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A PARTIAL SERVQUAL MODEL ANALYSIS OF A RETAIL PHARMACY

by

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ABSTRACT

With the several changes taking place in the retail, wholesale, manufacturing and academic sectors of pharmacy, the practice of pharmacy is becoming a challenging one in South Africa. As a result of this, it is important to prove to the government as well as to other health care professionals that pharmacy can do more than deliver a supply function. This would involve the pharmacist becoming more committed to the quality of service and value (irrespective of the sector), and in so doing raise the overall standard of the profession.

This research involves a survey amongst 100 customers who live in the Pinetown area. It investigates service quality in a retail pharmacy by using the SERVQUAL instrument as a measuring tool. It involved assessing respondents expectations and perceptions of service quality in retail pharmacy. The respondents indicated that understanding patient needs, assurance, reliability, efficiency, tangibles, attention and staff presentation were important factors that they expected from service of any retail pharmacy. With respect to the service provided by Pinelands pharmacy, respondent perceptions of service quality included patient individualisation, pharmacy staff competence, efficiency, staff presentation and convenient operating hours, aesthetic appeal and a modern pharmacy.

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CHAPTER 1 – INTRODUCTION

1. STATEMENT OF THE PROBLEM

With the green light given by the competition authorities to retail giants e.g. New Clicks, major challenges and changes face retail pharmacy. The entrance of the retail giants is not the only pressure in the industry, the different forms of service providers such as mail-order pharmacy and on-line dispensaries are also rapidly emerging. The giants can pose their own in-store pharmacies and also boast better prices and discounting strategies because of their ability to bulk buy. In order, for single retail pharmacies to remain competitive amidst the numerous corporate players in the marketplace, retail pharmacy would have to look at the way they provide services. Also, these big chains are profit-driven and not community focussed. Therefore their promise of low prices may be a strong enough inducement to bring the customer to a pharmacy for the first time, but price on its own is not strong enough to bring them back again. The retail pharmacist, therefore, is the one who has the potential to deliver quality service to the community.

Pharmacists play a vital role in bringing healthcare to consumers. The role of the pharmacist in the health care chain can be described as a unique and important one. The pharmacist can serve as the first and last link in the chain. The pharmacist in some cases is the first one to be contacted when one has health problems. When the doctor issues the patient with a prescription, it is the pharmacist who needs to be consulted in dispensing the medication (the last person).

By determining consumer expectations of service from community pharmacy, it would serve as a guide to ensure that the service provided in a pharmacy is of high quality and in so doing able to attract and retain customers and prevent them from straying toward the giant retailers.

Consumer perceptions also play an important role. By determining the perceptions of a business practice, management would be able to pinpoint areas of deficiencies and in so doing be able take corrective steps towards improving service delivery and raising quality standards.

2. OBJECTIVES OF THE STUDY

The research will investigate service quality of a retail pharmacy, which involves assessing customer expectations and perceptions of retail pharmacy with the focus being on the quality of service delivery.

The objectives of the study are as follows:

- To identify the factors that influence customer expectations of retail pharmacy.
- To identify the factors that influence customer perceptions of a retail pharmacy.
- To determine the market segments of pharmacy users.

3. BACKGROUND

The world of pharmacy comprises many sectors – manufacturing, wholesale, research and development and the retail sector. The focus of this dissertation lies in the retail sector. The retail pharmacy sector involves focussing on the providing professional, personalised service to the community. The community plays a crucial role in the success of any business and, for this reason, it is imperative that businesses give back to the community.

The concept of measuring quality of health is not new. Government agencies, private accrediting bodies and health care professionals have been performing these assessments for decades. There are many reasons for measuring the quality of pharmacy services and the activities of pharmacists. These include that of demonstrating economic value, professional value and quality improvement.

As illustrated by the registrar of the South African Pharmacy Council, Jan du Toit (**Good Pharmacy Practice in South Africa, 1997: 1**), a commitment to good, quality pharmacy practice “ requires a thorough understanding of the principles in providing a pharmaceutical service of acceptable standard to all citizens of South Africa.”

The cut and thrust of competing for customers produces a wide variety of strategies to bring traffic into the pharmacy, all of them aimed in some way at improving the value equation in favour of the customer.

According to Johan Roux, “ consumers attach value not only to products, but also to the quality of the shopping experience that accompanies the buying of those products. The things that make up this quality are much less tangible, but they are real nonetheless. They can constitute the service package experienced by the customer. ”

(The Journal of Modern Pharmacy, May 2003:4-5)

The terms shopping experience and service package are usually synonymous in the eyes of the consumer, but not in the eyes of many business managers. The service package conjures up things like more paypoints to avoid queuing, chairs at the dispensary to make waiting easier, keeping error free records. These are useful points to bear in mind , however they scarcely reflect the spirit of what customers really expect from retail pharmacy.

Shopping experience is a much more useful focal point. The reason being that it looks at the business through the eyes of the consumer – what do customers expect when they enter the retail pharmacy ? By gauging customer expectations and then comparing it to their perceptions is a way of adding value to services provided and will more than justify the prices charged. As a retail player in pharmacy, the idea is to build a service package to a point where one offers exceptional value, even though prices are higher.

4. STRUCTURE OF THE DISSERTATION

The dissertation will follow the following structure :

CHAPTER 2 – LITERATURE REVIEW

This chapter looks at the theoretical aspect of service quality gathered from secondary sources.

CHAPTER 3 – RESEARCH METHODOLOGY

This chapter looks at the various techniques implemented to conduct the research

CHAPTER 4 – ANALYSIS AND FINDINGS

Various tables and figures were generated after the relevant data was captured.

CHAPTER 5 – RESEARCH CONCLUSIONS AND RECOMMENDATIONS

CHAPTER 2 – LITERATURE SURVEY

1. INTRODUCTION

Quality is often considered to be one of the keys to success. The competitive advantage of a firm is said to depend on the quality and value of its goods and services. However, according to **Cow and Vortices** (as cited in Baron and Harris 1995), quality is the lifeblood that brings increased patronage, competitive advantage and long term profitability.

The term quality is multifaceted. In a management perspective it is more relevant to talk about the 'right' quality rather than high quality. Right quality means that the service provider has met the specifications or requirements, which were laid down for the service on the basis of the customers' demand and needs, and that the customers' expectations, have been fulfilled.

There was a time when quality was a fad. However, according to a USA study called 'Profit Impact of Marketing Strategies (PIMS)', "the most important single factor affecting a business unit's performance is the quality of its product and service, relative to those of the competition." (**Financial Mail, Nov 1991: 89**).

Not surprisingly, therefore, companies are realising the importance of service to their overall profitability as competition increases; good service is often the only way to clinch sales, because undercutting competitors on price is no longer viable. **Manning (1991)** reinforces this order by suggesting that superior quality translate directly into profits. It triggers a stream of benefits that add up to a competitive advantage.

It was also found that customers are prepared to buy more of the service and to pay more for that service if they believe they are getting value for their money. Quality is an issue of vital importance to marketers in the delivery of services. But the delivery of quality to the consumer has been an especially difficult proposition. Hence, according to PIMS, companies that deliver superior perceived quality get the following:

- stronger customer loyalty
- more repeat purchases
- are able to charge higher prices without the loss of market shares
- they have lower marketing costs
- they have a bigger market share in industry

Quality of services refers to how well a customer is being served, including the extent to which the server helps the customer and the manner of the server (Tse, 2001). Consumer behaviour has an important role to play in the delivering of quality services. According to Loudon and Della Bitta (1993), consumer behaviour may be defined as “the decision process and physical activity individuals engage in when evaluating, acquiring, using, or disposing of goods and services.” Wilkie (1990) further defines consumer behaviour as “the activities that people engage in when selecting, purchasing and using products and services so as to satisfy needs and desires. Such activities involve mental and emotional processes, in addition to physical actions.”

The American Marketing Association (as cited in Peter and Olson 1996:11) however, states that consumer behaviour is “the dynamic interaction of affect and cognition, behaviour, and environmental events by which human beings conduct the exchange aspects of their lives”.

To effectively market a product or service, marketing managers must clearly understand consumers needs and wants. The study of consumer behaviour thus provides strategic information about what consumers need and want and how marketing programmes should be designed to precipitate an exchange (**Hoyer and MacInnis, 1997**). **Edvardsson et al 1994**), argues that quality is a matter of finding out what creates value for the customer and achieving it. For this, it is necessary to really understand the customer and the current situation. Therefore defining the customer demands the right way is of fundamental importance. If this is not done, good quality cannot be achieved. Knowledge and understanding of what the customer needs must then be translated into a demand specification for the services. In the next step, the demand specification must be transformed into concrete services.

2. WHAT IS A SERVICE?

Kotler (1991: 455) defines a service as “any act or performance that one party can offer to another that is essentially intangible, and does not result in the ownership of anything. Its production may or may not be tied to a physical product.”

A service can be described as "any act or performance that one party can offer to another that is essentially intangible, and does not result in the ownership of anything" (Kotler, 1997:46 as cited in **Coulter and Coulter, 2002:35**).

According **Baron and Harris (1995)**, a service can be broken down into two quality dimensions:

- a) **technical quality** – refers to the relatively quantifiable aspects of the service, that is, what is being done. Examples of technical quality include the quality and effectiveness of diagnoses and medical procedures at a hospital, the effectiveness of a car repair or the cleanliness of a hotel room.
- b) **functional quality** – refers to how the technical quality is being delivered to customers. It comprises the care and manners of the people involved in service delivery eg. empathy.

Both dimensions are important to the customer.

3. SERVICE CHARACTERISTICS

Pre-purchase evaluation of service characteristics by consumers, as well as their production and marketing by providers, is said to differ from products because of their intangibility, heterogeneity, inseparability and perishability characteristics.

- **Intangibility**

This is seen as the fundamental difference between goods and services. Berry (1980: 24) defines a good as “an object, device, a thing and a service as a deed, a performance, and an effort.”

When purchasing goods, the consumer employs many tangible cues to guide quality, style, hardness, colour, label, feel or package fit. When purchasing services, fewer tangible cues exist. In most cases, tangible evidence is limited to the service provider’s physical facilities, equipment and personnel.

Intangibility of services, therefore, makes it more challenging to understand how consumers perceive and what they expect of services and service quality.

