPTION	MATRICULATION	ENROL
Post purchase Evaluation	POST PURCHASE		

Figure 4.2

DECISION MAKING PROCESS FOR EDUCATION*



*Derived from the Bateson's Model

4.2 The Prepurchase Stage

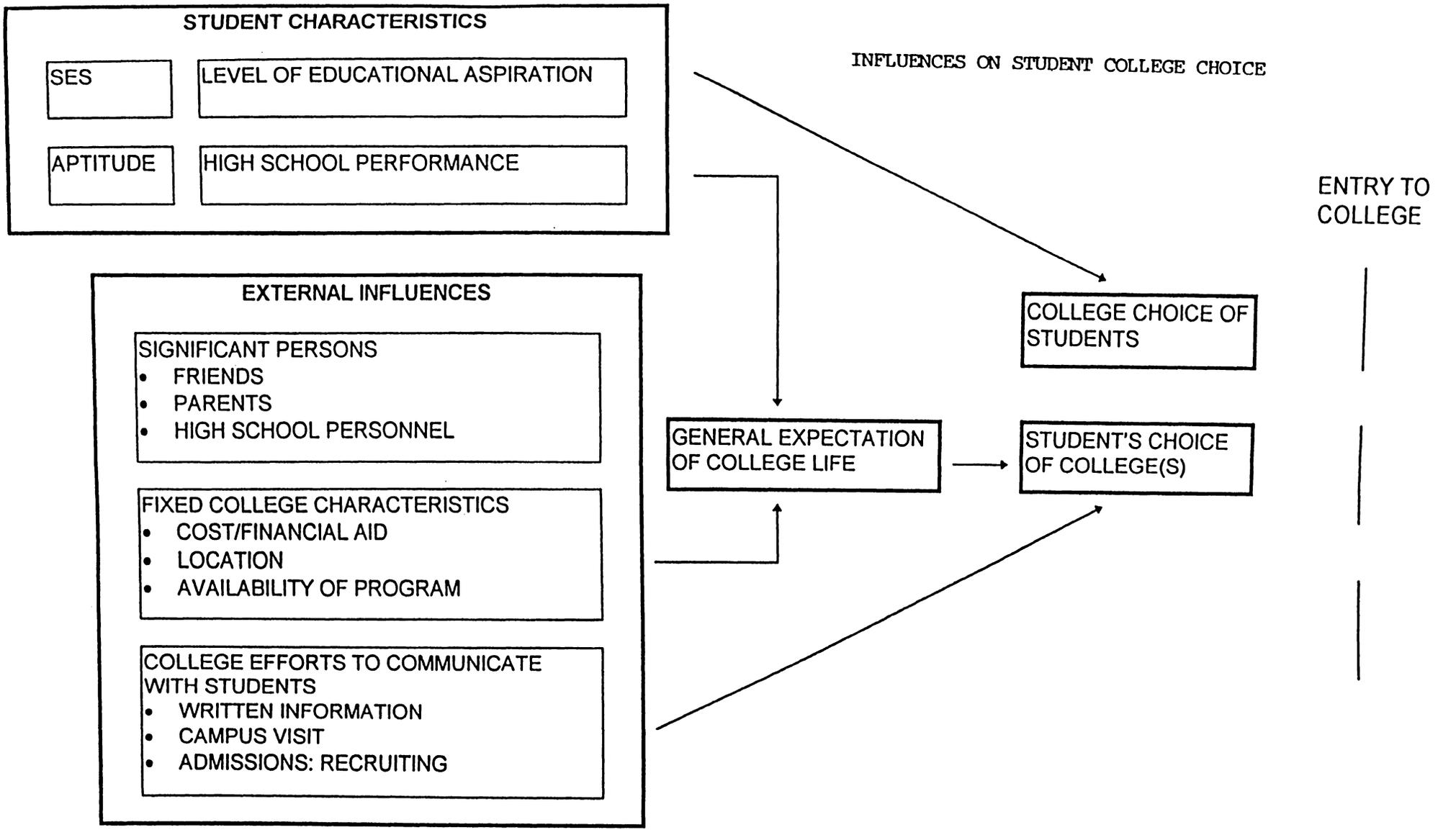
This stage covers all the activities that take place before the purchase of a service. This stage begins when the consumer recognizes that there is a "problem". The individual searches for information from internal and external sources and arrives at a cluster of possible solutions to the problem. The individual then selects the solution that the individual considers most satisfactory (Barnes, 1986; Bruner and Pomazal, 1988; Hill and Needley, 1988; Bateson, 1992).

When the student has decided to attend an educational institution, the next question becomes,"Which institutions are on the list?". This list is what is referred as the "evoked set"- the set of brands that will be evoked by the consumer and from which the choice will be made (Bateson, 1992).

The issue of tertiary institution choice criteria has been widely researched. Unfortunately no **one** set of most important attributes has been arrived at.

In 1981 David Chapman developed a Model of Student College (tertiary institution) Choice (See Fig 4.3).

FIGURE 4.3



SOURCE: Chapman, David (1981), " A Model of Student College Choice", Journal of Higher Education, Vol 52, No 5, pp 492.

He concluded that there are three external influences that affect a student's college choice. These are:

a) Significant persons - friends, parents, and high school personnel.
b) Fixed college characteristics - cost (financial aid), location, availability of programme.
c) College (tertiary institution) efforts to communicate with students - written information, campus visits and admissions/recruitment.

The "significant persons" category influences the student in three ways:

1. Comments made by these people shape students' expectations of a particular tertiary institution.
2. They may offer direct advice as to which institution the student should choose.
3. The advice of friends that attend a particular institution also influences their decision.

Of all significant persons, parents are the ones that have the greatest impact on the student's choice (Chapman, 1981).

Chapman (1981) made a special effort to determine the degree of influence of printed material on the student's college choice. He determined that even though printed material influences

college decisions, it does not influence them to the degree administrators believe they do.

In a study conducted by Mathews and Hadley (1993), to determine how high school students perceive the quality of universities, and how these perceptions affect their decision process, the researchers concluded that:

a) The perceived institutional quality of students varies across the different universities chosen for the study
b) Students form their decision with little knowledge of perceived quality.
c) There is a relationship between selection of university and perceived quality.

Several other studies have addressed the issue of students' choice criteria and have identified several determinants. Baird (1967) concluded that good faculty, high academic standards and special programmes were what students were looking for. Bowes and Pugh (1972) identified good faculty and high standards as the most important factors, while Chapman (1979) identified quality of the institution and cost as the most important elements. Murphy (1981) recognized academic reputation and cost as the determinants of college choice while Maguire and Lay (1981) named financial aid, peer influence, special programmes, size of the institution, location, athletic facilities and social activities

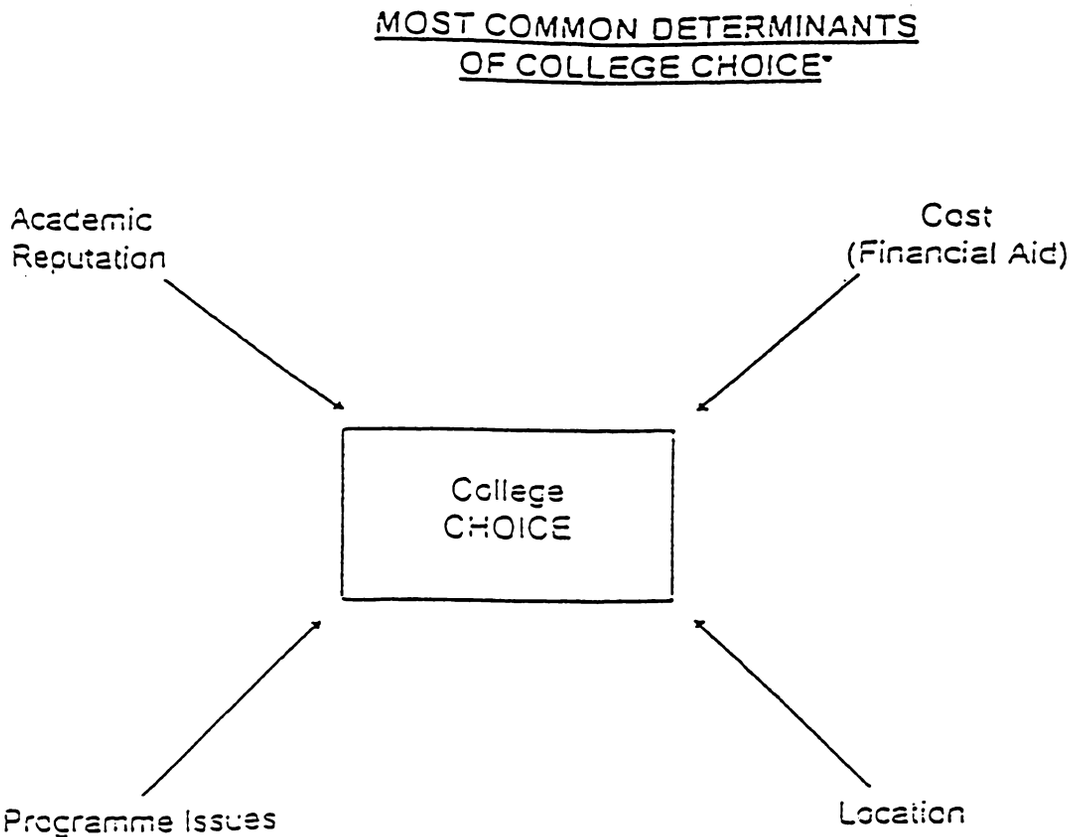
as the most important factors in choosing an educational institution. Discenza et al (1985) and Hossler (1985) named academic reputation, peer influence, financial assistance, and location as the most important factors.

Researchers such as Litten (1982),Seneca and Taussig (1982) and Tierney (1983) have found that academically talented students are looking for different attributes when compared with average students. The former evaluate an institution based on the quality of their programmes while the latter, in addition to good programmes, are also interested in factors like physical appearance and social life. This illustrates the scope for segmenting the market and approaching the recruitment of the distinct segments with tailor-made strategies

Studies that look at the variables that influence business students' selection of tertiary institution (Houston 1979, Krone et al 1983, Webb 1993) point towards a wide range of choice criteria. The criteria that seems to be most important are programme-related issues such as flexibility and length of the programme, and reputation/prestige related issues. Cost related issues seem to have more importance as years go by. Houston (1979) found it was at the bottom of the scale, while in Webb (1993) it is one of the most important elements.

It is clear from the literature that a variety of attributes have been identified as playing a part in the decision making process of students. It is proposed that a multi-attribute model is necessary to provide tertiary institutions with a set of important attributes students use in their decision making process (See Fig 4.4). According to Cook and Zallocco (1983) a multi-attribute model will help institutions define the strengths and weaknesses of competing universities, will provide a benchmark, and give in depth information that will aid the formulation of marketing strategies.

FIGURE 4.4



4.3 The Consumption Stage

The outcome of the previous stage is a choice of service offered. This choice, according to Bateson (1992), is accompanied by a set of expectations about the performance of the service. In the educational setting, students would have chosen a specific institution to attend and they would have formed a set of expectations based on the choice criteria they used to select the institution.

The service firm, such as a university, plays an active role in the consumption of the service because the service, for example a lecture, is both produced and consumed at the same time. Bateson (1992) asserts that customers evaluate the quality of the service while they are interacting with the service provider. In education, students evaluate the quality of the service (lecture) they are receiving while they are experiencing it. Since service quality is evaluated at this stage, it is therefore necessary to consider the nature of what is meant by Service Quality.

Service Quality

Service Quality can be defined as the customers' perception of the actual service received (Parasuraman et al. 1985, Mattsson, 1990, Gourdin & Kloppenborg 1991). Lehtinen and Lehtinen (1982) - authors of the first conceptual service quality work coming out

of Europe - recognize a three dimensional approach to service quality. The first dimension deals with the tangible aspects of a service, *physical quality*. For example, things that have an influence on the physical quality of an educational institution would include, a lecture theatre, the reception area, teaching equipment, among others. This dimension is identified by Gronroos (1983) as technical quality, and by Berry et al. (1985) as "outcome" quality. The second dimension involves the interactive nature of services namely *interactive quality*. This dimension deals with the interaction between the customer and the service provider, or its representative. In the case of education, interactive quality would be influenced, among other things, by the contact between a lecturer and the students. This dimension of quality was classified by Gronroos (1983) as "functional quality" and by Berry et al. (1985) as "process quality".

The last service quality dimension identified by Lehtinen and Lehtinen (1982) is that of *corporate quality*. This refers to the image the customers and potential customers have of the service provider. This dimension was not identified by either Gronroos 1983) or by Berry et al. (1985); but Lehtinen and Lehtinen (1982) state that corporate quality is a dimension that remains stable over time, because it does not vary depending on the situation (See Table 4.2)

TABLE 4.2

DIMENSIONS OF SERVICE QUALITY		
LEHTINEU & LEHTINEN 1982	GRONROOS 1983	BARRY et al 1985
Physical Quality	Technical Quality	Outcome Quality
Interactive Quality	Functional Quality	Process Quality
Corporate Quality		

Some of the earliest research in Service Quality was conducted by Gronroos (1983), Lehtinen and Lehtinen (1982) and Berry et al. (1985). In their research three major themes have developed:

* Evaluating product quality is much easier than evaluating service quality.
* The difference between consumer expectations and actual service performance results in service quality perceptions.
* The evaluation of the whole process of service delivery determines the perception but not the actual outcome of the service.

When consumers purchase goods, they evaluate them by using several tangible cues such as colour, style or fit. These cues are not available when dealing with services so customers are limited to the tangible cues given by the service provider, these being physical facilities, equipment, and personnel (Bitner,1990). A limited amount of research has been done on the nature of other tangible cues that customers utilize to evaluate a service, except for price which several researchers (McConnell 1968, Olander 1970, Zeithaml 1981, Monroe and Krishnan 1985, Parasuraman et al. 1985) find a crucial quality indicator when a limited amount of information is available.

There is a large body of evidence to support the assertion that service quality is a measure of how well the service delivered matches customer expectations (Lewis and Booms 1983; Parasuraman et al 1988; Smith and Huston 1983; Gronroos 1988). Following this line of thought, Gronroos (1983) and Parasuraman et al (1985) developed models based upon the premise that customers compare the perceived service they receive with their expectations of it when evaluating service quality (For a discussion on Service Quality models see Appendix A).

The expectancy/disconfirmation paradigm is widely accepted as one of the processes by which consumers evaluate the quality of a service, and develop feelings of satisfaction or dissatisfaction (Cadotte et al 1987).

Importance/performance analysis is the other paradigm that empirical research has shown could be used to measure service quality and its effect on customer satisfaction (Martilla and James 1977, Ennew et al 1993).

What follows is a discussion on both of the above paradigms and their applicability to education.

4.3.1 Expectancy/Disconfirmation

Evaluation implies a comparison of actual performance with some standard. The expectancy/disconfirmation paradigm produces three possible outcomes: confirmation, (when performance meets the standard); positive disconfirmation, (when the performance surpasses the standard), which leads to satisfaction; and negative disconfirmation (when the performance falls below standard),which leads to dissatisfaction (Oliver 1977, Prakash 1984, Cadotte et al 1987, Oliver and Swan 1989).

Customer expectations have been investigated in a number of research situations (Parasuraman et al. 1993) but have been dealt with more in depth in the customer satisfaction/dissatisfaction (CS/D), and service quality literatures. These literatures have arrived at the conclusion that expectations act as standards against which experiences will be compared. On the other hand, these literatures fail to arrive at a consensus in issues such as the nature of expectations, the number of expectations, and the antecedents of expectations.

When looking at the literature dealing with expectations (Miller 1977, Gilly 1979, Swan and Trawick 1980, Gilly et al 1983, Prakash 1984, Woodruff et al 1987, Parasuraman et al 1991, 1993, Boulding et al 1993), one can find similar patterns of thought with regard to expectations. One such pattern is that which

defines expectations as "what customers believe will happen" (Miller 1977, Gilly 1979, Swan and Trawick 1980, Gilly et al 1983, Prakash 1984, Parsuraman et al 1991,1993, Boulding et al 1993). These expectations are given different names by different researchers but they all stem from the same perspective (See Table 4.3). It is considered that this is the most common interpretation of expectations; and this belief is demonstrated in Table 4.3 which illustrates that the "expected" category was identified by all but one of the researchers quoted in the table.

Expectations have also been proposed as ideal standards. According to Boulding et al (1993), these ideal standards are described as " what customers want in an ideal sense which may be unrelated to what is reasonable or feasible." Parasuraman et al (1991,1993), Miller (1977), Swan and Trawick (1980) and Prakash (1984) also identify expectations from this viewpoint. It could be argued that ideal expectations only exist when the customer does not have experience with the product/service in question. After the customer has had contact with the product/service provider, the customer has a standard with which to compare the next encounter. In other words, they have developed a predictive expectation.

Expectations have also been posited as the level of service the customer will accept. Miller (1977) termed this the minimum tolerable expectation, while Woodruff et al (1987) suggested these were experience-based norms. Parasuraman et al (1993) labelled these as "adequate service expectations". One could argue that these adequate expectations would be fulfilled by delivering the core services.

TABLE 4.3

CLASSIFICATION OF EXPECTATIONS

MILLER 1977	GILLY 1979	SWAN & FRANWICK 1980	GILLY ET AL 1983	PRAKASH 1984	WOODRULL et al 1987	PARASURAMAN et al 1991	PARASURAMAN et al 1993	BOULDING et al 1993
Expected	Predictive	Predictive	Predictive	Predictive		Adequate	predicted	will
Ideal		DESIRED		NORMATIVE		DESIRED	DESIRED	
Minimum Tolerable					EXPERIENCE-BASED NORM		ADEQUATE	
Deserved								
				COMPARATIVE				
								SHOULD

Miller (1977) suggested another classification for expectations, "deserved expectations". These are defined as the consumer's subjective evaluation of their own product investment. This is very applicable to education, as it could be argued that the more effort students put into succeeding in their studies, the more they would expect from the service provider.

Prakash (1984) submitted another standard which he called "comparative expectations". These are consumer expectations from other similar brands. These could be considered predictive expectations as they tell the customers what will happen during their next purchase/encounter.

Finally, Boulding et al (1993), proposed the "should expectations". These are defined as "what ought to happen based on what the consumer views as reasonable or feasible based on experience with the service and/or its competitors". It could be argued that this last type of expectation is a combination of predictive and comparative expectations. Either way, it seems obvious that the issue of expectations is far from settled. There seem to be various interpretations and viewpoints on the subject, but it is considered that the adoption of "should" expectations (Boulding et al, 1993) are the ones that would yield the most valuable information in the context of education. This is because it is maintained that expectations are only

worthwhile considering when they are based on experience; for they tend to be those that are closer to reality.

Parasuraman et al (1991,1993) and Boulding et al (1993) provide some of the most recent research on expectations in the service quality literature (For a detailed discussion of these studies and their findings, please refer to Appendix B)

Parasuraman et al (1988) developed a procedure for quantifying customers perceptions of service quality called "SERVQUAL" (For a detailed discussion on SERVQUAL and Service Quality models, see appendix A). This is a disconfirmation based instrument that has been the object of some major criticisms.

4.3.2 A Critical Examination of SERVQUAL

A major weakness of the SERVQUAL instrument is its treatment of expectations. This instrument relies on the premise that the difference between customers expectations and perceptions of a service results in the perception of service quality.

A) Criticisms by Teas

Teas (1993, 1994) questions the validity of the expectancy/disconfirmation framework. The purpose of his 1993 study was to :

* Examine the expectancy/disconfirmation framework with the view of identifying the conceptual and definitional problems.

* Identify measurement validity problems concerning the analysis of the expectancy/disconfirmation measurement framework.

* Empirically test the expectancy/disconfirmation paradigm, and two alternative perceived quality models designed to address the problems associated with the expectancy/disconfirmation model.

* Examine some implications of the conceptual issues.

The methodology included the empirical testing of the conceptual operational definition congruence of the SERVQUAL expectation; and revised expectation measures, and the criteria and construct validity of the original expectancy/disconfirmation, and revised expectancy/disconfirmation, "normed" quality measurement and evaluated performance measurement framework.

To achieve this, the researcher utilized a random sample of 120 respondents from a small midwestern city which were chosen for a personal interview. Each of the participants was assigned to one of two cells and requested to respond to a series of measurement instruments designed to analyse the SERVQUAL expectancy/disconfirmation and revised expectancy/disconfirmation

measurement framework, the "normed" quality measurement framework, and the evaluated performance measurement framework. The hypotheses were tested within the context of the ongoing service provided by 3 local discount stores. Each respondent in each of the two cells was randomly assigned one of the stores to rate on ten of the service attributes from the SERVQUAL instrument and two attributes for each of the five general SERVQUAL dimensions.

The major findings of this study were: ambiguity in the definition of expectations; lack of theoretical justification of SERVQUAL expectations; conceptual issue - involving the usefulness of the probability component of the evaluated performance perceived quality framework. The view that "perceived quality is a function of satisfaction" is questionable; and the results of the study indicate that the SERVQUAL expectations and revised expectations measures lack discriminant validity with respect to the concept of attribute importance, and the classic attribute ideal points at a performance forecast.

In 1994 Parasuraman et al responded to the above criticisms by stating that even though they agreed with the argument that the expectancy/disconfirmation specification was problematic for certain types of attributes under certain conditions, it was not as big a problem as Teas stated. They also question his

conclusion in relation to the analysis of expectations. They argue that the purpose of the follow-up interviews (based on the concerns about the analysis of expectations), was to determine why the respondents had lower than the maximum expectation level. Parasuraman et al argue that the focus of those interviews should have been "how respondents interpreted the expectations questions". Parasuraman et al contend that this makes the basis of Teas' argument debatable.

Teas responded to the Parasuraman et al (1994) rebuttle of his 1993 arguments. Teas (1994) focused on:

* The validity of the Parasuraman et al (1994) discussion of the theoretical issues outlined by Teas (1993), with respect to the SERVQUAL expectancy/disconfirmation model.

* Their assessment of the Teas (1993) evaluated performance and normed quality models.

* The theoretical merit of the SERVQUAL "mixed model" which Parasuraman et al (1994) argue reduces the problems associated with the original SERVQUAL expectancy/disconfirmation model, and represents an alternative to the models specified by Teas (1993).

For Teas (1994) the major issues were:

* Problem Magnitude: According to Teas, Parasuraman et al (1994) admission of the existence of a problem leads to two concerns
a) The admission is good enough to challenge the validity of the original SERVQUAL expectancy/disconfirmation framework.
b) The argument that the 22 SERVQUAL items are likely to be considered by respondents as vector attributes, inappropriately mixes theoretical and operational issues.

* Conceptual definition ambiguity: Multiple definitions of expectations and corresponding measurement analyses of the SERVQUAL model, results in an "expectations norm concept" that is defined loosely, and open to multiple interpretations. Teas questions the dropping of Parasuraman's "should" expectations and their replacement with Teas (1993) classic and feasible ideal concept. If this is the case, the original SERVQUAL expectations and revised expectations measurement scales may not be appropriate measures of the expectancy norm.

* Measurement operationalization issues:

a) Measurement of attribute type (vector vs nonvector). Teas (1994) suggests that a normative expectation scale and corresponding instructions could be developed that would allow

the assumption that an extreme response on the scale can be interpreted to mean the attribute is a vector.

b) Teas feels that with respect to the perceived quality models (Teas 1993) it would be useful to examine an alternative to the practice of measuring the variables in the models separately.

Teas (1994) concludes that the primary weakness of the SERVQUAL model is Gap 5 (expectancy/disconfirmation). Teas argues that the Parasuraman et al (1994) SERVQUAL mixed model is actually a restricted version of Teas (1993) "normed" quality model.

B) Criticisms by Cronin and Taylor

Cronin and Taylor (1992,1994) also question SERVQUAL's validity in measuring service quality. The purpose of their 1992 work was to examine the current conceptualization of service quality (SERVQUAL) which according to Cronin and Taylor (1992) is inadequate because there is little empirical evidence to support the relevance of the expectancy/disconfirmation gap as the basis for measuring service quality and to examine the relationship between service quality, customer satisfaction and purchase intentions.

Cronin and Taylor (1992) conducted personal interviews in a medium sized city in the United States to gather the data for

their study. They obtained 660 usable questionnaires. The industries studied were banking, pest control, dry cleaning, and fast food.

Cronin and Taylor (1992) reached the following conclusions:

* SERVQUAL is flawed due to the fact that it is based on a satisfaction paradigm rather than an attitude model.

* Empirical evidence suggests that performance based measures of service quality are better than the SERVQUAL approach.

* Empirical evidence supports the Parasuraman et al (1985, 1988) notion that service quality leads to customer satisfaction.

In 1994, Parasuraman et al responded to the above criticisms by saying that there is strong theoretical support for their expectancy/disconfirmation based argument regardless of what Cronin and Taylor state. They also question Cronin and Taylor's arguments about attitude formation. Parasuraman et al assert that SERVQUAL is an instrument to measure attitude level regardless of how it was formed. In summary, Parasuraman et al challenge Cronin and Taylor's argument that performance based measurements are preferable to disconfirmation based ones. They assert that even though performance based measures are more commonly used, it does not mean that they are superior.

Cronin and Taylor (1994) made the following comments about the above analysis :

* The literature largely supports the emerging performance based paradigm over the disconfirmation based SERVQUAL paradigm.

* Disconfirmation and customer satisfaction judgement are both process constructs that share a similar reliance on the consumer experiencing a service encounter, whereas performance perception is not constrained to actual customer experience.

* The criticisms identified by Parasuraman et al (1994) appear to be more a matter of interpretation rather than substance.

* The literature supports Cronin and Taylor's (1992) conclusions regarding the conceptual problems of SERVQUAL.

The above discussion illustrates why using the expectancy/disconfirmation paradigm to measure service quality has major drawbacks. Looking at this paradigm from the education perspective, the discussion on expectations asserts that expectations are standards against which performance can be measured. These standards are formed based on prior knowledge and experience with the service. It can be argued that, in the case of education potential, students have little or no prior knowledge and experience with tertiary education. Thus, their

expectations lack validity. Stern (1970), and Chapman et al (1977), state that students enter tertiary institutions with unrealistic expectations. The source of these expectations is not certain (Stern 1970, Tillery 1973, Chapman et al 1977), and even though accurate information might be available, students still seem to distort it and arrive at these idealized expectations.

Another argument that makes disconfirmation inappropriate in the case of education is the fact that for it to function correctly expectations must remain constant. Education is a long term service, and Carman (1990) maintains that expectations change with familiarity with the service.

The above arguments suggest the need for an alternative method of measuring service quality. What follows is a discussion on the Importance/performance paradigm which provides a different perspective to be considered in the measurement of service quality.

4.3.3 Importance/Performance Analysis

When students evaluate the quality of the service they receive from an educational institution they use different criteria which are likely to differ in their importance, usually some being more important than others.

While several criteria are important only a few are most important. These determinant attributes are the ones that will define service quality from the consumer's perspective (Loudon and Della Bitta, 1988).

Research in the area of customer satisfaction (Anderson 1973, Swan and Combs 1976, Ortinau 1980) provides support for the premise that customer satisfaction is a function of expectations related to certain product/service attributes and judgements about attribute performance.

Empirical research (Ortinau, Anderson and Klippel, 1987) has found that students' perceptions of importance with respect to specific course features influence their expectations of the course over time. This change justifies the use of importance/performance analyses for the evaluation of the quality of educational services.

Martilla and James (1977) developed a simple importance/performance technique whose most attractive feature is that the mean importance and performance results can be graphically illustrated on a two dimensional grid (See Exhibit 4.1). The four quadrants in the grid can provide in-depth information on each of the attributes tested. According to Ortinau et al (1989), each of the quadrants can be described as follows:

Concentrate Here: This is where students feel that a specific attribute is very important but its performance is not satisfactory.

Keep Up the Good Work: Is where students feel that a specific attribute is very important and are satisfied with its performance.

Low Priority: Where students are not satisfied with the performance of a specific attribute but the students do not perceive it as being important.

Possible Overkill: Students are satisfied with the performance of a specific attribute but the students do not perceive it as being important.

Martilla and James (1977) state that several issues must be dealt with for the proper application of this technique. The first issue is the determination of the attributes to be measured. They suggest the use of qualitative research techniques such as focus groups, and unstructured personal interviews, to identify the potentially important factors. The second issue is the separation of the importance measures and the performance measures. They assert that if both are measured together, a bias will be introduced that will render the whole exercise invalid.

Another issue is the use of median values as a measure of central tendency instead of the "mean". They affirm that even though this is theoretically preferable, it would be better to calculate both, as the mean provide additional information.

The last element is the analysis of the importance/performance grid. This should be done systematically considering each attribute in order of its relative importance, moving from the top to the bottom of the grid.

Ortinau et al (1989) developed an extended version of the importance/performance analysis; for they assert that the performance vector on the traditional grid raises two questions: 1) "What part of the performance scale line represents a ***GOOD*** performance level?" and 2)"Where on the grid do the rating results demonstrate an ***EXCELLENT*** performance?"

The authors introduced two changes to compensate for the above problem. They state that evaluation of performances should be based on the confirmation or disconfirmation of expectations. Clearly, this methodological change creates another set of shortcomings; as already discussed in section 4.3.1.

The other consideration that Ortinau et al (1989) believe must be introduced for improving the traditional analysis, is the use of confidence intervals of significance. These intervals should

be statistically derived for each of the actual scale points used in the performance rating scheme (See Exhibit 4.2). Even though this is a valid point, it is to a certain extent unnecessary. The use of a five point Likert scale, with each point in the scale being labelled (ie. 1 = Strongly agree, 2 = Agree, etc.) would produce the same results.

For Ennew et al (1993), the issue is to develop a better measurement for Service Quality. They state that the qualitative nature of service quality implies that cardinal scales of measurement are inappropriate, but the process of applying ordinal rankings (importance/performance) to concepts is well established as a research methodology. Ennew et al (1993) state that a comparison of mean scores on the importance of service attributes provides a straightforward measure of how well a service meets customers' needs. They warn that there are problems when aggregating across customers because a comparison of means could reveal a close match on aggregate scores and yet there may still be a quality mismatch.

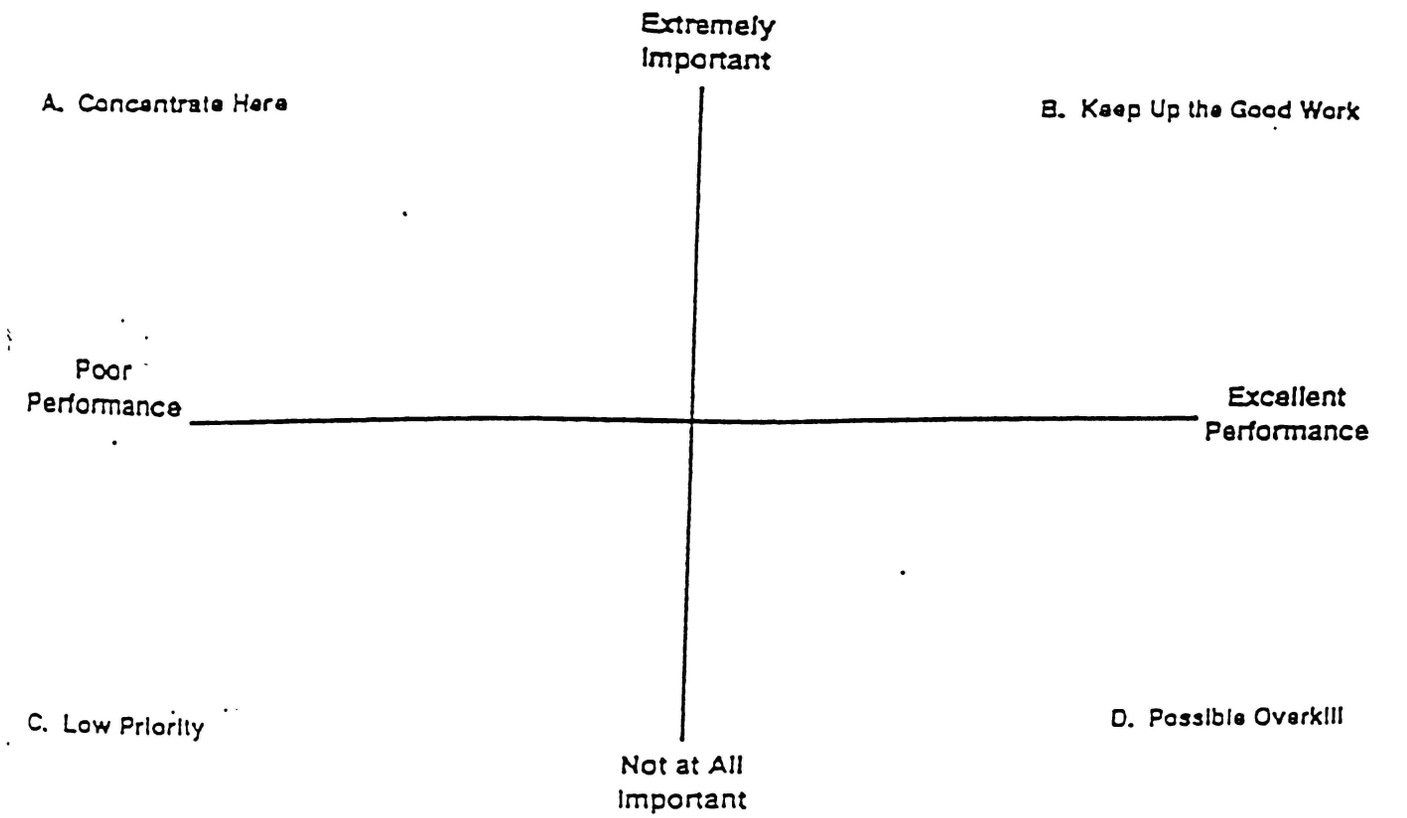
Bearing in mind all of the above, it is considered that the traditional importance/performance paradigm is the most appropriate way of measuring service quality in education. It must be kept in mind that this is the technique that allows for the tracking of possible sources of customer satisfaction/dissatisfaction. As was discussed earlier, by using

the importance/performance grid, educational administrators can identify the potential problem areas. Administrators can also recognize the spheres that are important to the students and make sure that the performances of those areas are to the students' satisfaction.

It is argued that the information derived from this technique will prove invaluable in terms of the development of marketing strategies for the educational institutions that use it. For example, if through the use of the importance/performance paradigm it has been determined that the cost of education is an important factor in the decision of which university to attend, administrators could develop a marketing strategy that incorporates different financial aid programmes.