According to **Bebko (2000)**, intangibility is the key to determining whether or not an offering is a service or product. Therefore this characteristic has a profound effect on the marketing of services. **Levitt (1981)** (as cited in **Bebko 2000**), argued that special difficulties arise from this intangibility, which lead to quality control problems for the producer and evaluation problems for the consumer. Most services cannot be counted, measured, inventoried, tested or verified in advance of sale to assure quality. Therefore firms may find it difficult to understand how consumers perceive their services and evaluate service quality

Kurtz and Claw (1998) state that in order to reduce intangibility, service providers have several options. These options include:

- stressing tangible cues
- using personal sources of information
- creating a strong corporate image
- encouraging employees to communicate with customers
- Stimulating word-of-mouth communication. Talking to customers during and after the service to ensure they are satisfied will be beneficial in stimulating positive word-of-mouth communications. Using salespeople to call on corporate accounts allows for two-way personal communication.

All of these above strategies make a service more tangible.

- Heterogeneity

This characteristic according to **Zeithaml *et al* (1985:34)** concerns the potential for high variability in the performance of services, since this depends on who provides them and when and where they are provided. Due to the intangibility of services, consistent performance is difficult to achieve in service operations. Unpredictable human behaviour will result in performance of a service varying when different employees serve a consumer, as well as being served by the same person on different occasions. In labour intensive industries, heterogeneity in service output is a major problem. **Kotler (1991: 457)**, suggests 3 steps that service firms can take to alleviate the problem:

- Invest in good personnel selection and training
- Standardise the service-performance process throughout the organisation
- Monitor customer satisfaction through suggestion and complaint systems and customer surveys so that poor service can be detected and corrected.

- Inseparability

Production and consumption of many services are inseparable. Physical goods are first manufactured, then put into inventory, distributed through multiple resellers and consumed still later. According to **Regan (1963: 58)** services are first sold, then produced and consumed simultaneously. Due to this inseparability, the buyer usually participates in producing the service, thereby affecting the performance and quality of the service. For example, a patient requesting for delivery of their medication depends on the patient's specifications, communication and participation in the production of the service.

This provider-consumer interaction is a special feature of services marketing where both parties affect the outcome. In labour intensive services, for example, quality occurs during service delivery, usually in an interaction between the client and the contact person from the service firm (**Lehtinen and Lehtinen 1982**). The service firm may also have less managerial control over quality in services where consumer participation is intense because the client affects the process. In these situations, the consumer's input becomes critical to the quality of service performance.

An important element of reducing inseparability is the selection and training of employees. Training should include both how to perform the service and how to properly interact with the customer. Doing this will increase the probability that customers will receive a high level of service quality (**Kurtz and Clow, 1998**).

- **Perishability**

This refers to the fact that services cannot be stored. Unlike products, which can be manufactured and stored in advance of demand, services cannot be saved.

This poses a problem for enterprises that are trying to match supply with demand.

4. SERVICE MANAGEMENT

Understanding service management is now of interest to manufacturers of goods, because customers are now more involved in various processes of the manufacture such as the design of goods, modular production, delivery, maintenance, helpdesk functions, information sharing and a host of other processes. In today's competitive environment these processes have become important for the creation of a competitive advantage. All these activities bring the manufacturing of goods and service management closer to each other. Hence, according to **Grönroos (2000)**, service management can be summarised as follows:

- Understanding the value customers receive by consuming or using the offerings of an organisation and knowing how services alone or together with information, physical goods or other kinds of tangibles contribute to this value; understanding how total quality is perceived in customer relationships to facilitate such value and how it changes over time.
- Understanding how an organisation (people, technology and physical resources, systems and customers) will be able to produce and deliver this perceived quality and value.
- Understanding how an organisation should be developed and managed so that the intended perceived quality and value are achieved.
- Making an organisation function so that this perceived quality and value are achieved and the objectives of the parties involved (including the organisation, the customers and other parties) are met.

Hence, this means that the firm has to understand the following:

- the perceived quality and value customers are looking for in service competition
- how to create that value for customers; and
- how to manage the resources available to the organisation to achieve such service-based value-creation.

Grönroos (2000:197) however, defines service management as, “a total organisational approach that makes quality of service, as perceived by the customer, the number one driving force for the operation of the business”. Applying service management principles means that service is considered the organisational imperative. As organisations increasingly move towards being network organisations, many of these resources are outside the boundaries of traditional organisational constructs. It is also important to observe that the definition of service management requires a dynamic approach to management. It is not enough to understand which values or benefits customers are seeking, one must also understand that the benefits customers are looking for will change over time, and that the customer perceived quality and value which is produced has to change accordingly.

5. SERVICE QUALITY

The pressures driving successful organisations to deliver top quality services has led to the evolvment of quality management and the subsequent measurement of service performance. Service quality starts with the idea that it is less costly (and hence more profitable) to sell to people who have previously bought from the firm, than to acquire new customers.

Thus the name of the game is customer service quality that brings customers back repeatedly and allows the firm to cross-sell to them. **Parasuraman *et al* (1985)** (as cited in Walker and Baker 2000) state that service quality is the gap between consumer's expectations and their perceptions of how the service is performed.

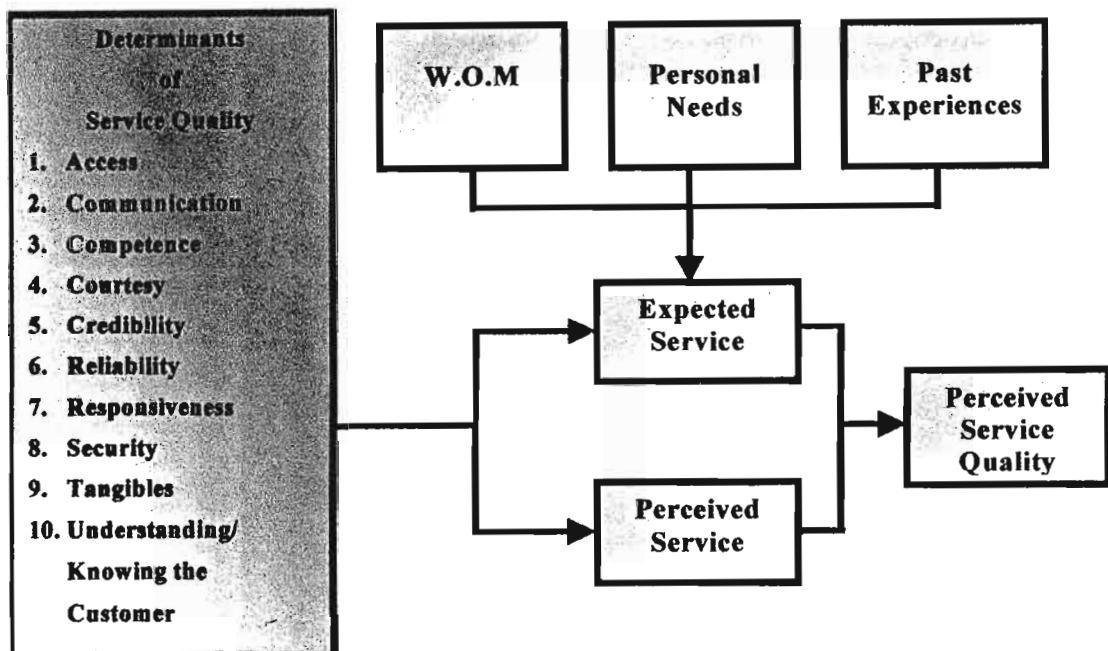
Lewis and Booms (1983) however, state that service quality is a measure of how well the service level delivered matches customer expectations. Delivering quality service means conforming to customer expectations on a consistent basis.

5.1. Determinants of Service Quality

Parasuraman *et al* (1988) (as cited in Lee, Lee, and Yoo 2000), conceptualised perceived service quality as "a global judgement, or attitude, relating to the superiority of the service".

Parasuraman *et al* (1985) proposed that the following ten dimensions determine service quality.

FIGURE 1 : The Determinants of Service Quality



Source: Parasuraman, A., Zeithaml, V.A. and Berry, L.L. 1985 (Fall). A conceptual Model of Service Quality and its Implications for Future Research. *Journal of Marketing*, vol. 49. p.48.

5.1.1. Access

Access involves approachability and ease of contact. It means:

- the service is easily accessible by telephone (lines are not busy and they do not put you on hold).
- waiting time to receive service (example, at a bank) is not extensive.
- convenient hours of operation.
- convenient location of service facility.

5.1.2. Communication

Communication means keeping customers informed in language they can understand and listening to them. It may mean that the company has to adjust its language for different consumers – increasing the level of sophistication with a well-educated customer and speaking simply and plainly with a novice.

It involves:

- explaining the service itself.
- explaining how much the service will cost.
- explaining the trade-offs between service and cost.
- assuring the consumer that a problem will be handled.

5.1.3. Competence

Competence means possession of the required skills and knowledge to perform the service. It involves:

- knowledge and skill of the contact personnel
- knowledge and skill of operational support personnel
- research capability of the organisation, example, and securities brokerage firm.

5.1.4. Courtesy

Courtesy involves politeness, respect, consideration, and friendliness of contact personnel (including receptionists, telephone operators, etc.).

It includes:

- Consideration for the consumer's property (example, no muddy shoes on the carpet).
- Clean and neat appearance of public contact personnel.

5.1.5. Credibility

Credibility involves trustworthiness, believability, and honesty. It involves having the customers' best interests at heart. Contributing to credibility is:

- company name.
- company reputation.
- personal characteristics of the contact personnel.

the degree to hard sell involved in interactions with the customer.

5.1.6. Reliability

Reliability involves consistency of performance and dependability. It means that the firm performs the service right the first time. It also means that the firm honours its promises.

Specifically, it involves:

- accuracy in billing
- keeping records correctly
- performing the service at the designated time.

5.1.7. Responsiveness

Responsiveness concerns the willingness or readiness of employees to provide service. It involves timeliness of service:

- mailing a transaction slip immediately
- calling the customer back quickly
- giving prompt service (for example, setting up appointments quickly).

5.1.8. Security

Security is the freedom from danger, risk, or doubt. It involves:

- physical safety (Will I get mugged at the automatic teller machine?).
- financial security (Does the company know where my stock certificate is?).
- confidentiality (Are my dealings with the company private?).

5.1.9. Tangibles

Tangibles include the physical evidence of the service:

- physical facilities.
- appearance of personnel.
- tools or equipment used to provide the service.
- physical representations of the service, such as a plastic credit card or a bank statement.
- other customers in the service facility.

5.1.10. Understanding/knowning the customer

Understanding/knowning the customer involves making the effort to understand the customer's needs. It involves:

- learning the customer's specific requirements.
- providing individualised attention.
- recognising the regular customer.