EXHIBIT 4.1

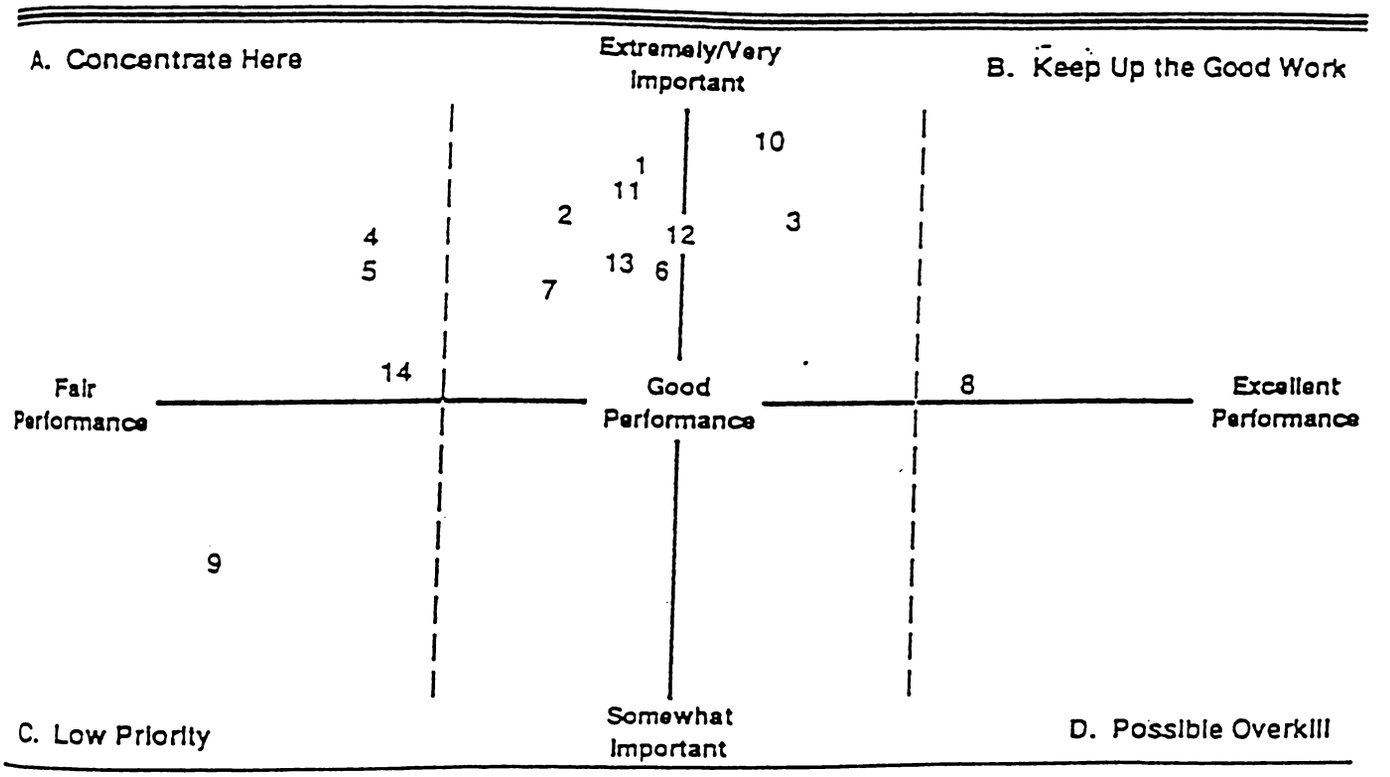
EXAMPLE OF THE TRADITIONAL IMPORTANCE-PERFORMANCE GRID



SOURCE: Ortinau, David., Alan Bush, Robert Bush and Jacquelyn Twible (1989) "The Use of Importance-Performance Analysis for Improving the Quality of Marketing Education: Interpreting Faculty-Course Evaluations" Journal of Marketing Education, Summer

EXHIBIT 4.2

IMPORTANCE-PERFORMANCE GRID WITH ATTRIBUTE RATINGS
FOR THE COURSE CONTENT AND TEXTBOOK DIMENSIONS



SOURCE: Ortinau, David., Alan Bush, Robert Bush and Jacquelyn Twible (1989) "The Use of Importance-Performance Analysis for Improving the Quality of Marketing Education: Interpreting Faculty-Course Evaluations" Journal of Marketing Education, Summer

4.4 Postpurchase Evaluation

The notion that students are the consumers of educational services leaves educational administrators with the need to identify and understand the consumers wants and needs, and their corresponding levels of satisfaction (Hampton 1983, Ortinau and Anderson 1986). To be able to acquire an understanding of customer/student satisfaction it is important to address the issue of what is satisfaction.

4.4.1 Customer Satisfaction: Transaction and Brand Specific

Satisfaction can be examined from two different perspectives: "transaction specific" and "brand specific". From the transaction specific conceptualization, satisfaction is seen as a postpurchase evaluation (Oliver, 1980; Oliver and DeSarbo, 1988). Most recent research has concentrated on the brand specific perspective which deals with satisfaction as the evaluation of an overall experience with a product or service over a period of time (Anderson, Fornell and Lehmann, 1993; Fornell, 1992; Johnson and Fornell, 1991; Westbrook and Oliver, 1991). This thesis focuses on brand specific satisfaction because education is made up of a series of encounters; so measuring service quality based on one transaction is not deemed appropriate. It is important for educational institutions to

assess the students satisfaction with their overall educational experience, not only with one specific encounter.

4.4.2 Quality and Satisfaction

An important issue to deal with at this stage is the relationship between quality and satisfaction. Quality is viewed as a potential of product attributes to provide satisfaction (Juran, 1988). Satisfaction is a postconsumption evaluation of perceived quality in relation to expected quality (Anderson and Fornell, 1994). It is suggested that satisfaction with educational services is a postconsumption evaluation of how well performances meet the importance requirements. In the case of education, expectations are not applicable, because customers expectations of completely unfamiliar experiences, such as tertiary education for first time students, are almost meaningless. It is submitted that service quality in education is measured by using the importance/performance analysis instead of the disconfirmation based SERVQUAL-style instruments.

4.4.3 Customer Satisfaction at the Microeconomic Level

The purpose of measuring satisfaction at the microeconomic level is to ascertain the prospects of future revenue for the firm, in this case an educational institution. According to Anderson and Fornell(1994, p 253), "higher customer satisfaction should

indicate increased life expectancy for current customers, reduced price elasticities, insulation of current customers from competitors' efforts, lower costs of future transactions, lower costs of attracting new customers, and an enhanced reputation. Particularly in the case of New Zealand, the recent changes that have been introduced to the education sector (See Chapter 2, section 2.1) warrant the need for examining student satisfaction at the microeconomic level.

An important issue when dealing with customer satisfaction is the set of antecedents that lead to satisfaction. At the microeconomic level Anderson and Sullivan (1993) assert that there is reason to expect that satisfaction will be affected by perceived quality. In the case of disconfirmation, Johnson, Anderson and Fornell (1992) suggest that its appropriateness is doubtful at this level. They assert that customers as a group have realistic expectations of actual quality. In conclusion, satisfaction at the microeconomic level is a function solely of perceived quality. Johnson et al (1992) found perceived quality to have a large positive impact on satisfaction, while expectations had a very small impact on satisfaction. Researchers like Churchill and Suprenant (1982), Oliver and De Sarbo (1988), Cronin and Taylor (1992), Fornell (1992), and Anderson and Sullivan (1993), have provided empirical support to the statement that quality is an antecedent of customer satisfaction.

A number of studies, Bearden and Teel (1983), LaBarbera and Mazursky (1983),Oliver and Swan (1989), Fornell (1992), Boulding et al (1993) and Anderson and Sullivan (1993) have found a strong relationship between customer loyalty and higher profitability, while Anderson et al (1992), Rust and Zahorik (1993) and Anderson, Fornell and Lehmann (1994) have empirically demonstrated the relationship between customer satisfaction and profitability. For the purposes of this research, it is assumed that quality is an antecedent of customer satisfaction; and profitability is a consequence (See Fig 4.5).

FIGURE 4.5



Source:

Rust, Roland and Richard Oliver (1994), Service Qulaity: New Directions in Theory and Practice, Saga Publications:California.

4.5 Customer Satisfaction Models

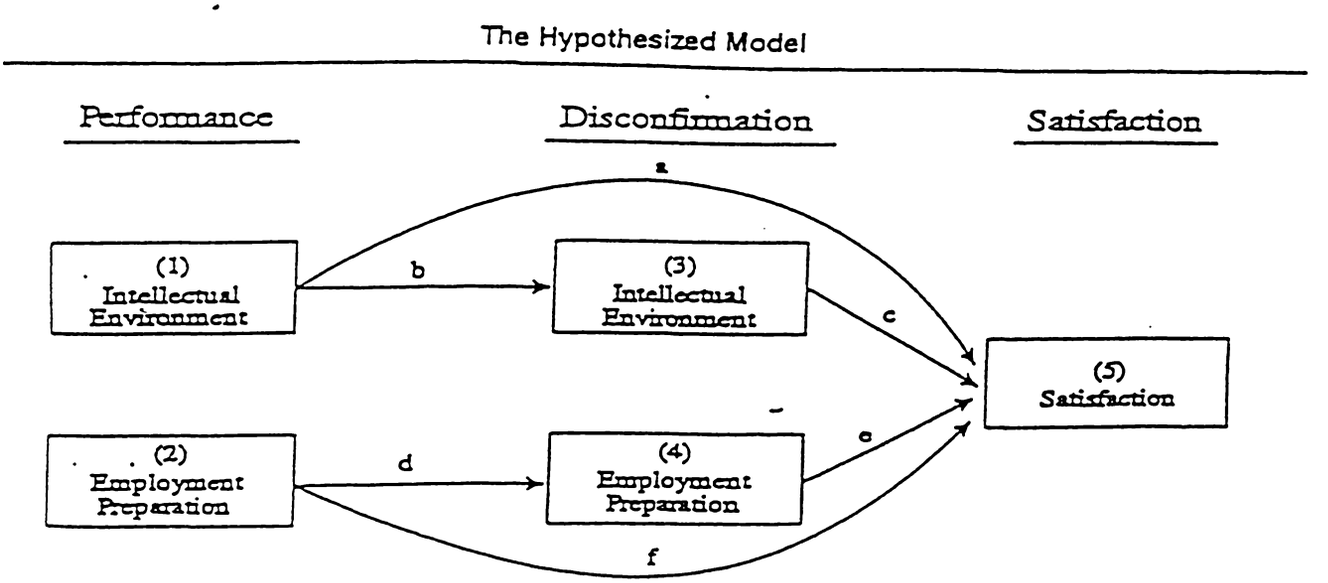
Halstead et al (1994) proposed a satisfaction model (See Fig. 4.6) for educational services. This is a disconfirmation based model that has two performance attributes: Intellectual Environment and Employment Preparation. This model tested the following hypotheses (Halstead et al 1994,):

1. "A performance-disconfirmation model that contains multiple sources of performance (constructs 1 and 2) and separate disconfirmations (Constructs 3 and 4) will provide a better representations of the satisfaction formation process than the traditional single-source model.

2. A customer's ability to form a pre-experience comparison standard will determine the process the customer uses to form judgements of satisfaction or dissatisfaction.

2a. Poorly developed comparison standards about specific attributes will lead to customers forming satisfaction judgements primarily through the direct effects of performance on satisfaction (Paths a and f). Significant direct effects are expected between intellectual environment and satisfaction (Path a) but not between employment preparation and satisfaction (Path f).

FIGURE 4.6



SOURCE: Halstead, Diane., David Hartman and Sandra Schmidt (1994), " Multisource Effects on the Satisfaction Process", Journal of the Academy of Marketing Science, Volume 22, No 2.

2b. Well-developed comparison standards about specific attributes will lead to customers forming satisfaction judgments primarily through the disconfirmation process (Path b-c and d-e). Significant indirect effects are expected between employment preparation and satisfaction (Paths d-c) but not between intellectual environment and satisfaction (Paths b-c)".

The analysis of the results show support for the model, which in turn supports our proposition that the expectancy/disconfirmation paradigm is not applicable for education (hypothesis 2a). This is because first time students do not have prior experience or knowledge of tertiary education which makes their expectations meaningless. So, satisfaction with education for first time students is a function only of performance. Something similar could be said of current students. The lack of any accepted definition of expectations and the idealistic expectations that students seem to have (discussed in section 4.3.1 - expectancy/disconfirmation) does not appear to be applicable.

Ortinau and Anderson (1986) developed a conceptual model of post-purchase educational satisfaction/dissatisfaction. This is a disconfirmation based model that is divided into four time-experience stages: new student ownership, early consumption, subsequent consumption, and disposition.

In the new student ownership stage, students evaluate their enrolment decision based on perceptions, expectations and attitudes toward the course which they had at the time of enrolment. In this stage, the students evaluate and justify their choice, and develop an expected level of satisfaction based on the degree of congruence between their feelings towards the course before and after their actual choice.

In the early consumption stage the student's initial attitude of satisfaction may become misconstrued because of the interaction with external environmental factors, new effective factors etc. This leads to the modification of the previous level of satisfaction.

The subsequent consumption stage is similar to the early consumption stage. The difference is that the factors that affect the student's satisfaction formation take on greater importance in this stage than in the prior one. The period of time that elapses in this phase is larger than in the others which allows for changes in the student's circumstances and external environment which have an influence in the student's satisfaction. Ortinau and Anderson (1986) assert that this is the most complex section of the student's evaluation process. The outcome of this stage is a satisfaction attitude that may lead to an obvious expression of satisfaction and behaviour.

The disposition stage is when the student evaluates how well the course actually fulfilled the modified expectations from his/her satisfaction attitude formed in early stages. This evaluation results in the determination of an overall satisfaction attitude or perceived worth of the course the student enrolled in.

The Ortinau model gives good insights into the cognitive process of students' satisfaction evaluation. It recognizes that expectations change over time and that the degree of importance of the determinants of satisfaction varies during the different stages of the model. However, it is a expectancy/disconfirmation based model which allows for satisfaction formation based on unrealistic expectations. The validity of this satisfaction is highly questionable.

4.6 Review of Major Findings

The decision making process for education has been widely discussed by several authors. A decision making process has been used (See Fig 4.2) that has three phases : ***Problem Recognition***, in this stage students make the decision whether to attend a tertiary institution; ***Choice,*** this is where alternatives are evaluated and an actual choice is made. The attributes of location, cost, programme issues and academic reputation have been identified through the literature as being some of the most important criteria used when choosing a tertiary institution (See

Tables 4.4 and 4.5). It is recognized that these attributes might change after primary research is conducted. The last stage is ***Post Purchase Evaluation*** in which service quality is measured. This evaluation has two possible outcomes: Customer satisfaction which in turn leads to profitability, or customer dissatisfaction which leads to loss of future revenue.

The main issue discussed in this chapter is the measurement of service quality which, it has been argued, leads to customer satisfaction and profitability (See Fig 4.5). In light of the changes that have occurred in the education sector in New Zealand in the past few years (see Chapter 3), this relationship makes the measurement of service quality in education of crucial importance. This relationship means that without service quality, customer satisfaction and in turn profitability cannot be achieved. As it was discussed in an earlier section, profitability in education means being able to attract enough students, and in turn funds, to operate the educational institution effectively. The loss of future revenue for an educational institution could affect the quality of service the institution is able to provide. Looking at this situation from the determinants of service quality view point, the loss of revenue could increase the cost of education, decrease the funds available to attract quality staff (academic reputation) and reduce the number of courses available (programme issues).

TABLE 4.4

STUDENTS CHOICE CRITERIA

BAIRD (1967)	BOWES & PUGH (1972)	CHAPMAN (1979)	MURPHY (1981)	MACGUIRE & LAY (1981)	DISCENZA ET AL (1985)	HOSSLER (1985)
.Good Facully	.Good Facully	.Quality of Institution	.Academic Reputation	.Financial Aid (Cost)	.Academic Reputation	.Academic Reputation
.High Academic Standards	.High Academic Standards	.Cost	.Cost	.Peer Influence	.Peer Influence	.Peer Influence
.Special Programmes				.Special Programmes	.Financial Assistance (Cost)	.Financial Assistance
				.Size of Institution	.Location	.Location
				.Location		
				.Athletic Facilities		
				.Social Activities		

TABLE 4.5

BUSINESS STUDENTS CHOICE CRITERIA

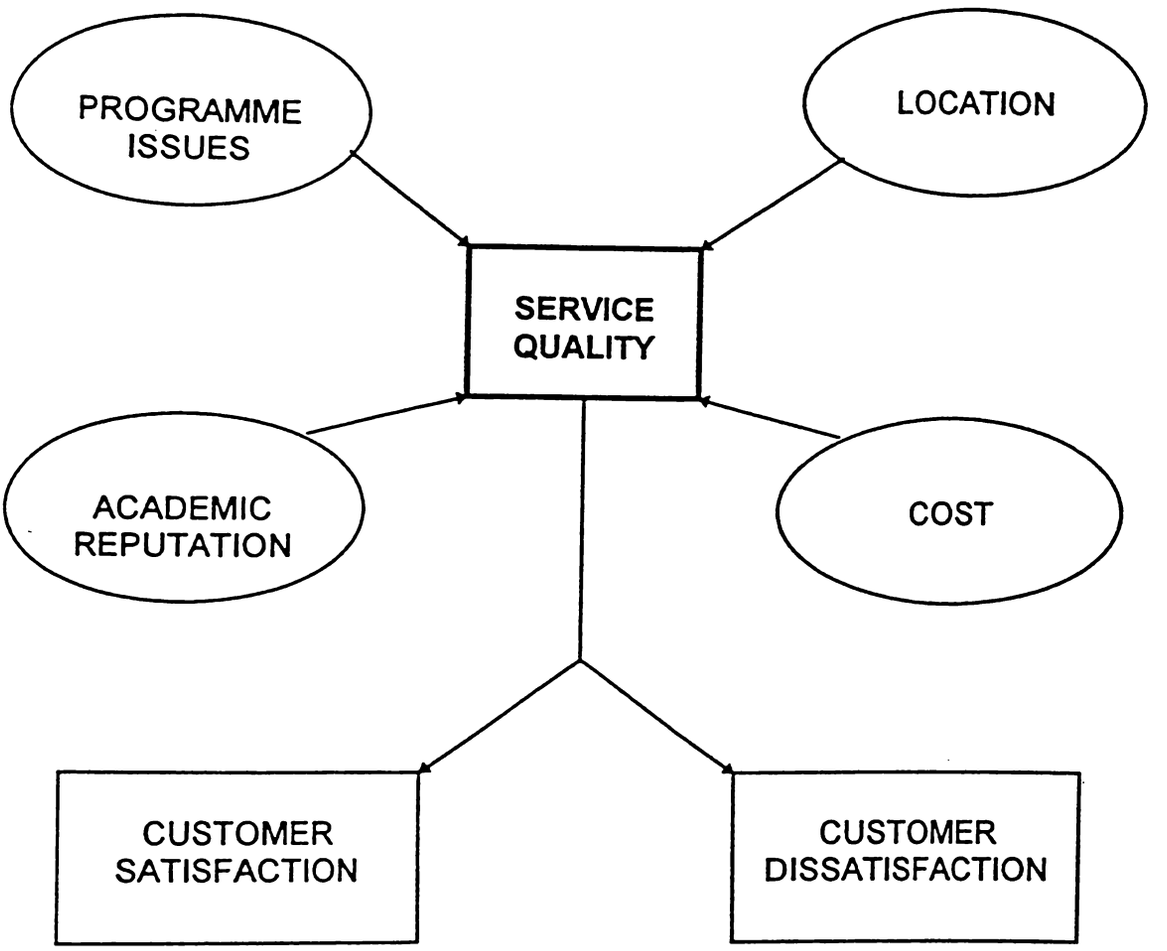
HOUSTON (1979)	KRONE ET AL (1983)	WEBB (1993)	
. COST	. COST (Financial Aid)	. ACADEMIC REPUTATION	
. SIZE OF INSTITUTION	. PROGRAMME RELATED ISSUES i.e. Flexibility	. PROGRAMME ACCREDITATION	
. NATURE OF PROGRAMME i.e. Flexibility	. REPUTATION/PRESTIGE	. LOCATION	
. REPUTATION/PRESTIGE	. GEOGRAPHICAL LOCATION	. COSTS	
. NATURE & REPUTATION OF MAJOR AREA	. SIZE OF INSTITUTION		

The above illustrates the importance of service quality in education. This thesis' contribution to the marketing discipline is a service quality model for education (See Figure 4.7) that addresses the issues that educational institutions need to be aware of if they plan to achieve customer satisfaction. The model shows that four attributes namely, programme issues, location, cost and academic reputation (identified through the literature review), are considered as being the determinants of service quality in education. If the performance of the educational institution matches the importance allocated to each element by the student population, the result would be satisfaction. On the other hand, if the performance of these elements does not match the importance given to them by the students, the result would be dissatisfaction.

It is submitted that service quality in education should be measured by using importance/performance analysis. The proposed dimensions/attributes to be measured are cost, location, academic reputation, and programme issues. However, the researcher accepts Martilla and James (1977) proposition that every time importance/performance is utilized, focus groups and/or personal interviews must be conducted to ascertain the attributes that the specified population considers most important.

Figure 4.7

DETERMINANTS OF SERVICE QUALITY MODEL FOR EDUCATION



4.7 Chapter Summary

This chapter has provided an analysis of the issues related to service quality and customer satisfaction and their impact on education. The different models utilized to measure service quality, both generally and in the field of education, have been reviewed and it has been determined that they are not necessarily suitable for measuring service quality in education.

The issues discussed in this chapter support the need to develop a service quality model for education. The model presented in this chapter attempts to address the matters deemed important for the measurement of service quality in education. Details of the research methodology to be utilized to test the appropriateness of this model for measuring service quality in education can be found in Chapter Five.

CHAPTER FIVE

RESEARCH METHODOLOGY

5.0 Chapter Introduction

This chapter aims to explain in detail all aspects of the research programme, with particular reference to all the key practical and theoretical issues involved. The main topics to be covered are details regarding the procedures involved in the qualitative data collection method, the development of the Determinants of Service Quality Model for Education, the research questions, the choice of data collection method, questionnaire development, and the methods of data analysis employed. The chapter concludes with a brief summarised assessment of the strengths and weakness of the overall research programme, so that subsequent findings can be viewed with these factors firmly in mind.

5.1 Overall Research Plan

This project will conform to a sequence of logical stages outlined below (Zikmund, 1994).

1. Problem Definition: This stage makes a clear statement of the research problem and objectives, as already covered in sections 1.1 and 1.4.

2. Development of Research Questions: This stage involves studying the problem at hand and developing a series of key questions that will be answered.

3. Data Collection Method and Design: This stage involves aspects of the research method including sample selection, questionnaire construction and pilot testing.

4. Analysis and Interpretation of Results: This stage relates to how the raw data is translated into meaningful information with respect to the problem statement and objectives

5. Conclusions and Recommendations: The major conclusions of the study will be discussed. The practical implications for educators will be addressed and suggestions for further research will be provided.

5.1.1 Research Presentation

The research problem and objectives have already been discussed in Chapter 1 of this thesis. Chapters 6 and 7 will discuss the stages 4 and 5 of the plan mentioned above. The rest of this chapter will focus on items 2 and 3, that is, the development of research questions and the subsequent design of the field work used for this research.

5.2 Development of Research Questions

For years philosophers have had an on going debate on how to arrive at the best research design. This debate is based on the suitability of two proposed paradigms:

1. Logical positivism which used quantitative methods to test questions, and
2. Phenomenological inquiry, which uses qualitative approaches (Patton, 1990)

Patton (1990) asserts that rather than necessarily aligning oneself to either paradigm, it is important to appreciate that different methods should be used for different situations, depending on what is most appropriate. This situational responsiveness is supported by Simon (1969) who stated: "There is never a single, standard, correct method of carrying out a piece of research".

Chisnall (1991) and Gioia and Pitre (1990) argue that a multi-technique approach maximizes the benefits and minimises the drawbacks of a single-technique approach and is recognized as the optimum research strategy.

The methodological approach adopted for this research is a multi-technique strategy which will employ two methods of data

collection: focus group interviews, and a mail survey, since both are relevant to this study.

5.2.1 Need and Choice of Qualitative Research

The purpose of this qualitative research was to generate research questions that can be answered quantitatively as well as to obtain information helpful in structuring questionnaires. Out of the three qualitative research procedures available, namely: focus groups, depth interviews, and observation techniques, the qualitative method chosen for this research is focus group interviews. These are unstructured free-flowing interviews with a small group of people. These are not rigid question-answer sessions, on the contrary, they have a flexible format that allows for discussion (Zikmund, 1994). A moderator introduces the topic and then the participants discuss it. The moderator's role is to focus the discussion on the topic of concern (McDaniel and Gates 1993, Zikmund 1994).

In this study, exploratory focus groups were utilized with the purpose of generating specific research questions for testing and further research. This was considered as the most appropriate technique to be used to ascertain what attributes students considered to be important when choosing an educational institution.

It is considered that the benefits derived from focus groups (McDaniel and Gates, 1993) include the fact that information can be gathered in a short period of time, and new ideas generated. The major drawback of this method is its reliance on the skills of the moderator and its inevitable subjectivity.

5.2.1.1 Sample Frame - Focus group interviews

In Chapter four, a "Determinants of Service Quality in Education Model" (Fig 4.7) was developed based on the literature. In Chapter four it was shown, based on the Bateson's decision-making process, that service quality can only be evaluated at the post-purchase evaluation stage. This is why the participants of the focus groups for this research are students who have experienced the service and are in their final year of study.

Twenty students currently studying at the University of Waikato were randomly chosen to participate in a focus group for this study. The students chosen were either honours students or fourth year undergraduate students. The rationale behind this was that it is assumed that these students already have experienced the service and were able to evaluate its quality. The students were divided into three groups. The first two groups comprised seven students each and the third group had six members.

5.2.1.2 Qualitative Research Results

Two independent moderators conducted the focus groups and the whole process took about two hours to complete. In separate groups the students were asked to describe what they thought a quality institution should provide. The three initial lists were combined together by the moderators and a common list containing 21 items was compiled (See Exhibit 5.1). The groups were then asked to prioritize the most important factors from the above 21 items and rank them in order of importance with one being the most important. On collating the ranked list put together by the three groups, 20 common factors were identified. The 20 items were regarded by all groups as important elements they would look for when they evaluate an educational institution.

For a list of the determinants of quality for an educational institution from the students point of view see Exhibit 5.1

Exhibit 5.1

QUALITY DETERMINANTS

* Prestigious and quality degree programme
* Ideal location
* Specialist programmes
* Flexibility
* Flexible entry requirements
* Employability
* The length of degree
* Accommodation facilities
* Practical component
* Cost of accommodation
* Word-of-mouth communication
* Different types of courses offered
* Family and peers influence
* Facilities and instructors
* Cost of education
* Campus layout and physical appearance
* Information about career opportunities available
* Sports and recreation facilities
* Flexibility to move within school of study
* Degree must be internationally reputable

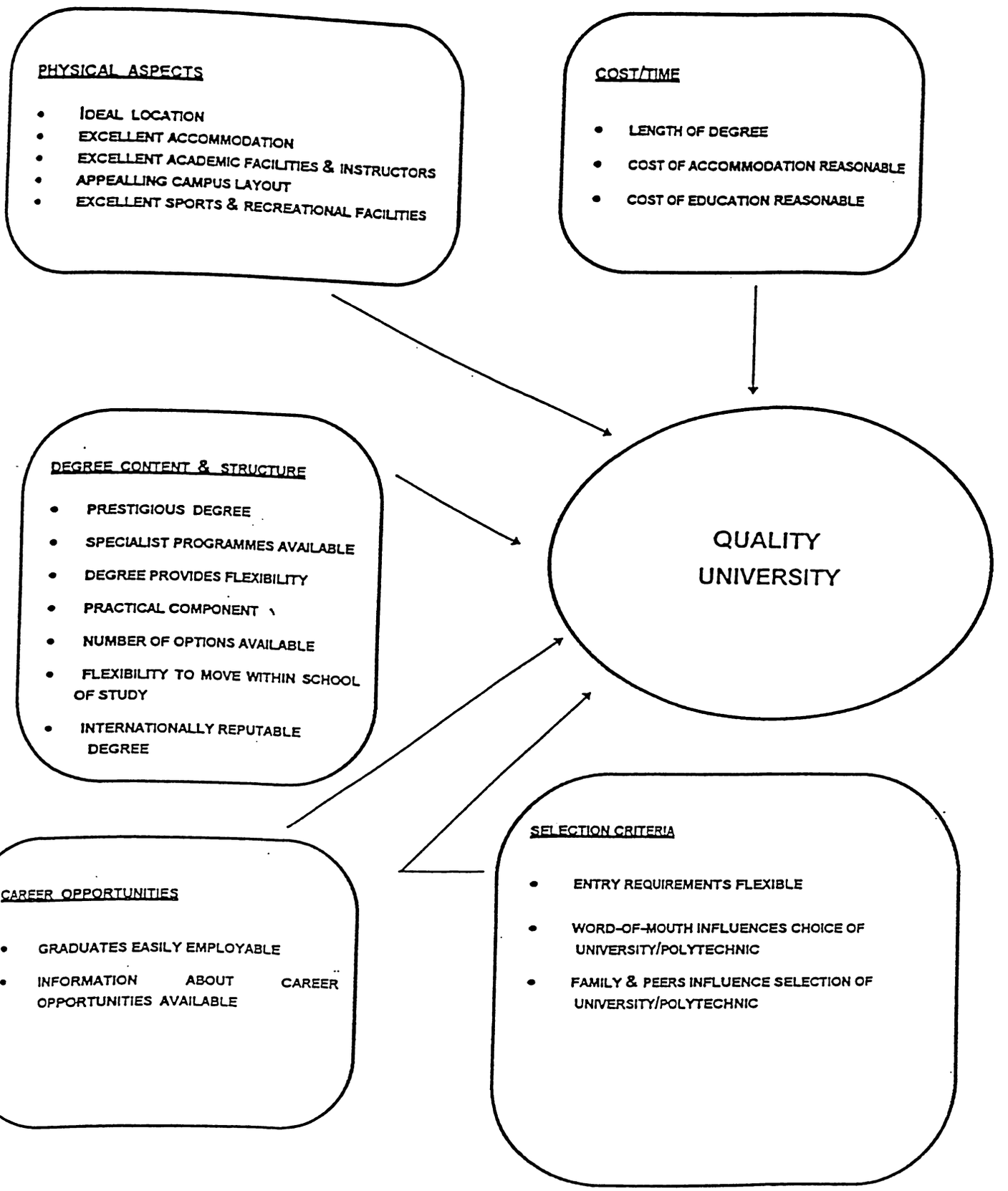
The focus groups were asked to group the factors based on their similarities. The above factors were further divided into five different categories: Cost/Time, Physical Aspects, Degree (Content, Structure, etc), Career Opportunities and Entry Criteria (See Fig 5.1)

The cost/time category includes the length of the degree, and the cost of accommodation and education. The items in the Physical Aspects grouping are: location of the institution, accommodation, academic facilities and instructors, campus layout, sports and recreational facilities.

The degree content and structure classification includes the reputation of the degree, programme flexibility (which provides students with the possibility of taking different courses within their school of study or across schools), several options available(which provides students with a variety of courses within their major area of study), as well as a practical component. Career opportunities refers to how readily employable graduates will be on obtaining the degree, as well as the information the university gives in relation to career opportunities in the different fields of study.

FIGURE 5.1

STUDENTS QUALITY DETERMINANTS



The last classification is entry criteria. This grouping includes flexibility in entry requirements, and recognizes the importance of word-of-mouth, and family and peer influence when selecting an educational institution.

Due to the flexibility provided by the focus group interview technique, it was possible to acquire more detail in each of the above categories as well as distinguish further elements that influence the evaluation of service quality in education.

The Modified Determinants of Service Quality Model for Education (See Fig 5.2) has seven attributes that influence the evaluation of service quality in education. These attributes are:

Programme Issues: This category now comprises the availability of specialist programmes, degree flexibility, a practical component in the degree, the availability of several course options and the flexibility of entry requirements.

Academic Reputation: A prestigious degree recognized nationally and internationally, as well as excellent instructors are the elements contained in this group.

Physical Facilities: Excellent accommodation, academic and sports and recreational facilities are the attributes included in this category.

Cost/Time: This section deals with three issues, the length of time it takes to complete a degree, the cost of accommodation and the fees charged.

Location: This relates to the geographical location of the institution.

Career opportunities: The students addressed two issues within this category, how employable will they be after getting a degree from a specific institution and the information the institution provided on career opportunities.

Other: This category deals with the influence of word-of-mouth communication as well as of family and peers when selecting a university.

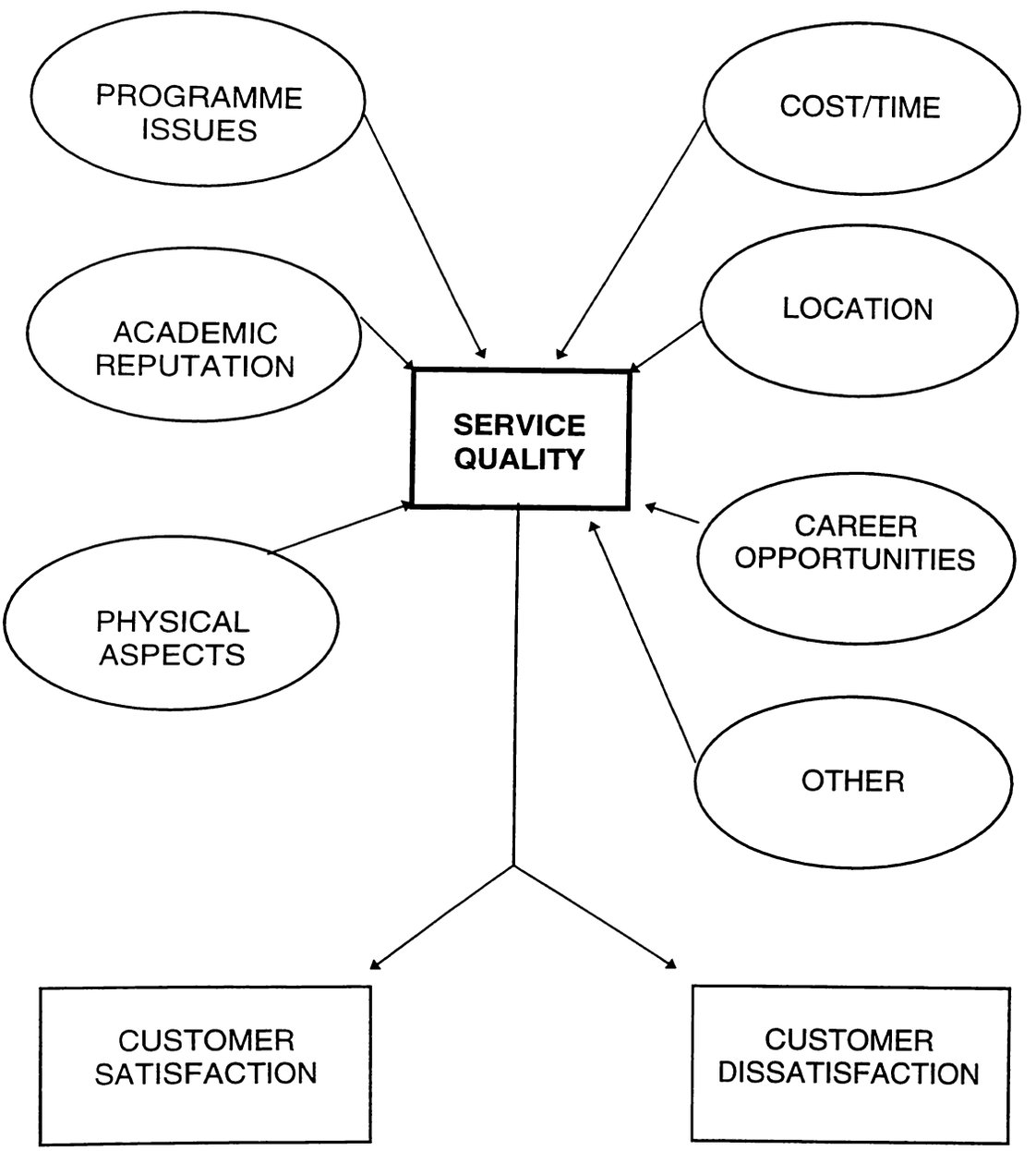
This Modified Determinants of Service Quality Model for Education has amalgamated the results of the focus group interviews with those of the literature. The focus groups findings were consistent with the literature review. However, the results also identified additional factors used for the evaluation of service quality in education. The changes made to the original model were based on the outcome of the focus group. These changes include the elimination of the ***degree: content and structure*** category. This was done because the elements of this category are better

explained by incorporating them into the ***programme issues*** and ***academic reputation*** categories. These categories are more closely related to the issues addressed by the ***degree: content and structure*** category which amalgamated elements that were quite distinct from each other. The ***entry criteria*** classification has been deleted and one of its elements, flexibility of entry requirements, included in the ***programme issues*** category while the two remaining elements, the influence of word-of-mouth as well as that of family and peers, form the "***other***" classification. This was done because it is considered that flexibility of entry is a ***programme issue***, rather than a communication one. The ***other*** category was labelled as such because even though its components are communication related, the term communication is too broad and it could be misconstrued

Location has been made a separate category as both, the literature and the qualitative research, assert its importance. The ***cost/time*** considerations have been put together to form one classification. This was done because it is considered that the longer it takes to complete a degree, the more it will cost to do so.