Parasuraman, Zeithaml and Berry (1988) as cited in **Baron and Harris (1995)**, points out that the ten determinants are not necessarily independent of each other, that is, there could be some overlap between the categories. These determinants are also appropriate for assessing quality across a broad variety of services.

After further research into the measurement of service quality, **Parasuraman et al (1988)** (as cited in Baron and Harris 1995), advocated that the ten determinants could be collapsed into five dimensions of quality. They are:

- *Tangibles*: including the physical components of the service, for example seating, lighting, etc.
- *Reliability*: dependability of service provider and accuracy of performance.
- *Responsiveness*: promptness and helpfulness.
- *Assurance*: knowledge and courtesy of employees and their ability to inspire trust and confidence.
- *Empathy*: caring, individualised attention the firm gives its customers.

The dimensions of tangibles, reliability and responsiveness remain unchanged. 'Assurance' encompasses competence, courtesy, credibility and security and 'empathy' includes access, communication and understanding the customer. Virtually all-subsequent research, by Parasuraman, Zeithaml and Berry and others, involves use of the five dimensions of quality, rather than the original ten determinants.

5.2. Underlying Principles of Service Quality

When discussing the concept of service quality, three underlying principles should be kept in mind.

- Service quality is more difficult for the consumer to evaluate than quality of tangible goods

When purchasing goods, the consumer employs many tangible cues to judge quality: style, hardness, colour, label, and feel, package and fit. When purchasing services, fewer tangible cues exist. In most cases, tangible evidence is limited to the service provider's physical facilities, equipment, and personnel. In the absence of tangible evidence on which to evaluate quality, consumers must depend on other cues. Researchers have not investigated the nature of these other cues, although some authors have suggested that price becomes a pivotal quality indicator in situations where other information is not available. (McConnell, 1968, Olander, 1970, Zeithaml, 1981)

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

Researchers and managers of service firms concur that service quality involves a comparison of expectations with performance. Grönroos (1982) developed a model in which he contends that consumers compare the service they expect with perceptions of the service they receive in evaluating service quality.

Smith and Houston (1982) claimed that satisfaction with services is related to confirmation or disconfirmation of expectations. They based their research on the disconfirmation paradigm, which maintains that satisfaction is related to the size and direction of the disconfirmation experience where disconfirmation is related to the person's initial expectations (**Churchill and Suprenaut, 1982** as cited in Parasuraman, Zeithaml and Berry, 1985).

- Quality evaluations are not made solely on the outcome of a service; they also involve evaluations of the process of service delivery

Service quality involves more than outcome, it also includes the manner in which the service is delivered.

This notion surfaces in other research on service quality as well. Grönroos (1982) postulated that two types of service quality exist: technical quality, which involves what the customer is actually receiving from the service, and functional quality, which involves the manner in which the service is delivered.

Lehtinen and Lehtinen's (1982) basic premise is that service quality is produced in the interaction between a customer and elements in the service organisation. The three quality dimension, such as physical quality, includes the physical aspects of the service (for example equipment or building); corporate quality which involves the company's image or profile, and interactive quality is derived from the interaction between contact personnel and customers as well as between some customers and other customers.

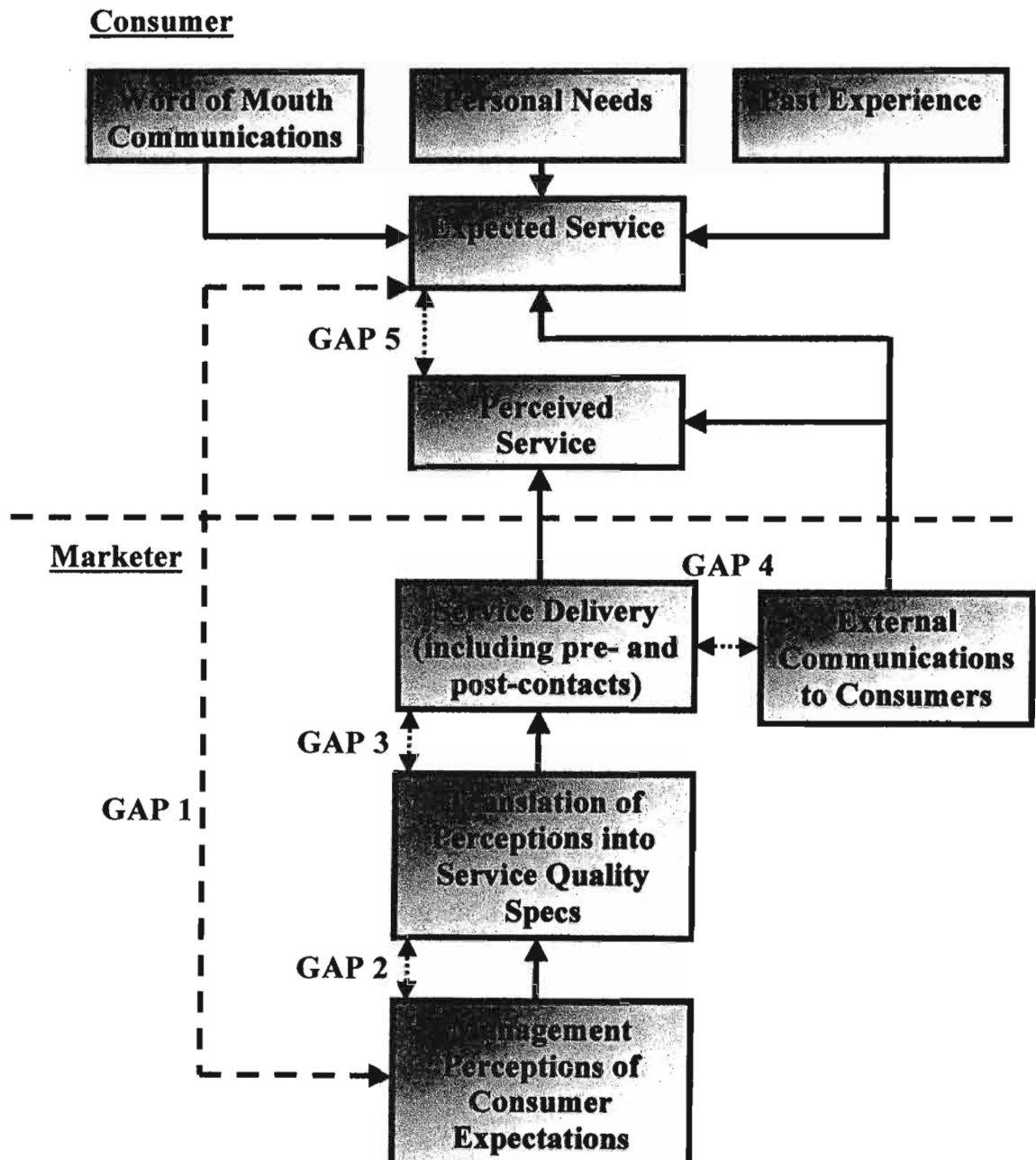
5.3. A Model of Service Quality

Parasuraman *et al* (1985) initiated a research stream that many consider to be the most comprehensive investigation into service quality. Service quality as discussed earlier, is generally used to measure customers' perceptions of services rendered (Zeithaml *et al.*, 1990 as cited in **Frost and Kumar, 2000**). Customers are ideal for appraising how well employees have provided quality service because they are in a better position to observe employee performance than employees' supervisors.

5.3.1. The SERVQUAL Model

Parasuraman *et al* (1985) developed a 22-item instrument named SERVQUAL based on the Gap Model, for measuring service quality.

FIGURE 2 : A conceptual model of service quality



Source : Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (Fall 1985). A conceptual Model of Service Quality and its implications for future research. *Journal of Marketing*, Vol. 49. p. 44.

The instrument assesses customers' perception of quality by comparing their perception of the services received, across various service quality dimensions. Research conducted by **Parasuraman *et al* (1985)** has shown SERVQUAL to be an effective and stable tool for measuring service quality across service industries.

The service quality model views service quality and service quality problems as existing between the consumer and marketer. From the consumer's point of view, service quality is the difference between what he/she expects and what he perceives to be receiving from the service provider. When the perceptions are greater than expectations, then perceived quality is very good, when they are equal; perceived quality is good; but if expectations exceed perceptions, the perceived quality will be less than satisfactory. It is thus clear that judgements of high and low service quality depend on how customers perceive the actual service performance in the context of what they expect.

Several factors may influence a customer's expectations. Firstly, what customers hear by the way of ***word of mouth communications*** from other customers is an influential factor. Secondly, expectations vary depending on the respondent's individual characteristics and circumstances, suggesting that ***personal needs*** of customers might influence their expectations to a certain degree. Thirdly, ***past experience*** with using a service could influence expectation levels. Finally, external communications play a key role in shaping customers' expectations.

The SERVQUAL model pinpoints areas of potential shortfalls in service quality – areas where there could be discrepancies, or gaps, between customers' expectations and their perceptions. This model consists of five gaps and **Parasuraman *et al* (1985)** identifies these following gaps:

- **Gap 1 is between consumer expectations and management perception of these expectations.**

Management can provide a service they think customers expect when customers do not expect it.

- **Gap 2 is the difference between management's perception of consumer expectations and the translation of those perceptions into service quality specifications.**

Management may understand and know what customers want but fail to translate these expectations into the correct service specifications (**Kurtz and Clow, 1998**).

- **Gap 3 is the difference between the service quality specifications and the delivery of those specifications to the customer.**

Primary causes of this gap are the variable and inseparable nature of services. Since, most services are performed by people, the quality of service is highly dependent upon how well the service provider performs his or her job. If service contact personnel provide services as specified, customers are usually satisfied and their expectations are met. If employees do not provide the service as specified in the service specifications, customer expectations will not be met and customers will be dissatisfied (**Kurtz and Clow, 1998**).

- **Gap 4 is the difference between the service delivered to customers and the external communications about the service.**

Promises are made to consumers by a firm's advertising, sales promotions, and sales staff. These promises may be explicitly stated or they may be implied. If the firm does not provide the service that is promised, there is a gap between what customers expected and the service received (Kurtz and Clow, 1988).

- **Gap 5 is the difference between customers' perceptions of an actual service experience and the customers' expectations of an ideal service.**

Gap 5 denotes the service-quality shortfall as perceived by customers while gaps 1 through 4, the shortfalls within the service providers' organisation. Furthermore gaps 1 and 2 are management orientated while gaps 3 and 4 deal specifically with service

5.3.2. Critiques on SERVQUAL and Alternate Models

After SERVQUAL was proposed by Parasuraman et al. (1988), several critiques were levied against it.