Figure 5.2

MODIFIED DETERMINANTS OF SERVICE QUALITY MODEL FOR EDUCATION



5.2.2 Research Questions

Ten research questions were developed based on the objectives of this study, the critical factors identified through the literature review and the results of the qualitative research. These research questions are as follows:

Research Question 1

Do universities have an intuitive understanding of the determinants of quality for an educational institution?

When reviewing the literature dealing with the changes that have occurred in the public sector in New Zealand (Chapter Two, section 2.0), the themes of accountability, efficiency and competition are the ones that drive those changes. Looking at education in this context, service quality is an important component that could help Universities differentiate their services and create a competitive advantage.

This question can be answered by comparing the "ideal" quality institution with the "actual" quality institution. If these constructs closely match, it could be argued that Universities have an intuitive understanding of quality.

Research Question 2

Are students satisfied with the quality of service provided by their educational institution?

The issue of the set of antecedents that lead to customer satisfaction is an important one(Chapter 4, sections 4.4.2 and 4.4.3). Anderson and Fornell (1992) suggest that satisfaction at the microeconomic level is a function solely of perceived quality. Researchers such as Churchill and Suprenant (1982), Oliver and DeSarbo (1988), Cronin and Taylor (1992), Fornell (1992) and Anderson and Sullivan (1993) have provided empirical evidence to support quality being an antecedent of customer satisfaction.

Research Question 3

Do students perceive word-or-mouth as a factor that influences the evaluation of Service Quality in education?

The first step in the consumer decision-making process is the prepurchase stage(See section 4.2). This is the stage in which the individual recognizes there is a "problem" to solve; in the case of education which institution to attend; and the individual then searches for information from internal and external sources. According to Chapman (1981), the external sources include

friends, parents and high school personnel. These people influence the students' choice of institution as well as the importance the student will place on different attributes(See section 4.2). The focus groups also emphasized that this factor was taken into consideration when evaluating the quality of service provided by different educational institutions (See section 5.2.1.2).

Research Question 4

Does the location of an educational institution influence the perception of students in the evaluation of service quality in education?

Chapman (1981) identified location as one of the fixed college characteristics that influence students' choice of college. For detail of the studies that have identified location as a choice criteria, see chapter 4 section 4.2. The focus groups considered the location of an educational institution as an important element when evaluating service quality in education (See section 5.2.1.2 in this chapter).

Research Question 5

Does the cost of education influence students perceptions when evaluating service quality in education?

Studies that have looked at influences on students' college choice have identified cost (and any financial aid available) as an element that has an impact on the students' final choice of educational institution(See chapter 4, section 4.2). The focus groups also considered cost as an important issue when evaluating service quality in education (See section 5.2.1.2 in this chapter).

Research Question 6

Do programme issues influence students perceptions when evaluating service quality in education?

When looking at programme issues, studies show the students consider flexibility, and availability of special programmes among other things, as important issues that affect their choices as well as the quality of an educational institution. For a more in-depth look at these issues and studies, please refer to Chapter 4, section 4.2 and section 5.2.1.2 in this chapter.

Research Question 7

Does the length of time it requires to complete a degree, influence the perception of the students in their evaluation of service quality in education?

The time required to complete a degree is an issue that influences students' choice of educational institution. This was an element identified as a result of the focus group interviews (See section 5.2.1.2).

Research Question 8

Does the academic reputation of an educational institution influence the perception of students in their evaluation of service quality in education?

Academic reputation is an element identified by both. Several studies discussed in Chapter 4, section 4.2, and the results of the focus group (section 5.2.1.2 in this chapter) identified academic reputation as having an effect on the choice of educational institution, as well as defining a quality institution. For details please see the section mentioned above.

Research Question 9

Do the accommodation, academic and sports and recreational facilities of an educational institution influence the students evaluation of service quality in education?

A study by Maguire and Lay (1981) mentions athletic facilities as a criteria students use when choosing an educational institution (Chapter 4, section 4.2). The focus group interviews also identified good academic, accommodation, and sports and recreational facilities as elements that are believed must exist in a quality institution and that influence college choice (section 5.2.1.2).

Research Question 10

Do the career opportunities that an educational institution provides its students, influence their evaluation of service quality in education?

An institution that gives good information on career opportunities is considered a quality institution. This element also influences the choice of educational institution (section 5.2.1.2).

5.3 Survey Research Method

It was decided that a mail survey was the most appropriate method for this study. This method was chosen mainly because of the type of information that was required and the practicality of its application. The choice of method was also based on the following criteria :

1. Quantity of Data: A key advantage of using a mail survey is the amount of data that can be collected. This method of data collection was the most appropriate way to collect the large amount of data required for this type of study.

2. Sample Control: Mail surveys can reach a wide range of geographically dispersed respondents. This is not normally possible when using personal or telephone interviews without incurring high costs.

3. Quality of data: Mail surveys eliminate interviewer bias which usually exists in the case of telephone and personal interviews. Also because mail surveys do not involve interaction between the interviewer and the respondents, it is possible to ask sensitive questions that might not be possible with either personal or telephone interviews.

4. Cost: The relatively inexpensive cost of mail surveys is one of the most attractive features of using mail surveys.

Other studies (Parasuraman et al 1988, Carman 1990, Cronin and Taylor 1992) that have endeavoured to measure service quality have also used mail surveys as their method for data collection.

Even though mail surveys have disadvantages such as being less versatile, typically having a low response rate, and often requiring a longer time for data collection, when compared with other methods, its advantages out-weigh its disadvantages for the collection of the data required for this study. The issue of low response rate will be overcome by distributing through lecturer involved in the course

5.3.1 Development of Survey Instrument

The instrument was developed based on both the literature and a series of focus group interviews. A number of factors identified in the literature as key determinants of service quality in education were also identified by the participants of these focus groups. A copy of the questionnaire is enclosed in Appendix D.

The questionnaire is divided into four major areas. Section I deals with students' perceptions of an excellent university, Section II deals with the ranking of the most important

attributes. Section III is concerned with students' perceptions of their own university. Section IV collects background information on the participant. The main topics in each section were as follows:

Section I: Student perception of an excellent university in relation to - Programme Issues, Academic Reputation, Physical Facilities, Cost/Time, Career Opportunities, Location and the other category.

Section II: Ranking of the above mentioned attributes.

Section III: Perception of their own university in relation to Programme Issues, Academic Reputation, Physical Facilities, Cost/Time, Career Opportunities, Location and the other category.

Section IV: Personal background of respondents including, age, gender, ethnic identity, area of study, degree enrolled for, and year of study

5.3.2 Pilot Testing

The survey was tested on a sample of students from the University of Waikato's School of Management Studies. This resulted in some minor changes which made the questionnaire easier to understand.

5.3.3 Sample Selection

There are two basic methods of sampling: probability and non probability. Probability sampling is better known as random sampling because each unit of the target population has an equal chance of being selected for the sample. On the other hand, in non probability sampling, often referred to as personal judgement or convenience sampling, the probability of each unit of the target population being selected is unknown.

For the purpose of this research, a non-probability sample was considered the best option for the following reasons. Firstly, as a result of the Privacy Act it was not possible to get the names and addresses of students. Thus, it is not possible to draw a random sample of respondents. Another factor to be taken into consideration is that when using a non-probability sampling technique, it is possible that higher response rates could be obtained. As a result of the above considerations it was decided that a non probability sample was the only viable method for this research. The non-probability technique chosen for this study was "quota sampling". Quota sampling is a non-probability sampling procedure that ensures that certain characteristics of a population sample will be represented to the exact extent that the investigator desires (Zikmund, 1994). The purpose of using this technique was to ensure that the various universities were represented in the total sample based on the number of business

students currently enrolled. This means that universities that have a higher number of business students were more heavily represented in the sample. This ensured that as far as possible, a representative sample was obtained.

The sample selection used for this study involved several stages. The first stage involved the definition of the population of interest. This population is made up of all the students enrolled in final year business courses across the seven New Zealand universities. From this population a sampling frame was developed. The quota sampling technique was used to ensure that the final sample represented the number of final year business students each university has.

5.3.4 Sample Population

The surveys were mailed out to selected lecturers in the seven New Zealand universities who in turn distributed them to final year business students. Because it was considered that those that have experienced the service for a relatively long period of time would be the best judges of its quality, it was decided that the sample should be made up of final year students. The lecturers were randomly selected from those that taught final year business courses during the first semester of 1995. The surveys were distributed to the students during class time and they were given time to fill them out then and there. Based on

pre-test results, it took approximately 15 minutes to complete the questionnaire. The surveys were then collected by the lecturers and mailed back to the researcher. The balance of responses across universities is not known as the purpose of this thesis was not to identify particular educational institutions. A sample of 1000 students was surveyed for this study. It could be argued that with this method of data collection a 100% response rate should have been achieved. However, here, some surveys were unusable and some students failed to complete and return the surveys to their lecturers.

5.3.5 Questionnaire Layout and Design

To maximize the level of response, various approaches regarding the layout of the survey instrument were adopted (Kanuk and Berenson, 1975; Lovelock et al ,1976; Klompmaker et al 1977; Lehmann, 1989; Dillion, 1994). These approaches include:

* Attractive design of the questionnaire in the form of a booklet
* Tidy and consistent layout
* Clear and simple instructions were provided at the start of each section.
* All questions and sections were clearly labelled.
* All keywords were bold printed, and italics were used for the instructions.
* The questionnaires were printed on coloured paper.

5.4 Method of Analysis

The data was edited, coded and entered into the SPSS for Windows statistical package for analysis. A sample of the data was randomly checked for accuracy in data entry.

Descriptive and gap analysis were performed to interpret the data. Frequency tables, percentages, cumulative percentages and frequency distribution were obtained to identify any trends or patterns. To make comparisons with the different groups of respondents, cross tabulation, T-Test and ANOVA were performed. This helped identify any difference between the various groups. In addition, exploratory factor analysis were performed to identify a small number of factors that can be used to represent relationships among interrelated variables.

To measure the overall reliability of the survey instrument developed, the computation of Cronbach Alpha was used. The data used in computing Cronbach Alpha were the difference means (Performance - Importance). This approach of using difference scores to develop scales for measuring constructs has been used by Ford et al (1993) and Parasuraman et al (1988).

5.5 Strengths and Weaknesses of the Research Design

5.5.1 Strengths

The sample selection method used for this research allowed for a high response rate and simplified the collection of data. The use of both quantitative and qualitative methods maximizes the benefits and minimises the drawbacks of a single technique approach. This approach also provided the level of information that was required for the objectives of the study to be fully addressed.

5.5.2 Weaknesses

It could be argued that a larger number of exploratory focus group interviews could have been conducted (ie nationwide). This could have provided new research questions and/or issues to be addressed when measuring service quality in education. Also the use of categories in the questionnaire could have introduced an element of bias in the way respondents may have answered the questions.

5.6 Chapter Summary

The determinants of service quality in education were identified based on the literature review and the qualitative research. A number of research questions related to these determinants have been developed. The results of the qualitative research and the literature review provided the basis for the survey instrument. A non-probability sampling technique was employed so that the sample was representative of the total population.

This chapter has explained all aspects of the research programme. Chapter six now provides a detailed analysis of the results.

CHAPTER SIX

Analysis of Results

6.0 Chapter Introduction

This chapter presents a detailed analysis of the data collected; relating to all the research questions discussed in chapter 5. Each research question is analysed using gap analysis, followed by cross-tabulations and other descriptive statistics. Factor analysis was carried out to empirically examine the proposed decision model by identifying underlying invisible factors or dimensions that would link together survey items seen as related to one another by the respondents. T-Tests and ANOVAS were done to compare the sample responses across all the items for significant differences. Of the 1000 students surveyed for this study, 616 usable questionnaires were returned giving a response rate of 61.2%.

6.1 Sample Characteristics

As expected most of the respondents were between 21-25 years of age (61.3%) as the target samples were those students in their final year of study. There were more males (57.6%) than females (42.3%) in this sample and the ethnic backgrounds most represented were Pakeha(65.3%) and least represented Maori and Pacific Islanders (5%). The major area of study most represented

was accounting & finance while the least represented was information systems (See figures 6.1-6.4). The gender of the sample is similar in nature to the general population of New Zealand university students (see Table 6.0). According to the Tertiary Education Statistics (1994), the majority (56%) of students enrolled in business degree programmes are males while 44% are females. In relation to ethnic identification, most of the university students are Pakeha (75.8%) while the least represented ethnic groups are Maori and Pacific Islanders (11.1%).

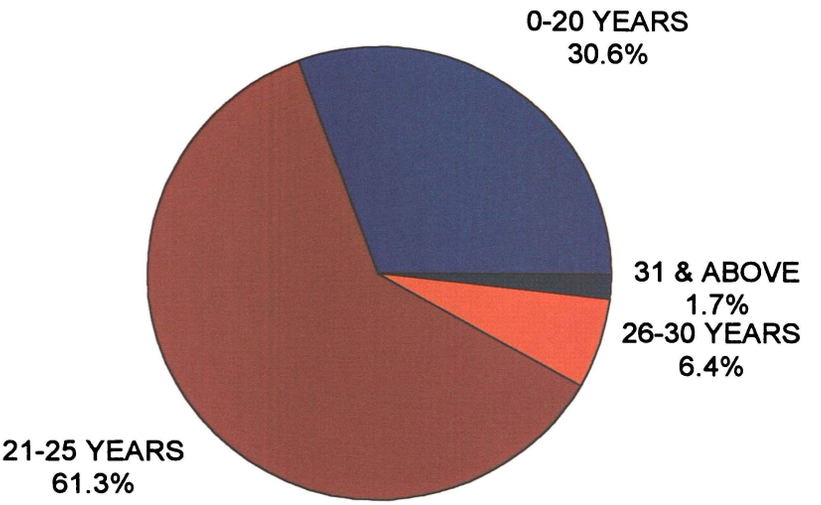
TABLE 6.0

GENDER	**TOTAL POPULATION**	**SAMPLE**
MALES	**4364**	**354**
FEMALES	**3397**	**262**
TOTAL **CHISQ = 2.000** **D.F = 1** **TABULAR VALUE = .0002** **SIGNIFICANCE = .99**	**7761**	**616**

*** Number of respondents in this sample is representative of the total population**

Figure 6.1 & 6.2

AGE OF RESPONDENTS



RESPONDENTS BY GENDER

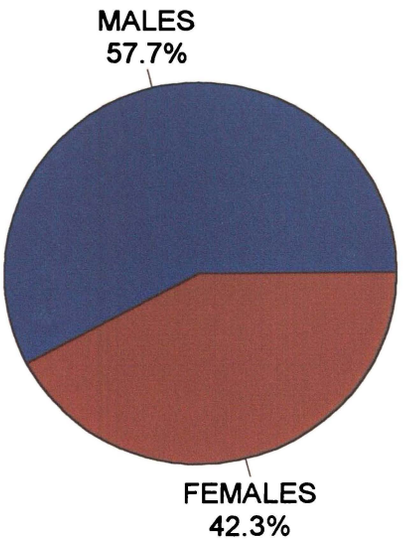
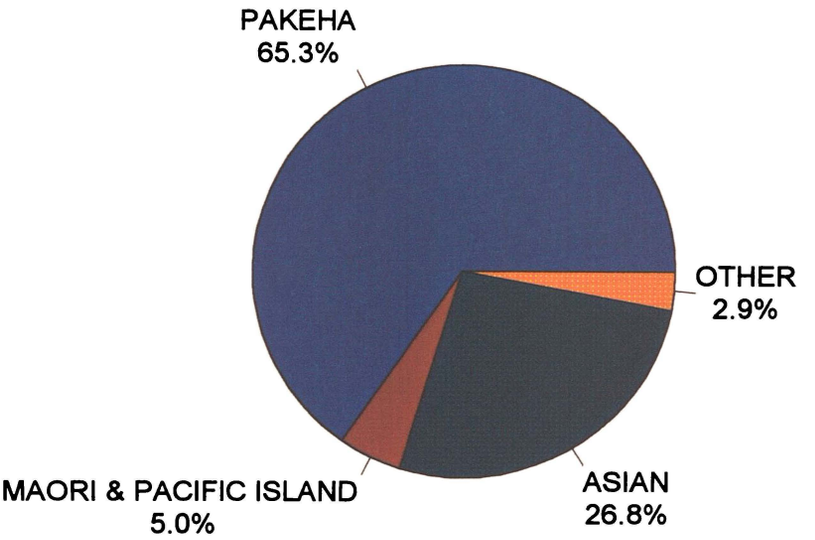
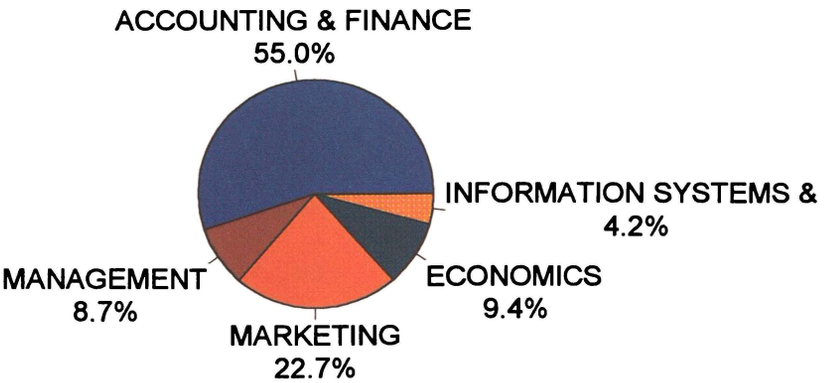


FIGURE 6.3 & 6.4

ETHNIC BACKGROUND



RESPONDENTS BY AREA OF STUDY



6.2 Testing The Determinants Of Service Quality Model For Education Using Factor Analysis

Table 6.1 shows the rotated factor scores (for details on factor analysis see Appendix E) for the model of the important choice criteria for students for a tertiary educational institution in New Zealand, which was hypothesized earlier in chapter 5. This table shows that there are strong links between the factors in the seven factor solution. The scree plot (Figure 6.5) shows the gradual trailing off factors beginning at the seventh factor. The Eigenvalue (for details see Appendix E) for factor seven is just below 1, but 59% of the total variance is attributable to the first seven factors (See Table 6.1). Thus, a model with seven factors may be adequate to represent the data. Since the scree plot break is at 7, factor solutions of 5, 6 and 7 were all attempted. For details of five and six factor solutions, please see Table 6.2a & b.

The items that were expected to load together did, given the hypothesized model, with a few exceptions. In the sample analysis, academic reputation has an extra element in it- namely, excellent academic facilities. This change could be interpreted as meaning that students perceive academic facilities as an element that defines the academic reputation of an educational institution. The data showed a variation in the Cost/Time category and it has now been named Physical Aspects/Cost since

it includes cost of accommodation and education as well as having excellent accommodation and sports and recreational facilities. It is possible that students perceive that cost is driven by the physical aspects provided by the educational institutions. The Location category has an additional element namely excellent campus layout and appearance. The inclusion of this element could be interpreted that students perceive location from the geographic as well as the aesthetic view points. The element length of time required to complete degree was identified as a stand-alone category. This could be explained by the fact that the time it takes to complete a degree could vary depending on the institution attended. For a comparison of original factors, which were identified through the literature and the focus groups, and those identified through factor analysis (new factors), please see Table 6.3.

Table 6.1

ROTATED FACTOR SCORES FOR A MODEL OF THE IMPORTANT CHOICE CRITERIA FOR STUDENTS FOR A TERTIARY EDUCATIONAL INSTITUTION IN NEW ZEALAND

Programme Issues (Factor 1)	
Options available	.68671
Flexibility to move within school of study	.66093
Degree provides flexibility	.61951
Specialist programmes provided	.47434
Flexible entry requirements	.46208
Practical component in degree	.42301
Academic Reputation (Factor 2)	
Reputable degree	.73218
Excellent Instructors	.71301
Excellent academic facilities	.66333
Physical Aspects/Cost (Factor 3)	
Reasonable cost of accommodation	.80941
Excellent accommodation facilities	.75674
Excellent sports & recreational	.54216
Reasonable cost of education	.44208
Career opportunities (Factor 4)	
Graduates easily employable	.76103
Excellent information on career opportunities	.74107
Location (Factor 5)	
Ideal location	.55615
Excellent campus layout and appearance	.60581
Time (Factor 6)	
Acceptable length of time to complete degree	.89381
Other (Factor 7)	
Family & peers influence university choice	.84187
Word of mouth influences choice of university	.81399

TABLE 6.1

ROTATED FACTOR SCORES FOR A HIGH QUALITY UNIVERSITY - SEVEN FACTOR SOLUTION

Variable	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
VAR001	1.00000 *	1	4.11069	20.6	20.6
VAR002	1.00000 *	2	1.63592	8.2	28.7
VAR003	1.00000 *	3	1.51641	7.6	36.3
VAR004	1.00000 *	4	1.30733	6.5	42.9
VAR005	1.00000 *	5	1.14231	5.7	48.6
VAR006	1.00000 *	6	1.11919	5.6	54.2
VAR007	1.00000 *	7	.96456	4.8	59.0
VAR008	1.00000 *	8	.88859	4.4	63.4
VAR009	1.00000 *	9	.81333	4.1	67.5
VAR010	1.00000 *	10	.79559	4.0	71.5
VAR011	1.00000 *	11	.76449	3.8	75.3
VAR012	1.00000 *	12	.70831	3.5	78.8
VAR013	1.00000 *	13	.65473	3.3	82.1
VAR014	1.00000 *	14	.60365	3.0	85.1
VAR015	1.00000 *	15	.57778	2.9	88.0
VAR016	1.00000 *	16	.55384	2.8	90.8
VAR017	1.00000 *	17	.52149	2.6	93.4
VAR018	1.00000 *	18	.47862	2.4	95.8
VAR019	1.00000 *	19	.44322	2.2	98.0
VAR020	1.00000 *	20	.39998	2.0	100.0

Rotated Factor Matrix:

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
VAR013	**.68671**	.17183	.10912	.05573	.07126	.05980	.11955
VAR014	**.66093**	.04109	-.04109	.11920	-.05744	.17765	. 31826
VAR011	**.61951**	.30998	.05622	.18701	.07570	.01677	-.17401
VAR010	**.47434**	.42395	.16138	-.11457	.01541	-.09105	-.00917
VAR015	**.46208**	-.23299	-.03537	.07253	-.08944	.36161	-.18527
VAR012	**.42301**	.20386	.18166	.39742	-.03684	-.33620	-.01434
VAR008	.04975	**.73218**	.03052	.23383	.03437	.00430	.00168
VAR009	.18735	**.71301**	.04823	.23260	.01600	.12544	-.00143
VAR002	.15773	**.66333**	.16689	.04547	-.07981	.04636	.20229
VAR006	.10289	.09492	**.80941**	.12303	.04313	-.01703	.02683
VAR001	.03289	.06611	**.75674**	.00934	.03316	.21949	-.03755
VAR004	-.00129	.19073	**.54216**	-.14522	-.09258	.42737	.14058
VAR007	.22098	.02501	**.44208**	.44114	-.04797	-.36479	.16422
VAR016	.11739	.15434	-.03847	**.76103**	-.00819	.13676	.02432
VAR017	.05257	.22658	.08082	**.74107**	.07628	.16394	.08752
VAR020	.04730	-.00150	-.00536	-.10507	**.84187**	-.01251	-.02547
VAR019	-.01757	-.00534	.02422	.14641	**.81399**	.10996	.03092
VAR003	.02671	.21386	.15559	.14333	-.00492	**.60581**	.05567
VAR018	.21537	-.06308	.14681	.14367	.18936	**.55615**	-.02566
VAR005	.08162	.12713	.05951	.10549	.01214	.00177	**.89381**

TABLE 6.2a

ROTATED FACTOR SCORES FOR A HIGH QUALITY UNIVERSITY

Five Factor Solution

FACTOR 1

Reputable degree	.68824
Excellent instructors	.66942
Excellent information on career opportunities	.65516
Graduates easily employable	.59500
Excellent academic facilities	.36510

FACTOR 2

Several options offered	.68549
Degree provides flexibility	.64702
Flexibility to move within school of study	.64639
Practical component in degree	.48982
Specialist program provided	.47609
Flexible entry requirement	.45482

FACTOR 3

Accommodation at reasonable cost	.77541
Excellent accommodation facilities	.76173
Excellent sports & recreational facilities	.63398

FACTOR 4

Word of mouth influences choice of university	.81873
Family & peers influence choice of university	.80891

FACTOR 5

Excellent campus layout & appearance	.56001
Ideal location	.54227
Reasonable cost of education	-.43186

TABLE 6..2a continue

ROTATED FACROR SCORES FOR A HIGH QUALITY UNIVERSITY - FIVE FACTOR SOLUTION

Variable	Communality *	Factor	Eigenvalue	Pct of Var	Cum Pct
VAR001	1.00000 *	1	4.11069	20.6	20.6
VAR002	1.00000 *	2	1.63592	8.2	28.7
VAR003	1.00000 *	3	1.51641	7.6	36.3
VAR004	1.00000 *	4	1.30733	6.5	42.9
VAR005	1.00000 *	5	1.14231	5.7	48.6
VAR006	1.00000 *	6	1.11919	5.6	54.2
VAR007	1.00000 *	7	.96456	4.8	59.0
VAR008	1.00000 *	8	.88859	4.4	63.4
VAR009	1.00000 *	9	.81333	4.1	67.5
VAR010	1.00000 *	10	.79559	4.0	71.5
VAR011	1.00000 *	11	.76449	3.8	75.3
VAR012	1.00000 *	12	.70831	3.5	78.8
VAR013	1.00000 *	13	.65473	3.3	82.1
VAR014	1.00000 *	14	.60365	3.0	85.1
VAR015	1.00000 *	15	.57778	2.9	88.0
VAR016	1.00000 *	16	.55384	2.8	90.8
VAR017	1.00000 *	17	.52149	2.6	93.4
VAR018	1.00000 *	18	.47862	2.4	95.8
VAR019	1.00000 *	19	.44322	2.2	98.0
VAR020	1.00000 *	20	.39998	2.0	100.0

Rotated Factor Matrix:

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
VAR008	**.68824**	.08615	.06474	-.00830	-.04061
VAR009	**.66942**	.21900	.09010	-.02294	.08603
VAR017	**.65516**	.12803	.02441	.16371	.11144
VAR016	**.59500**	.19285	- .11339	.09173	. 11062
VAR002	**.55836**	.17089	.24122	-.14997	.01929
VAR005	**.36510**	.05862	.15663	-.04383	-.10135
VAR013	.14830	**.68549**	.11871	.05511	.05678
VAR011	.26431	**.64702**	.02353	.08345	. 03638
VAR014	.15198	**.64639**	-.00977	-.06626	.17292
VAR012	.33531	**.48987**	.08434	.01289	-.35308
VAR010	.20011	**.47609**	.18736	-.04211	-.10125
VAR015	-.17195	**.45482**	-.05319	-.04120	.40967
VAR006	.12834	.15574	**.77541**	.08025	-.11617
VAR001	.04612	.06405	**.76173**	.05755	.13119
VAR004	.10868	-.00916	**.63398**	-.12401	.34010
VAR019	.10289	-.02228	.02303	**.81873**	.09713
VAR020	-.07662	.02026	.00665	**.80891**	-.00349
VAR003	.30448	.02551	.23251	-.00464	**.56001**
VAR018	.06376	.20942	.17908	.22040	**.54227**
VAR007	.27752	.29834	.33662	.02617	**-.43186**

Table 6.2 b
ROTATED FACTOR SCORES FOR A HIGH QUALITY UNIVERSITY

Six Factor Solution

FACTOR 1	
Options in the types of courses offered	.68924
Provides a great deal of flexibility	.64818
Provides flexibility to move within school of study	.64701
Provides specialist programmes	.49541
Flexibility in the entry requirements	.46089
Practical components of degree is appropriate	.43927
FACTOR 2	
Reputable business degree	.71870
Provides excellent instructors	.68858
Excellent academic facilities	.68751
Length of time to complete degree is appropriate	.33049
FACTOR 3	
Provides accommodation at reasonable cost	.80152
Provides excellent accommodation facilities	.74848
Provides excellent sports & recreational facilities	.55535
FACTOR 4	
Graduates are easily employable	.74986
Provides information about career opportunities	.73377
Cost of education is reasonable	.45254
FACTOR 5	
Word of mouth influences choice of university	.84072
Family & peers influence choice of university	.81118
FACTOR 6	
Campus layout and physical appearance appealing	.60600
Ideal location	.55172

FIGURE 6..2 b continue

ROTATED FACTOR SCORES FOR A HIGH QUALITY UNIVERSITY - SIX FACTOR SOLUTION

Variable	Communality	Factor	Eigenvalue	Pct of Var	Cum Pct
VAR001	1.00000 *	1	4.11069	20.6	20.6
VAR002	1.00000 *	2	1.63592	8.2	28.7
VAR003	1.00000 *	3	1.51641	7.6	36.3
VAR004	1.00000 *	4	1.30733	6.5	42.9
VAR005	1.00000 *	5	1.14231	5.7	48.6
VAR006	1.00000 *	6	1.11919	5.6	54.2
VAR007	1.00000 *	7	.96456	4.8	59.0
VAR008	1.00000 *	8	.88859	4.4	63.4
VAR009	1.00000 *	9	.81333	4.1	67.5
VAR010	1.00000 *	10	.79559	4.0	71.5
VAR011	1.00000 *	11	.76449	3.8	75.3
VAR012	1.00000 *	12	.70831	3.5	78.8
VAR013	1.00000 *	13	.65473	3.3	82.1
VAR014	1.00000 *	14	.60365	3.0	85.1
VAR015	1.00000 *	15	.57778	2.9	88.0
VAR016	1.00000 *	16	.55384	2.8	90.8
VAR017	1.00000 *	17	.52149	2.6	93.4
VAR018	1.00000 *	18	.47862	2.4	95.8
VAR019	1.00000 *	19	.44322	2.2	98.0
VAR020	1.00000 *	20	.39998	2.0	100.0

Rotated Factor Matrix:

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
VAR013	**.68924**	.16608	.11955	.05324	.06620	.04815
VAR011	**.64818**	.23810	.02640	.14717	.09226	.02980
VAR014	**.64701**	.08508	-.00225	.14315	-.07773	.15157
VAR010	**.49541**	.38922	.14616	-.13979	.02357	-.08628
VAR015	**.46089**	-.29233	-.03840	.06086	-.08493	.36154
VAR012	**.43927**	.19264	.16196	.37955	-.02778	-.33253
VAR008	.09508	**.71870**	.00032	.19722	.04975	.02405
VAR009	.23294	**.68858**	.01957	.19402	.03143	.14378
VAR002	.18603	**.68751**	.16282	.03191	-.07787	.04876
VAR005	.04189	**.33049**	.15056	.18936	-.03879	-.05231
VAR006	.10985	.10793	**.80152**	.12121	.04892	-.02318
VAR001	.04142	.06171	**.74848**	.00384	.04052	.21653
VAR004	.00338	.21699	**.55535**	-.13766	-.09636	.41721
VAR016	.13871	.16670	-.05036	**.74986**	-.00196	.14328
VAR017	.07471	.25469	.07261	**.73377**	.08060	.16791
VAR007	.21886	.07431	.44449	**.45254**	-.05075	- .37679
VAR020	.04504	-.01686	-.00498	-.10749	**.84072**	-.01294
VAR019	-.01762	.00050	.02832	.14907	**.81118**	.10780
VAR003	.04265	.21750	.16011	.13817	-.00418	**.60600**
VAR018	.21844	-.07927	.15412	.14218	.18864	**.55172**

FIGURE 6.5 Factor Scree Plot

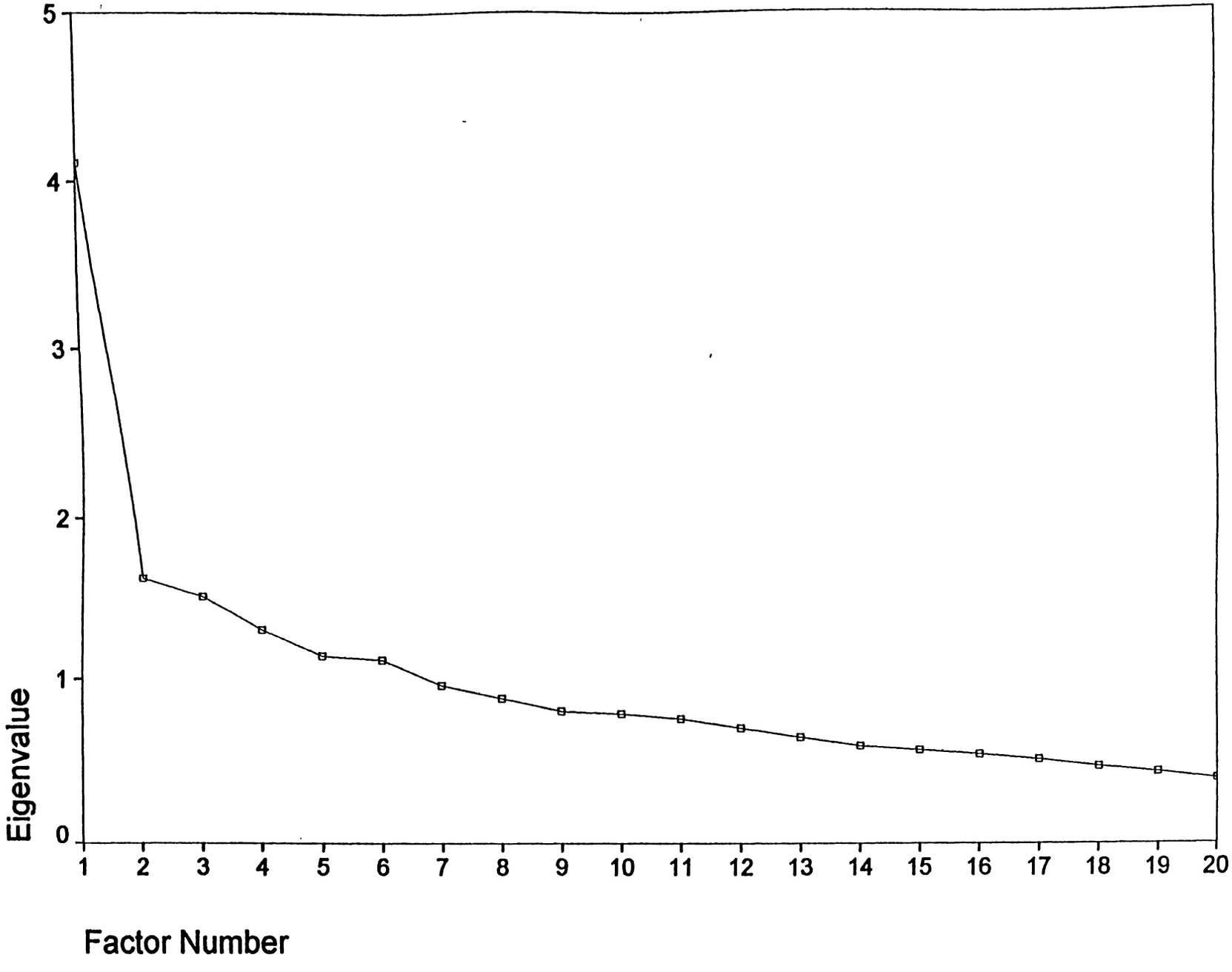


Table 6.3

ORIGINAL FACTORS	NEW FACTORS
PHYSICAL ASPECTS	**PHYSICAL ASPECTS/COST**
Excellent accommodation facilities	Excellent accommodation facilities
Excellent Sports and recreational facilities	Excellent sports and recreational facilities
Campus layout and appearance	Cost of accommodation
Excellent academic facilities	Cost of education
PROGRAMME ISSUES	**PROGRAMME ISSUES**
Options available	Options available
Flexibility to move within school of study	Flexibility to move within school of study
Degree provides flexibility	Degree provides flexibility
Specialist programmes provided	Specialist programmes provided
Flexible entry requirements	Flexible entry requirements
Practical component in degree	Practical component in degree
ACADEMIC REPUTATION	**ACADEMIC REPUTATION**
Reputable degree	Reputable degree
Excellent instructors	Excellent instructors
	Excellent academic facilities
CAREER OPPORTUNITIES	**CAREER OPPORTUNITIES**
Graduates easily employable	Graduates easily employable
Excellent information on career opportunities	Excellent information on career opportunities
LOCATION	**LOCATION**
Ideal location	Ideal location
	Campus layout and appearance

OTHER	**OTHER**
Word of mouth influences choice of university	Word of mouth influences choice of university
Family and peers influence choice of university	Family and peers influence choice of university
COST/TIME	**TIME**
Length of time required to complete degree	Length of time required to complete degree
Cost of accommodation	
Cost of education	

6.3 Specific Research Questions

RQ1. Do universities have an intuitive understanding of the determinants of quality for an educational institution?

The literature (Chapter Two, section 2.0 & 2.1) suggests that the changes introduced to the educational sector should promote accountability, efficiency and competition. This thesis has argued that service quality is an aspect that could be used by Universities to create a competitive advantage. However, the negative differences between the means of the item responses with regard to the respondents perceptions of their own university and that of the ideal quality institution suggest that Universities have not achieved a high perceived level of service quality which could give them a competitive advantage. Table 6.4 shows the difference between the actual and the ideal means in the seven categories used in the questionnaire. All the means are negative except for the one for location (.053).

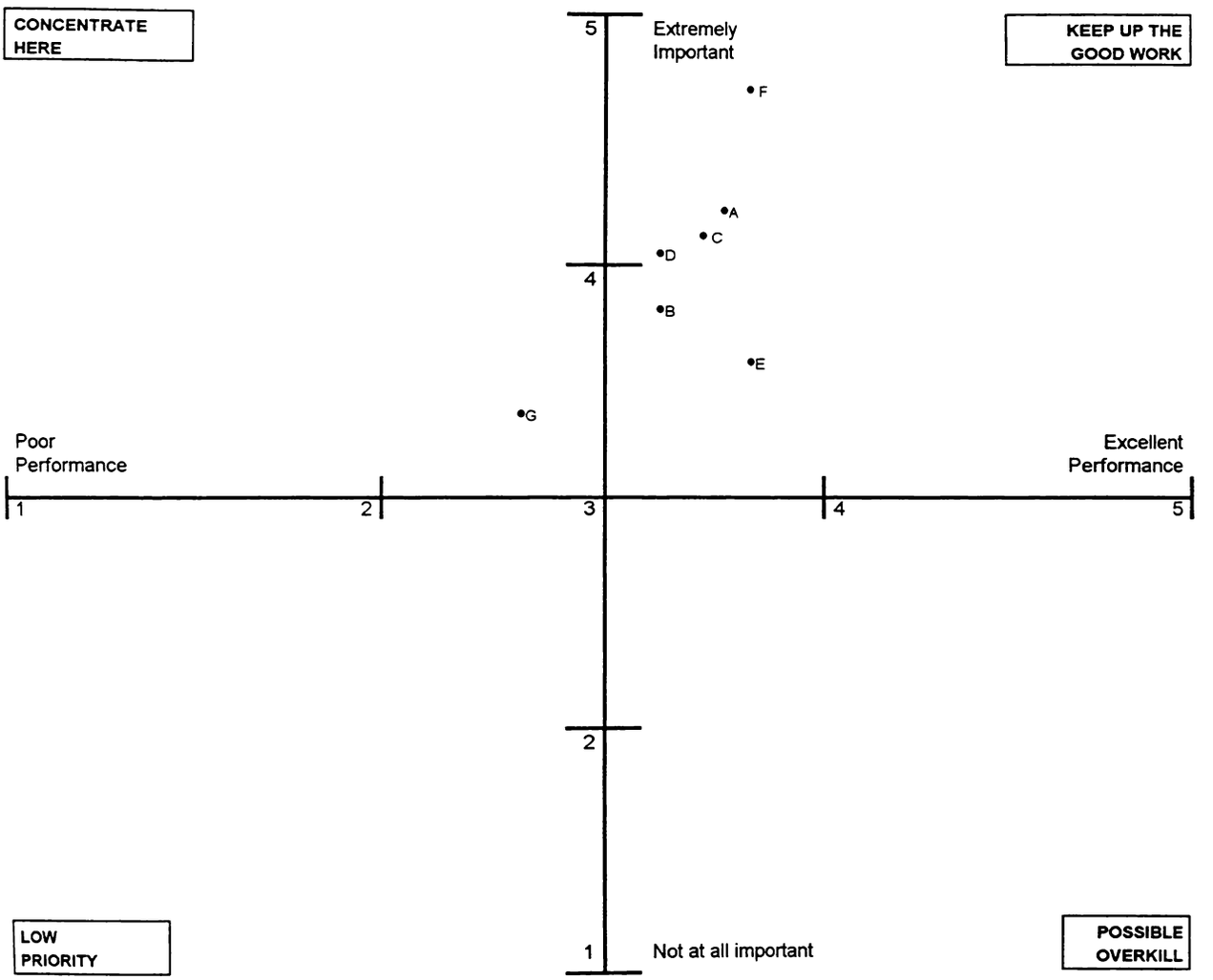
The importance - performance grid developed by James and Martilla (1977) is a technique that allows the mean importance and performance results to be graphically illustrated on a two dimensional grid. Each of the four quadrants in the grid, which were labelled by James and Martilla (1977) as **concentrate here,**

keep up the good work, possible overkill and low priority, can provide in depth information on each of the attributes tested. Exhibit 6.1 shows that all the categories, except one, fall in the "**keep up the good work**" quadrant which gives an indication that even though universities are not performing at the level of what students perceive a quality institution should, the students are still satisfied with their performance. This suggests that universities have an intuitive understanding of quality in education. The data used to construct the importance - performance grid were the mean scores for each category from section 1 (importance) and section 3 (performance).

The results of this research, specifically, the importance-performance analysis, suggest that universities do have an intuitive understanding of the determinants of service quality in education. However, it is interesting to note that students do not perceive their universities as "ideal" institutions. This discrepancy could be explained by assuming that the universities' performance falls within the students' "zone of tolerance" (For details see Appendix E) which is the difference between the desired and the adequate level of service.

EXHIBIT 6.1

IMPORTANCE - PERFORMANCE GRID



A	Career Opportunities
B	Cost/TIme
C	Physical Aspects
D	Programme Issues
E	Location
F.	Academic Reputation
G	Other

TABLE 6.4

SUMMARY OF MEANS			
CATEGORY	**IMPORTANCE**	**PERFORMANCE**	**PERFORMANCE minus IMPORTANCE**
PHYSICAL ASPECTS			
Accommodation facilities	3.696	2.971	-0.725
Academic facilities	4.716	3.660	-1.056
Campus layout and appearance	4.002	3.734	-0.268
Sports and recreational facilities	3.998	3.600	-0.398
COST/TIME			
Length of degree	3.908	3.998	-0.09
Cost of accommodation	3.747	2.680	-1.067
Cost of education	3.662	2.892	-0.77
ACADEMIC ISSUES			
Reputable degree	4.667	3.817	-0.856
Excellent instructors	4.705	3.370	-1.335
PROGRAMME ISSUES			
Specialist programmes	4.228	3.541	-0.687
Flexible structure and content	4.242	3.474	-0.768

SUMMARY OF MEANS			
Practical component	4.096	3.182	-0.914
Options available	4.370	3.838	-0.532
Flexibility to move within school of study	4.143	3.374	-0.769
Flexible entry requirements	3.102	3.305	.203
CAREER OPPORTUNITIES			
Employable graduates	4.120	3.468	-0.652
Information on career opportunities	4.413	3.653	-0.76
LOCATION			
Ideal location	3.575	3.630	0.055
OTHER			
Word of mouth	3.249	2.982	-0.267
Family and peers	3.251	2.926	-0.325

RQ2 Are students satisfied with the quality of service provided by their educational institution?

The literature (Chapter 4, sections 4.4.2 & 4.4.3) shows some empirical evidence that suggests that quality is an antecedent of customer satisfaction. Table 6.4 shows that the respondents do not believe that their own universities are quality institutions and according to the literature this should lead to customer dissatisfaction. However, the vast majority 67% of the respondents indicated that they were somewhat satisfied with their overall educational experience. The mean response to the question about their satisfaction with their university experience (Appendix D; Section 4, question 4) was 3.749 in a 5 point scale.

It could be argued that the performance of universities falls in the respondents' "zone of tolerance". This suggests that even though the respondents perceive their institution as not a "quality" institution, they are happy with its performance as long as certain conditions are met. Exhibit 6.1 gives support to this theory as it shows that even though the majority of the categories fall into the "keep up the good work" quadrant, their performance is not what it could be. It is considered that further research should be undertaken to ascertain the size and the parameters of this "zone of tolerance".

On the issue of satisfaction, it was considered important to determine the level of satisfaction according to the respondents gender or area of study to ascertain whether there were any significant differences. There was no significant differences between males and females in relation to satisfaction. However, there were significant differences betweeen respondents in the different areas of study. It is interesting to note that a high percentage of students with an Accounting/Finance or a Marketing major are satisfied with their experience. This result could be explained by proposing that the career opportunities for these majors are better than for the rest. Hence, these students are more likely to be satisfied with their educational experience.

In general, the results of this research suggest that students are relatively satisfied with the quality of service provided by their educational institution.

RQ3 Do students perceive word-of-mouth as a factor that influences the evaluation of Service Quality in education?

The literature (Chapter 4, section 4.2) suggests that students seek information from internal and external sources when they must decide which university to attend. Chapman (1981) states that external sources are friends, parents, and high school personnel. The results of the exploratory focus groups (Chapter 5, section 5.3.1.2) indicate that students are also influenced by word-of-mouth communication which in this case takes the form of promotional material, open days, etc.

The questionnaire addressed this issue by including two items: the influence of word-of-mouth, and that of family and peers (Q. 19 and 20, section 1 and questions 19 & 20, section 3, Appendix D). The respondents were slightly in agreement with the statements that word-of-mouth, and family and peers influence the selection of a quality university, with mean responses of 3.25 (with 3 being the scale's midpoint) for both items. On the other hand, when they were questioned about their own experience with using family and peers, and word-of-mouth to select their university, the mean responses were 2.93 and 2.98 respectively (For a summary of all means, see Table 6.4). This implies that even though these elements are seen as somewhat important when choosing an ideal university, they are not very strong influences when actually choosing a university.

The category which contained these items was found to be perceived as the least important of all, with 81.3% of the respondents stating so (See Table 6.5). Clearly, word-of-mouth was not seen by the student respondents as playing a very big role when evaluating service quality in education. Table 6.6 shows that there are statistically significant differences in the allocation of importance between males and females for the "other" (word-of-mouth) dimension. Females consider this category more important than males and is perceived by males as generating a better performance. However, this was found to be the least important determinant. There were no statistically significant differences in the mean responses for this category between males and females (See Tables 6.7 - 6.9). In addition, the analysis of variance (ANOVA) by major area of study showed no statistically significant differences between the sample responses. However, students 36 years of age and above, perceived the performance of their institution in the "other" category as being that of a high quality institution. The results of these analyses can be seen in tables 6.10 and 6.11).

Table 6.5

IMPORTANCE OF THE CATEGORIES				
RANK	**CATEGORY**	**% SECTION 2**	**CATEGORY**	**OVERALL MEANS SECTION 1**
1	Academic Reputation	33.1	Academic Reputation	4.686
2	Career Opportunities	24.8	Career Opportunities	4.266
3	Programme Issues	22.4	Physical Aspects	4.103
4	Cost/Time	29.4	Programme Issues	4.030
5	Physical Aspects	33.8	Cost/Time	3.772
6	Location	37.8	Location	3.575
7	Other	81.3	Other	3.250

Table 6.6

Comparison of Respondent Mean Allocations Among the Dimensions

DIMENSION	**MALE**	**FEMALE**	**P-VALUE**
COST/TIME	**3.63**	**3.58**	**N.S.**
PHYSICAL ASPECTS	**5.06**	**5.19**	**.038**
PROGRAMME ISSUES	**2.98**	**2.70**	**N.S.**
CAREER OPPORTUNITIES	**2.50**	**2.53**	**N.S.**
ACADEMIC REPUTATION	**2.21**	**2.14**	**N.S.**
LOCATION	**4.89**	**5.01**	**.025**
OTHER	**6.66**	**6.81**	**.000**

Overall, the evidence indicates that this category is to some extent a determinant of service quality in education. However, it is the least important one. This study has established that the "other" category influences students when choosing an ideal university, but its influence when actually choosing a university is limited.

RQ4 Does the location of an educational institution influence the perception of students in the evaluation of service quality in education?

The literature (Chapter 4, section 4.2) suggests that location is one of the elements that students consider when choosing a university. Moreover, the exploratory focus groups also indicated that students are influenced by the location of the institution (Chapter 5, section 5.2.1.2). This element is explored in the survey with question 18, section 1 and question 16, section 3 (See Appendix D).

The findings of this study are supportive of the notion that in general, students appear to agree that a quality university is in an ideal location (this item having a mean of 3.575 with 3.00 the midpoint of the scale). The respondents also expressed that their own universities were in an ideal location (mean 3.630). This was the only category in which students perceived the performance of their own university as being above that of an "ideal" university. It could therefore be argued that location

is a factor which influences the perception of service quality in education. However, a limitation of this can be seen in that 37.8% of the respondents ranked location sixth out of seven in importance. Females allocate more importance to this category than their male counterparts (See Table 6.6). A small proportion (9.9%) of females considered location as the fourth best aspect of their university while males(9.9%) considered it the fifth best aspect. 5.7% of females consider this factor as the seventh (out of eight) worst aspect of their university, while 10% of the male respondents consider this category as the fifth worst aspect of their university. However, when the respondents were asked to mention an aspect of their university they would like changed, none of them mentioned location (See Tables 6.12 - 6.14). This might be due to the fact that the concept of "location" is unclear to the respondents. The t-tests and the ANOVAS show no statistically significant differences in the samples responses for this category (See Tables 6.7 - 6.9 and Tables 6.10 - 6.11).

However, the only positive gap score in this study was for this dimension from the female sample, but this dimension is ranked sixth out of seven in importance.

On balance, the results of this research demonstrates that location is a determinant of service quality in education. However, its degree of influence in the students evaluation of service quality is limited as is illustrated by being considered

one of the least important (ranked sixth out of seven) determinants of service quality in education.

Table 6.7 COMPARISON OF MEAN RESPONSES ACROSS ITEMS

ITEM	MALE	FEMALE	P-VALUE
For High Quality University	N=355	N=261	
Physical Aspects			
Accommodation Facilities	3.62	3.78	.000
Academic facilities	4.68	4.78	.000
Campus layout and appearance	3.99	4.03	N.S.
Sports and recreational facilities	3.99	4.02	N.S.
Summary Variable	16.30	16.61	N.S
Cost/Time			
Length of degree	3.86	3.97	N.S.
Cost of accommodation	3.62	3.93	.000
Cost of education	3.60	3.78	N.S.
Summary Variable	11.10	11.67	N.S.
Academic Reputation			
Reputable degree	4.67	4.68	N.S.
Excellent instructors	4.71	4.73	N.S.
Summary Variable	9.39	9.41	N.S.
Programme Issues			
Specialist programmes	4.19	4.28	N.S.
Flexible degree	4.25	4.23	N.S.
Practical component	4.07	4.15	N.S.
Options available	4.38	4.38	N.S.
Flexibility to move within school of study	4.15	4.14	N.S.
Flexible entry requirements	3.18	3.01	N.S.
Summary variable	24.25	24.22	N.S.
Career Opportunities			
Employable graduates	4.09	4.20	N.S.
Information on career opportunities	4.38	4.50	.010
Summary variable	8.48	8.71	.016
Location			
Ideal Location	3.55	3.62	N.S.
Other			
Word of mouth	3.24	3.27	N.S.
Family and Peers	3.24	3.26	N.S.
Summary variable	6.48	6.54	N.S.

*N.S.= Not Significant

Table 6.8 COMPARISON OF MEAN RESPONSES ACROSS ITEMS

ITEM	MALE	FEMALE	P-VALUE
For respondent's own university	N=355	N=261	
Career Opportunities			
Employable graduates	3.39	3.57	.015
Information on career opportunities	3.60	3.72	.000
Summary variable	6.99	7.30	N.S.
Cost/Time			
Length of degree	3.91	4.11	N.S.
Cost of accommodation	2.67	2.70	N.S.
Cost of education	2.90	2.87	N.S.
Summary variable	9.47	9.69	N.S.
Physical Aspects			
Accommodation facilities	2.95	2.99	N.S.
Academic facilities	3.64	3.69	N.S.
Campus layout and appearance	3.70	3.80	N.S.
Sports and recreational facilities	3.64	3.55	N.S.
Summary Variable	13.93	14.04	N.S.
Programme Issues			
Options available	3.85	3.81	N.S.
Specialist programmes	3.54	3.54	N.S.
Flexible degree	3.55	3.36	N.S.
Practical component	3.13	3.24	N.S.
Flexibility to move within school of study	3.40	3.33	.049
Flexible entry requirements	3.36	3.23	N.S.
Summary variable	20.85	20.52	N.S.
Location			
Ideal Location	3.46	3.84	N.S.
Academic Reputation			
Reputable degree	3.79	3.82	N.S.
Excellent instructors	3.37	3.34	N.S.
Summary Variable	7.17	7.16	N.S.
Other			
Family and peers	2.83	3.05	N.S.
Word of mouth	2.92	3.05	N.S.
Summary of Variable	5.75	6.11	N.S.

*N.S.= Not Significant

Table 6.9 COMPARISON OF MEAN RESPONSES ACROSS ITEMS

ITEM	MALE	FEMALE	P-VALUE
Gap Scores	N=355	N=261	
Career Opportunities			
Graduates easily employable	-.6834	-.6316	N.S.
Information on career opportunities	-.7738	-.7702	.041
Summary variable	-1.4572	-1.4024	.014
Cost/Time			
Length of degree	.0500	.1417	.014
Cost of accommodation	-.9588	1.2249	N.S.
Cost of education	-.7018	-.9315	N.S.
Summary of variable	-1.6212	-2.0041	N.S.
Physical Aspects			
Accommodation facilities	-.6683	-.7831	N.S.
Academic facilities	-1.0382	-.0968	N.S.
Campus Layout and appearance	-.2815	-.2369	N.S.
Sports and recreational facilities	-.3540	-.4739	N.S.
Summary variable	-2.363	-2.5673	N.S.
Programme Issues			
Options available	-.5310	-.5806	N.S.
Specialist programmes	-.6500	-.7470	N.S.
Flexible degree	-.7080	-.8876	N.S.
Practical component	-.9412	-.9061	.040
Flexibility to move within school of study	-.7441	-.8293	.020
Flexible entry requirements	.1821	.2249	N.S.
Summary variable	-3.3772	-3.7333	N.S.
Location			
Ideal Location	-.0855	.2240	N.S.
Academic Reputation			
Reputable degree	-.8757	-.8675	N.S.
Excellent instructors	-1.3323	-1.3927	N.S.
Summary Variable	-2.2119	-2.2561	N.S.
Other			
Family and peers	-.4059	-.2120	N.S.
Word of mouth	-.3107	-.2240	N.S.
Summary variable	-.7308	-.4360	N.S.

* N.S. = Not Significant

TABLE 6.10

ANOVA RESULTS BY MAJOR AREA OF STUDY

Physical Aspects

EXCELLENT ACCOMMODATION FACILITIES

	Importance	Performance	Gap Scores
Value label	Means		
Acct & Fin	3.6	3.0	-.64
Management	3.9	2.9	-1.03
Marketing	3.7	2.9	-.75
Economics	3.5	2.9	-.58
Info Systems	3.4	2.7	-.70
Other	3.9	2.3	-1.57
Summary	3.6	2.9	-.71
Sig.	NS	NS	NS

EXCELLENT ACADEMIC FACILITIES

Value label	Means	Means	Means
Acct &Fin	4.6	3.6	-1.03
Management	4.8	3.3	-1.57
Marketing	4.7	3.8	-.95
Economics	4.6	3.7	-.98
Info Systems	4.8	3.8	-1.00
Other	4.8	3.8	-1.06
Summary	4.7	3.6	-1.05
Sig.	NS	.0317	.0049

APPEALING LAYOUT

Value label	Means	Means	Means
Acct & Fin	3.9	3.7	-.17
Mangement	4.2	3.1	-1.05
Marketing	4.1	3.9	-.12
Economics	3.9	3.7	-.17
Info Systems	3.8	3.5	-.30
Other	4.0	3.0	-.93
Summary	4.0	3.7	-.26
Sig	NS	.0001	.0001

EXCELLENT SPORTS & RECREATIONAL FACILITIES

Value label	Means	Means	Means
Acct & Fin	4.0	3.6	-.36
Management	4.0	3.0	-1.00
Marketing	4.0	3.6	-.38
Economics	3.7	3.6	-.12
Info Systems	3.6	3.2	-.40
Other	4.1	3.4	-.73
Summary	4.0	3.6	-.41
Sig.	NS	NS	NS

SUMMARY OF PHYSICAL ASPECTS

	IMPORTANCE	**PERFORMANCE**	**GAP SCORES**
ACCT & FINANCE	**16.33**	**14. 11**	**-2.21**
MANAGEMENT	**17.17**	**12.50**	**-4.70**
MARKETING	**16.62**	**14.38**	**-2.20**
ECONOMICS	**15.94**	**14.07**	**-1.87**
INFO SYSTEMS	**15.60**	**13.20**	**-2.40**
OTHER	**16.93**	**12.35**	**-4.57**
SIG	**NS**	**NS**	**.0002**

Cost/Time

LENGTH OF TIME TO GET DEGREE

Value Labels	Means	Means	Means
Acct & Fin	3.8	3.9	.09
Mangement	3.8	3.9	.07
Marketing	4.0	4.1	.10
Economics	3.8	3.9	.07
Info Systems	4.1	4.1	.00
Other	3.9	4.1	.20
Summary	3.9	4.0	.09
Sig.	NS	NS	NS

ACCOMMODATION AT REASONABLE COST

Value Labels	Means	Means	Means
Acct & Fin	3.7	2.6	-1.10
Management	3.9	2.6	-1.26
Marketing	3.8	2.6	-1.12
Economics	3.4	2.9	-.48
Info Systems	3.1	2.6	-.50
Other	3.6	2.1	-1.50
Summary	3.7	2.6	-1.06
Sig	.0325	NS	.0110

REASONABLE COST OF EDUCATION

Value Labels	Means	Means	Means
Acct & Fin	3.6	2.8	-.83
Management	3.6	2.6	-.94
Marketing	3.7	3.0	-.77
Economics	3.6	3.1	-.55
Info Systems	3.3	3.2	-.10
Other	3.5	2.7	-.80
Summary	3.6	2.9	-.7914
Sig.	NS	NS	NS

SUMMARY OF COST/TIME

	IMPORTANCE	**PERFORMANCE**	**GAP SCORES**
ACCT & FIN	**11.31**	**9.48**	**-1.84**
MANAGEMENT	**11.40**	**9.25**	**-2.20**
MARKETING	**11.62**	**9.80**	**-1.79**
ECONOMICS	**10.96**	**10.00**	**-0.96**
INFO SYSTEMS	**10.50**	**9.90**	**-0.60**
OTHER	**11.13**	**8.35**	**-2.35**
SIG	**NS**	**NS**	**NS**

Academic Reputation

REPUTABLE BUSINESS DEGREE

Value Labels	Means	Means	Means
Acct & Fin	4.6	3.8	-.81
Mangement	4.6	3.7	-.94
Marketing	4.7	3.8	-.86
Economics	4.6	3.6	-1.00
Info Systems	4.7	3.6	-1.10
Other	4.6	3.2	-1.35
Summary	4.6	3.8	-.87
Sig.	NS	NS	NS

EXCELLENT INSTRUCTORS

Value Labels	Means	Means	Means
Acct & Fin	4.6	3.3	-1.31
Management	4.8	3.0	-1.82
Marketing	4.8	3.5	-1.29
Economics	4.7	3.4	-1.30
Info Systems	4.6	3.7	-.90
Other	4.9	3.3	-1.60
Summary	4.7	3.3	-1.35
Sig.	.0325	.0520	.0198

SUMMARY OF ACADEMIC REPUTATION

	IMPORTANCE	**PERFORMANCE**	**GAP SCORES**
ACCT & FIN	**9.31**	**6.23**	**-2.12**
MANAGEMENT	**9.51**	**5.60**	**-2.82**
MARKETING	**9.52**	**6.52**	**-2.15**
ECONOMICS	**9.42**	**6.43**	**-2.29**
INFO SYSTEMS	**9.30**	**7.30**	**-2.00**
OTHER	**9.60**	**6.13**	**-2.85**
SIG	**NS**	**.0043**	**NS**

Programme Issues

PROVIDES SPECIALIST PROGRAMMES

Value Labels	Means	Means	Means
Acct & Fin	4.2	3.5	-.66
Mangement	4.4	3.3	-1.07
Marketing	4.3	3.6	-.63
Economics	4.1	3.3	-.73
Info Systems	4.0	3.6	-.40
Other	4.1	3.9	-.20
Summary	4.22	3.5	-.68
Sig	NS	.0547	NS

FLEXIBILITY IN STRUCTURE & CONTENT

Value Labels	Means	Means	Means
Acct & Fin	4.2	3.4	-.82
Management	4.3	3.4	-.88
Marketing	4.2	3.6	-.65
Economics	4.1	3.3	-.76
Info Systems	4.4	4.0	-.40
Other	4.4	3.6	-.80
Summary	4.2	3.4	-.77
Sig	NS	NS	NS

PRACTICAL COMPONENT

Value Labels	Means	Means	Means
Acct & Fin	4.0	3.0	-.91
Management	4.2	2.9	-1.23
Marketing	4.3	3.5	-.84
Economics	3.9	2.9	-1.03
Info Systems	3.9	3.6	-.30
Other	4.3	3.5	-.80
Summary	4.1	3.1	-.92
Sig.	.0044	.0004	NS

PROVIDES NUMBER OF OPTIONS

Value Labels	Means	Means	Means
Acct & Fin	4.3	3.7	-.59
Management	4.4	3.6	-.84
Marketing	4.3	4.0	-.25
Economics	4.2	3.7	-.55
Info Systems	4.4	3.5	-.90
Other	4.7	4.0	-.73
Summary	4.3	3.8	-.54
Sig.	NS	.0019	.0029

FLEXIBILITY TO MOVE WITHIN SCHOOL

Value Labels	Means	Means	Means
Acct & Fin	4.0	3.2	-.80
Management	4.3	3.3	-.94
Marketing	4.2	3.5	-.71
Economics	4.0	3.5	-.58
Info Systems	4.1	4.0	-.10
Other	4.8	3.8	-1.00
Summary	4.1	3.3	-.76
Sig.	.0018	.0103	NS

FLEXIBLE ENTRY REQUIREMENT

Value Labels	Means	Means	Means
Acct & Fin	3.1	3.3	.22
Management	3.3	3.0	-.23
Marketing	2.9	3.2	.30
Economics	3.1	3.3	.19
Info System	3.2	3.4	.20
Other	2.7	3.0	.26
Summary	3.1	3.3	.20
Sig.	NS	NS	NS

SUMMARY OF PROGRAMME ISSUES

	IMPORTANCE	**PERFORMANCE**	**GAP SCORES**
ACCT & FIN	**24.03**	**20.44**	**-3.56**
MANAGEMENT	**25.11**	**19.86**	**-5.16**
MARKETING	**24.44**	**21.68**	**-2.85**
ECONOMICS	**23.80**	**20.32**	**-3.48**
INFO SYSTEMS	**24.00**	**20.10**	**-1.90**
OTHER	**25.00**	**21.86**	**-3.26**
SIG	**NS**	**.0017**	**.0284**

Career Opportunities

GRADUATES EASILY EMPLOYABLE

Value Labels	Means	Means	Means
Acct & Fin	4.0	3.3	-.67
Management	4.2	3.4	-.80
Marketing	4.1	3.7	-.44
Economics	4.0	3.2	-.80
Info Systems	4.2	3.5	-.70
Other	4.5	3.5	-.92
Summary	4.1	3.4	-.65
Sig.	NS	.0004	NS

INFORMATION ABOUT CAREER OPPORTUNITIES

Value Labels	Means	Means	Means
Acct & Fin	4.3	3.7	-.63
Management	4.4	3.5	-.96
Marketing	4.5	3.5	-.97
Economics	4.3	3.5	-.79
Info Systems	4.4	3.8	-.60
Other	4.6	3.5	-1.13
Summary	4.4	3.6	-.77
Sig.	NS	NS	.0106

SUMMARY OF CAREER OPPORTUNITIES

	IMPORTANCE	**PERFORMANCE**	**GAP SCORES**
ACCT & FIN	**8.47**	**7.12**	**-1.13**
MANAGEMENT	**8.73**	**6.96**	**-1.76**
MARKETING	**8.72**	**7.13**	**-1.42**
ECONOMICS	**8.42**	**6.79**	**-1.61**
INFO SYSTEMS	**8.60**	**7.30**	**-1.30**
OTHER	**9.20**	**7.07**	**-2.21**
SIG	**NS**	**NS**	**NS**

Location

IDEAL LOCATION

Value Labels	Means	Means	Means
Acct & Fin	3.5	3.5	-.06
Management	3.6	3.2	-.34
Marketing	3.5	3.9	.45
Economics	3.6	3.6	.03
Info Systems	3.2	3.4	.20
Other	3.2	3.4	.26
Summary	3.5	3.6	.05
Sig.	NS	NS	NS

Other

RELY ON WORD OF MOUTH COMMUNICATION

Value Labels	Means	Means	Means
Acct & Fin	3.2	2.9	-.36
Management	3.3	2.5	-.42
Marketing	3.3	3.0	-.26
Economics	3.1	3.2	-.17
Info Systems	3.3	2.8	-.46
Other	2.9	2.9	.00
Summary	3.2	2.9	-.32
Sig.	NS	NS	NS

FAMILY & PEER INFLUENCE

Value Labels	Means	Means	Means
Acct & Fin	3.2	2.9	-.30
Management	3.0	2.7	-.38
Marketing	3.2	3.1	-.17
Economics	3.2	2.9	-.19
Info Systems	3.6	2.7	-.60
Other	3.2	2.8	-.36
Summary	3.2	2.9	-.27
Sig.	NS	NS	NS

SUMMARY OF OTHER

	IMPORTANCE	PERFORMANCE	GAP SCORES
ACCT & FIN	6.52	5.82	-.68
MANAGEMENT	6.32	5.51	-.80
MARKETING	6.62	6.18	-.44
ECONOMICS	6.39	6.01	-.37
INFO SYSTEMS	6.90	6.30	-.60
OTHER	6.20	5.66	-.53
SIG	NS	NS	NS

*NS: NOT SIGNIFICANT

TABLE 6.11

ANOVA RESULTS BY AGE OF RESPONDENTS

Physical Aspects

EXCELLENT ACCOMMODATION FACILITIES

	Importance	Performance	Gap Scores
Value label	Means		
0 - 20 Years	3.72	2.98	-.73
21 - 25Years	3.69	2.95	-.73
26 - 30 Years	3.56	3.07	-.48
31 - 35 Years	4.00	2.66	-1.33
36 & above	4.25	3.00	-1.25
Summary	3.70	2.96	-.73
Sig.	NS	NS	NS

EXCELLENT ACADEMIC FACILITIES

Value label	Means	Means	Means
0 - 20 Years	4.69	3.71	-.97
21 - 25 Years	4.73	3.63	-1.09
26 - 30 Years	4.83	3.73	-1.08
31 - 35 Years	4.83	3.50	-1.33
36 & above	4.75	3.75	-1.00
Summary	4.72	3.66	-1.06
Sig.	NS	NS	NS

APPEALING LAYOUT

Value label	Means	Means	Means
0 - 20 Years	4.02	3.72	-.28
21 - 25 Years	4.00	3.72	-.27
26 - 30 Years	4.13	4.02	-.13
31 - 35 Years	4.00	3.50	-.50
36 & above	4.00	4.25	-.25
Summary	4.01	3.74	-.26
Sig	NS	NS	NS

EXCELLENT SPORTS & RECREATIONAL FACILITIES

Value label	Means	Means	Means
0 - 20 Years	3.96	3.60	-.37
21 - 25 Years	4.06	3.63	-.42
26 - 30 Years	3.78	3.42	-.40
31 - 35 Years	3.50	3.33	-.16
36 - above	4.00	3.25	-.40
Summary	4.0	3.60	-.41
Sig.	NS	NS	NS

SUMMARY OF PHYSICAL ASPECTS

	IMPORTANCE	PERFORMANCE	GAP SCORES
0 - 20 Years	**16.39**	**14.02**	**-2.26**
21 - 25 Years	**16.49**	**13.92**	**-2.54**
26 - 30 Years	**16.33**	**14.26**	**-2.11**
31 - 35 Years	**16.33**	**13.00**	**-3.33**
36 & above	**17.00**	**14.25**	**-2.75**
SIG	**NS**	**NS**	**NS**

Cost/Time

LENGTH OF TIME TO GET DEGREE

Value Labels	Means	Means	Means
0 - 20 Years	3.91	3.95	.05
21 - 25 Years	3.90	4.02	.11
26 - 30 Years	3.85	3.94	.08
31 - 35 Years	4.16	4.33	.16
36 & above	4.25	4.25	.00
Summary	3.90	4.00	.09
Sig.	NS	NS	NS

ACCOMMODATION AT REASONABLE COST

Value Labels	Means	Means	Means
0 - 20 Years	3.66	2.65	-1.01
21 - 25 Years	3.85	2.66	-1.18
26 - 30 Years	3.45	3.00	-. 43
31 - 35 Years	3.33	2.66	-. 66
36 & above	3.75	2.75	-1.00
Summary	3.76	2.68	-1.08
Sig	NS	NS	.0234

REASONABLE COST OF EDUCATION

Value Labels	Means	Means	Means
0 - 20 Years	3.53	3.01	-.53
21 - 25 Years	3.77	2.82	-.95
26 - 30 Years	3.83	3.15	-.72
31 - 35 Years	2.33	2.16	-.16
36 & above	4.00	3.00	-1.00
Summary	3.69	2.89	-.8042
Sig.	.0063	NS	-.0259

SUMMARY OF COST/TIME

	IMPORTANCE	PERFORMANCE	GAP SCORES
0 -20 Years	**11.12**	**9.62**	**-1.50**
21 - 25 Years	**11.52**	**9.50**	**-2.03**
26 - 30 Years	**11.14**	**10.10**	**-0.94**
31 - 35 Years	**9.83**	**9.16**	**-0.66**
INFO SYSTEMS	**12.00**	**10.00**	**-2.00**
SIG	**NS**	**NS**	**.04**

Academic Reputation

REPUTABLE BUSINESS DEGREE

Value Labels	Means	Means	Means
0 - 20 Years	4.66	3.74	-.91
21 - 25 Years	4.70	3.83	-.87
26 - 30 Years	4.67	3.86	-.81
31 - 35 Years	4.00	3.66	-.33
36 & above	4.75	4.00	-.75
Summary	4.68	3.80	-.87
Sig.	NS	NS	NS

EXCELLENT INSTRUCTORS

Value Labels	Means	Means	Means
0 - 20 Years	4.73	3.34	-1.38
21 - 25 Years	4.71	3.35	-1.36
26 - 30 Years	4.78	3.57	-1.21
31 - 35 Years	4.83	2.60	-2.20
36 & above	4.75	3.00	-1.75
Summary	4.72	3.35	-1.36
Sig.	NS	NS	NS

SUMMARY OF ACADEMIC REPUTATION

	IMPORTANCE	PERFORMANCE	GAP SCORES
0 - 20 Years	**9.40**	**7.09**	**-2.28**
21 - 25 Years	**9.42**	**7.18**	**-2.23**
26 - 30 Years	**9.45**	**7.44**	**-2.02**
31 - 35 Years	**8.83**	**6.20**	**-3.00**
36 & above	**9.30**	**7.20**	**-3.00**
SIG	**NS**	**NS**	**NS**