- **Cronin and Taylor's Servperf**

Based on a literature review by Lee, Lee and Yoo (2000), it was found that SERVQUAL confounds satisfaction and attitude. Cronin and Taylor (1992) stated that service quality can be conceptualised as "similar to an attitude", and can be operationalised by the "adequacy-importance" model.

In particular, they maintained that “performance” instead of “performance-expectation” determines service quality and that developed an alternative measurement tool, Servperf, which concerns only performance. Research showed that in their empirical study, SERVQUAL appeared to have a good fit in only two of the four industries examined, whereas Servperf had an excellent fit in all four industries.

In response to the **Cronin and Taylor’s (1992)** critique, **Parasuraman *et al* (1994)** defended their position by insisting that past research provides strong support conceptually and empirically for service delivery as the discrepancy between expectations and perceptions (e.g. Bolton and Drew, 1991a, 1991b, Zeithaml *et al*, 1991). It was pointed out that Cronin and Taylor did not allow for possible interrelations among the five latent constructs. They argued, therefore, that it might have been a possible reason for the low fit of Cronin and Taylor’s SERVQUAL data. For the **Parasuraman *et al*** argument that conceptually no problem exists in SERVQUAL, **Cronin and Taylor (1994)** emphasised that many other researchers pointed out the problems of SERVQUAL and they also argued that their actual analysis did correctly account for the interrelations among the five constructs.

➤ **Brown *et al* non-difference score measure**

Brown *et al* (1993) argued that calculation of a difference score in the SERVQUAL measure could lead to several psychometric problems; therefore, a non-difference score measure would be more desirable.

In line with their arguments, their empirical investigation indicated that:

- the reliability of SERVQUAL has below that of non-difference score measure;
- SERVQUAL could not achieve discriminate validity but a non-difference score displayed better discrimination validity;
- Variance restriction effects were exhibited in using SERVQUAL; and
- A non-difference score measure outperformed SERVQUAL on other psychometric considerations while requiring subjects to respond to only half as many items.

Parasuraman *et al* (1993) responded to **Brown *et al* (1993)** critiques of SERVQUAL's difference score conceptualisation. They argued that the superiority of the non-difference score conceptualisation were debatable. Their arguments can be summarised as follows:

- Reliability – their own findings from multiple studies demonstrated high reliabilities for the SERVQUAL measures.
- Discriminate validity – they argued that Brown *et al.*'s discussion; in two parts were not correct. In addition, the difference score formulation displayed somewhat stronger discriminate validity than did the non-difference score formulation.
- Variance restriction problem may arise when difference scores are used in multivariate analysis. However, it is not relevant when difference scores are used for diagnostic purposes and the diagnostic application of SERVQUAL dominates commercial use of the instrument and is one of its primary advantages.

- Finally, they demonstrated a stronger convergent validity of the SERVQUAL measure using the results of **Brown *et al* (1993)** data analysis. In addition, they argued that the SERVQUAL measure has more diagnostics, therefore, more practical implications than has the perceptions only measure.

5.3.3. Problems with SERVQUAL

Although SERVQUAL is an excellent instrument for measuring service quality, managers must be aware of some potential problems with the instrument as well as the gap theory methodology on which it is based. An understanding of these problems may prevent service companies from misinterpreting the results and developing inappropriate marketing plans (**Mudi and Cottam, 1999**).

The SERVQUAL instruments have three potential problems (**Mudi and Cottam, 1999**) :

- SERVQUAL measures customers' expectations of the ideal firm in a particular service industry. This may or may not be relevant to the capabilities of a particular service firm or the set of service firms available to a customer.
- SERVQUAL is generic in nature. Since it is not industry specific, it does not measure variables, which may be industry specific.
- SERVQUAL deals with the gap methodology used for measuring the level of service quality. Measuring consumer expectations after a service has been provided will bias consumers' responses.

6. CUSTOMER PERCEIVED SERVICE QUALITY

How service quality is perceived has been studied extensively during the past two decades. Most of these studies are based on the disconfirmation notion; that is, quality is perceived through a comparison between expectations and experiences over a number of attributes.

Grönroos (2000) introduced a service-oriented approach to quality with the concept of perceived service quality and the model of total perceived service quality. This approach is based on research into consumer behaviour and the effects of expectations concerning goods performance on post-consumption evaluations. The perceived service quality approach with its disconfirmation construct (that is, it measures how well experiences of the service process and its outcome meet expectations) still forms the foundation of most ongoing service quality research.

The original Perceived Quality Model was developed to help managers and researchers understand what constitutes a service in the minds of customers. The Perceived Service Quality model was introduced as a conceptual framework, which describes how customers perceive the “features” of a service. In the same way as a marketer of physical goods needs to know how customers perceive the quality of product features, the service marketer has to assess how customers perceive the quality of the “service features” implied by the perceived service quality framework.

A study covered on British Airway Airlines by Grönroos (2000), demonstrated some of the key aspects of service quality perceptions. This study was conducted in order to assess which attributes of service quality customers appreciate most and the following four aspects emerged:

- **Care and concern:** the customer wants to feel that the organisation, its employees and its operational systems are devoted to solving his problems.
- **Spontaneity:** contact employees demonstrate a willingness and readiness to actively approach customers and take care of their problems. They show that they can think for themselves and not just go by the book.
- **Problem solving:** contact employees are skilled in taking care of their duties and perform according to standards. Moreover, the rest of the organisation, including operational support employees and operational systems, are also trained and designed to give good service.
- **Recovery:** if anything goes wrong, or something unexpected happens, there is someone who is prepared to make a special effort to handle the situation.

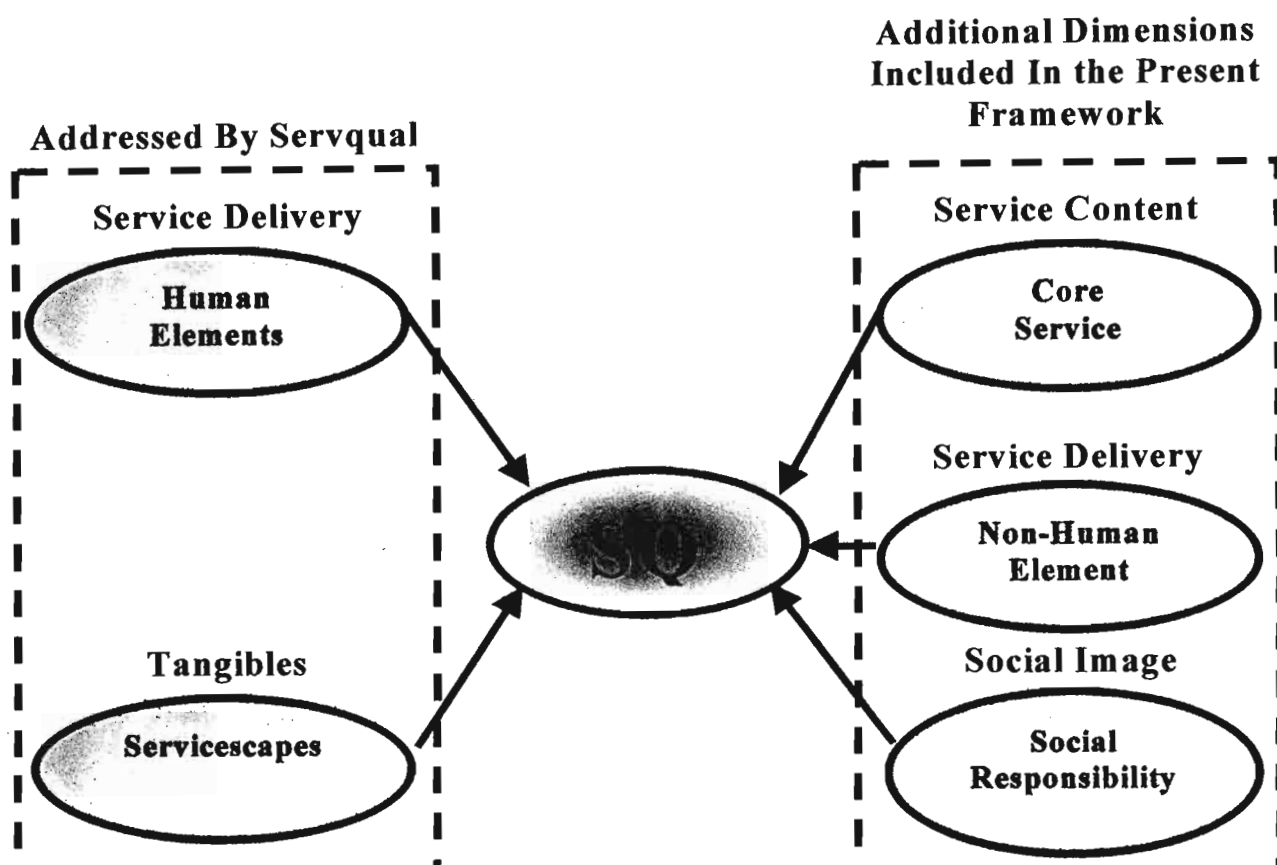
A strength of this study is that it demonstrates what is at the heart of customer perceptions of service quality.

6.1. The critical factors of customer-perceived service quality

Customer perceived service quality is based on essentially five factors. (Figure 3)

According to **Sureshchandar, Rajendran and Anantharaman (2002)**, they are as follows:

FIGURE 3 : The Critical Factors of Customer-Perceived Service Quality



Source: Sureshchander, G.S., Rajendran, C. and Anantharaman, R.N. 2002. Determinants of customer-perceived service quality: a confirmatory factor analysis approach. *Journal of Services Marketing*, 16(1), p.15.

6.1.1 Human element of service delivery

This factor refers to all aspects (reliability, responsiveness, assurance empathy, moments of truth, critical incident and recovery) that will fall under the domain of the human element in the service delivery.

6.1.2. Tangibles of service-servicescapes

The tangible facets of the service facility (these include equipment, machinery, signage, employee appearance.) or the man-made physical environment, known as the “servicescapes.”

6.1.3. Core service or service product

The core service portrays the “content” of a service. It portrays the “what” of a service, that is, the service product is whatever feature that are offered in a service. For example, even though a restaurant’s staff maybe friendly and courteous, customers will not attach a high value to the quality of service the restaurant provides if it fails to offer good quality and tasty food.

6.1.4. Systematisation of service delivery : non-human element

The processes, procedures, systems and technology that would make a service a seamless one. Customers would always like and expect the service delivery processes to be perfectly standardised, streamlined, and simplified so that they could receive the service without any hassles, hiccups or undesired questioning by the service providers.

6.1.5. Social Responsibility

Social responsibility helps an organisation to lead as a corporate citizen in encouraging ethical behaviour in everything it does.

These subtle, but nevertheless forceful, elements send strong signals towards improving the organisation's image and goodwill and consequently influencing the customer's overall evaluation of service quality and their loyalty to the organisation. For example, a hospital that gives free treatment to the poor is likely to be well regarded by all consumers, thus, improving the organisation's image and influencing customer perceptions of service quality. According to **Zemke and Schaaf, 1990** (as cited in Sureshchandar *et al* 2002), a study, conducted by "Consumer Reports" on customers of Non-Banking Financials, found that one of the predominant consumer concerns on service quality was: "Equal treatment tempered by pragmatism, stemming from the belief that everyone, big or small, should be treated the same".

Sureshchandar *et al* (2002), developed a new model which they believe could improve the understanding of the way in which customers perceive service quality. The model, developed in the financial services context covers the above five factors. It includes 41 items, tested in the context of the Indian banking industry. They also believe that the model can be used to measure levels of customer perceived service quality and provide managers with a yardstick on which improvement efforts can be found.

7. CUSTOMER EXPECTATIONS

Services tend to be intangible, inseparable from their provider, perishable and credence qualities, so consumers have a more difficult time evaluating services compared to goods.

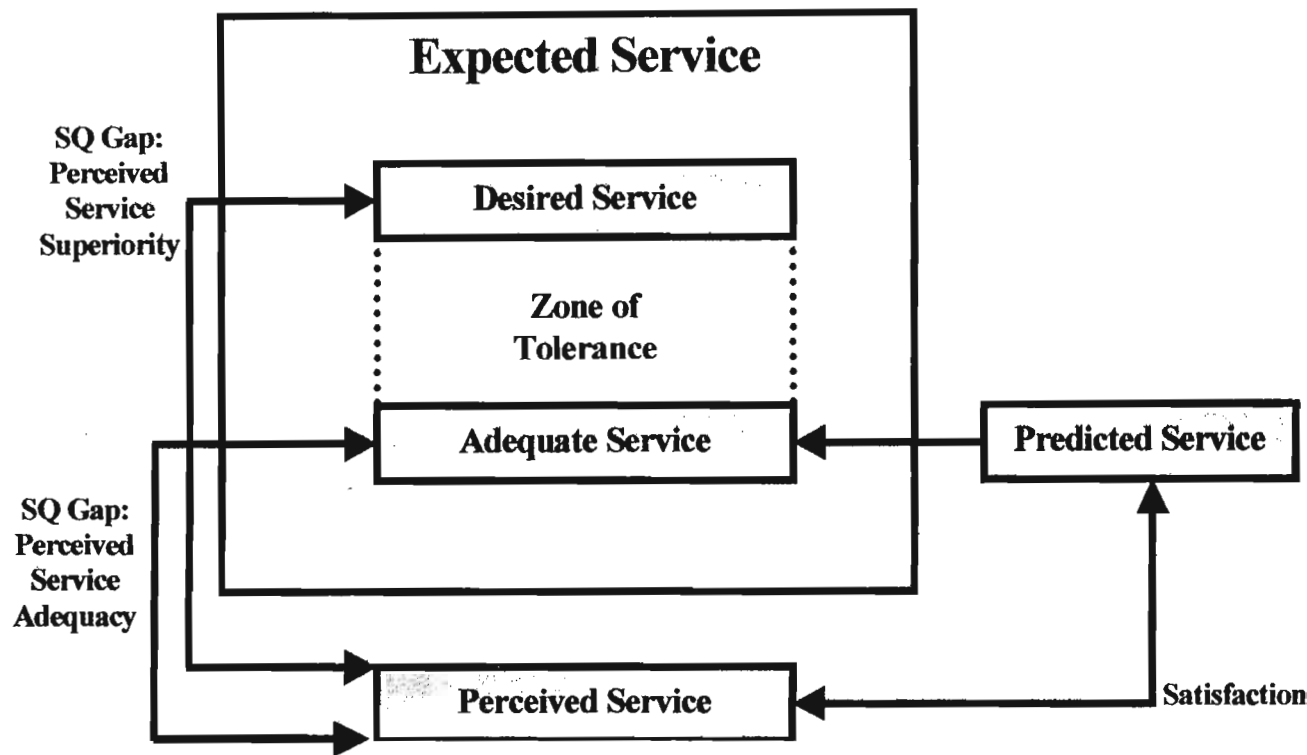
As the Perceived Service Quality model (Figure 3.8) shows, customer expectations has a decisive impact on customers quality perceptions. If perceived quality exceeds expectations then customers are satisfied or even delighted with the service. If performance falls below expectations they will be dissatisfied. **Walker and Baker (2000)**, describes service as a promise of satisfaction. Such promises, both implicit and explicit, made by service organisations influence customers' expectations of the service experience (**Bitner, 1995** as cited in Walker and Baker, 2000).

Since expectations are the standards against which customers evaluate service quality, it is important to understand the nature of customers' expectations. If a service provider over-promises, it raises customers' expectations too high and, consequently, customers will perceive that they get low quality. The level of quality may very well still be high, objectively measured, but as customer expectations were not in balance with experiences, the perceived quality is nevertheless low.

With growing attention on the need for examining multi-expectation standards, a framework was recently proposed that integrates both the service quality and satisfaction perspectives of expectations.

It is within this multi-expectation standard perspective that Zeithaml *et al* (1993) proposed that consumers use a combination of expectation types to guide service quality judgements. This can be represented as follows:

FIGURE 4: A Conceptual Model of Expectations in Evaluation of Services



Source: Zeithaml et al. 1993. as cited in Walker and Baker. 2000. An Exploratory Study of a Multi-expectation Framework for Services. *Journal of Services Marketing*, 14(5). p.414

This model expands upon by incorporating two levels of expectations, desired and adequate. Desired expectations represent the level of service a consumer hopes to receive, a blend of what a consumer believes “can be” and “should be” offered, while adequate expectations, a lower level of expectations, relate to what consumers deem an acceptable level of performance (Walker and Baker, 2000).

Desired expectations are thought to remain relatively stable over time, while adequate performances expectations may vary more widely. Between these two service quality expectation levels is a zone of tolerance. The zone of tolerance represents a range of performance that the service consumer considers acceptable. The zone expands and contracts like an accordion. Like the zone of tolerance, the two levels may vary from customer to customer and from one situation to another for the same customer. Similarly, they vary depending on the quality dimension involved (**Edvardsson, Thomasson and Qvretveit, 1994**). Understanding the workings of the zone of tolerance will provide practitioners better opportunities to optimise resource allocations in their continual attempt to meet/exceed customer expectations.

Walker and Baker (2000), demonstrate that managers should measure both levels of expectation, because marketers can fine-tune the way they allocate resources by incorporating the zone-of-tolerance framework. For example, a service provider with limited resources can improve customer's perceptions of service quality by making improvements to meet consumers' minimum expectation levels on the most essential attributes first. The service provider can then devote more resources and attention to less essential attributes, and/or to better meeting desired standard.

8. THE RELATIONSHIP BETWEEN SERVICE QUALITY AND CUSTOMER SATISFACTION

In the modern, highly competitive business world, the key to sustainable competitive advantage lies in delivering high quality service that will, in turn, lead to satisfied customers. **Baron and Harris (1995)** maintain that customer satisfaction is distinct from service quality. Satisfaction results from the comparison between predicted service and perceived service, whereas service quality refers to the comparison between desired service and perceived service. Any decline in customer satisfaction due to poor service quality would be a matter of concern. Consumers being more aware of rising standards in service, prompted by competitive trends, have developed higher expectations (**Frost and Kumar, 2000**). Service quality is commonly noted as a critical prerequisite for establishing and sustaining satisfying relationships with valued customers. In this way, the association between service quality and customer satisfaction has emerged as a topic of significant and strategic concern. In general, research in this area suggests that service quality is an important indicator of customer satisfaction (Spreng and Mackoy, 1996 as cited in **Lassar, Manolis and Winsor, 2000**).

Sureshchandar et al (2002) pointed out that service quality and customer satisfaction are inarguably the two core concepts that are at the crux of the marketing theory and practice.

They examined in detail the relationship between service quality and customer satisfaction and identified five factors of service quality as critical from a customer point of view:

- core service or service product – the content of a service
- human element of service delivery aspects such as reliability, responsiveness, assurance, empathy and service recovery, that are part of the human element in service delivery.
- Systematisation of service delivery – the processes, procedures, systems and technology that make a service seamless.
- Tangibles of service – the equipment, signage, appearance of employees, and the man-made physical environment surrounding the service, which is commonly known as the “servicescape”.
- Social responsibility – the ethical behaviour of the service provider.

Sureshchander *et al* (2002) pointed out that customer satisfaction couldn't be assessed by simply asking for the customer's overall feeling towards the service provider. Customer satisfaction, like service quality, is likely to be multidimensional in nature. They argued that customer satisfaction should be operationalised along the same five factors (41 items) as service quality.

Research showed that by analysing information collected from customers of different banks in India, **Sureshchandar *et al* (2002)**, were able to show that service quality and customer satisfaction are two different constructs, which customers are capable of distinguishing.

Service quality is more abstract than customer satisfaction and likely to be influenced by variables such as advertising and other forms of communication. Service providers must therefore view service quality and customer satisfaction separately. Managers should not simply focus on improving customer satisfaction, but also seek to improve customer perceptions of overall service quality.

In a more recent study also addressing the relationship between service quality and satisfaction, Spreng and MacKoy (1996) tested a model developed by Oliver (1993). Oliver's model integrates the two constructs, and suggests, among other things, that perceived service quality is an antecedent to satisfaction. Spreng and MacKoy's results indicate that, as predicted, service quality leads to satisfaction.

Lee, Lee and Yoo (2000) claim that customer satisfaction has more influence on the intention to buy a service than does service quality. Customers do not necessarily buy the highest quality services, but buy services that provide most satisfaction. Factors such as convenience, price or availability may influence satisfaction and then the intention to purchase – while not actually affecting customers' perceptions of service quality. Service managers should therefore try not only to improve service quality, but also to find and manage factors, which may not be related to service quality but to satisfaction. This may lead service managers to spend relatively more on increasing customer satisfaction, so in turn, increasing the customers' intention to purchase the service. This is particularly important because of the widely acknowledged belief that it is more cost-effective to retain an existing customer than to attract a new one.

The research by **Sureshchandar *et al* (2002)**, also shows, however, that service quality and customer satisfaction are closely related, and that an increase in one is likely to lead to a rise in the other. Satisfying customers may not be sufficient to remain ahead of the competition. The true gains of a quality revolution come only from delighting the customer. This, to a great extent, depends on the customer's perceptions of overall service quality.