Programme Issues

PROVIDES SPECIALIST PROGRAMMES

Value Labels	Means	Means	Means
0 - 20 Years	4.14	3.53	-.61
21 - 25 Years	4.26	3.55	-.71
26 - 30 Years	4.35	3.65	-.72
31 - 35 Years	4.33	3.50	-.83
36 & above	4.50	3.00	-1.50
Summary	4.23	3.54	-.69
Sig	NS	NS	NS

FLEXIBILITY IN STRUCTURE & CONTENT

Value Labels	Means	Means	Means
0 - 20 Years	4.26	3.31	-.96
21 - 25 Years	4.22	3.53	-.68
26 - 30 Years	4.43	3.52	-.94
31 - 35 Years	4.33	4.00	-.20
36 & above	4.50	3.25	-1.25
Summary	4.25	3.47	-.7897
Sig	NS	NS	NS

PRACTICAL COMPONENT

Value Labels	Means	Means	Means
0 - 20 Years	4.01	3.03	-.97
21 - 25	4.12	3.26	-.85
26 - 30 Years	4.41	2.94	-1.52
31 - 35 Years	4.00	3.00	-1.00
36 & above	4.25	3.00	-1.25
Summary	4.10	3.16	-.93
Sig.	NS	NS	.0556

PROVIDES NUMBER OF OPTIONS

Value Labels	Means	Means	Means
0 - 20 Years	4.40	3.77	-.63
21 - 25 Years	4.37	3.85	-.51
26 - 30 Years	4.44	3.97	-.50
31 - 35 Years	4.33	4.00	-.33
Info Systems	4.50	4.00	-.50
Summary	4.38	3.84	-.54
Sig.	NS	NS	NS

FLEXIBILITY TO MOVE WITHIN SCHOOL

Value Labels	Means	Means	Means
0 - 20 Years	4.17	3.31	-.85
21 - 25 Years	4.13	3.39	-.74
26 - 30 Years	4.25	3.50	-.77
31 - 35 Years	4.00	3.33	-.66
36 & above	4.50	3.50	-1.06
Summary	4.15	3.37	-.78
Sig.	NS	NS	NS

FLEXIBLE ENTRY REQUIREMENT

Value Labels	Means	Means	Means
0 - 20 Years	3.06	3.37	.31
21 - 25 Years	3.07	3.27	.20
26 - 30 Years	3.35	3.26	-.10
31 - 35 Years	4.00	3.16	-.83
36 & above	3.25	2.75	-.50
Summary	3.10	3.30	.19
Sig.	NS	NS	NS

SUMMARY OF PROGRAMME ISSUES

	IMPORTANCE	**PERFORMANCE**	**GAP SCORES**
0 - 20 Years	**24.08**	**20.31**	**-3.77**
21 - 25 Years	**24.21**	**20.89**	**-3.29**
26 - 30 Years	**25.22**	**20.86**	**-4.58**
31 - 35 Years	**25.00**	**21.00**	**-3.40**
36 & above	**25.50**	**19.50**	**-6.00**
SIG	**NS**	**NS**	**NS**

Career Opportunities

GRADUATES EASILY EMPLOYABLE

Value Labels	Means	Means	Means
0 -20 Years	4.22	3.43	-.77
21 - 25 Years	4.08	3.49	-.58
26 - 30 Years	4.27	3.42	-.88
31 - 35 Years	3.66	3.33	-.33
36 & above	4.75	4.00	-.75
Summary	4.13	3.47	-.65
Sig.	NS	NS	NS

INFORMATION ABOUT CAREER OPPORTUNITIES

Value Labels	Means	Means	Means
0 - 20 Years	4.49	3.69	-.78
21 - 25 Years	4.40	3.63	-.76
26 - 30 Years	4.37	3.64	-.75
31 - 35 Years	4.83	3.50	-1.33
36 & above	4.50	3.50	-1.00
Summary	4.43	3.65	-.77
Sig.	NS	NS	NS

SUMMARY OF CAREER OPPORTUNITIES

	IMPORTANCE	**PERFORMANCE**	**GAP SCORES**
0 - 20 Years	**8.72**	**7.12**	**-1.55**
21 - 25 Years	**8.48**	**7.12**	**-1.34**
26 - 30 Years	**8.66**	**7.05**	**-1.68**
31 - 35 Years	**8.50**	**6.83**	**-1.66**
36 & above	**9.25**	**7.50**	**-1.75**
SIG	**NS**	**NS**	**NS**

Location

IDEAL LOCATION

Value Labels	Means	Means	Means
0 - 20 Years	3.64	3.54	-.09
21 - 25 Years	3.52	3.68	.15
26 - 30 Years	3.72	3.47	-.27
31 - 35 Years	3.66	3.66	.00
35 & above	3.75	4.25	.50
Summary	3.57	3.63	.05
Sig.	NS	NS	NS

Other

RELY ON WORD OF MOUTH COMMUNICATION

Value Labels	Means	Means	Means
0 - 20 Years	3.24	3.10	-.15
21 - 25 Years	3.26	2.89	-.38
26 - 30 Years	3.24	2.47	-.37
31 - 35 Years	3.16	2.00	-1.00
36 & above	3.25	3.25	.00
Summary	3.25	2.92	-.32
Sig.	NS	.0105	NS

FAMILY & PEER INFLUENCE

Value Labels	Means	Means	Means
0 - 20 Years	3.26	3.06	-.16
21 - 25 Years	3.28	2.95	-.30
26 - 30 Years	2.86	2.75	-.47
31 - 35 Years	3.00	3.16	.00
36 & above	3.25	3.50	.25
Summary	3.24	2.97	-.26
Sig.	NS	NS	NS

SUMMARY OF OTHER

	IMPORTANCE	**PERFORMANCE**	**GAP SCORES**
0 - 20 Years	**6.50**	**6.16**	**-.32**
21 - 25 Years	**6.54**	**5.84**	**-.70**
26 - 30 Years	**6.10**	**5.16**	**-.94**
31 - 35 Years	**6.16**	**5.16**	**-1.00**
36 & above	**6.50**	**6.75**	**.25**
SIG	**NS**	**.0446**	**NS**

***NS: NOT SIGNIFICANT**

Table 6.12

BEST ASPECT OF A UNIVERSITY				
	MALES	%	FEMALES	%
1.	Programme Issues	35.2	Programme Issues	41.4
2.	Environ-ment	17.6	Environ-ment	15.7
3.	Lecturers	15	Facilities	14.1
4.	Facilities	12.1	Location	9.9
5.	Location	9.9	Appearance	8.9
6.	Appearance	8.4	Lecturers	7.3
7.	Articula-tion Agreement	1.1	Articula-tion Agreement	1.6
8.	Cost	.7	Cost	1.0

Table 6.13

WORST ASPECT OF A UNIVERSITY				
	MALES	%	FEMALES	%
1.	Facilities	22.6	Lecturers	21.1
2.	Cost	17.2	Facilities	21.1
3.	Lecturers	17.2	Cost	17.7
4.	Programme Issues	16.3	Programme Issues	16.6
5.	Location	10	Bureau-cracy	6.3
6.	Bureau-cracy	9.2	Administration	6.3
7.	Administration	5.4	Location	5.7
8.	Other	2.1	Other	5.1

Table 6.14

ASPECT OF UNIVERSITY STUDENTS WOULD LIKE CHANGED				
	MALES	%	FEMALES	%
1.	Facilities	25.6	Facilities	28.5
2.	Cost	16.6	Cost	16.7
3.	Accountability of lecturers	16.1	Accountability of lecturers	15.3
4.	Quality information	10.9	Programme issues	14.6
5.	Programme issues	10	Quality information	10.
6.	Customer orientation	9	Customer orientation	5.6
7.	Bureaucracy	6.2	Administration	4.2
8.	Administration	4.3	Bureaucracy	2.8
9.	Class size	1.4	Class size	2.1

RQ5 Does the cost of education influence the students perceptions when evaluating service quality in education?

The literature and the exploratory focus group interviews identified cost as a factor that influences the evaluation of service quality in education. Several studies have identified cost (and any financial aid available) as an element that influences the students' final choice of educational institution (Chapter 4, section 4.2). The focus groups were more specific about the cost issue. The qualitative research results divided cost into two sub-areas, the cost of accommodation, and the cost of education (tuition and fees). This issue was addressed in the survey instrument by questions 6 and 7 in section 1 and questions 4 and 5 in section 3 (See Appendix D).

The questionnaire findings support the above assertions because students agree that a quality institution should offer accommodation at a reasonable cost, and that the cost of education (tuition and fees) should be reasonable (mean scores of 3.747 and 3.662 respectively, with 3 being the scale's midpoint). The performance of the respondent's own university was below what each considered acceptable. The cost of accommodation gained a 2.680 mean while the cost of education had a 2.892 mean score. Only a small percentage (1%) of females considered cost as one of the best aspects of their university (ranked eighth out of eight). On the other hand, a larger proportion (17.7%) of

females considered this category as one of the worst aspects of their own university (ranked third out of eight). Based on the above, it is not surprising to find that 16.7 % of females consider this category as one of those they would like changed. Of the male respondents, a small percentage (.7%)of them considered cost as one of the best aspects of their university (ranking eighth out of eight). A larger proportion (17.2%) of males regard this category as one of the worst aspects of their university (ranking second out of eight). Based on this, it is not surprising to find that 16.6% of these students want this aspect changed (See Tables 6.6 - 6.8). Economics and Accounting & Finance are the major areas of study with the highest percentage of students, 18.8% and 18.4% respectively, who indicated cost as an aspect of their university they would like changed (See Figures 6.6 -6.11). However, it is interesting to note that this category is ranked fourth in order of importance (See Table 6.5).

There are no statistically significant differences of the mean responses for this dimension (See Tables 6.9 -6.11). The ANOVA by Major area of study yielded no statistically significant differences for this category, however the ANOVA by age of the respondents showed that there is a significant difference within this category. Students 36 years of age and above consider this category more important than the rest, while those 26 - 30 years of age perceive their institution's performance in this category

as being better than the other age groups (See Tables 6.14 & 6.15).

The evidence suggests that cost is a determinant of service quality in education. However, its importance to this evaluation process is not as originally reputed.

RQ6 Do programme issues influence students' perceptions when evaluating service quality in education?

The literature (See Chapter 4, section 4.2) and focus group research (Chapter 5, section 5.2.1.2) suggest that programme issues, such as flexibility and availability of specialist programmes are important issues that affect students' choice as well as their perceptions with regard to the quality of an educational institution. These issues were addressed in the questionnaire by questions 10-15 section 1 and questions 10-15 in section 3 (See Appendix D).

This study supports those findings as respondents have given this category an overall 4.030 mean score. This translates into solid support for programme issues as an influence in the evaluation of service quality in education. In the performance side of this study, students have given their universities an overall 3.452 mean score. This means that every university's performance is below that which would be expected in a quality institution. When looking at the individual items that make up this category,

males were more critical of their universities' performance in relation to the practical component of their degrees, while females were more critical with their perceptions of the flexibility to move within school of study. All the other items yielded no statistically significant differences between the responses of male and female respondents.

This determinant was ranked third out of seven in terms of importance by 22.4% of the respondents (See Table 6.5). There is no statistically significant difference in the mean allocations for this determinant between the females and males in this sample (See Table 6.6).

Males and females consider programme issues as the best aspect of their university (35.2% of males and 41.4% of females). However, it is also interesting to note that a significant percentage of males (16.3%) and females (16.6%) asserted that this is the fourth (out of eight) worst aspect of their institution. 10% of males and 14.6% of females consider programme issues as an aspect of their university they would like changed (See Tables 6.6 -6.8). A relatively large proportion (20.5%) of Marketing majors and Information Systems majors (20%) stated that this is an aspect of their university they would like changed (See Figures 6.6 and 6.11).

There are no statistically significant differences when comparing mean responses between males and females. However, both males and females seem to have perceptual problems with the delivery of these items, illustrated by having the largest negative gap scores (See Tables 6.7 -6.9). The ANOVA by age of the respondents yielded no statistically significant differences, however the ANOVA by major area of study showed that the largest gap score was for Management majors and the smallest for Information Systems majors. It also showed that the best performance for this dimension was perceived by the other (ie. Business Communication, Operations Management) major area of study and the worst performance was perceived by Management majors (See tables 6.10 & 6.11). So, overall programme issues are indeed a determinant of service quality in education.

RQ7 Does the length of time it requires to complete a degree, influence the perception of the students in their evaluation of service quality in education?

This issue was identified by the focus group interviews (Chapter 5, section 5.2.1.2). The literature reviewed does not seem to address this issue and its importance in this context could be explained by the fact that in New Zealand the length of a business degree varies from 3 to 4 years, depending on the university attended. This issue was addressed by question 5 in section 1 and question 3 in section 3 of the survey instrument

(See Appendix D). The importance and the performance of this element is very close , as the means are 3.998 and 3.908 respectively. This indicates that the respondents believe that this is relatively important to their educational experience, and that universities are providing students with what they require in relation to this determinant.

This dimension was combined with cost as it is considered that the longer it takes to complete a degree, the more costly it would be. A relatively large percentage (29.4%) of the respondents ranked this category fourth in order of importance (See Table 6.5). There are no statistically significant differences between mean allocations for this category between male and female respondents (See Table 6.11). The length of time item in the cost/time category produced positive gap scores for both males and females (See Table 6.10). It is evident from this table that the female respondents have a bigger positive gap score than men. These results seem to indicate that the students are satisfied with the performance of the time portion of this dimension.

The ANOVAS for field of study and for age categories showed no statistically significant differences in the time portion of this category (See Tables 6.10 -6.11). Thus overall, it seems time is considered a determinant of service quality in education.

RQ8 Does the academic reputation of an educational institution influence the perception of students in their evaluation of service quality in education?

The literature (chapter 4, section 4.2) and exploratory qualitative research identified academic reputation as an important element that influences the evaluation of service quality in education. This element is addressed by questions 8 and 9 in section 1 and questions 17 and 18 in section 3 (See Appendix D).

The results of this study indicate that the sample views academic reputation to be a very important element when evaluating service quality in education. This category received an importance overall mean score of 4.686 (in a 5 point scale), being the highest scoring category. Again the performance of the respondent's own university was below that of an ideal institution (overall mean 3.593); however this is the highest performance score of all.

For this study, academic reputation was found to be the most important dimension when evaluating service quality in education (See Table 6.5). There were no statistically significant differences in the respondents mean allocations for this dimension (See Table 6.6). Both males and females seem to have problems with this category as it has the third largest negative

gap scores (See Table 6.11). It is interesting to note that 15% of the male respondents and 7.3% of the female population stated the their lecturers(one of the items that forms this dimension) are one of the best aspects of their university. However, a relatively large percentage (17.2%) of males stated that their lecturers were the third worst aspect of their university and a larger percentage (21.1%) of females asserted that they were the worst aspect. As expected, both males and females would like this aspect changed (See Tables 6.6 - 6.8), with a relatively large (25.6%) of Management majors and Information systems majors (20%) supporting this change (See Figures 6.6 - 6.11).

Academic Reputation is the most important dimension in this study; all the students perceive it as having a poor performance. In particular, Management majors have a perceptual problem with the quality of the instructors their universities provide (See Table 6.14). So, it would appear academic reputation is one of the most important determinants of service quality in education, but one which does not seem to be performing at the students' desired level.

RQ9 Do the accommodation, academic and sports and recreational facilities of an educational institution influence the students evaluation of service quality in education?

The literature (Chapter 4, section 4.2), and focus groups (Chapter 5, section 5.2.1.2) identified accommodation, academic and sports and recreation facilities as important factors that influence the evaluation of service quality in education. This issue was addressed by questions 1-4, section 1 and questions 6-9, section 3 (See Appendix D).

The importance of these facilities is emphasized by this study, since this category has an overall mean of 4.103, the third highest. On the performance side, the overall mean for this category is 3.491. Even though the performance does not compare well with the importance as indicated by the students, this result illustrates that the student sample tends to agree that the facilities provided by their universities are good, but they still fall short of what they believe is important for a quality institution to deliver.

Physical Aspects is the fifth most important dimension in this study in terms of categorical importance rankings (See Table 6.5) Females consider it more important than males (See Table 6.6). However, both males and females have problems with this dimension as it has the second highest negative gap score (See Table 6.9).

Females consider this dimension as the third best aspect of their university, while males consider it the fourth best aspect (See Table 6.12). It is an interesting anomaly to note that this is the worst aspect for male respondents and second worst for female. As expected (based on the above results), this is the first aspect that all students want changed (See Tables 6.12 - 6.14). It appears that Management majors in particularly have a perceptual problem with the quality of the physical aspects provided by their university (See Table 6.10). So, overall the results of this research emphasize that physical aspects is a determinant of service quality in education.

RQ10 Do the career opportunities that an educational institution provides its students, influence their evaluation of service quality in education?

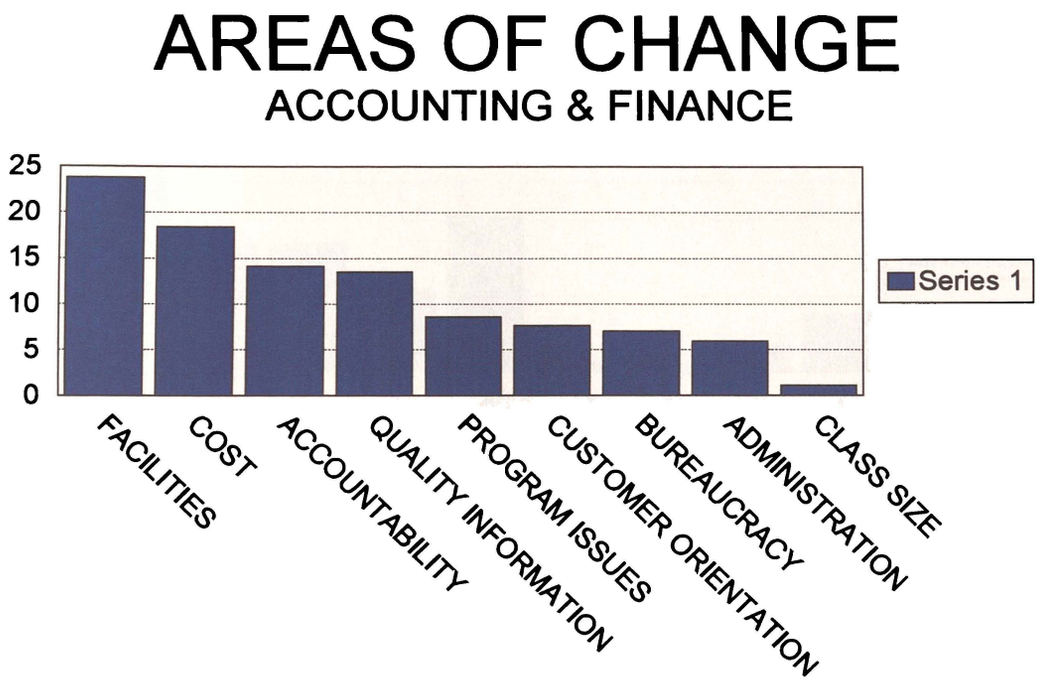
This particular issue was raised by the focus group interviews. The groups felt that the employability of graduates, and the quality of the information about career opportunities provided by educational institutions was an important issue when evaluating service quality in education (Chapter 5, section 5.2.1.2).

This category got a 4.266 (in a 5 point scale) overall mean in the importance section, which suggests that the respondents see this is a particularly important category in the evaluation of

service quality in education. As with the majority of the other categories, the performance section, with an overall mean score of 3.561, was below what is required from a quality institution. However, the respondents agree that the performance of their university is acceptable even though is not ideal.

Career Opportunities is the second most important dimension (See Table 6.5), with females giving this dimension more importance and being more critical of its performance than males. Both males and females have a perceptual problem with this dimension; and this is illustrated by this factor having the fifth largest negative gap score (See Tables 6.9 -6.11). This is of particular concern considering that this is the second most important factor when evaluating service quality in education. The analyses of variance did not exhibit any statistically significant differences across any of the categories of interest, age, and areas of study. Overall therefore, the evidence suggests that Career Opportunities is indeed a determinant of service quality in education.

Figure 6.6 & 6.7


AREAS OF CHANGE
ACCOUNTING & FINANCE
25
20
15
10
5
0
Series 1
FACILITIES
COST
ACCOUNTABILITY
QUALITY INFORMATION
PROGRAM ISSUES
CUSTOMER ORIENTATION
BUREAUCRACY
ADMINISTRATION
CLASS SIZE

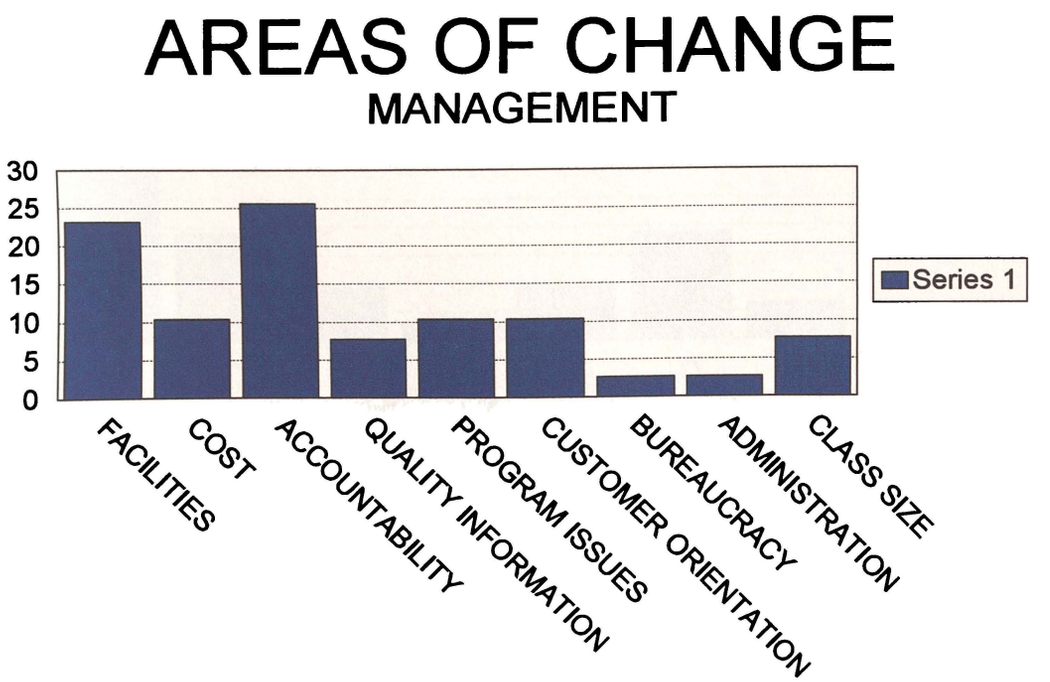
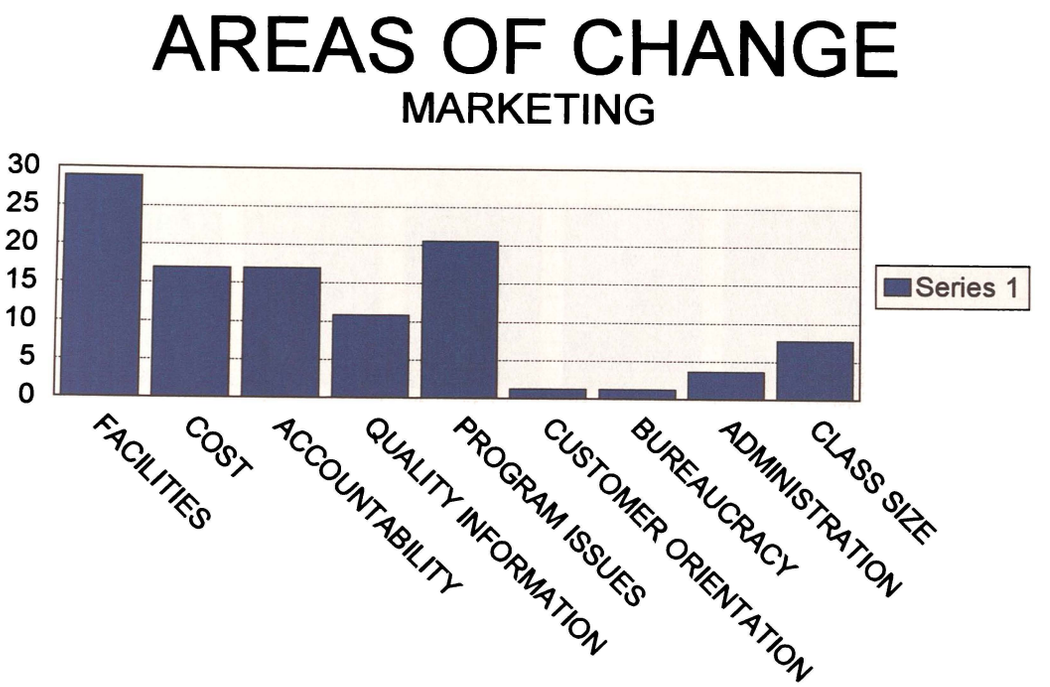

AREAS OF CHANGE
MANAGEMENT
30
25
20
15
10
5
0
Series 1
FACILITIES
COST
ACCOUNTABILITY
QUALITY INFORMATION
PROGRAM ISSUES
CUSTOMER ORIENTATION
BUREAUCRACY
ADMINISTRATION
CLASS SIZE

FIGURE 6.8 & 6.9


AREAS OF CHANGE
MARKETING
30
25
20
15
10
5
0
Series 1
FACILITIES
COST
ACCOUNTABILITY
QUALITY INFORMATION
PROGRAM ISSUES
CUSTOMER ORIENTATION
BUREAUCRACY
ADMINISTRATION
CLASS SIZE

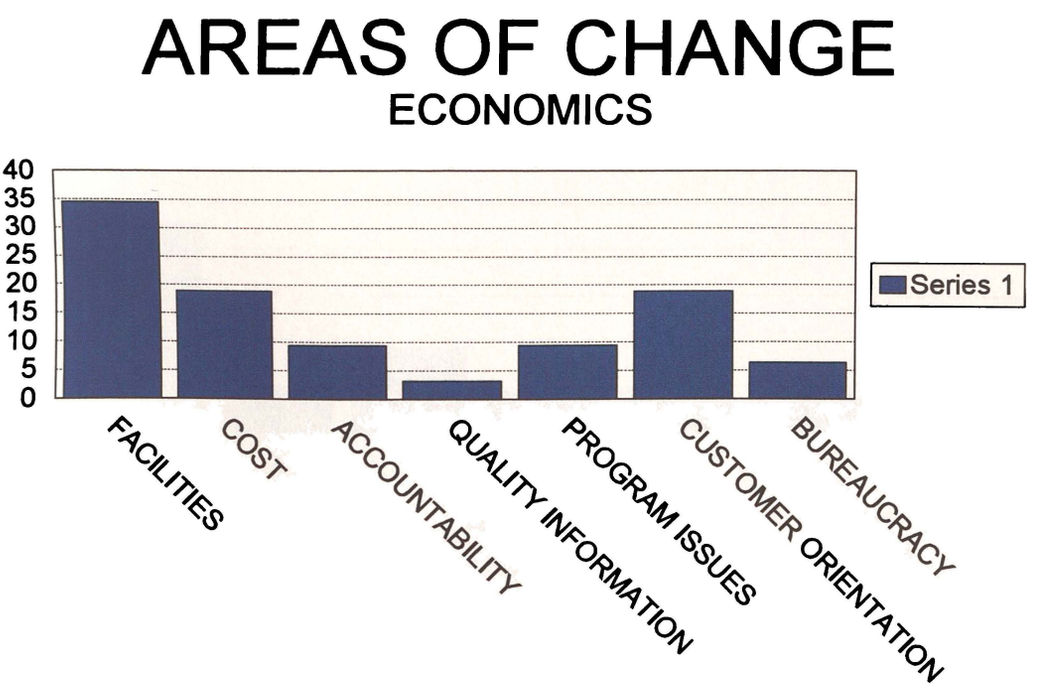
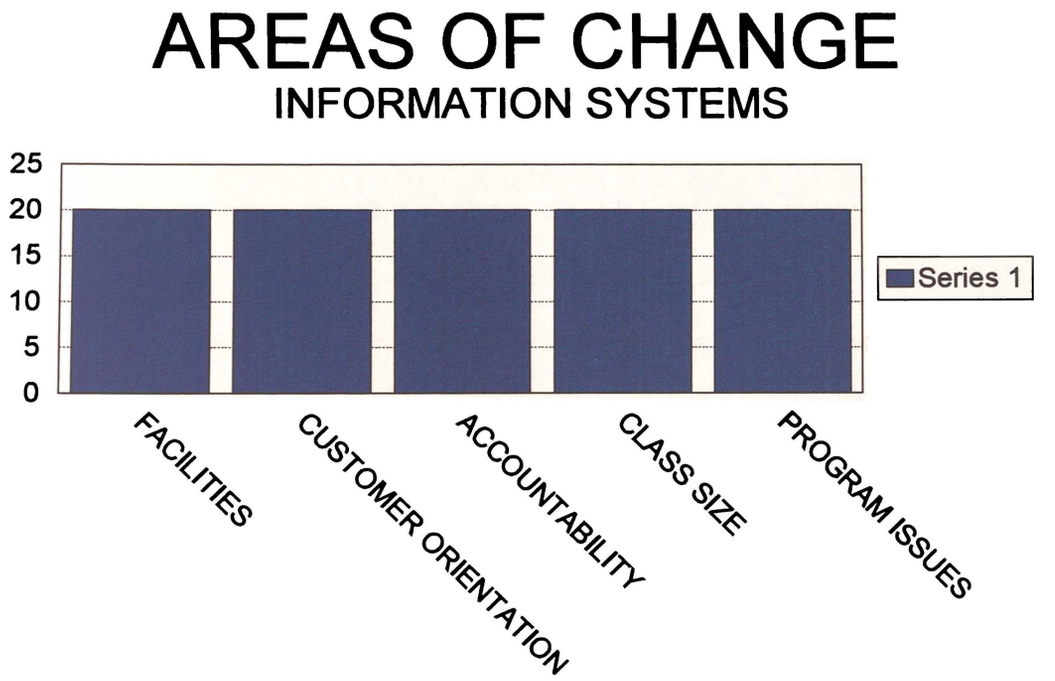
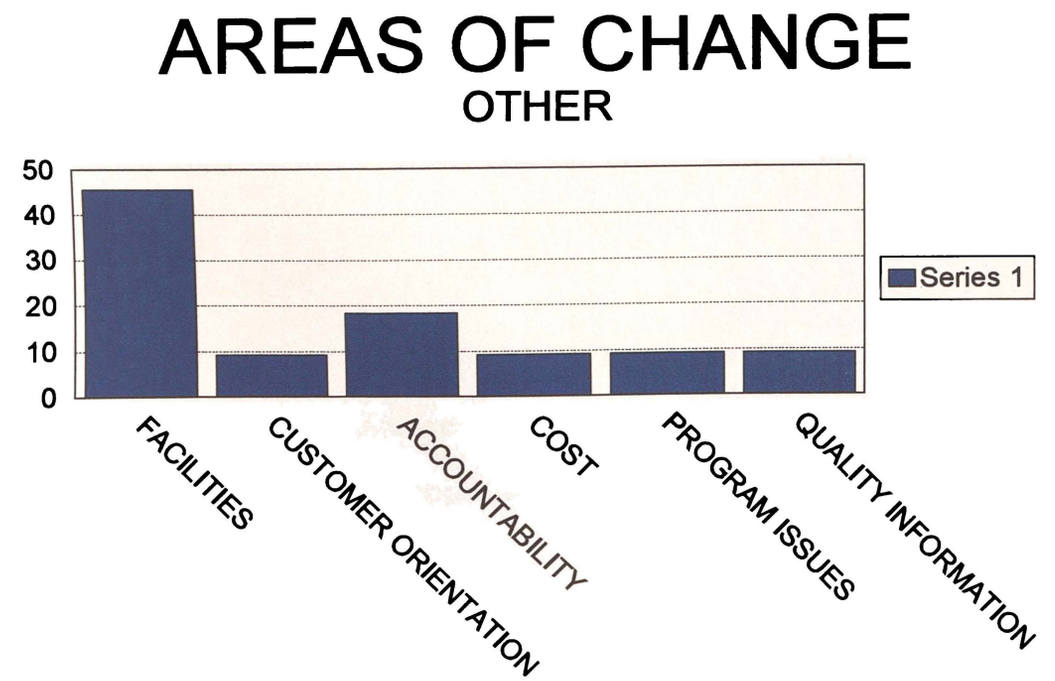

AREAS OF CHANGE
ECONOMICS
40
35
30
25
20
15
10
5
0
Series 1
FACILITIES
COST
ACCOUNTABILITY
QUALITY INFORMATION
PROGRAM ISSUES
CUSTOMER ORIENTATION
BUREAUCRACY

FIGURE 6.10* & 6.11



* N=5



6.4 SUMMARY OF FINDINGS

The results of this study support the influence of the seven factors used to evaluate Service Quality in education (see Table 6.15). Even though the order of the items vary somewhat, all of the original considerations are sustained. These results also imply that even though universities are not performing up to the standards students desire, they are still somewhat satisfied with their overall educational experience. As mentioned earlier, this can be explained by assuming that the performance is falling within the respondents zone of tolerance.

It is obvious that there is a perceptual problem with students when the sample indicates poor performance for their universities across the most important dimensions, when compared with an ideal university. It is alarming that the best performing dimensions (location and other) are those that are considered the least important.

It is important to mention that because 55% of the respondents had accounting & finance as their major area of study, their opinions could be overrepresented.

TABLE 6.15 OVERVIEW OF RESEARCH QUESTIONS

RESEARCH QUESTIONS	KEY FINDINGS
Do universities have an intuitive understanding of the determinants of service quality in education?	Even though universities are not performing up to the level of a quality institution, their performance falls within the students' "zone of tolerance" and it can be concluded that universities have an intuitive understanding of service quality
Are students satisfied with the level of service provided by their educational institution?	The majority of the respondents (67%)indicated that they are satisfied with their educational experience and it could be concluded that students are relatively satisfied with the quality of service provided by their educational institution
Do students perceive word-of-mouth as a factor that influences the evaluation of service quality in education?	Even though word of mouth is seen as somewhat important when choosing an ideal university, it is not a very strong influence when actually choosing a university. This was ranked as the least important factor.
Does the location of an educational institution influence the perception of students in the evaluation of service quality in education?	Location is a determinant of service quality in education. However, its degree of influence in the students evaluation of service quality is limited as illustrated by being considered one of the least important (ranked sixth out of seven) determinants of service quality in education.
Does the cost of education influence the students perceptions when evaluating service quality in education?	The findings support the concept that a quality institution should provide education at a reasonable cost. Even though cost is a determinant of service quality in education, its importance to this evaluation process is not as originally reputed

RESEARCH QUESTIONS	KEY FINDINGS
Do programme issues influence students perceptions when evaluating service quality in education?	Programme issues is an important factor influencing students' perception of a quality institution. This determinant was ranked third out of seven in terms of importance by the respondents.
Does the length of time required to complete a degree influence the perception of the students in their evaluation of service quality in education?	Respondents believe this factor is relatively important to their educational experience, and that universities are providing students with what they require in relation to this determinant
Does the academic reputation of an educational institution influence the perception of students in their evaluation of service quality in education?	Results indicate that this is the most important element when evaluating service quality in education but one which is not necessarily performing at the students' desired level.
Do the accommodation, academic and sports and recreational facilities of an educational institution influence the students evaluation of service quality in education?	Physical aspects was found to be the fifth most important dimension in terms of categorical importance ranking. Results also indicated that respondents tend to agree that the facilities provided by their universities are good, but they still fall short of what they believe is important for a quality institution to deliver
Do the career opportunities that an educational institution provides its students influence their evaluation of service quality in education?	This was found to be the second most important determinant of service quality in education. Respondents have a perceptual problem with this dimension as can be seen from the negative gap score and from the overall mean score which falls below what is required from a quality institution.

6.5 Chapter Summary

This chapter has presented a detailed, analytical account of all data collected relating to the Determinants of Service Quality Model for Education developed in this study. All research questions have been addressed and the evidence supports all seven determinants. This thereby completes the presentation and analysis of research findings.

What follows is a discussion of the conclusions, recommendations and suggestions for further research.

Chapter Seven

Summary, Conclusions, Recommendations and Suggestions for Further Research

7.0 Chapter Introduction

The objective of this chapter is to review this research and discuss its major findings and implications. For this to be achieved, the chapter is divided into : a review of the need for this research and its objectives; a discussion of the major findings in relation to the research objectives; a review of the contributions made; a discussion of possible strategies for educational institutions; and suggestions for further research.

7.1 A Review of the Need for this Research and its Objectives

The changes that have occurred in the education sector in New Zealand over the past few years have aimed to introduce accountability, efficiency and competition into the sector. This research proposes that Service Quality can be used by educational institutions to create a competitive advantage that will allow them to deal with the reforms introduced to this sector. The use of Service Quality in education can be investigated from the practical and the academic view point.

The theoretical discussion of service quality includes a number of empirical works that support the relationship

between quality, customer satisfaction, and profitability. However, the few that have studied these relationships in the education sector have approached them using the expectancy /disconfirmation paradigm. This thesis has argued that the paradigm is not suitable for education because expectations are based on prior knowledge and experience in tertiary education. It is argued that potential students have little or no prior knowledge and experience with tertiary education. Another argument against disconfirmation in the case of education is the fact that for disconfirmation to function correctly expectations must remain constant. Because education is a long term service, expectations change with familiarity with the service. This thesis advocates the use of the importance/performance paradigm which focuses on ranking the choice criteria in order of importance and evaluating their performance.

From the practical stand point, educational institutions need to find a "tool" that would allow them to measure whether they are meeting the needs of their customers (in this thesis, customers being students). Especially in business education, competition has been aggressive, as the number of providers increased from 7 to 15 in a short period of time (Kelsey, 1993). Improving competitiveness is an area that needs addressing for educational institutions to succeed in this new environment.

Taking the above into consideration, this research has focused on providers of business education, and in the development of a "tool" for measuring service quality in education. Within this framework, the following research objectives were identified:

1. To identify the criteria students use to evaluate the quality of the service provided by a tertiary institution.
2. To develop a model that identifies the quality factors that influence the students' decision making process.
3. To develop a survey instrument to measure service quality in education.
4. To determine if cost is an important factor in a student's evaluation of service quality in education.
5. To determine the extent to which students are generally satisfied with their overall educational experience.

7.2 The Research Process

7.2.1 Overall Structure and Methodology Employed

To achieve these objectives, the research first provided a background on tertiary education, and marketing education in New Zealand. Next, the literature of marketing education as a service, and of service marketing, was reviewed. The literature on service quality and its role in consumer decision making was examined. The literature served to

generate specific research questions related to the determinants of service quality in education.

A research methodology based on focus group interviews followed by a mail survey was developed as a means of answering the research questions. Data was analysed using the SPSS statistical package.

7.3 Findings in Relation to the Research Objectives

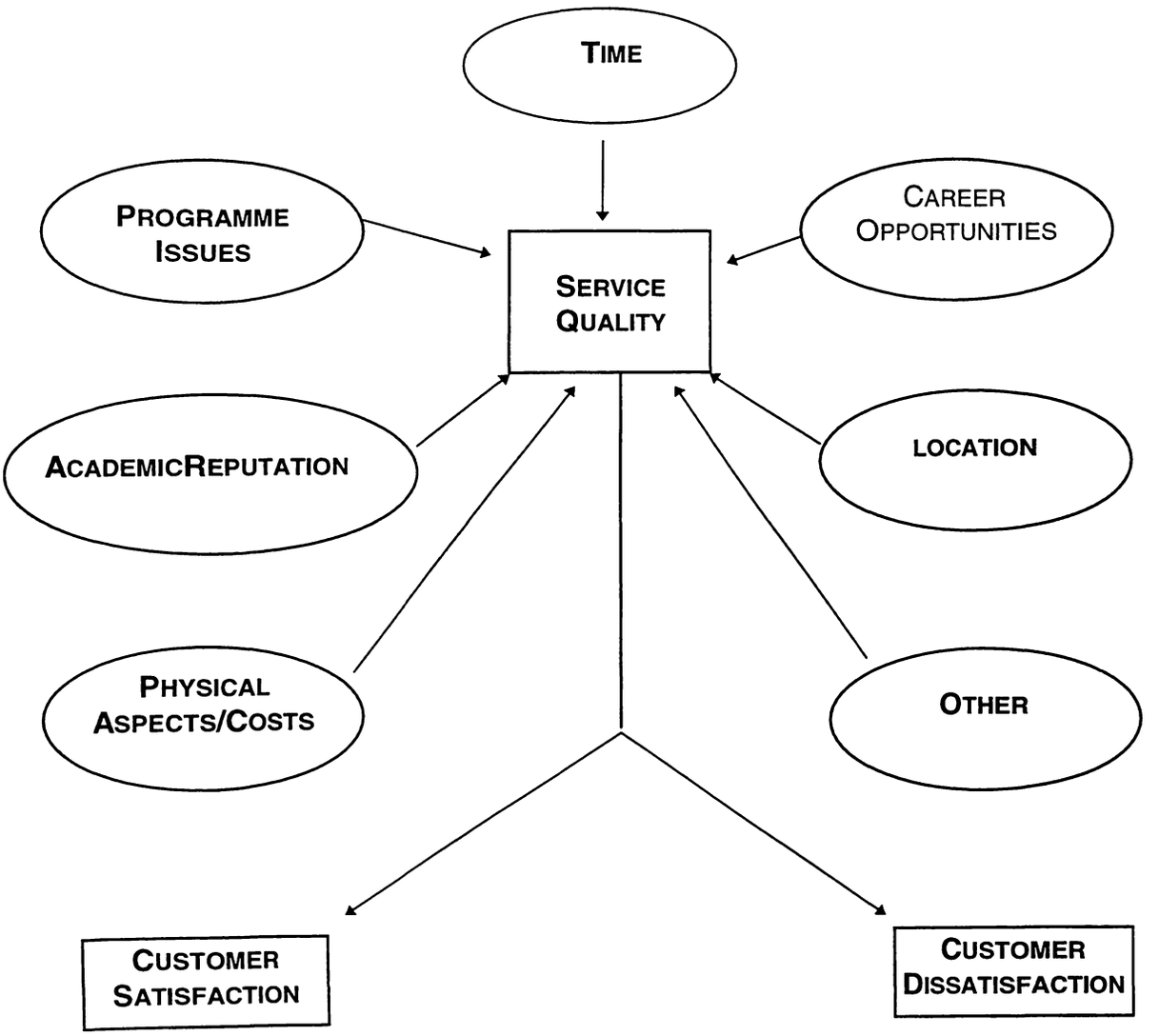
7.3.1 The criteria students use to evaluate the quality of the service provided by a tertiary institution.

The literature suggested that the most common determinants of college choice are academic reputation, cost, location and programme issues. The exploratory focus groups supported the influence of these four determinants and further suggested the use of physical aspects, time, career opportunities and word-of-mouth as additional criteria by which to evaluate service quality.

Factor analysis showed that the items within each determinant loaded together as expected, with a few exceptions. The seven determinants identified by factor analysis and the items addressed by each one of them were (See Figure 7.1):

Figure 7.1

REVISED DETERMINANTS OF SERVICE QUALITY MODEL FOR EDUCATION



Programme Issues: This determinant includes; several options offered, specialist programmes provided, degree flexibility, practical component in degree, flexibility to move within school of study and flexible entry requirements.

Academic Reputation: This determinant views the perceived advantage of a reputable degree, excellent instructors and academic facilities.

Physical Aspects/Cost: This determinant establishes the importance of excellent sports and recreational facilities, and accommodation facilities; and considers the cost of accommodation and education.

Career opportunities: This determinant considers the issues of graduates being easily employable, and having excellent information on career opportunities.

Location: This determinant considers the value of the an "ideal" location and campus layout and appearance.

Other: This determinant includes the influence of family and peers, and that of word-of-mouth.

Time: This determinant questions the acceptable length of time to complete a degree.

It should be emphasized, however, that these criteria have a different degree of importance. For example, whereas about a third (33.1%) of respondents considered Academic Reputation the most important determinant of service quality in education, a large proportion (81.3%) of the respondents considered the "Other" category (word-of-mouth) as the least important determinant of service quality in education. Table 7.1 shows the seven determinants of service quality in education in order of their relative importance.

Table 7.1

DETERMINANTS OF SERVICE QUALITY IN EDUCATION		
RANK	**DETERMINANT**	**PERCENTAGE**
1	**Academic Reputation**	**33.1**
2	**Career Opportunities**	**24.8**
3	**Programme Issues**	**22.4**
4	**Cost/Time**	**29.4**
5	**Physical Aspects**	**33.8**
6	**Location**	**37.8**
7	**Other**	**81.3**

7.3.2 Development of a model that identifies the quality factors that influence the students' decision making process.

The evidence provided by this research confirms the quality determinants identified in the service quality model developed in chapter 5. The importance of all the determinants is apparent when evaluating the overall means in section 1 of the survey instrument (See Table 7.2). None of the means are

below 3.250 (in a five point scale), which illustrates that all the factors are considered at least somewhat important.

Table 7.2

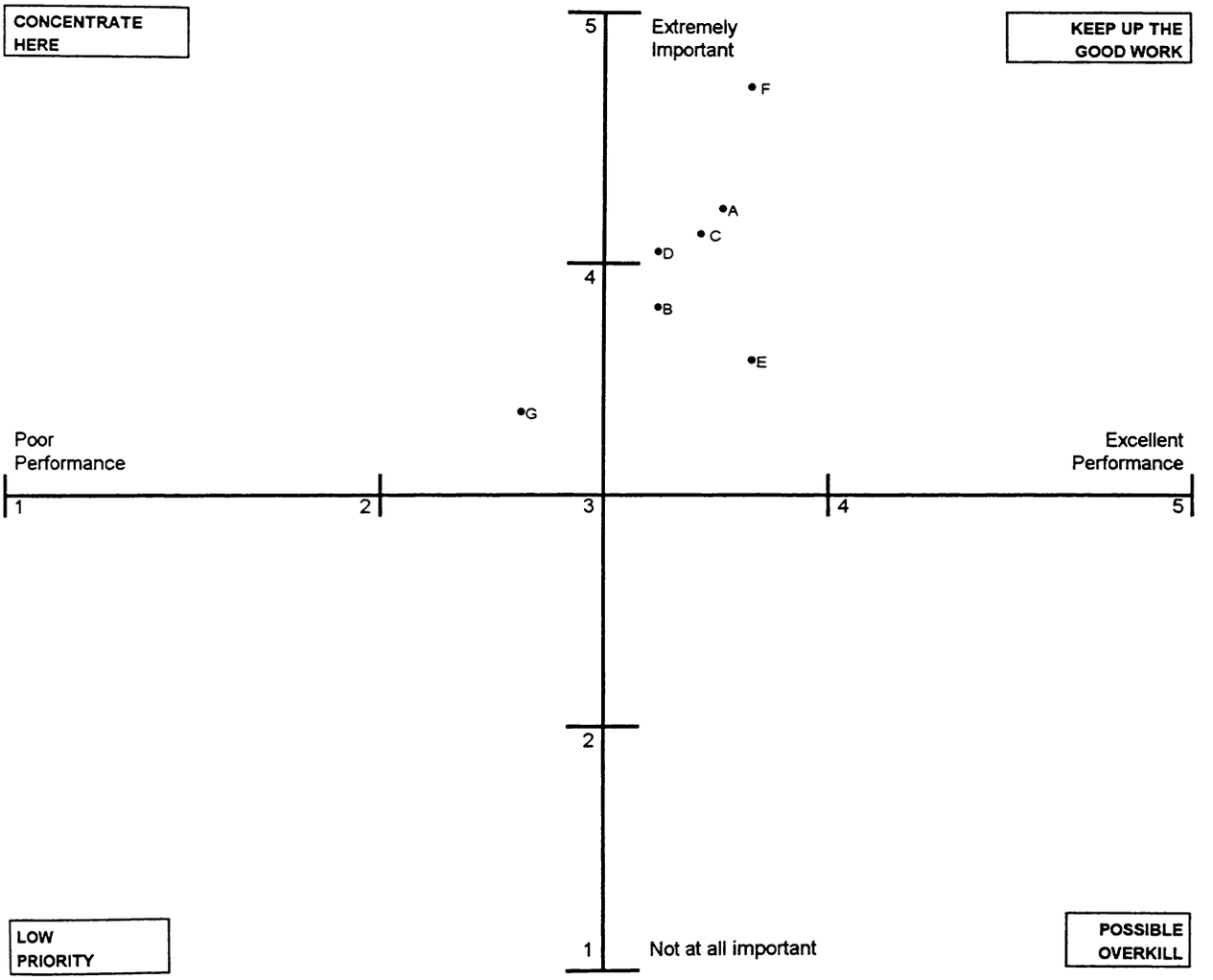
OVERALL MEANS - SECTION 1	
Category	**Mean**
Academic Reputation	**4.686**
Career Opportunities	**4.266**
Physical Aspects	**4.103**
Programme Issues	**4.030**
Cost/Time	**3.772**
Location	**3.575**
Other	**3.250**

The evidence provided by this research supports the premise that service quality leads to students satisfaction with their educational experience. This is illustrated by a large proportion (67%) of respondents stating that they were satisfied with their overall educational experience. Even though the performance of the majority of the factors is below that of the importance attributed to each one of them (See Table 7.3), all except one of the factors fall into the ***"keep up the good work"*** quadrant (See Exhibit 7.1). Looking at the Importance-Performance analysis from the Hemmasi, Strong and Taylor (1994) perspective (See Exhibit 7.2) three of the factors (cost/time, location and other) moved to other

quadrants. Cost/Time and Other moved to the **"low priority"** quadrant and location moved to the **"possible overkill"** quadrant but the three most important ones (in terms of ranking) still remain in the same **"keep up the good work"** quadrant. The main difference between the two methodologies is that in the James and Martilla (1977) method the axes are drawn based on the mid point of the scale, while in the Hemmasi et al (1994) method the axes are drawn based on the overall importance and performance means. The difference in the results using both methods is simply that the factors that moved were those that were very close to the axes, which further illustrates their importance in the evaluation of service quality in education. Arguably, the Hemmasi et al (1994) grid provides a useful alternative tool for strategy development as it provides a clearer picture of the factors that are critical for resource allocation.

EXHIBIT 7.1

IMPORTANCE - PERFORMANCE GRID

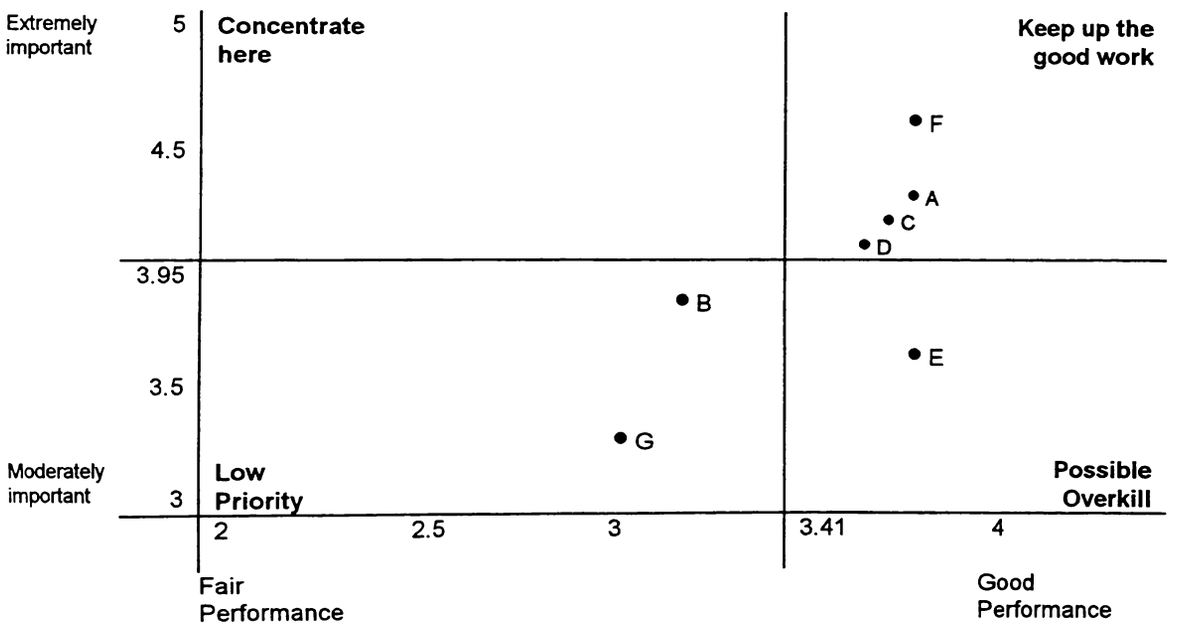


A	Career Opportunities
B	Cost/TIme
C	Physical Aspects
D	Programme Issues
E	Location
F.	Academic Reputation
G	Other

Exhibit 7.2

IMPORTANCE - PERFORMANCE GRID

(Hemmasi et al 1994 Methodology)



A	Career Opportunities
B	Cost/Time
C	Physical Aspects
D	Programme Issues
E	Location
F	Academic Reputation
G	Other

7.3.3 Development of a survey instrument to measure service quality in education.

A survey instrument was developed based on the literature, and the exploratory focus group interviews (See Exhibit 5.1).

The overall Cronbach alpha for this instrument is .7506 which indicates that it is a reliable instrument to measure service quality in education.

7.3.4 Determine if cost is an important factor that influences a student's choice of an educational institution.

The literature reviewed suggests that in recent times, cost has become an important issue to consider when choosing an educational institution. Anecdotal evidence also seems to point towards the importance of this issue, with the latest campaign from the Association of Tertiary Students claiming that the only prerequisite for tertiary education is "having a cheque book"! However, when students were asked to rank the different determinants in order of importance, cost ranked fourth out of seven categories with only 8.3% of the respondents giving it the first rank and 12.8% giving it the second one. It is also interesting to note that the overall mean for this category in section 1 of the questionnaire (importance section) is 3.772, which indicates that cost is somewhat important but not as important as reputed.

Institutions should bear in mind that even though cost was found not to be an important determinant of service quality in education, the price/quality issue could still affect the students' perceptions of a university.

7.3.5 Ascertain whether students are generally satisfied with their overall educational experience.

The differences between the performance and the importance means of the seven determinants are negative, except for Location (See Table 7.3). This depicts a situation in which the students do not perceive their universities as quality institutions. According to the literature this should lead to customer dissatisfaction, yet the majority of the respondents (67%) stated that they were satisfied with their overall educational experience.

It can also be seen in Exhibit 7.1 that when the importance-performance grid is used, all of the factors, except one, fall within the "***keep up the good work***" quadrant which could be construed as depicting satisfaction. It is also important to note that none of the performance overall means is higher than 3.593 (in a five point scale). This could mean that the universities are doing the bare minimum to satisfy their customers and this would lend support to the theory that the performances are falling within the students zone of tolerance.

When looking at this issue using the Hemmassi et al (1994) grid (See Exhibit 7.2) it could also be argued that this depicts satisfaction as the factors that have moved to other quadrants are the least important ones and the majority of the factors (which include the most important ones) still remain the **"keep up the good work"** quadrant.

This research has concentrated on ascertaining the students' level of satisfaction with their **overall** educational experience. Hence, measuring the students' satisfaction with each determinant of service quality in education is beyond the scope of this study.

Table 7.3

OVERALL MEAN DIFFERENCE	
Category	**Mean**
Career Opportunities	**-.699**
Cost/Time	**-.905**
Physical Aspects	**-.612**
Programme Issues	**-.581**
Location	**.055**
Other	**-.297**
Academic Reputation	**-1.096**

7.4 A Review of the Contributions

This research has made three major contributions. First, is the development a list of service quality determinants in education. This list of factors, ranked in order of importance (See Table 7.1), can be used by educational institutions to determine whether they are allocating their efforts in the areas that are considered important by the student consumers. It could also be used as a guideline to be followed for resource allocation, financial or otherwise.

The second contribution is a set of determinants of service quality model for education. This model provides a framework which could help in the development of strategies by education administrators. The model also illustrates the importance service quality should have as a competitive tool, which if applied properly could yield overall satisfaction with the education experience.

The third contribution from this research is the development of an instrument to measure service quality in education. Evidence shows that the instrument is reliable, and that educational institutions could use it to measure the overall level of service quality they provide. The benefits of the use of such an instrument are that the instrument can be used to track performance over a period of time, as well as a

current diagnostic tool. The latter could be quite effective at identifying possible areas of concern before they become problems that could lead to dissatisfaction.

7.5 Possible Strategies for Educational Institutions

The following are suggested strategies developed based on the outcome of this research. The promotional strategies do not suggest any specific media as this is beyond the scope of this study. The suggested strategies are divided into four sections: overall strategies, strategies by gender, strategies by major area of study, and strategies by age group.

7.5.1 Overall Strategies

The following strategies are applicable to all students regardless of their gender, major area of study, or age group.

7.5.1.1 The most important factors that influence the evaluation of service quality in education are academic reputation and career opportunities. From the positioning stand point, this is the most preferred combination of attributes. This means that universities should develop their market positioning strategy taking these attributes into consideration. In other words, aim to strengthen their offerings in these areas. For those institutions which are

currently strongly positioned in the market, a protective and defensive strategy is suggested. They could pre-empt competitive moves (ie. from polytechnics) by introducing another service positioned to appeal to the same market segment. An example of this is the twinning arrangements between universities and polytechnics, in which students that want to pursue a degree may do part of their studies at a polytechnic and continue them at a university. Another possible defense strategy is the offering of programmes (ie Executive MBA)in different sites around the country. Although this strategy cannibalizes the market of the established service, in the long run is better for an institution to compete with itself than to lose customers to other service providers.

Promotional activities developed by universities should support their market positioning and reflect the importance of the academic reputation and career opportunities attributes. To achieve this the following should be adhered to:

* Use testimonials of alumni who are presently employed. This could emphasize the employability of graduates.

* Have a good placement service on campus. This service would keep in contact with employers, and encourage recruiting on campus. It could also organize seminars on career

opportunities. These seminars could be conducted by Personnel Consultants or Company Executives who could provide information of positions, salaries and qualifications required. A booklet containing information on past graduates, their current employment status and income ranges should also be made available. In addition a list of employers and their addresses should be compiled so students can contact them to enquire about employment opportunities.

* Universities should form an advisory committee comprising both existing and potential employing companies. This will allow employers to contribute to the content of the courses taught at the institution and also help to further the partnership between the university and the business community.

* Universities should send out regular newsletters to employers and the business community about the latest developments taking place in the university. These newsletters can also stress the practical help available to companies through student projects.

* Universities should endeavour to attract quality academic staff members, and advertise their achievements, qualifications and service to the community. This could be done through the use of press releases which would reach students, parents and employers. Using testimonials from

employers who would attest to the quality of the graduates, could build up the academic reputation of an educational institution.

7.5.1.2 The importance - performance grid shown in Exhibit 7.1 shows that the performance of all categories is not at the desired level. The ideal position in the grid is the right hand side of the "**keep up the good work**" quadrant, but categories A-F are close to the fringe (left hand side) of this quadrant and category G is in the **"concentrate here"** quadrant. It is suggested that the performance of all factors needs to be improved and monitored regularly, to make sure students are satisfied with their overall educational experience.

7.5.1.3 Customer feedback is an established concept of strategic planning (Lovelock, 1991). It is therefore recommended that the survey instrument developed in this study, be used to monitor the performance of educational institutions regularly. Marketing controls are necessary if the institution is to remain as an attractive proposition for potential students. This instrument would help in allowing institutions to keep abreast of their performance, and of emerging trends and changes in the market. Also it is important to assess the situation at regular intervals since

isolated uses could give "snapshots" only and not accurately depict trends.

7.5.1.4 It is suggested that the determinants of service quality for education identified in this research, be used as the basis for the development of marketing plans for educational institutions. This research has demonstrated that the appropriate use of marketing planning could lead to service quality.

7.5.2 Strategies by Gender

This research identified a number of areas upon which educational institutions could focus in order to strengthen their competitive position, thus being more attractive to students of both genders.

7.5.2.1 Females

For females the most important factors are physical aspects, location and word-of-mouth. Educational institutions should focus on these areas when trying to recruit female students. The following highlights some elements that should be taken into consideration when developing appropriate promotional activities.

Physical Aspects : In their promotional efforts institutions should highlight the different facilities available to students (ie lecture theatres, computer labs, libraries). The attractiveness of the campus, in terms of layout and safety of movement should be emphasized. Also the availability of recreational facilities should be promoted (See section Chapter 6, section 6.3).

In the case of accommodation, issues such as safety, value for money and closeness to other campus facilities should be highlighted in the promotional strategy. Also emphasis should be placed on promoting accommodation facilities as a "home away from home" (See Chapter 6, section 6.3).

Location: The promotional activities should emphasize the quality of life the location provided. Issues such as safety (low crime rate, availability of campus security), closeness to recreation centres (cafés, theatres, shopping malls), outdoor pursuit areas (skiing, hiking) and the quality of public transport should be addressed. Student clubs could highlight their location activities and planned outings in their promotional brochures (See Chapter 6, section 6.3).

Word-of Mouth: This element is more important for female students than for their male counterparts. Institutions should use opinion leaders in their promotional strategies.

For example, during career evenings, current university students as well as parents of university students should be asked to speak on behalf of the institution. This is because these people could be able to relate better to the audience (potential students and their parents) and could be considered opinion leaders. If universities can create a positive image in the mind of high school students through their marketing activities the better off they will be. It could also be assumed that excellent employment opportunities attested to by recent graduates would significantly stimulate word-of-mouth (See Chapter 6, section 6.3).

Flexibility to move within school of study: Promotional activities should stress that just because students may choose a major, for example, economics, it does not mean that they cannot take a marketing paper. This could be further emphasized by providing printed material illustrating a programme of study putting special attention to programme flexibility (See Chapter 6, section 6.3).

7.5.2.2 Males

In the case of males, promotional emphasis should be placed on the following areas:

Flexible degree: Emphasize that students are able to take courses from other schools of study, as well as their own school. Provide examples, using pamphlets, of what a programme of study could be. The advantage of the use of pamphlets is that potential students can take them home, review them, compare with other offerings, and discuss them with those that would influence their choice of service provider. It could also focus on the possibility of students to create their own degree with the proper involvement of academic staff members. The "interdisciplinary studies" degree could become attractive to students who are not sure of their plans when they enter a university; or students who want something which is not available in a standard degree programme (See Chapter 6, section 6.3).

Entry requirements: Information provided should emphasize flexible entry requirements. Promote "each case will be evaluated individually". This philosophy will demonstrate flexibility. Also, emphasis should be placed on the fact that entry requirements for diploma courses are different from those for degree programmes. This will allow universities to

attract students who normally would not qualify for entry into a degree program (See Chapter 6, section 6.3).

Information on career opportunities: This element can be addressed before and after students make a choice of service provider (university). Before they make a choice, information on career opportunities should be sent to guidance counsellors and heads of commerce for them to pass on to potential students. This information should also be stressed in career evenings, education fairs, open days and promotional materials sent to potential students (See Chapter 6, section 6.3). After students have made a choice of service provider, the suggestions provided in section 7.5.1.1 should be followed.

Practical Component of degree: Universities must make an effort to incorporate a practical component in their business degree. This component must be promoted to all students but especially to males which seem to be more critical of this item, than their female counterparts. Practical experience will also allow for better career opportunities and academic reputation as students will become more employable. This practical component allows employers to see the graduates "in action" before hiring them (See Chapter 6, section 6.3).

The practical component could take the form of "internships" with industry, a Report of Investigation project, or a scheme

whereby marketing students may act as consultants for local small businesses. These projects can then possibly be put into a portfolio of a student's projects, which could serve as an effective promotional tool to differentiate the student, and enhance his or her attractiveness to a potential employer.

7.5.3 Strategies by Major Area of Study

This study has identified attributes that must be stressed when promoting a business degree to students that want to major in management, marketing, or information systems. All these elements and their role in promotional strategies have been discussed in detail in sections 7.5.1.1 and 7.5.2. For those wanting to major in either accounting and finance or economics no distinctive attributes were identified due to the nature of responses to this study, and the lack of clear distinctions for these disciplines.

7.5.3.1 Management

In promotions to students that showed an interest in pursuing a management major, the research indicated that educational institutions should emphasize the following in their promotional efforts: (see sections 7.5.1.1 and 7.5.2)

* Accommodation facilities and their cost

* Academic facilities

* Sports and recreation facilities

* Career opportunities

* Number of options for students to take within their programme of study.

7.5.3.2 Information Systems

For students majoring in this area, the research has shown that the emphasis should be on the following: (see sections 7.5.1.1 and 7.5.2)

* Academic facilities

* Reputable business degree

* Number of options available

* Word-of-mouth

7.5.3.3 Marketing

In the case of marketing majors, the research has shown that the emphasis for the promotional strategies should be placed on: (see sections 7.5.1.1 and 7.5.2)

* Reputable business degree

* Number of options available

* Practical component

* Cost of education
* Cost of accommodation
* Sports and recreational facilities

Based on the above it could be argued that each department within the business school could, therefore, develop its own promotional brochures which stress the variables that its students are most attracted to.

7.5.4 Strategies by Age Group

<u>20 & under and 21-25 yrs</u>

Cost of accommodation needs to be stressed in the promotional efforts directed to these age groups (See Chapter 6, section 6.3). Universities should endeavour to promote accommodation options for different budgets. Promotional material sent to these age groups should provide examples of accommodation and estimated prices. For example:

Private Board $xx per week
Flats (walking distance from campus) $xx per week
Accommodation on campus $xx per week
Accommodation for married couples $xx per week
5 day meal plan $xx per week

26-30 yrs and 31-35 yrs

For these age groups the practical component of the degree is the attribute that needs to be emphasized in the promotional strategy. (This component was discussed in detail in section 7.5.2.2).

36 yrs - above

The practical component of the degree is an element that also needs to be emphasized when developing promotional strategies to this age group (For details see section 7.5.2.2).

Cost of education is another element that is considered important by this age group (See Chapter 6, section 6.3). Promotional information given to this age group should emphasize any financial aid available.

(For a summary of the elements that educational institutions need to include in their promotional strategies, see Table 7.4).

TABLE 7.4 CHECKLIST OF ELEMENTS FOR PROMOTIONAL STRATEGIES

ALL STUDENTS

ACADEMIC REPUTATION ____

CAREER OPPORTUNITIES____

FEMALES

PHYSICAL ASPECTS ____

LOCATION ____

WORD-OF-MOUTH ____

FLEXIBILITY(WITHIN

SCHOOL OF STUDY) ____

MALES

FLEXIBLE DEGREE ____

ENTRY REQUIREMENTS ____

INFORMATION ON

CAREER OPPORTUNITIES ____

PRACTICAL COMPONENT ____

MANAGEMENT MAJORS

PHYSICAL ASPECTS ____

OPTIONS AVAILABLE ____

INFORMATION SYSTEMS MAJORS

ACADEMIC FACILITIES _____

REPUTABLE BUSINESS

DEGREE _____

NUMBER OF OPTIONS _____

WORD-OF-MOUTH _____

MARKETING MAJORS

REPUTABLE BUSINESS

DEGREE _____

NUMBER OF OPTIONS _____

PRACTICAL COMPONENT _____

SPORTS & REC FACILITIES _____

COST _____

20YRS-BELOW & 21-25YRS

COST OF ACCOMMODATION _____

26-30YRS & 31-35 YRS

PRACTICAL COMPONENT _____

36YRS & ABOVE

COST OF EDUCATION _____

PRACTICAL COMPONENT _____

7.6 Suggestions for Further Research

* Test the determinants of the service quality model developed in this study in other areas besides business. It will be helpful to determine whether this model can be applied to other areas of study. The choice criteria identified could be a useful guideline when developing marketing strategies in other major areas of study as well as for the entire educational facility.

* Another area for further research is the application of this model to students in other countries. This will provide insights relative to the impact of culture on students' decision making process. By doing a cross-cultural comparison it could be determined whether there are similarities in the choice criteria. Also, with economic pressures on business schools in times of competition, the existence of foreign students can increase revenue.

* Further research needs to be done to determine the best possible medium for promotional purposes. This is important because it would allow educational institutions to streamline its strategies through the most effective avenue. This knowledge will also limit the waste of promotional budgets. It may be that a single avenue, or a particular combination of promotional tools may have greater chances of success.

* The satisfaction of internal customers is essential for achieving the satisfaction of external ones. This is why measuring the satisfaction of internal customers in educational institutions is considered an area that requires further research.

* Determine the parameters of the students' "zone of tolerance". This is important because administrators need to know at what point students cease to be satisfied with the core service they are receiving. Due to resource restrictions, in some instances it is not possible for institutions to provide everything that students want. Knowledge of the zone of tolerance allows institutions to allocate resources accordingly. Previous research (Ford, Joseph and Joseph, 1993) has indicated that students may actually be facing decreasing levels of satisfaction with their service provider (university) over time. Why and how this is happening could be helpful to overcome this potential problem.

* Ascertain which are the determinants of service quality in education from other customer groups (ie, employers, government, general public etc). This thesis has concentrated on the student customer only; but it is recognized that education has other customer groups which must be satisfied. By identifying the determinants of service quality from other customer groups it would be possible to ascertain whether

there is any common ground, and whether it is possible to satisfy all customers at the same time.

This study has provided a useful starting point for exploring the issue of service quality in education in New Zealand. The framework used in this research should facilitate the further development of this area of study.

APPENDIX A

SERVICE QUALITY MODELS

THE GRONROOS MODEL

The first service quality model was developed by Christian Gronroos in 1982. He asserts that the statement "Service firms must improve the quality of their service to be competitive," has no meaning until two issues are addressed:

1. How the service is perceived by the customer; and
2. In what way service quality is influenced.

Gronroos (1984) maintains that due to the high consumer involvement in the consumption of a service, the perceived quality of a service is the result of the evaluation which compares the customer's expectations with his perception of the service received. Hence, service quality depends on the customer's perceptions and expectations of the service.

Expected service is affected by traditional marketing activities such as advertising and pricing. External factors also influence expectations, these factors could be past experience with the service and word-of-mouth communication.

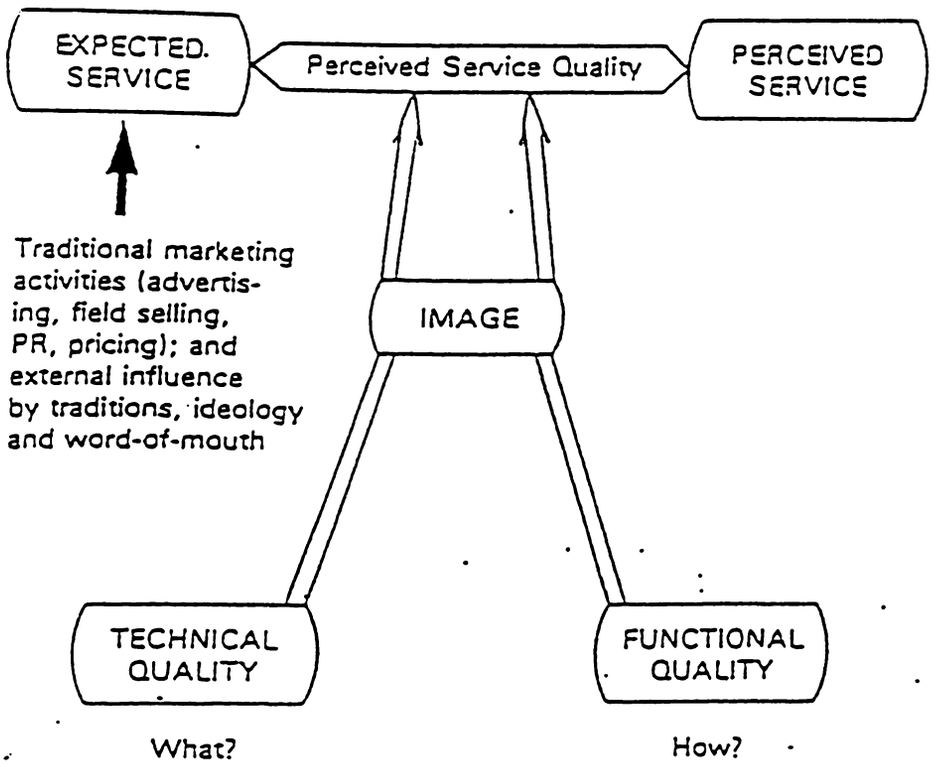
As it can be seen in Gronroos' service quality model (See Fig A.1), there are two elements that have an impact on perceived service. These elements are technical quality and

functional quality. Technical quality deals with what the consumer gets as a result of his association with the service provider. This type of quality can be judged by the customer in a very objective way, as any technical element of a product. Functional quality, on the other hand, is assessed in a more subjective way as it deals with the way in which the service was delivered. Gronroos (1984), argues that technical quality is a requirement for customer satisfaction but it is not enough. If the functional quality is not considered suitable, the consumer will still be dissatisfied regardless of the degree of satisfaction given by the technical quality. Another dimension that influences quality is corporate image. The image of a service provider will influence the customer's expectations of that firm. According to Gronroos (1984), corporate image is the result of how customers perceive a service and as such this image is built upon the technical and functional quality of its services.