CHAPTER 3 – RESEARCH METHODOLOGY

1. STUDY DESIGN

A descriptive research design was used to investigate the perceptions and expectations of customers at a designated pharmacy, i.e. Pinelands pharmacy.

A questionnaire was designed to gauge respondent's perceptions and expectations towards service quality in retail pharmacy. Descriptive research method design comprised quantitative methods to analyse empirical data collected. A qualitative method, collage was used to assist in establishing the basic content to be included in the questionnaire design.

2. QUESTIONNAIRE DESIGN

A collage technique comprised an exploratory technique in order to gather insight for the questionnaire design (Appendix A). Customers were required to put pictures together in a collage that reflected their expectations of retail pharmacy.

The following themes emerged from the collage research:

- Trust
- Versatility
- Understanding and sincerity
- Guidance
- Professionalism
- Tangibility
- Efficiency
- Follow-up
- Specialised individual care

Descriptive questionnaires were used to ascertain customer expectations and perceptions of pharmacy service. 100 questionnaires were handed out to selected customers during May/June 2003. Customers were required to fill in the questionnaire in-store so as to secure a good response rate. The questionnaire comprised 20 questions and the content was adapted from **Zeithaml, Parasuraman and Berry (1990) Service Quality Model**. (Appendix 2).

The measurement instrument was pre-coded to enable the input of data directly from the questionnaire. The questionnaire focussed on statements that required the respondents to evaluate their responses using the Likert scale (5 point). The Likert scale comprised the following:

1 = strongly disagree

2 = disagree

3 = unsure

4 = agree

5 = strongly agree

The questionnaire consisted of three sections:

- ◆ **SECTION A** – consisted of the demographics and information pertaining to respondents reasons to calling on retail pharmacy service. The information gathered in this section was employed for statistical and empirical purposes to determine characteristics and dispositions of customers.
- ◆ **SECTION B** – consisted of 20 statements pertaining to customer expectations of retail pharmacy.

- ♦ **SECTION C** – consisted of 20 statements pertaining to customer perceptions of retail pharmacy.

Each of SERVQUAL's five dimensions was operationalised by the several questions whereby the higher the number, the more favourable or stronger the associations. The statements were grouped as follows:

Statements 1 to 4 = Tangibles

Statements 5 to 8 = Reliability

Statements 9 to 12 = Responsiveness

Statements 13 to 16 = Assurance

Statements 17 to 20 = Empathy

3. DATA ANALYSIS METHODS

The SPSS package was the statistical methods used to interpret the data. The methods used were:

- Factor analysis
- Cross tabulation - was used to determine respondents profiles
- Cluster analysis - this is a technique used to group similar objects or people.

4. RESEARCH RELIABILITY AND VALIDITY

Carman (1990) assessed the SERVQUAL model with respect to its validity.

Kinnear (1991:232) defines validity as “the extent to which the measurement process is free from both systematic and random error.”

Carman used factor analysis and the Cronbach alpha reliability statistic. He found the following:

- The SERVQUAL model did a “fair job” in terms of construct validity (which includes understanding the theoretical rationale underlying the obtained measurements).
- In terms of discriminant validity, most of the dimensions recommended by Parasuraman *et al* (1985) were found. Validity checks, however, suggested that the dimensions were not so generic as to exclude the addition of items or new factors in specific applications of SERVQUAL.

The Cronbach coefficient Alpha method was used in this research to assess internal consistency for Section B and Section C of the questionnaire. The Reliability Coefficient Alpha obtained for both sections indicated a relatively high degree of internal consistency amongst the items in each section (see Appendix C). Validity in this research involved face validity. Face validity which is referring to the professional agreement that a scale’s content logically appears to accurately reflect what was intended to measure, was implemented

CHAPTER 4 – EVALUATION OF DATA ANALYSIS AND FINDINGS

1. INTRODUCTION

The raw data obtained from the questionnaires must be edited for data entry. Editing detects errors and omissions to responses. Editing is therefore done before data analysis. This ensures accuracy of the data when it is converted from the raw data form to a reduced and classified form. Close-ended questions were pre-coded to simplify the data entry process.

Data was then tabulated in order to determine the empirical distribution of the variables in the question and to calculate the descriptive statistics.

2. RESPONDENT PROFILING

Table 1: Type of pharmaceutical service acquired according to gender
(n = 100)

		WHEN DO YOU SEEK THE SERVICES OF A PHARMACY ?			TOTAL
		prescription only	General accessories and OTC	Both	
GENDER	Male	25	7	13	45
	Female	25	10	20	55
Total		50	17	33	100

50% of the customers go to pharmacies, in general, to have their prescriptions dispensed only. This group consists of an equal number of males and females. 61% of the customers who go to pharmacies to have their prescriptions dispensed and also for general accessories and OTC(over-the-counter medication), are females.

**Table 2 : Duration of patronage according to gender
(n = 100)**

		HOW LONG HAVE YOU BEEN A CUSTOMER OF THIS PHARMACY ?					
		under 1 year	between 1 year to under 2 years	between 2 to 3 years	more than 3 years	First time	
GENDER	Male	13	5	0	11	16	45
	Female	9	6	7	14	19	55
Total		22	11	7	25	35	100

Majorities of the customers (35%) have come for the first time and are females.

Table 3 : Medical concern contact according to gender (n=100)

		WHEN YOU HAVE A MEDICAL PROBLEM WHOM DO YOU CONTACT FIRST ?				Total
		doctor	pharmacist	depends on problem	other	
GENDER	Male	14	18	13		45
	Female	19	24	11	1	55
Total		33	42	24	1	100

42% of the customers indicated that the pharmacist is the person of first contact whenever there is a medical concern. The females (57%) comprised most of this group.

Table 4 : Monthly income according to gender (n = 100)

		MONTHLY INCOME				Total
		under R2000	Between R2000 To R3999	between R4000 to R6000	more than R6000	
GENDER	Male	0	6	22	17	45
	Female	2	18	20	15	55
Total		2	24	42	32	100

There was no noticeable difference between the income status between the genders.

From the above tables it is evident that gender differences do exist with respect to seeking pharmacy services. The female population seem to be highly involved in making decisions regarding services from a retail pharmacy.

3. SERVICE QUALITY DIMENSIONS OF CUSTOMER EXPECTATIONS AND PERCEPTIONS OF A RETAIL PHARMACY

Table 5 : Perceived Mean, Expected Mean and Mean difference Scores (n = 100)

Attributes	Perceived Mean	Expected Mean	Mean difference
TANGIBLES			
1. Modern looking equipment	4.24	3.81	0.43
2. Visually appealing physical facilities	3.51	4.01	-0.5
3. Staff dress code	3.98	4.8	-0.82
4. Visually appealing materials	3.71	4.29	-0.58
RELIABILITY			
5. Promise to do something by a certain time	3.8	4.84	-1.04
6. Sincere interest in solving problems	3.76	4.89	-1.13
7. Perform service right the first time	3.78	4.79	-1.01
8. Error free records	3.47	4.64	-1.17
RESPONSIVENESS			
9. Inform customers when a service will be provided	3.65	4.86	-1.21
10. Prompt service to customer	4.41	4.89	-0.48
11. Willingness to help	4.13	4.91	-0.78
12. Never be too busy to respond to requests	3.79	4.83	-1.04
ASSURANCE			
13. Confidence in staff behaviour	4.18	4.92	-0.74
14. Safety in transaction with pharmacy	4.1	4.94	-0.84
15. Staff courtesy	3.91	4.96	-1.05
16. Staff knowledge to answer questions	4.04	4.97	-0.93
EMPATHY			
17. Individual attention to customers	3.74	4.91	-1.17
18. Convenient operating hours	3.52	4.89	-1.37
19. Patients best interest at heart	3.97	4.98	-1.01
20. Understand specific needs of patients	3.86	4.96	-1.1

The GAP 5 scores are calculated by determining the means of customer expectations and perceptions. The expectation mean is subtracted from the perception mean. The resulting difference, which is recorded in Table 5 is the GAP score.

The more negative the score, the more serious the gap, indicating that guests are not receiving the expected service delivery.

Table 5 brings to light, GAP 5 of the SERVQUAL model. GAP 5 denotes the difference between customer perception of an actual service experience and customer expectations of an ideal service.

The following can be deduced from the above table :

With respect to :-

a) Perceptions

- Attribute 1, 10, 11, 13, 14, 16, have a mean score above 4. This indicates that the customers have good perceptions of the service they received with respect to the above-mentioned attributes. The gap difference between the above-mentioned attributes was also small therefore, indicating that customer perceptions were close to the expectations.
- Attribute 1 has a positive mean difference. This shows that customer expectations of modern looking equipment were met and even exceeded by customer perceptions.

b) Expectations

- Attributes 2 to 20 recorded scores above 4. This indicates that the customers have high expectations of pharmaceutical services.

Table 6 : Dimensional scores and overall GAP 5 score (n = 100)

SERVICE DIMENSION	GAP SCORE
Tangibles	-0.368
Reliability	-1.088
Responsiveness	-0.878
Assurance	-0.890
Empathy	-1.163
Overall Score	-0.877

The retail pharmacy's service quality along the five dimensions, are assessed across all customers as follows :

- For each dimension, add the mean difference scores (from Table 5) of the statements pertaining to the dimension and divide the sum by the number of statements making up that dimension.
- The overall GAP 5 score is computed by averaging the totals of the five dimensions.

The tangibles score is slightly negative. This is attributed to the low perceived scores obtained in Table 5. The staff dress code attribute needs to be looked at as it obtained the most negative score.

There is a difference between the reliability and tangibles scores. The scores of statements 5 to 8 pertaining to reliability were above 1. Statement 8 (error-free records) had the most negative score of -1.17. This indicates that expectations were not adequately met.

Statement 9 (inform customers when a service will be provided) achieved a score of -1.21 (see Table 5). This was the highest gap score for responsiveness. This indicates that customers highly agreed that they expected to be informed about when a service will be provided, however, their perceptions thereof were not favourable.

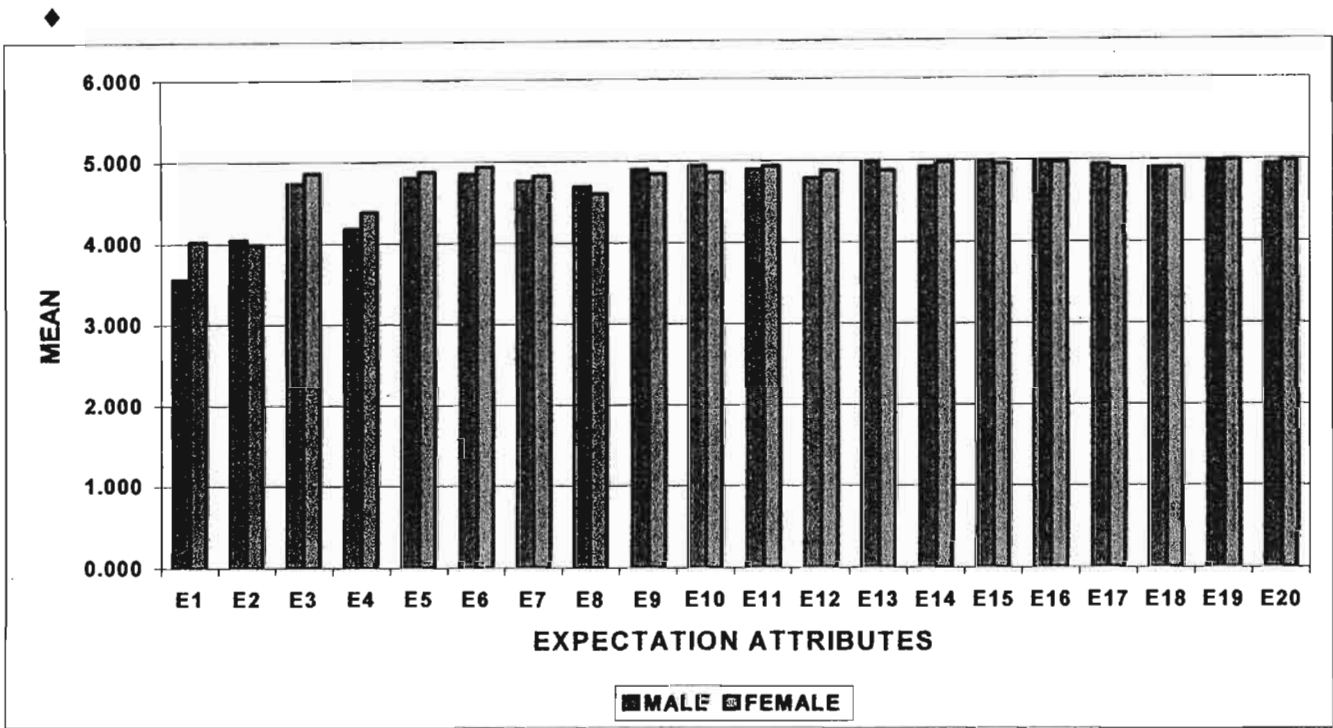
Assurance is the knowledge and courtesy of staff as well as their ability to convey trust and confidence. Statement 15 (staff courtesy) with a score of -1.05 (see Table 5) needs to be looked at. In the pharmacy service, staff courtesy is important.

The empathy dimension score of -1.163 (see Table 6) has the highest overall gap score. This indicates that the caring, individualised attention that the pharmacy should be providing is not up to expected standards. Statement 17 (individual attention to customers) and statement 18 (convenient operating hours) contribute mainly to the high gap score and therefore need some attention.

The overall SERVQUAL Gap scores is only slightly negative. This indicates that perceptions of the service are slightly below expectations. However, important dimensions such as reliability and empathy need to be investigated as they are important factors to consider in pharmacy service. Patients require empathy and reliability to boost their confidence and trust in their pharmacist as this concerns their health and thus their quality of life.

Figure 5 indicates the difference between male and female expectations of service delivery from pharmacies. Their expectations of each attribute were relatively the same with very slight differences. Perhaps, the most noticeable difference can be spotted with attribute E1, where the females' expectations, relating to modern looking equipment was higher than the males.

FIGURE 5 : Expected attributes according to gender

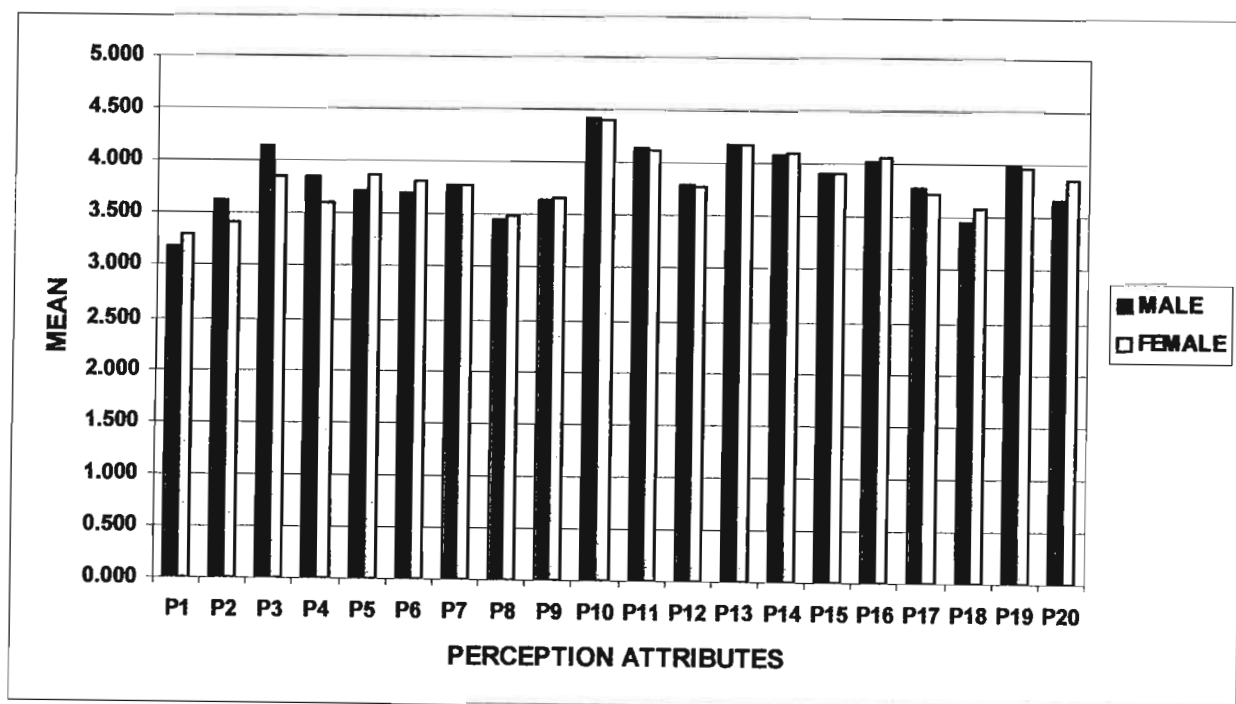


- ◆ E1 = Excellent pharmacies should have modern looking equipment
- ◆ E2 = The physical facilities should be visually appealing.
- ◆ E3 = The staff should be neatly dressed.
- ◆ E4 = The materials associated with the service should be visually appealing
- ◆ E5 = When the staff promise to do something, by a certain time, they should do so.
- ◆ E6 = When I have a problem, the staff should show a sincere interest in solving it.
- ◆ E7 = The pharmacy should perform the service right the first time.
- ◆ E8 = The pharmacy should insist on error free records.
- ◆ E9 = The staff should inform customers when a service will be provided.
- ◆ E10 = The staff should give prompt service to customers.
- ◆ E11 = The staff should always be willing to help.
- ◆ E12 = The staff should never be too busy to respond to customer requests.
- ◆ E13 = The behaviour of staff should instil confidence in the patient.

- ◆ E14 = Patients should feel safe in their transactions with the pharmacy.
- ◆ E15 = The staff should be consistently courteous with customers.
- ◆ E16 = The staff should have the knowledge to answer patient questions.
- ◆ E17 = The pharmacy should give patient's individual attention.
- ◆ E18 = The pharmacy should have convenient operating hours to all patients.
- ◆ E19 = The pharmacy should have patient's best interests at heart.
- ◆ E20 = The staff should understand the specific needs of their patients.

Figure 6 indicates the difference between male and female perceptions of service delivery from Pinelands pharmacy. Their perceptions of each attribute were relatively the same with very slight differences. The most noticeable difference can be spotted with attribute P2 and P3, where the males' perceptions, relating to visually appealing physical facilities and neatly dressed staff, respectively, were more favourable than the females. The females had a more favourable perception of the staff understanding their specific needs than the males.

FIGURE 6 : Graph of Perception Attributes Vs Mean with respect to Gender



- ◆ P1 = Pinelands pharmacy has modern looking equipment.
- ◆ P2 = The physical facilities are be visually appealing.
- ◆ P3 = The staff are neatly dressed.

- ◆ P4 = The materials associated with the service are visually appealing
- ◆ P5 = When the staff promise to do something, by a certain time, they do so.
- ◆ P6 = When I have a problem, the staff show a sincere interest in solving it.
- ◆ P7 = The pharmacy performs the service right the first time.
- ◆ P8 = The pharmacy insists on error free records.
- ◆ P9 = The staff informs me when a service will be provided.
- ◆ P10 = The staff give me prompt service.
- ◆ P11 = The staff are always willing to help.
- ◆ P12 = The staff are never be too busy to respond to my requests.
- ◆ P13 = The behaviour of staff instils confidence in me.
- ◆ P14 = I feel safe in my transactions with the pharmacy.
- ◆ P15 = The staff are consistently courteous with me.
- ◆ P16 = The staff have the knowledge to answer my questions.
- ◆ P17 = The pharmacy gives me individual attention.
- ◆ P18 = The pharmacy has convenient operating hours to all patients.
- ◆ P19 = The pharmacy has my best interests at heart.
- ◆ P20 = The staff understands my specific needs.

4. FACTOR ANALYSIS

This is an interdependency technique with the objective of data reduction so that those variables that belong together and have overlapping measurement characteristics can be determined. Principal component analysis method of extraction and varimax rotation was used.

4.1. Identifying the factors that influence customer expectations

The KMO of sampling adequacy was implemented to assess the appropriateness of factor analysis. The KMO value is 0.631 (see Table 7) and therefore adequate to proceed with factor analysis. This value indicates that a high degree of correlation exists amongst the variables. Bartlett's test of Sphericity is high with a value of 16.631 and is significant ($p = 0.000$). This indicates that the factor analysis would provide statistically reliable information.