Gronroos (1984), warns that traditional marketing activities, such as advertising, should not be used to promote an image that does not match its functional and technical qualities. If such a situation occurs, the only thing that will be achieved is disappointed customers. Marketing activities that promise services that cannot be provided, only increase customers expectations; and dissatisfaction affects the firm's image.

FIGURE A1

Figure 1. The Service Quality Model



Source: Gronroos, Christian (1984), " A Service Quality Model and its Marketing Implications", European Journal of Marketing, Vol 18, No 4, pp 36-44.

THE PARASURAMAN et al MODEL

One of the most widely used models to measure perceived service quality was developed by Parasuraman A., Valarie Zeithaml and Leonard Berry in 1985. This conceptual model of service quality, indicated that customers' perception of service quality was influenced by a series of gaps that hinder the delivery of high service quality.

This model was developed from an extensive investigation of four service industries: retail banking, credit card services, securities brokerage, and product repair and maintenance services. Interviews with executives and consumers were carried out to develop the model. The consumers interviewed for this study were screened to ensure that only current and recent users of the service were included. Information was obtained from consumers regarding satisfaction and dissatisfaction with the service received, descriptions of the consumer's perception of an ideal service, the importance and meaning of service quality, performance expectation, and the influence of price in service quality. The executives interviewed came from marketing, operations, customer relations and senior management. Areas covered in the executive interview included these four:

* What did the executives perceive to be service-quality from the customers' perspective?

* Key criteria they believe their customers used in judging the quality of services provided by their companies.

* Problems faced in consistently delivering high quality service.

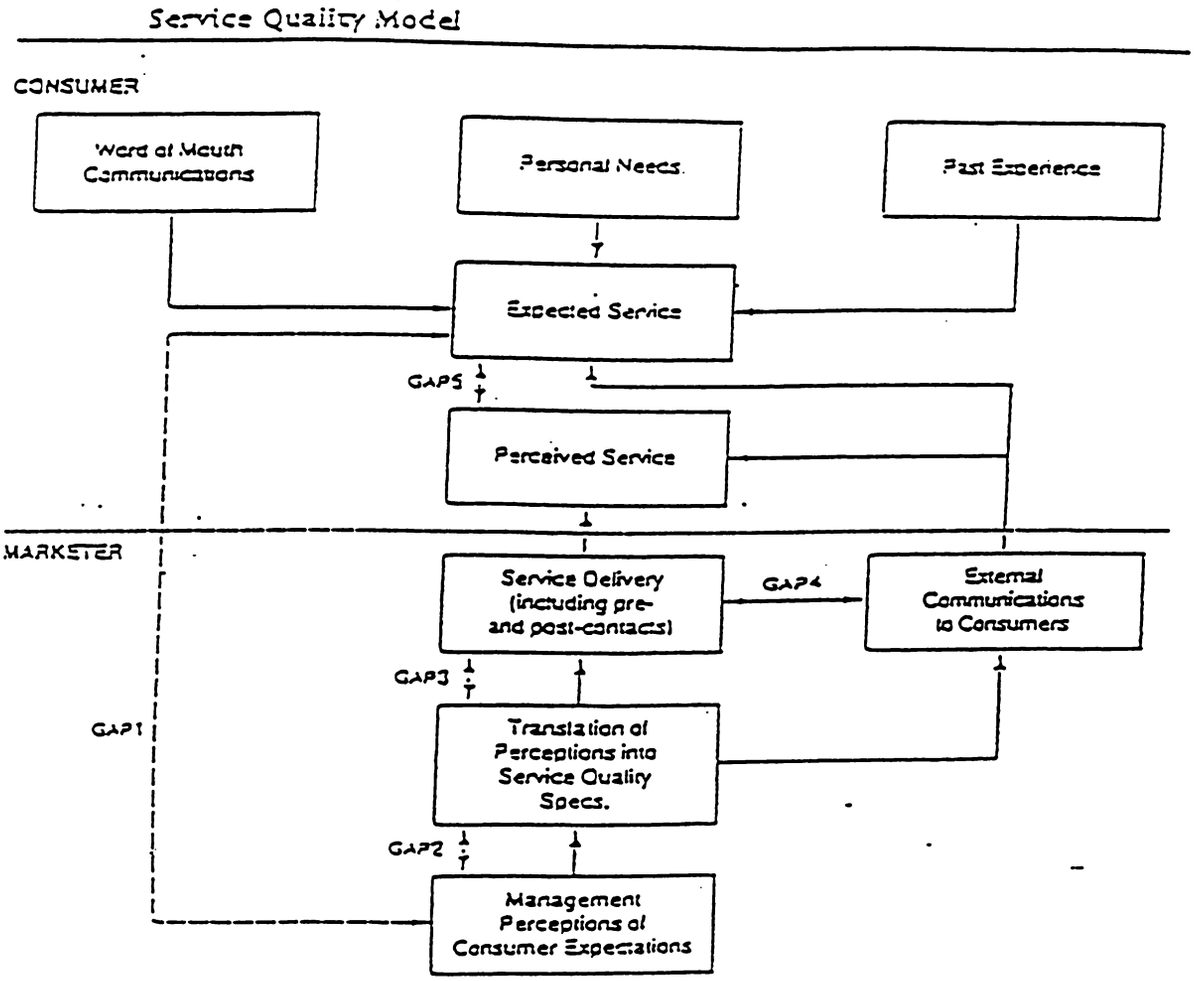
* Steps taken to control or improve the service quality.

The information obtained showed five key discrepancies or gaps pertaining to executive perception of service quality and the task associated with service delivery to customers. The gaps are as follows: (See Fig A.2)

*Consumer Expectations - Management Perception Gap (Gap 1): There are key discrepancies or gaps between executives' perceptions of service quality and what consumers expect. This gap between consumer expectations and management perception of those expectations will have a major impact on the consumer's perception of service quality.

*Management Perception - Service Quality Specification Gap (Gap 2): The gap that exists between management perceptions of consumer expectations and the firm's service quality specifications will affect service quality from the consumer's viewpoint.

FIGURE A2



Source: Parasuraman, A., Valarie Zeithaml and Leoanard Berry (1985), " A Conceptual Model of Service Quality and Its Implications for Future Research", Journal of Marketing, Vol 49, pp 41-50.

*Service Quality Specifications - Service Delivery Gap (Gap 3): The gap between service quality specifications and actual service delivery will affect service quality from the consumer's standpoint.

*Service Delivery - External Communication Gap (Gap 4): The gap between actual service delivery and external communication about the service will affect service quality from a consumer's standpoint.

*Expected Service - Perceived Service Gap (Gap 5): The quality that a consumer perceives in a service is a function of the magnitude and direction of the gap between expected service and perceived service.

Following on from this Parasuraman et al (1988), developed a procedure for quantifying customer perceptions of service quality called "SERVQUAL", an instrument used to measure service quality along five dimensions, namely:

* Tangibles: appearance of physical facilities, equipment, personnel and written material.
* Reliability: ability to deliver the promised service dependably and accurately.
* Responsiveness: willingness to help the customer and also provide prompt service.

* Assurance: Informed employees and their ability to gain trust and confidence.
* Empathy: Customizing attention provided to customers.

SERVQUAL is a brief multiple-item scale with good reliability and validity that firms can use to assess the quality of the service they provide consumers. The SERVQUAL questionnaire consists of an expectation and a perception section with 22 statements each, and also a section to determine customers' assessment of the relative importance of the five dimensions mentioned earlier.

A shortcoming of this instrument is its applicability to long term services, such as education. Carman (1990) states, that the expectations section of SERVQUAL must be administered before the customer experiences the service, and the perceptions section after receiving the services. This poses a major problem for education. For this exercise to be valid, it must be assumed that expectations do not change over time, but according to Carman (1990) expectations change with familiarity with the service.

A last concern in relation to SERVQUAL is the applicability of the five dimensions identified as being the determinants of service quality. Even though Parasuraman et al.(1988) stated that SERVQUAL would need to be customized for each industry,

Cronin & Taylor (1992) and Carman (1990) assert that the degree of customization necessary is higher than Parasuraman et al.(1988) lead us to believe. Carman (1990) empirically tested SERVQUAL in four different industries and he found that the dimensions where not general enough to cater for the needs of all industries.

In conclusion, the researcher believes that SERVQUAL is a good starting point when dealing with service quality, but due to the above mentioned shortcomings is deemed not appropriate for measuring service quality in education.

APPENDIX B

STUDIES ON EXPECTATIONS IN SERVICE QUALITY

PARASURAMAN et al (1991)

PURPOSE

The purpose of this study was to answer the following questions:

* What is the nature of customers' expectations? Are there different types of expectations?
* What factors influence the formation of these expectations?
* How stable are the expectations? Do they change over time? Do they vary across situations and across customers?
* How can companies manage expectations to enhance customers' perceptions of service?
* What can companies do to exceed customers' expectations?

METHODOLOGY

The study consisted of 16 focus group interviews conceived to provide insights into the nature and structure of customers' expectations. The participants were selected to reflect a wide variety of services to reveal industry and customer specific differences, as well as to make sure the findings were applicable to an ample cross section of the service businesses.

To achieve the above, the researchers systematically varied their choice of industries according to three criteria. First, eight of the sixteen focus groups were made up of customers of "pure" services (those not associated with tangible products), while the other eight came from services associated with tangible products. Second, within each of the two service categories, four groups were conducted with business customers and four with end-consumers. Within each service type and customer type combination, half the focus groups were conducted with "experienced" customers and the other half with "inexperienced" customers. This differentiation was based on the degree of service utilization and amount of service contacts. To provide geographic variety, the focus groups were conducted in Atlanta, Chicago, Dallas, Rochester and Seattle.

Eight major companies participated in this study and provided the researchers with customer lists from which the participants were chosen. There was an average of nine participants per focus group and each interview took between one and a half and two hours. In the interviews the participants addressed their expectations pertaining to service in general rather than the specific service of the sponsoring companies.

FINDINGS

1. Customers expect the service fundamentals to be delivered at a level equal to the price they paid for the service. Customers "expect fundamentals, not fanciness; performance, not empty promises".

2. Expectations can be categorized into the five dimensions identified by Parasuraman et al (1988): reliability, tangibles, empathy, assurance and responsiveness. The focus groups pointed towards reliability as the dimension to be used to meet customers expectations and towards the process dimensions (assurance, responsiveness, tangibles and empathy) as the most important ones in exceeding customer expectations.

3. There are two different types of expectations: desired and adequate. Desired is the service the customer hopes to receive, while adequate is the level of service the customer finds acceptable. A zone of tolerance separates both types of expectations and this zone varies from customer to customer and from situation to situation. According to the findings of this study, the zone of tolerance for service reliability (outcome dimension) is smaller than for the process dimensions (tangibles, assurance, empathy and responsiveness) because reliability is seen as the service "core". As a consequence,

the desire and adequate level of expectations are higher for the outcome dimension.

4. Customers want to develop a personalized relationship with the same company representative. These relationships are essential to exceed customer expectations. These relationships are process-intensive because they are based on fairness, understanding of the customer, and personalized communications with the customer.

Parasuraman et al (1991) started from the premise that to deliver superior service, one must understand customer expectations, and that when judging a firm's service, customers compare perceptions with expectations .

CONCLUSIONS

Because customer expectations exist at two levels, companies must measure two service quality gaps: between perceived service and adequate service, and between perceived service and desired service.

Parasuraman et al (1991) conclude that firms can operate at a competitive advantage when perceptions fall in the zone of tolerance and at a customer franchise level (unyielding customer loyalty) when perceptions exceed desired level.

More recently, Parasuraman et al (1993) concentrated on determining the nature of service expectations and the key determinants. They utilized the data collected in their 1991 research and developed a conceptual model of customer expectations of service (See figure B.1).

The conceptual model is separated into four different parts:

THE EXPECTED SERVICE COMPONENT

This component deals with the two levels of expectations: adequate, and desired. The zone of tolerance is what separates both types of expectations and it varies depending on the customer and the situation.

ANTECEDENTS OF DESIRED SERVICE

Desired service is affected by six factors:

1. Enduring service intensifiers
2. Personal needs
3. Explicit service promises
4. Implicit service promises
5. Word-of-mouth
6. Past experience

ENDURING SERVICE INTENSIFIERS

These are what Parasuraman et al (1993, p 7) call "stable factors that lead the customer to a heightened sensitivity to service", ie derived expectations. These intensifiers increase the level of desired service.

PERSONAL NEEDS

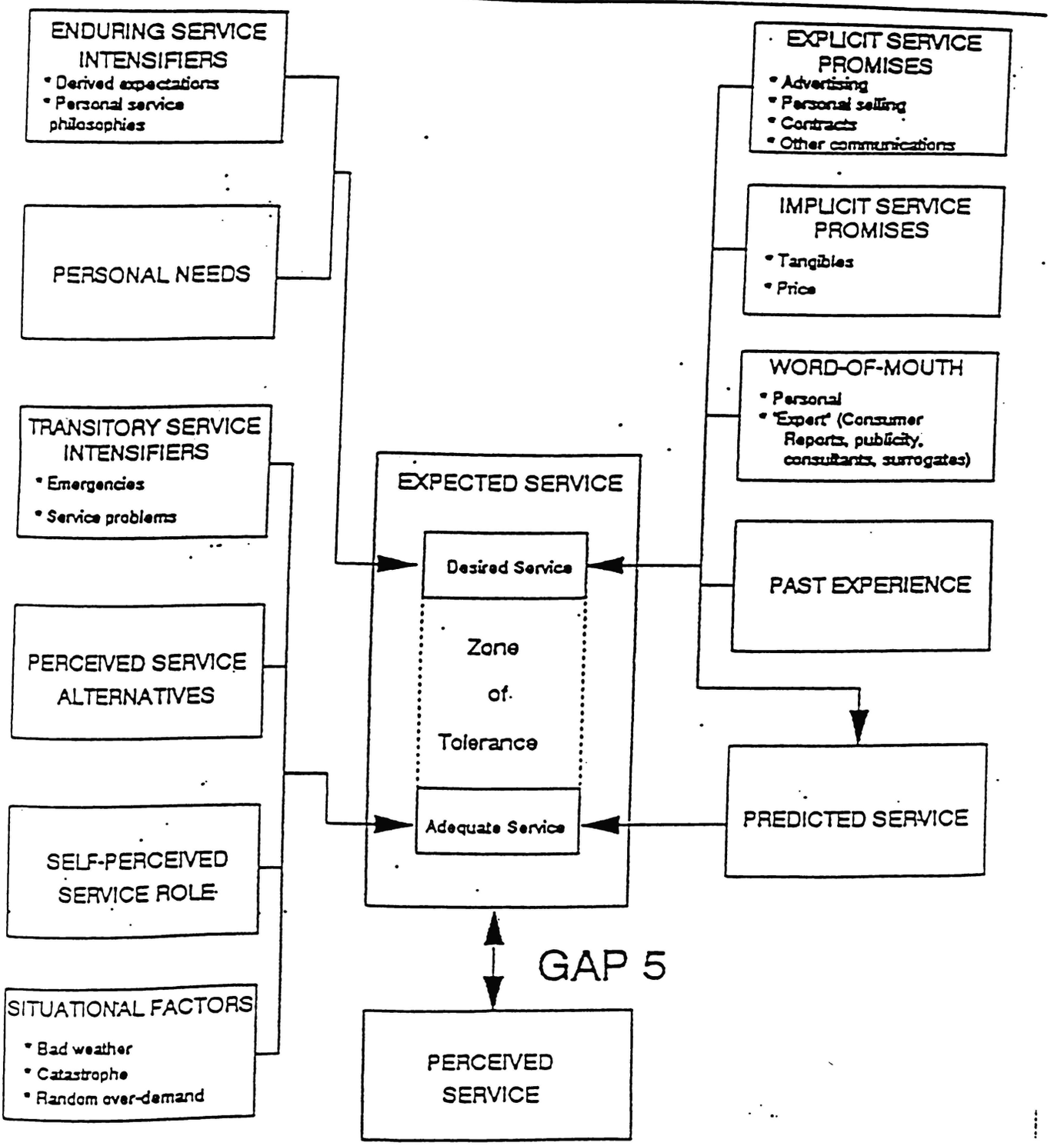
These are "states or conditions essential to the physical or psychological well-being of the customer" (Parasuraman et al 1993, p 7). Parasuraman et al (1993) submit that a positive relationship exists between personal needs and desired service.

EXPLICIT SERVICE PROMISES

These are the personal and nonpersonal promises made to the customer by the organization. Advertising and personal selling are examples of vehicles used to deliver these explicit promises. Parasuraman et al (1993) suggest that the higher the level of explicit service promises, the higher the level of desired service.

FIGURE B1

FIGURE 1
Nature and Determinants of Customer Expectations of Service



IMPLICIT SERVICE PROMISES

These are service related prompts, such as price and the tangibles related to the service, that give an indication about what the service should and will be like. Parasuraman et el (1993) propose that implicit service promises elevate the level of desired service.

WORD OF MOUTH COMMUNICATION

These are personal and sometimes non-personal assertions made by other parties than the organization that relate what to expect from the service. Parasuraman et al (1993) hypothesize that positive word of mouth elevates the level of desired service.

PAST EXPERIENCE

The customer's previous experience with the service, the service's competition, or any other type of service that has an influence on customers' expectations. Parasuraman et al (1993) suggest that there is a positive relationship between the levels of past experience and those of desired service.

ANTECEDENTS OF ADEQUATE SERVICE

Adequate service is influenced by five elements:

1. Transitory service intensifiers: These are momentary factors lead the customer to a increased sensitivity to service. An example of such an intensifier is a personal

emergency in which the customer feel the customer needs the service immediately, and senses that the firm ought to deliver. Based on this, Parasuraman et al (1993) suggest that when transitory service intensifiers are present, the level of adequate service will increase, and the zone of tolerance will become smaller.

2. Perceived service alternatives

These are the perceptions customers have of obtaining better service from other companies. If customers perceive that there are several alternatives for service provision, including providing it themselves, their levels of adequate service may be higher than those of customers that believe there are no alternatives. Parasuraman et al (1993) suggest that the perception of service alternatives, raises the level of adequate service and restricts the zone of tolerance.

3. Self-perceived service role

This is the customers' perception of the extent to which they influence the level of service they receive. It is proposed that the higher the level of a customer's self-perceived service role, the higher the level of adequate service.

4. Situational factors

These factors are defined as contingencies that the customers perceive as being beyond the control of the service provider.

Parasuraman et al (1993) suggest that these factors temporarily decrease the level of adequate service, extending the zone of tolerance.

Parasuraman et al (1993) postulated another variable that influences adequate service, predicted service which is defined as the level of service customers believe they are likely to get. They suggested that the higher the level of predicted service, the higher the level of adequate service and the more confined the zone of tolerance.

ANTECEDENTS OF BOTH DESIRED AND PREDICTED SERVICE

Predicted service is influenced by explicit service promises, implicit service promises, word-of-mouth communication and past experience. These factors were discussed previously in the antecedents of desired service section and have the same effect on predicted service as on desired service.

All these conclusions have been reached through exploratory research only, so there is a need to test them empirically to ascertain their validity.

THE BOULDING et al MODEL

Boulding et al (1993) developed a behavioral process model of perceived service quality. Perceptions of the dimensions of

service quality are believed to be a function of the customer's past expectations of what will and should happen during a service encounter, as well as the customer's most recent service encounter (See Figure B.2).

"Will expectations" are defined as what the customers believe will happen, and it is hypothesized that these expectations are influenced by expectations held prior to the service encounter, and by information obtained during the most recent encounter. "Should expectations" are what ought to happen based on what the consumer views as reasonable or feasible based on experience with service and /or competition. Boulding et al (1993) believe that these expectations are influenced by prior "should expectations"; information the customer receives between service encounters and the service encounter itself.

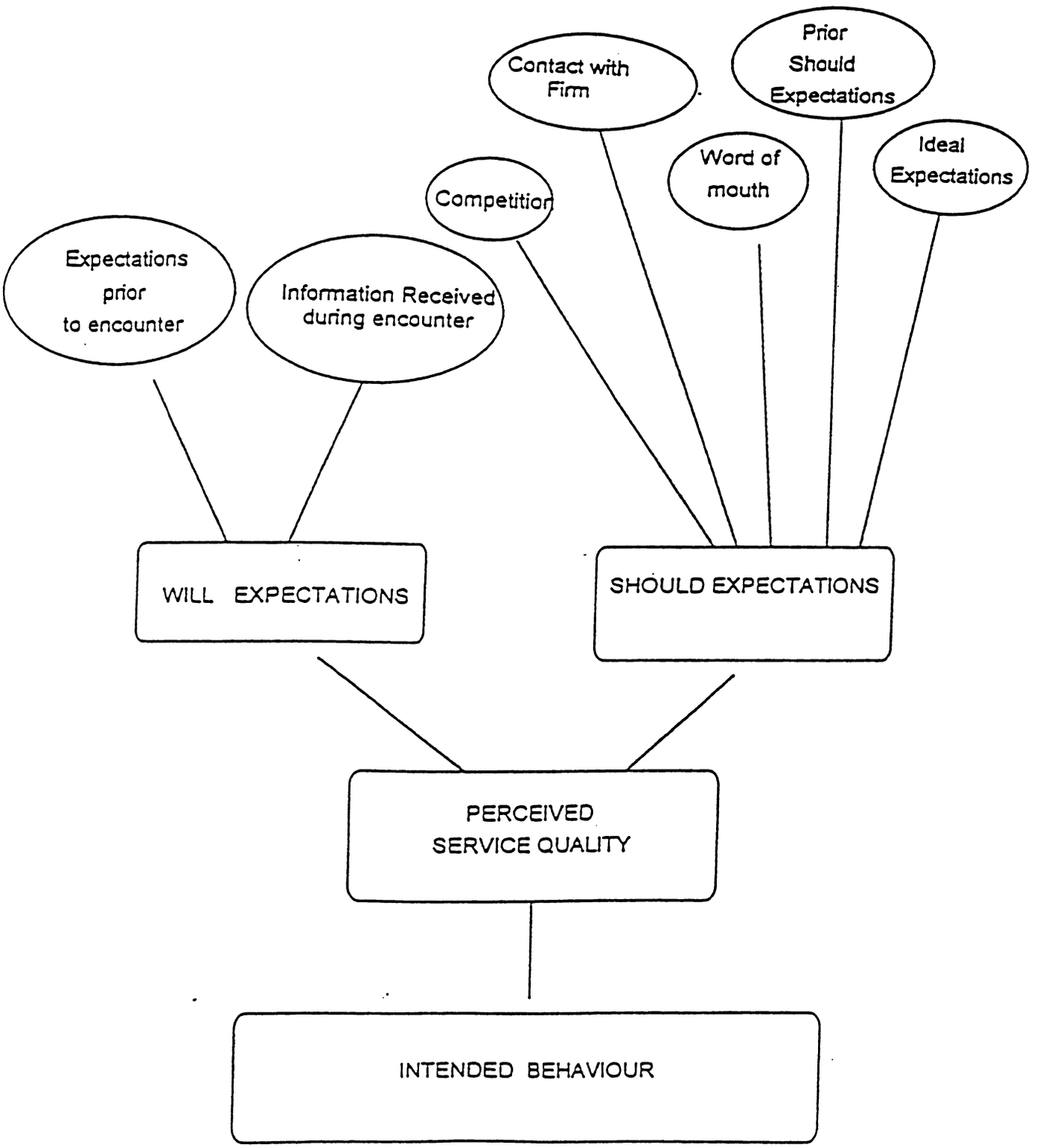
The empirical testing of this model was done with two tests, a longitudinal laboratory experiment and a field study. Both studies attested that the "will" and "should" expectations are different propositions. They confirmed that "will expectations" positively influence service quality while "should expectations" have a negative effect on it.

The major drawback of this study is the difficulty encountered during the field study to measure expectations. Boulding et al (1993, p 22) state : "Specifically, because we measure

expectations variables contemporaneously with perceptions variables, we do not have measures of prior expectations. Finally, we do not measure actual delivered service because any measure obtained from the customer immediately becomes a perception of the service...This is a typical problem in any service setting".

It can be seen that the above clearly states the problems confronted when using expectations to measure perceived service quality.

FIGURE B2



TED FROM: Boulding, William, Ajay Kalka, Richard Staelin and Valarie Zeitham, [1993] "A Dynamic Process Model and Service Quality : From Expectations to Beavoiural Inentions," Journal of Marketing Research, 30 (February), pp 7 - 27.

APPENDIX C

PRELIMINARY RESULTS: FOCUS GROUP

* Prestige of degree
* Employability
* Reputation in business community
* Resources available (human, facilities)
* Location (within country)
* Length of degree
* Cost of degree
* Accommodation facilities
* Specialist programme
* Physical appearance
* Practical component of degree
* Structure and content of degree
* Location of university (within city)
* Location of hostels on campus
* Career recruitment
* Sports and recreational facilities
* Computers facilities
* Word-of-mouth
* Course offerings
* Family influences
* Proximity to recreational facilities

APPENDIX D

SERVICE QUALITY IN EDUCATION

UNIVERSITY STUDENTS QUESTIONNAIRE

SECTION 1

The purpose of this section is to determine the characteristics you feel are necessary for an institution to be considered an excellent university. Please rate the following 20 statements on a scale of 1 to 5

[with **1** being **STRONGLY DISAGREE** and **5** being **STRONGLY AGREE**]

		1 STRONGLY DISAGREE	2 DISAGREE	3	4 AGREE	5 STRONGLY AGREE
PHYSICAL ASPECTS						
1	An excellent university provides excellent accommodation facilities	1	2	3	4	5
2	An excellent university provides students with excellent academic facilities	1	2	3	4	5
3	The campus layout and physical appearance of an excellent university are appealing	1	2	3	4	5
4	An excellent university provides students with excellent sports and recreational facilities	1	2	3	4	5
COST/TIME						
5	The length of time required to get a business degree at an excellent university is acceptable	1	2	3	4	5
6	An excellent university provides students with accommodation at a reasonable cost	1	2	3	4	5
7	The cost of education at an excellent university is reasonable	1	2	3	4	5
ACADEMIC REPUTATION						
8	An excellent university provides a nationally and internationally reputable business degree	1	2	3	4	5
9	An excellent university provides students with excellent instructors	1	2	3	4	5

		1 STRONGLY DISAGREE	2 DISAGREE	3	4 AGREE	5 STRONGLY AGREE
PROGRAMME ISSUES						
10	An excellent university provides specialist programmes to cater for different needs	1	2	3	4	5
11	The structure and content of the business degree offered by an excellent university provides a great deal of flexibility	1	2	3	4	5
12	The practical component of the business degree offered by an excellent university is appropriate	1	2	3	4	5
13	An excellent university provides students with a number of options in the types of courses they offer	1	2	3	4	5
14	An excellent university provides students with greater flexibility to move within their school of study	1	2	3	4	5
15	There is a great degree of flexibility in the entry requirements for an excellent university	1	2	3	4	5
CAREER OPPORTUNITIES						
16	Graduates from an excellent university are easily employable	1	2	3	4	5
17	An excellent university provides students with information about career opportunities	1	2	3	4	5
LOCATION						
18	An excellent university is in an ideal location	1	2	3	4	5
OTHER						
19	Students rely on word of mouth communication to select an excellent university	1	2	3	4	5
20	Students rely on family and peer influences to select an excellent university	1	2	3	4	5

SECTION 2

Given the seven groups of attributes mentioned in the previous section, please rank them in order of importance to you personally when looking at a university on a scale of 1 to 7.

[with **1** being **MOST IMPORTANT** and **7** being **LEAST IMPORTANT**]

_____ Cost/Time

_____ Physical Aspects

_____ Programme Issues

_____ Career Opportunities

_____ Academic Reputation

_____ Location

_____ Other

SECTION 3

This section will deal specifically with the university you are presently attending. Please indicate your reaction to the following questions on a scale of 1 to 5.

[with **1** being **STRONGLY DISAGREE** and **5** being **STRONGLY AGREE**]

		1 STRONGLY DISAGREE	2 DISAGREE	3	4 AGREE	5 STRONGLY AGREE
CAREER OPPORTUNITIES						
1	Business graduates from my university are easily employable	1	2	3	4	5
2	My university provides information regarding career opportunities	1	2	3	4	5
COST /TIME						
3	The length of time required to get a business degree at my university is acceptable	1	2	3	4	5
4	My university provides me with accommodation at a reasonable cost	1	2	3	4	5
5	The cost of education at my university is reasonable	1	2	3	4	5
PHYSICAL ASPECTS						
6	My university provides excellent accommodation facilities	1	2	3	4	5
7	My university provides me with excellent academic facilities	1	2	3	4	5
8	The campus layout and physical appearance of my university is appealing	1	2	3	4	5
9	My university provides excellent sports and recreational facilities	1	2	3	4	5

		1 STRONGLY DISAGREE	2 DISAGREE	3	4 AGREE	5 STRONGLY AGREE
PROGRAMME ISSUES						
10	My university provides a number of options in the type of courses they offer	1	2	3	4	5
11	My university provides specialist programmes to cater for different needs	1	2	3	4	5
12	The structure and content of the business degree offered by my university provides a great deal of flexibility	1	2	3	4	5
13	The practical component of the business degree provided by my university is appropriate	1	2	3	4	5
14	My university provides me with great flexibility to move within my school of study	1	2	3	4	5
15	My university provides a great degree of flexibility in entry requirements	1	2	3	4	5
LOCATION						
16	My university is in an ideal location	1	2	3	4	5
ACADEMIC REPUTATION						
17	My university provides a nationally and internationally recognised business degree	1	2	3	4	5
18	My university provides me with excellent instructors	1	2	3	4	5
OTHER						
19	I relied on family and peer influences when selecting my university	1	2	3	4	5
20	I relied on word of mouth communication when selecting my university	1	2	3	4	5

SECTION 4

The purpose of this section is to ascertain your level of satisfaction with the educational institution you are attending.

1 What is the best aspect of your university?

2 What is the worst aspect of your university?

3 If you had the chance to change any particular aspect of your university, what would it be?

4 On a scale of 1 to 5 [with **1** being **VERY DISSATISFIED** and **5** being **VERY SATISFIED**] rate your overall educational experience with your university to date.

VERY DISSATISFIED	**DISSATISFIED**	**NEUTRAL**	**SATISFIED**	**VERY SATISFIED**
1	**2**	**3**	**4**	**5**
[ ]	[ ]	[ ]	[ ]	[ ]

SECTION 5 - DEMOGRAPHICS

1 **AGE:** _____

2 **GENDER:** **Male** ☐ **Female** ☐

3 **ETHNIC IDENTITY:**

- Pakeha ☐
- Maori ☐
- Pacific Islander ☐
- Asian ☐

Other *[please specify]* _____

4 **MAJOR AREA OF STUDY:**

- Accounting/Finance ☐
- Management ☐
- Marketing ☐
- Economics ☐
- Information Systems ☐

Other *[please specify]* _____

5 **YEAR OF STUDY:** _____

6 **ADDITIONAL COMMENTS**

APPENDIX E

GLOSSARY

* **FACTOR ANALYSIS:** It permits the reduction of a set of variables to a smaller set of factors by identifying dimensions underlying the data.

* **EIGENVALUE:** During factor analysis, the total variance that is explained by each factor is listed in a column labelled Eigenvalue.

* **CRONBACH ALPHA:** A reliability measure that determines if an instrument provides consistent results over time

* **ZONE OF TOLERANCE:** The difference between the desired and the adequate level of service is called the zone of tolerance. It can vary from one situation to the other and also vary from one person to the other.

REFERENCES

Albrecht, Karl and Ron Zemke. (1985), Service America, Dow Jones- Irwin, Homewood, Illinois.

Allen, Davis and Duane Davis (1991), " Searching for Excellence in Marketing Education, the Relationship between Service Quality and three Other Variables", Journal of Marketing Education, Spring, pp 47-55.

Anderson, E., C. Fornell and D. Lehmann (1994), "Customer Satisfaction, Market Share and Profitability: Findings from Sweden," Journal of Marketing, 58 (July), pp 53-66.

Anderson, Eugene and Claes Fornell (1994), "A Customer Satisfaction Research Prospectus," in Service Quality: New Dimensions in Theory and Practice, Roland Rust and Richard Oliver, eds., Sage Publications: California.

Anderson, E and M. Sullivan (1993), "The antecedents and consequences of customer satisfaction for firms", Marketing Science, Vol 12, pp 125-143.

Anderson, E., C. Fornell and D. Lehmann (1992), Perceived quality, customer satisfaction, market share and profitability. Working paper, University of Michigan.

Anderson, R (1973), "Consumer Dissatisfaction: The Effects of Disconfirmed Expectancy of Perceived Product Performance," Journal of Marketing Research, 10 (February), pp 38-44.

Armistead, Colin (1990), " Service Operations Strategy: Framework for Matching the Service Operations Task and the Service Delivery System", International Journal of Service Industry Management, Vol 1, No 2, pp 6-16.

Astin, Alexander and Lewis Solmon (1981), "Are Reputational Ratings Needed to Measure Quality", Change, October, pp 14-19.

Babakus, Emin and Gregory Boller (1992), "An Empirical Assessment of the SERVQUAL Scale," Journal of Business Research, Vol 24, pp 253-268.

Babakus, Emin and Glenn Mangold (1992), "Adapting the SERVQUAL Scale to Hospital Services: An Empirical Investigation", Health Service Research, Vol 26, No 6, pp 767-780.

Baird, Leonard (1967), "The educational tools of college bound youth", American College Testing Program Research Report, Iowa.

Ball, C. (1985), "What the hell is quality", Fitness for Purpose, Guildford: SHRE.

Band, William (1990), "Performance Metrics keep Customer Satisfaction", Marketing News, May, 28, p12.

Barker, Alan (1993), "The New Zealand Qualifications Authority framework: practical issues in its implementation", paper presented at the 1993 Tertiary Education Conference: Successfully Managing Quality, Performance and Efficiency, Wellington.

Barnes, Nora. (1988), "Ready or Not.... The Use of Marketing Techniques by Private Elementary Schools, Journal of Professional Service Marketing, Vol 4, No 1, pp 119-130.

Barnes, Nora (1986), "The Consumer Decision Process for Professional Services Marketing: A New Perspective", Journal of Professional Services Marketing, Vol 2, Fall/Winter, pp 39-45.

Bateson, John (1992), Managing Service Marketing, Second Edition, Dryden Press, Chicago.

Bateson, John (1989), Managing Service Marketing, Dryden Press: Chicago.

Bayus, Barry (1985), "Word of Mouth: The Indirect Effects of Marketing Efforts", Journal of Advertising Research, Vol 25, pp. 31-39

Bearden, William and Jesse Teel (1983), "Selected Determinants of Consumer Satisfaction and Complaint Reports," Journal of Marketing Research, Vol 20 (February), pp 21-28.

Bell, D.R. and D.S.E. Shieff (199?), " Managing Service Quality for Improved Competitive Performance", New Zealand Journal of Business, Vol , pp 1-12.

Berry, Leonard. (1980), "Service Marketing is Different", Business Magazine, May-June, pp 24-29.

Berry, Leonard. (1981), "The Employee as Customer", Journal of Retail Banking, March.

Berry, Leonard and A. Parasuraman (1992), "Prescription for a Service Quality Revolution in America", Organizational Dynamics, Vol 20, No 4, Spring, pp 5-15.

Berry, Leonard, A. Parasuraman and Valarie Zeithaml (1988), " The Service-Quality Puzzle", Business Horizons, Sept/Oct, pp 35-44.

Berry, Leonard. (1987), "Big Ideas in Service Marketing", The Journal of Service Marketing, Vol 1, No 1, pp 5-9

Berry, Leonard., Valarie Zeithaml and A. Parasuraman. (1985), "Quality Counts in Services, Too", Business Horizons, Vol 28, pp 44-52.

Berry, Leonard and Bruce Allen. (1977), " Marketing's Crucial Role for Institutions of Higher Education", Atlanta Economic Review, July-August, pp 24-31.

Berry, Leonard and William George. (1975), " Marketing the University: Opportunity in an Era of Crisis", Atlanta Economic Review, July-August, pp 4-8.

Bitner, Mary Jo. (1990), " Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses", Journal of Marketing, Vol 54, April, pp 69-82.

Bojanic, David (1991), " Quality Measurement in Professional Services Firm", Journal of Professional Services Marketing, Vol 7, No 2, pp 27-36.

Bolton, Ruth and James Drew (1991), " A Multistage Model of Customers' Assessments of Service Quality and Value", Journal of Consumer Research, Vol 17, March, pp 375-84

Bolton, Ruth and James Drew (1991), " A Longitudinal Analysis of the Impact of Service Change on Customer Attitudes", Journal of Marketing, Vol 55, January, pp 1-9.

Bostingl, John (1992), "The Quality Revolution in Education," Educational Leadership, Vol 50, # 3 , pp. 4-9.

Boston, J (1991), The theoretical underpinnings of public service restructure in New Zealand. In J. Boston, J. Martin, J. Pallot and P. Walsh (Eds.) Reshaping the State: New Zealand's Bureaucratic Revolution.

Boulding, William, Ajay Kalra, Richard Staelin and Valarie Zeithaml (1993), " A Dynamic Process Model of Service Quality: From Expectation to Behavioral Intentions", Journal of Marketing Research, Vol 30, February, pp 7-27.

Bourke, P (1986), " Quality Measures in Universities", Commonwealth Tertiary Education Commission: Canberra.

Bowers,T and R. Pugh (1972), " A Comparison of factors underlying college choice by students and parents", American Educational Research Association Annual Meeting.

Brandt, Raddall and Kevin Reffett (1989), "Focusing on Customer Problems to Improve Service Quality", The Journal of Services Marketing, Vol 3, No 4, Fall, pp 5-14.

Brandt, Ron (1992), "On Deming and School Quality", Educational Leadership, Vol 50, # 3, pp. 28-31.

Brennan, M (1991), "Survey participation and Attitudes towards Surveys in New Zealand", New Zealand Journal of Business, 13, p. 72-95.

Brogowicz, Andrew., Linda Delene and David Lyth (1990), "A Synthesised Service Quality Model with Managerial Implications", International Journal of Service Industry, Vol 1, No 1, pp 27-45.

Brown, Daniel and David Gobeli (1993), "Improving the Quality of Business Education", Proceedings of the American Marketing Association Educators' Conference, Boston, August, pp 37-41.

Brown, Stephen and Teresa Swartz (1989), " A Dyadic Evaluation of the Professional Services Encounter", Journal of Marketing, Vol 53, April, pp 92-98.

Brown, Tom., Gilbert Churchill. Jr and Paul Peter (1992), " Improving the Measurement of Service Quality", A.C. Nielsen Working Paper, No 91-4, University of Wisconsin, Madison, W.I.

Bruner, Gordon and Richard Pomazal (1988), "Problem Recognition: The crucial first stage of the consumer decision process", The Journal of Services Marketing, Vol 2, No 3, pp 43-53.

Business Roundtable (1991), " An Assessment of American Education: The View of Employers, Higher Educators, the Public, Recent Students and Their Parents", National Council on Education Standards and Testing: Washington, D.C.

Carlzon, J. (1987), Moments of Truth, Cambridge, Mass: Ballinger.

Carman, James. (1990), " Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions", Journal of Retailing, Vol 66, No 1, Spring, pp 33-55.

Carmines, Edward and Richard Zeller (1979), Reliability and Validity Assessment, Sage Publications, California.

Cavaye, Angele and Mathew Joseph (1992), " The Employment of Business Graduates - A New Zealand Perspective", New Zealand Journal of Business, Vol 14, pp 61-73.

Chapman, David (1981), "A model of student college choice", Journal of Higher Education, Vol 52, pp 490-505.

Chapman, Randall (1984), "Toward a theory of college choice: A model of college search and choice behaviour," Alberta, Canada.

Chapman, Randall (1979), "Pricing policy and the college choice process", Research in Higher Education, Vol 10, No 37, pp 57.

Chisnall, Peter (1991), The Essence of Marketing Research, Prentice Hall, New York.

Church, John and David Gillingham (1985), " Situational Position and Student Choice Criteria", The Canadian Journal of Higher Education, Vol XV-2, pp 31-51.

Churchill, G.A. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs", Journal of Marketing Research, 16, p. 64-73.

Churchill, G and Carol Suprenant (1982), " An investigation into the determinants of customer satisfaction," Journal of Marketing Research, Vol 19, pp 491-504.

Cina, Craig. (1989), "Creating an Effective Customer Satisfaction Program", The Journal of Service Marketing, Vol 3, No 1, pp 5-14.

Collier, David (1990) "Measuring and Managing Service Quality" in Service Management Effectiveness Balancing Strategy, Organization and Human Resource Operation and Marketing, David Bowen, Richard Chase and Thomas Cummings and Associates, San Francisco: Jossey-Bass Publishers, pp 234-265.

Committee for Quality Assurance in Higher Education (1994), Report on 1993 Quality Reviews, Australian Government Publishing Service, Canberra.

Cook, Charles. (1989), "Reflections on the American Experience", In Ministerie van O&W Verslag van de Conferentie Kwaliteitsbewaking Hoger Onderwijs, Netherlands, May.

Cook, J. (1989), "Will Wall Street Fade?", Forbes, Vol 144, No 8, pp 138-139.

Cook, Robert and Ronald Zallocco (1983), "Predicting university preference and attendance", Research in higher Education, Vol 19, No 2, pp 197- 211.

Crandall, Morice (1994), Personal Communication, February 22.

Cronin, Joseph Jr. and Steven Taylor (1994), " SERVPERF Versus SERVQUAL: Reconciling Performance-Based and Perceptions-Minus-Expectations Measurement of Service Quality", Journal of Marketing, Vol 58, January, pp 125-131.

Cronin, Joseph Jr. and Steven Taylor (1992), " Measuring Service Quality: A Reexamination and Extension", Journal of Marketing, Vol 56, July, pp 55-68.

Curry, David (1985), " Measuring Price and Quality Competition", Journal of Marketing, pp 106-117.

Dale, B.G., D.M. Lascelles and J.J. Plunkett (1990), "The Process of Total Quality Management", in Dale, D.G. and J.J. Plunkett (Eds), Managing Quality, Oxford, pp 3-18.

Darby, M.R. and E. Karni. (1973), "Free Competition and the Optimal Amount of Fraud", Journal of Law and Economics 16, pp 67-86.

Davis, D and T. Ostrom (1987), "Attitudes, Attitude Theory and Scaling", in Concise Encyclopedia of Psychology, Raymond Corsini, ed, New York, John Wiley and Sons, pp 96-97.

Dichter, Ernest (1966), "How word of mouth advertising works"' Harvard Business Review, Vol 44, pp. 147-152.

Dillon, William; Thomas Madden and Neil Firtle (1994), Marketing Research in a Marketing Environment, Third Edition, Irwin, Illinois.

Dillon, William; Thomas Madden and Neil Firtle (1987), Marketing Research in a Marketing Environment, First Edition, Irwin,Boston.

Dilworth, James (1986). Production and Operation Management, Random House: New York.

Dinklocker, Christina (1992), "Our Deming Users' Group", Educational Leadership, Vol 50, # 3, p. 32.

Discenza, R, J. Ferguson and R. Wisner (1985), "Marketing higher education: Using a situation analysis to identify prospective student needs in today's competitive environment", NASPA, Vol 22, pp 18-25.

Donthu, Naveen (1991), "Quality Control in Service Industry", Journal of Professional Services Marketing, Vol 7, No 1, pp 31-55.

Editor. (1993), "Calling more scarfies", Marketing Magazine, December, pp 39.

Engel, James, Roger Blackwell and Paul Miniard (1986), Consumer Behaviour, 5th edition, Illinois: CBS College Publishing.

Ennew, Christine, Geoffrey Reed and Marting Binks (1993), "Importance-Performance Analysis and the Measurement of Service Quality," European Journal of Marketing, Vol 27, No 2, pp. 59-70.

Freeston, Kenneth (1992), "Getting Started with TQM", Educational Leadership, Vol 50, # 3, p 10-13.

Ford, John., Mathew Joseph and Beatriz Joseph (1993), "Service Quality in Higher Education: A Comparison of Universities in the United States and New Zealand using SERVQUAL, American Marketing Association, Summer, pp 75-81.

Fornell, Claes (1992), "A National Customer Satisfaction Barometer: The Swedish Experience", Journal of Marketing, Vol.56, January, pp. 6-21.

Fryar, Carolyn (1991), "What's Different About Services Marketing?", The Journal of Services Marketing, Vol. 5 No. 4, Fall, pp. 53-58.

Gallagher, H. (1991), "Avoiding the Pitfalls", Total Quality Management, June, Vol 3 No 3, pp 157-60.

Garfein, Richard. (1988), "Guiding Principles for Improving Customer Service", The Journal of Service Marketing, Vol 2, No 2, pp 37-41.

Garvin, David (1988), Managing Quality: The Strategic and Competitive Edge, Free Press: New York.

George, William (1984), "Internal Marketing for Retailers". In Lindqvist, J.D., ed., Developments in Marketing Science, Academy of Marketing Science.

George, William and Leonard Berry. (1981), " Guidelines for the Advertising of Services", Business Horizons, 24, May-June pp 52-56.

Gilly, Mary (1979), "Complaining Consumers: Their Satisfaction with Organizational Response," in New Dimensions of Consumer Satisfaction and Complaining Behaviour, Ralph Day and Keith Hun eds. Bloomington, IN: School of Business, Indiana University, pp 99-107.

Gilly, Mary, William Cron and Thomas Barry (1983), "The Expectation-Performance Comparison Process: An Investigation of Expectation Types", in International Fare in Consumer Satisfaction and Complaining Behaviour, Ralph Day and Keith Hunt eds. Bloomington, IN: School of Business, Indiana University, 10-16.

Gilmore, Jeffrey and Kathleen Price (1991), " Study Examines Price and Quality in Higher Education", Office of Educational Research and Improvement: Washington, D.C.

Ginsberg, M.B. (1991), Understanding Educational Reform in Global context: Economy, Ideology and the State. New York: Garland.

Gioia, D and E. Pitre (1990), "Perspective on Theory Building", Academy of Management Review, 15: 584-602.

Gordon, L (1992), "The state, devolution and educational reform in New Zealand". Journal of Education Policy, Vol 7, 187-203.

Gourdin , Kent and Timothy Kloppenborg (1991), "Identifying Service Gaps in Commercial Air Travel: The First Step Towards Quality Improvement", Transportation Journal, Fall, pp 22-30.

Greenley, J.K (1986), The Strategic and Operational Planning of Marketing, New York:McGraw Hill.

Gronroos, Christian (1991), "Scandinavian Management and the Nordic School of Services - Contribution to Service Management and Quality", International Journal of Service Industry, Vol 2, No 3, pp 17-25.

Gronroos, Christian (1990), Service Management and Marketing, Massachusetts:Lexington Books.

Gronroos, Christian (1990), Service Management and Marketing, Maxwell Macmillan International Editions, Singapore.

Gronroos, Christian (1988), " New Competition in the Service Economy: The Five Rules os Service", International Journal of Operation & Product Management, No 3.

Gronroos, Christian (1984), " A Service Quality Model and its Marketing Implications", European Journal of Marketing, Vol 18, No 4, pp 36-44.

Gronroos, Christian (1983), Strategic Management and Marketing in the Service Sector, Boston: Marketing Science Institute.

Gronroos, Christian (1982), "Strategic Management and Marketing in the Service Sector", Swedish School of Economics and Business Administration.

Gummesson, Evert, (1991), " Truths and Myths in Service Quality", International Journal of Service Industry Management, Vol 2, No 3, pp 7-16.

Halstead, Diane, David Hartman and Sandra Schmidt (1994), "Multisource Effects on the Satisfaction Formation Process", Journal of the Academy of Marketing Science, Vol 22, No 2, pp 114-129.

Hampton, Gerald (1983), "College Student Satisfaction: Marketing's Approach for Evaluating Higher Education," AMA Educators' Proceedings, Chicago, pp 169-173.

Hanna, Nessim and John Wagle (1988), "Who is your Satisfied Customer?", The Journal of Services Marketing, Vol. 2 No. 3, Summer, pp. 5-13.

Hansen, Mic and Elizabeth Steadman (1991), "The Customer Satisfaction Strategy", Mortgage Banking, November, pp.9-12.

Haynes, Ray and Patricia DuVall (1992), "Service Quality Management: A Process-Control Approach", International Journal of Service Industry Management, Vol 3, No 1, pp 14-24.

Haywood, Michael. (1989), " Managing Word of Mouth Communication", The Journal of Service Marketing, Vol 3 No 2, Spring, pp 55-66

Hemmasi, M, Kelly Strong and Steven Taylor (1994), "Measuring Service Quality for Strategic Planning and Analysis in Service Firms", Journal of Applied Business Research, Vol 10, No 4, pp 24-34.

Heskett, J.L. (1986), Managing in the Service Economy, Cambridge, Mass: Harvard Business School Press.

Hill, Jeanne and Sue Neeley (1988), "Differences in the consumer decision process for professional vs generic services", The Journal of Services Marketing, Vol 2, No. 1, pp 17-23.

Hoffman, Douglas and Thomas Ingram (1992), "Service Provider Job Satisfaction and Customer-Oriented Performance", The journal of Services Marketing, Vol. 6 No. 2, pp. 68-78.

Horovitz, Jacques and Chan Cudennec-Poon (1990), " Putting Service Quality into Gear", Service Industries Journal, April, pp 249-265.

Horovitz, Jacques. (1987), "How to check the Quality of Customer and Raise the Standard", International Management, January pp.

Hossler, D (1985), "A research overview of student college choice", Association for the study of higher education, Chicago, Illinois.

Hossler, D and K. Gallagher (1987), " Studying student college choice: A Three-phase model and the implications for policymakers", College and University, Vol 62, pp 207-221.

Houston, Michael (1979), "Cognitive structure and information search patterns of prospective graduate business students", Advances in Consumer Research, Vol VII, October, pp 552-557.

Howard, John and Jagdish Sheth (1969), The Theory of Buyer Behaviour, New York, Wiley.

Hutchins, D. (1985), Quality Circles Handbook, Nichols Publishing: New York.

Johnson,M, E Anderson and C.Fornell (1992), " Micro and macro antecedents of customer satisfaction", Working paper, University of Michigan.

Johnson, M and C. Fornell (1991), "A framework for comparing customer satisfaction across individuals and product categories," Journal of Economic Psychology, 12, pp 267-286.

Juran, J (1988), Juran's quality control handbook, 4h edition, New York: McGraw-Hill.

Jury, Desna (1993), "An Analysis of the Hawke Report, Learning for Life and Learning for Life: Two", Unpublished paper.

Kalafat, John (1991), "A Systematic Health Care Quality Service Program", Hospital and Health Services Administration, Vol 36 (4), Winter, pp 571-588.

Kanuk, L and C Berenson (1975), "Mail Surveys and Response Rates", Journal of Marketing, 12, p. 440-453.

Keiser, Thomas. (1988), " Strategies for Enhancing Services Quality", The Journal of Services Marketing, Vol 2 No 3, Summer, pp 65-69.

Kelsey, Jane (1993), "Commercialisation and contestability of legal education", Proceedings of the Law Teachers Conference, Christchurch, October, pp. 1-24.

Kinnell, Margaret. (1989), "International Marketing in UK Higher Education: Some Issues in Relation to Marketing Educational Programmes to Overseas Students", European Journal of Marketing, Vol 23, No 5, pp 7-21.

Klompmaker, J.K, J.D. Lindley and R. L. Page (1977), "Using Free Papers for Customer Surveys", Journal of Marketing, July, p. 80-82.

Kohn, Alfie (1993), "Turning Learning into a Business: Concerns about Total Quality" Educational Leadership, Vol 51, No 1, pp 58-61.

Kotler, Philip and Karen Fox. (1985), Strategic Marketing for Educational Institutions, Prentice-Hall, Inc., Englewood Cliffs, New Jersey.

Kotler, Philip (1982), Marketing for Nonprofit Organizations, Prentice-Hall, Englewood Cliffs, New Jersey.

Kotler, Philip (1976), "A Role for Marketing in College Admissions", Applying Marketing Theory to College Admissions, New York.

Kotler, Philip (1965), "Behavioural Models for Analysing Buyers," Journal of Marketing, October,Vol 29, pp 37-45

Krachenberg, A.R. (1972), "Bringing the Concept of Marketing to Higher Education", Journal of Higher Education, Vol 43, May, pp 369-80.

Krone, Flavia, Mary Gilly, Valarie Zeithaml and Charles Lamb (1983), "Factors influencing the graduate business school decision", American Marketing Association Educators' Proceedings, Chicago.

Kuntz, S. (1987), "Student's academic orientation and their perception for college",Annual meeting of the Association for the Study of higher Education, San Diego, California.

LaBarbera, Priscilla and David Mazursky (1983), "A Longitudinal Assessment of Consumer Satisfaction/Dissatisfaction," Journal of Marketing Research, Vol 20 (November), pp 393-404.

Lawton, S.B. (1992), "Why restructure?: An International Survey of the Roots of Reform". Journal of Education Policy, Vol 7, 139-154.

Lewis, Robert and Bernard Booms (1983), The Marketing Aspect of Service Quality", in Emerging Perspectives on Service Marketing, L.Berry, G.Shostack and G.Upah, eds., Chicago: American Marketing, pp 99-107.

Lilander, Veronica and Tore Strandvik (1993), "Estimating Zones of Tolerance in Perceived Service Quality and Perceived Service Value", International Journal of Service Industry Management, Vol 4, No 2, pp 6-28.

Lindsay, Alan (1993), "Performance and Quality in Higher Education", Australian Universities' Review, Vol 36, No 1, pp. 32-35.

Lindsay, Alan (1992), "Concepts of Quality in Higher Education," Journal of Tertiary Educational Administration, vol 14, No 2, pp 153-163.

Linke, R (1991), "Performance Indicators in Higher Education", Australian Government Publishing Service: Canberra.

Litten, Larry. (1980), "Marketing Higher Education", Journal of Higher Education, Vol 51, No 4, pp 40-59.

Lehtinen, U and J. Lehtinen (1982), Service Quality: A Study of Quality Dimensions, Research Report, Helsinki, Finland: Service Management Institute.

Leister, Douglas. (1975) " Identifying Institutional Clientele", Journal of Higher Education, Vol 46, No 4, pp 381-97.

Lilien, G.L. and P. Kotler (1983) Marketing Decision Making, New York:Harper & Row.

Litten, Larry (1982), "Different Strokes in the Applicant Pool", The Journal of Higher Education, Vol 53, July/August, pp 383-402.

Litten, Larry. (1980), "Marketing Higher Education", Journal of Higher Education, Vol 51, No 4, pp 40-59.

Loudon, David and Albert Della Bitta (1988), Consumer Behaviour: Concepts and Applications, Third Edition, Singapore: McGraw-Hill International.

Lovelock, Christopher. (1991), Service Marketing, Prentice-Hall Inc, Englewood Cliffs, New Jersey.

Lovelock, Christopher. (1981), " Why Marketing Management Needs to be different for Services", In James H. Donnelly and Williams R. George, Marketing Services, Chicago: American Marketing Association, pp 5-9.

Lovelock, C.H, R. Stiff, D. Cullwick and I.M. Kauffman (1976), "An Evaluation of the Effectiveness of Drop Off Questionnaires", Journal of Marketing Research, November, p. 358-364.

Lupton, Andrew. (1980), "Nine Ways Toward Better Management", Educational Record, Summer, pp 19-23.

McClain, C.I, et al (1989), "Northeast Missouri State University's Value Added Assessment Program: A Model for Educational Accountability" in Evaluating Higher Education, M.Kogan eds., London:JKP

McColl-Kennedy, J.R., G.F. Kiel, R Lusch and V Lusch (1994), Marketing: Concepts and Strategies, Thomas Nelson, Victoria.

McConkey, D.D (1987), "Planning for Uncertanity", Business Horizons, Vol 30, No 1, pp 40-45.

McConnell, J.D. (1968), " Effects of Pricing on Perception of Product Quality", Journal of Applied Psychology, Vol 52,, August, pp 300-303.

McCullogh, Myra (1993), "Total Quality Management: Its Relevance for Higher Education", Quality Assurance in Education, Vol.1 No.2, pp 5-11.

McDanial, Carl and Roger Gates (1993), Contemporary Marketing Research, West Publishing, St Paul.

Maguire, John and Robert Lay (1981), "Modelling the college choice: image and decision", College and University, Vol 56, pp 113-126.

Marcum, James (1993), "Quality Education," Productivity Review, Vol 12, No 2, Spring, pp 139-141.

Martilla, John and John James (1977), "Importance-Performance Analysis", Journal of Marketing, Vol 41 (January), pp 77-79.

Matthews, Mabel and Thomas Hadley (1993), "The Relationship Between and institution's Perceived Quality and Students' Application Sets", College and University, Vol 68/1, Winter, pp 22-30.

Mattsson, Jan. (1992), " A Service Quality Model Based on an Ideal Value Standard", International Journal of Service Industry Management, Vol 3, No 2, pp 18-33.

Miller, John (1977), "Studying Satisfaction, Modifying Models, Eliciting Expectations, Posing Problems and Making Meaningful Measurements," Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction, Keith Hunt, ed., Bloomington, IN: School of Business, Indiana University, pp 72-91.

Ministry of Education (1989), Learning for life: Education Beyond the Age of Fifteen, Vols I & II. Wellington, Government Printer.

Monroe, Kent and R. Krishnan (1985), " The Effect of Price on Subjective Product Evaluations" in Perceived Quality, Jacob Jacoby and Jerry Olson, eds. Lexington, Massachusetts: Lexington Books, pp 209-232.

Monroe, Kent and R. Krishnan (1983), " The Effect of Price on Subjective Product Evaluation", Working Paper, Blacksburg: Virginia Polytechnic Institute.

Mulvaney, John (1993), " The Characteristics Associated with Perceived Quality in Schools of Library & Information Science", Library Quarterly, Vol 63, No 2, pp 189-91.

Murphy Patrick (1981), "Consumer buying roles in college choice", College and University, Vol 56, pp 140-150.

Murphy, Patrick and Richard McGarrity. (1978), "Marketing Universities: A Survey of Student Recruitment Activities", College and University, Spring, pp 249-261.

Nadeau, Gillies (1992), " The Use of Quality and Excellence Indicators in Post Secondary Education", Canadian Society for the Study of Higher Education, No 10, Fall, pp 1-22.

Neidell, L.A. (1983), " Don't Forget the Product Life Cycle for Strategic Planning" Business, Vol 33, April/June, pp 30-35.

Nelson, P. (1970), " Advertising as Information", Journal of Political Economy, 81, pp 729-54.

New Zealand Labour Party (1984). 1984 Policy Document

New Zealand Labour Party (1987). 1987 Policy Document

Nicosia, Francesco and Yoram Wind (1977), Behavioral Models for Market Analysis, Illinois, Dryden.

Nunnally, J.C. (1978), Psychometric Theory, McGraw-Hill, New York.

Oakland, J.S. (1989), Total Quality Management, Butterworth-Heinemann, London.

O'Brian, Edward. (1973), "Marketing Higher Education", College and University, September, pp 23-24.

O'Brian, Elaine and Kenneth Deans (1995), "The Position of Marketing Education: A Students versus Employer Perspective", Marketing Intelligence & Planning, Vol 13, No 3, pp 47-52.

Olander, F. (1970), "The Influence of Price on Consumer's Evaluation of Product", in Pricing Strategy, B. Taylor and G.Wills, eds., Princeton:Brandon/Systems Press.

Oliver, R (1981)," Measurement and evaluations of satisfaction processes in retail settings," Journal of Retailing, Vol 57, pp 25-48.

Oliver, R (1980), " A cognitive model of the antecedents and consequences of satisfaction decisions," Journal of marketing Research, 17, pp 460-469.

Oliver, R (1977)," Effect of expectation and disconfirmation on postexposure product evaluations: an Alternative Interpretation", Journal of Applied Psychology, vol 62, pp 480-486.

Oliver,R and W.DeSarbo (1988)," Response determinants in satisfaction judgements" Journal of Consumer Research, 14, 495-507.

Ortinau, David (1980), "Testing the Influence of Time/Usage Experience on Consumers' Perceived, Expected, and Actual Satisfaction Attitudes toward Automobiles," in New Findings on Consumer Satisfaction and Complaining, Day and Hunt, eds., Bloomington, Indiana, pp. 23-28.

Ortinau, David and Robert Anderson (1986), "College Students' Post-Purchase Educational Satisfaction/Dissatisfaction Decision process: A Conceptual Model", AMA Educators' Proceedings, Chicago.

Ortinau, David, R. Anderson and R. Klippel (1987), "The Impact of Student Involvement and Expectancy Beliefs on Course/Faculty Evaluations," AMA Educators' Proceedings, Chicago, pp 266-271.

Ortinau, David, Alan Bush, Robert Bush and Jacquelyn Twible (1989), "The use of Importance-Performance Analysis for Improving the Quality of Marketing Education: Interpreting Faculty-Course Evaluations," Journal of Marketing Education, Summer, pp 78-86.
Lehman, D.R (1989), Market Research and Analysis, Irwin, Illinois.

Parasuraman, A., Valarie Zeithaml and Leonard Berry (1994), " A Reassessment of Expectations as a Comparative Standard in Measuring Service Quality: Implications for Future Research', Journal of Marketing, Vol 58, pp 111-124.

Parasuraman, A., Valarie Zeithaml and Leonard Berry (1993), "Research Note: More on Improving Service Quality Measurement", Journal of Retailing, 69 (Spring): pp 140-147.

Parasuraman, A., Leonard Berry and Valarie Zeithaml (1991), "Refinement and Reassessment of the SERVQUAL Scale", Journal of Retailing, Vol 67, No 4, pp 420-450.

Parasuraman, A., Leonard Berry and Valarie Zeithaml. (1991), "Understanding Customer Expectations of Service, Sloan Management Review, Spring, pp 39-47.

Parasuraman, A., Valarie Zeithaml and Leonard Berry (1988), "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality", Journal of Retailing, Vol 64, Spring, pp 12-40.

Parasuraman, A. (1987), "Customer Oriented Corporate Cultures are Crucial to Service Marketing Success", The Journal of Service Marketing, Vol 1, pp 39-46.

Parasuraman, A., Valarie Zeithaml and Leonard Berry (1985), "A Conceptual Model of Service Quality and its Implications for Future Research", Journal of Marketing, Fall, Vol 49, pp 41-50.

Parasuraman, A., Valarie Zeithaml and Leonard Berry (1994), "Alternative Scales for Measuring Service Quality: A Comparative Assessment Based on Psychometric and Diagnostic Criteria", Journal of Retailing, Vol 70, No 3, pp 201-230.

Patterson, Glenys (1991), New Zealand Universities under the Fourth Labour Government, Massey University, Palmerston North.

Patton, Michael Quinn (1990), Qualitative Evaluation and Research Methods, Second Edition, Sage Publications, California.

Peter, Paul., Gilbert Churchill. Jr. and Tom Brown (1992), "Caution in the Use of Difference Scores as Measure of Marketing Constructs", A.C. Nielsen Working Paper, No 91-2, University of Wisconsin, Madison, W.I.

Peters, Michael, James Marshall and Bruce Parr, (1993), "The marketisation of tertiary education in New Zealand", Australian Universities Review, Vol 36, No 2, pp 34-39.

Peters, Tom (1992), Liberation Management, London: Macmillan.

Porter, Michael, Graham Crocombe, and Michael Ewright (1991), Upgrading New Zealand Competitive Advantage, Oxford University Press: Auckland.

Prakash, Ved (1984), "Validity and Reliability of the Confirmation of Expectations Paradigm as a Determinant of Consumer Satisfaction", Journal of the Academy of Marketing Science, 12 (Fall), pp 63-76.

Pratt, M.J.(1991), DPhil Programme Handbook, Department of Accounting and Finance, University of Waikato.

Richard, Michael and Arthur Allaway (1993), " Service Quality Attributes and Choice Behaviour", Journal of Services Marketing, Vol 7, No 1, pp 59-68.

Richins, Marsha (1983), "Negative Word-of-Mouth by Dissatisfied Consumers: A Pilot Study", Journal of Marketing, Vol 47, pp.68-78.

Rust, Roland and Anthony Zahorik (1993), "Customer Satisfaction, Customer Retention and Market Share," Journal of Retailing, Vol 69 (Summer), pp 145-156.

Sasser, Earl. (1976), " Match Supply and Demand in Service Industries", Harvard Business Review, November-December,pp 133-140

Saunders, Ian and Michael Walker (1991), "TQM in Tertiary Education", International Journal of Quality and Reliability Management, Vol 8 No 5, pp 91-102.

Schewe, Charles (1973), "Selected Social Psychological Models for Analysing Buyers", Journal of Marketing, Vol 37, pp 31-39.

Schouten, John and James McAlexander. (1989), " Positioning Services for Competitive Advantage: The Case of Duds 'N Suds", The Journal of Service Marketing, Vol 3 No 2, Spring, pp 69-75.

Scott, Eion (1993), " Big Bucks in Building Brains", International Business, January, pp 7-9.

Seneca, Joseph and Michael Taussig (1987), "The effects of tuition and financial aid on the enrolment decision at a state university", Research in Higher Education, Vol 26, August, pp 337- 362.

Simon, Julian (1969), Basic Research Methods in Social Science: the Art of Empirical Investigation, Random House, New York.

Smith, Lily (1994), Personal Communication, February, 1994.

Smith, Lockwood (1992), Education in New Zealand - The Challenge of the future, Address to the Profitable Education Conference, Wellington.

Smith, Ruth and Michael Houston (1982), "Script-Based Evaluation of Satisfaction with Services", in Emerging Perspectives on Services Marketing, L.Berry, G.Shostack and G.Upah, eds., Chicago: American Marketing, pp 59-62.

Sonnenberg, Frank. (1989), " Service Quality: Forethought, Not Afterthought", The Journal of Business Strategy, Sept/Oct, pp 54-57.

Surface, James. (1971), " Universities Aren't Corporations", Business Horizons, June, pp 75-80.

Surprenant, Carol and Michael Solomon. (1987), " Predictability and Personalization in the Service Encounter", Journal of Marketing, Vol 51, April, pp 86-96.

Swan, John and Frederick Trawick (1980), "Satisfaction Related to Predictive vs Desired Expectations: A field Study," in New Findings on Consumer Satisfaction and Complaining, Ralph Day and keith Hunt, eds., Bloomington, IN: School of Business, Indiana University, pp 15-22.

Swan, John and Linda Combs (1976), "Product Performance and Consumer Satisfaction: A new concept," Journal of Marketing, 40 (April), pp 25-33.

Swartz, Teresa and Stephen Brown (1989), " Consumer and Provider Expectations and Experiences in Evaluating Professional Service Quality", Journal of Academy of Marketing Science, Vol 17, No 2, pp 189-195.

Tan, David (1986), "The Assessment of Quality in Higher Education: A Critical Review of the Literature and Research", Journal of the Association for Institutional Research, Vol 3, pp 223-265.

Tansuhaj, Patriya., Donna Randell and Jim McCullough. (1988), "A Service Marketing Management Model: Integrating Internal and External Marketing Functions", The Journal of Service Marketing, Vol 2, No 1, pp 31-36.

Taylor, Andrew and Frances Hill (1993), "Issues for Implementing TQM in Further and Higher Education", Quality Assurance in Education, Voll No.2, pp.12-21.

Taylor, W.A. and F.M. Hill (1993), "Quality Management in Education", Quality Assurance in Education, Vol 1 No 1, pp 21-28.

Teas, Kenneth (1994), " Expectations as a Comparison Standard in Measuring Service Quality: An Assessment of a Reassessment", Journal of Marketing, Vol 58, pp 132-139.

Teas, Kenneth (1993), "Consumer Expectation and Measurement of Perceived Service Quality", Journal of Professional Service Marketing, Vol 8, No 2, pp 33-53.

Teas, Kenneth (1993), " Expectations, Performance Evaluation, and Consumers' Perception of Quality", Journal of Marketing, Vol 57, pp 18-34.

The Treasury (1987), Government Management: Brief to the incoming Government, Vols 1 and 2, Government Printer, Wellington.

Tierney, Michael (1983), "Student College Choice Sets: Toward an Empirical Characterization," Research in Higher Education, Vol 18, pp 271-284.

Tribus, Myron (1993), "Quality Management in Education", Journal for Quality and Participation, Vol 16, Issue 1, Jan/Feb, pp. 12-21.

Viljoen, John., Dale Holt and Stanley Petzall (1990), "Quality Management in an MBA Program by Distance Education", Proceedings of the ANZAME Conference, December, pp 501-512.

Webb, Marion (1993), " Variables Influencing Graduate Business Students' College Selections", College and University, Vol 68, No 1, pp 38-46.

Webster, David (1981), " Methods of Assessing Quality", Change, October, pp 20-24.

West, Jonathan.(1991), "The Lessons of New Zealand", Australian Journal of Management, Vol 16, pp 161-176.

Westbrook, R and Richard Oliver (1991), "The dimensionality of consumption emotion patterns and consumer satisfaction," `Journal of Consumer Research, 18, pp 84-91

Witheley, Jervis. (1990), "Marketing an Institution of Higher Education: A Comparative Analysis, Unpublished Paper, Department of Management Studies, Hong Kong Polytechnic, Hong Kong.

Woodruff, Robert, Ernest Cadotte and Roger Jenkins (1987), "Expectations and Norms in Models of Consumer Satisfaction," Journal of Marketing Research, Vol 24,August, pp 305-314.

Wyckoff, Daryl. (1984) " New Tools for Achieving Service Quality", Cornell Hotel and Restaurant Administration Quarterly, November.

Zaltman, Gerald and Melanie Wallendorf (1979), Consumer Behaviour Basic Findings and Management Implications, New York: Wiley.

Zeithaml, Valarie., Leonard Berry and A Parasuraman (1993), " The Nature and Determinants of Customer Expectations of Service", Journal of the Academy of Marketing Science, Vol 21, No 1, pp 1-12.

Zeithaml, Valarie., A.Parasuraman and Leonard Berry (1990), Delivering Quality Service: Balancing Customer Perceptions and Expectation, Free Press: New York.

Zeithaml, Valarie (1988), "Customer Perceptions of Price, Quality and Value: A Means-End Model and Synthesis of Evidence", Journal of Marketing, July, pp 2-21.

Zeithaml, Valarie., Leonard Berry and A. Parasuraman (1988), "Communication and Control Process in the Delivery of Service Quality", Journal of Marketing, Vol 52, April, pp 35-48.

Zeithaml, Valarie. (1981), "How Consumers Evaluation Process Differ between Goods and Services", in Marketing of Services, J Donnelly and W.George, eds., Chicago: American Marketing, pp 186-190.

Zikmund, William (1994), Business Research Methods, Fourth Edition, Dryden Press, Texas.