Table 7 : KMO and Bartlett's Test for expectations

KMO AND BARTLETT'S TEST		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.636
Bartlett's Test of Sphericity	Approx. Chi-Square	852.445
	Df	190
	Sig.	0

Table 8 : Total variance explained for expectations

FACTOR	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.242	21.208	21.208	2.984	14.919	14.919
2	2.957	14.784	35.992	2.837	14.183	29.102
3	1.829	9.146	45.138	2.31	11.549	40.652
4	1.798	8.991	54.129	2.108	10.542	51.194
5	1.612	8.061	62.19	1.836	9.181	60.374
6	1.221	6.103	68.293	1.346	6.732	67.106
7	1.08	5.4	73.693	1.317	6.587	73.693
Extraction Method: Principal Component Analysis.						

The scree plot (see Appendix D) was used to identify the optimum number of factors that can be extracted before the unique variance begins to dominate the common variance structure. According to the scree plot seven factors were identified. Table 8 illustrates the seven factors and their relative explanatory powers are expressed by the Eigenvalues greater than 1.

The seven factors represent 73.693% of the variance. Factor 1 accounts for 21.208%. Factor 2 accounts for 14.784%. After rotation, majority of the variance is explained by Factor 1 (14.919%) and Factor 2 (14.183%).

Factor analysis enabled the research to conceptualise the expectations of customers of a retail pharmacy. The expectations could be grouped (see Table 9) as Factor 1 to Factor 7.

Table 9 : Factor analysis – Expectations

VARIABLE ATTRIBUTE	PRINCIPAL COMPONENT
	VARIMAX
Factor 1: Understanding Patient Needs	
The staff should have the knowledge to answer patient questions	0.785
Patients should feel safe in their transactions with the pharmacy.	0.754
The staff should always be willing to help.	0.737
The behaviour of staff should instil confidence in the patient.	0.577
The staff should never be too busy to respond to customer requests	0.526
Factor 2: Customer Service	
The staff should understand the specific needs of their patients.	0.892
The pharmacy should have the patient's best interests at heart.	0.833
The pharmacy should have convenient operating hours to all patients.	0.801
The staff should be consistently courteous with the patients.	0.535
Factor 3: Problem Solving	
When I have a problem, the staff should show a sincere interest in solving it.	0.827
The pharmacy should perform the service right the first time.	0.799
When the staff promise to do something by a certain time, they should do so.	0.749
Factor 4: Service Efficiency	
The pharmacy should inform patients, when a service will be provided.	0.847
The staff should give prompt service to customers.	0.642
The pharmacy should insist on error free records.	0.618
Factor 5: Visual Appeal	
Materials associated with the service should be visually appealing.	0.864
The physical facilities should be visually appealing.	0.761
Excellent pharmacies should have modern looking equipment.	0.672
Factor 6: Individual Attention	
The pharmacy staff should give customers individual attention.	0.545
Factor 7: Staff Appearance	
The staff should be neatly dressed.	0.862

Interpretation of factors

The factors classified in the above table could be interpreted as outlined below:

FACTOR 1 – UNDERSTANDING PATIENT NEEDS

Factor 1 accounts for 14.919% of the variance. It is made up of five variables as indicated in Table 11. These variable relate to the expectations of patients with respect to the individual attention.

FACTOR 2 – ASSURANCE

Factor 2 accounts for 14.183% of the variance. The factor is made of four variables and relate to the level of assurance customers expect of pharmacy.

FACTOR 3 – RELIABILITY

Factor 3 accounts for 11.549% of the variance and consists of three variables. The variables relate to customer expectations of reliability of pharmacy service.

FACTOR 4 – EFFICIENCY

Factor 4 accounts for 10.542% of the variance. It consists of three variables relating to expected efficiency with respect to prompt service, informing patients of services and error free record keeping.

FACTOR 5 – TANGIBLES

Factor 5 accounts for 9.181% of the variance and consists of three variables. The variables pertain to the aesthetic aspect of the pharmacy service delivery.

FACTOR 6 – INDIVIDUAL ATTENTION

Factor 6 accounts for 6.732% of the variance and consists of one variable relating to the expectation of individual attention.

FACTOR 7 – STAFF PRESENTATION

Factor 7 accounts for 6.587% of the variance and consists of one variable relating to expected staff appearance.

4.2. Identifying the factors affecting customer perceptions of a retail pharmacy

Table 10 : KMO and Bartlett's Test for perceptions

The KMO value is adequate to proceed with factor analysis (KMO = 0.822).

Bartlett’s test of Sphericity is also high.

KMO AND BARTLETT'S TEST		
Bartlett's Test of Sphericity	Approx. Chi-Square	1027.884
	Df	190
	Sig.	4.7E-115

Table 11 : Total Variance Explained for perceptions

The scree plot revealed six factors (see appendix E). The six factors represent 71.928% of the variance. After rotation, majority of the variance is explained by Factor 1 (27.441%) and Factor 2 (12.767%).

FACTOR	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.136	35.681	35.681	5.488	27.441	27.441
2	2.025	10.127	45.807	2.553	12.767	40.208
3	1.718	8.592	54.399	1.790	8.948	49.156
4	1.332	6.658	61.057	1.783	8.913	58.068
5	1.142	5.708	66.766	1.657	8.287	66.356
6	1.032	5.162	71.928	1.114	5.572	71.928

Table 12 : Factor Analysis of Perceptions

The perceptions could be grouped (see table 12 below) as Factor 1 to Factor 6.

VARIABLE ATTRIBUTE	PRINCIPAL COMPONENT
	VARIMAX ROTATION
FACTOR 1 – PATIENT INDIVIDUALISATION	
When I have a problem, the staff show a sincere interest in Solving it	0.859
The staff understands my specific needs	0.853
The staffs is never too busy to respond to customer requests.	0.824
The staff are consistently courteous with me.	0.785
When the pharmacy promises to do something by a certain time, They do so.	0.782
The staff informs me when a service will be provided.	0.751
The pharmacy gives me individual attention.	0.666
The pharmacy has my best interests at heart.	0.599
The staff have the knowledge to answer my questions	0.387
FACTOR 2 – PHARMACY STAFF COMPETENCE	
The staff give me prompt service.	0.83
The behaviour of staff instils confidence in me.	0.749
I feel safe in my transactions with the pharmacy.	0.671
The staff are always willing to help.	0.61
FACTOR 3 – EFFICIENCY	
The pharmacy staff performs the service right the first time.	0.87
The pharmacy insists on error free records.	0.739
FACTOR 4 – STAFF PRESENTATION AND CONVENIENT OPERATING HOURS	
The staff are neatly dressed.	0.794
The pharmacy has convenient operating hours to all patients.	0.716
FACTOR 5 – AESTHETIC APPEAL	
Materials associated with the service are visually appealing.	0.88
The physical facilities are visually appealing.	0.86
FACTOR 6 - MODERN	
Pinelands pharmacy has modern looking equipment.	0.919

Interpretation of Factors

FACTOR 1 – PATIENT INDIVIDUALISATION

Factor 1 accounts for 27.441% of the variance. It is made up of nine variables as indicated in Table 11. These variables relate to the perceptions of patient individualisation.

FACTOR 2 – PHARMACY STAFF COMPETENCE

Factor 2 accounts for 12.767% of the variance. The factor is made of four variables and relate to the perceptions of competence of the staff.

FACTOR 3 – EFFICIENCY

Factor 3 accounts for 8.948% of the variance and consists of two variables. The variables relate to perceived efficiency with respect to performing the service right the first time and error free record keeping.

FACTOR 4 – STAFF PRESENTATION

Factor 4 accounts for 8.913% of the variance. It consists of two variables relating to perceived staff presentation and convenient operating hours.

FACTOR 5 – AESTHETIC APPEAL

Factor 5 accounts for 8.287% of the variance and consists of two variables. The variables pertain to the aesthetic perceptions of the pharmacy.

FACTOR 6 – MODERN

Factor 6 accounts for 5.572% of the variance and consists of one variable relating to perception of modern equipment.

5. CLUSTER ANALYSIS

According to Cooper, Schinder (2001), cluster analysis is a set of techniques for grouping similar objects or people. It begins with an undifferentiated group of people, events or objects and attempts to reorganise them into homogenous groups. Cluster analysis was used to classify the 100 cases into homogenous groups with the aim of determining market segments of customers.

5.1. Identifying market segments

Customers of services can differ from each other in many ways and at many moments. Therefore many different market segments can be found, which are based on the specific characteristics of services.

In an attempt to identify market segments pertaining to expectations and perceptions of service quality in a retail pharmacy, Tables 13 and 14 (below) were generated. Two market segments relating to expectations and perceptions were identified.

On analysis of Table 13 (see below), a noticeable difference between the two clusters is noted with variables of modern looking equipment and visually appealing physical facilities. Customers of cluster 1 agreed (4.33 and 4.42) that they expected retail pharmacies to have modern looking equipment and visually appealing physical facilities. However, customers of cluster 2, on the same two attributes, tendered to disagree (2.65 and 3.10).

The responses to the other attributes were fairly similar between the two clusters. Therefore, although the cluster analysis was attempted, it can be concluded that there was no noticeable difference between the two clusters.

Table 13: Mean values of cluster variable with respect to expectations

VARIABLE	CLUSTER	CLUSTER
	1	2
1. Modern looking equipment	4.33	2.65
2. Visually appealing physical facilities	4.42	3.10
3. Staff dress code	4.81	4.77
4. Visually appealing materials	4.48	3.87
5. Promise to do something by a certain time	4.87	4.77
6. Sincere interest in solving problems	4.93	4.81
7. Perform service right the first time	4.83	4.71
8. Error free records	4.64	4.65
9. Inform customers when a service will be provided	4.86	4.87
10. Prompt service to customer	4.90	4.87
11. Willingness to help	4.91	4.90
12. Never be too busy to respond to requests	4.83	4.84
13. Confidence in staff behaviour	4.91	4.94
14. Safety in transaction with pharmacy	4.93	4.97
15. Staff courtesy	4.96	4.97
16. Staff knowledge to answer questions	4.99	4.94
17. Individual attention to customers	4.91	4.90
18. Convenient operating hours	4.84	5.00
19. Patients best interest at heart	4.97	5.00
20. Understand specific needs of patients	4.96	4.97

Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Unsure, 4 = Agree, 5 = Strongly Agree

Table 14 (below) also reveals a similar scenario to the expectations. A noticeable difference between the two clusters was noted in the perception of modern looking equipment (3.94 and 2.93). Thus no clear market segments could be identified, as the means for all other attributes between the two clusters were very close.

Table 14: Mean values of cluster variable with respect to perceptions

VARIABLE	CLUSTER 1	CLUSTER 2
	1	2
1. Modern looking equipment	3.94	2.93
2. Visually appealing physical facilities	3.39	3.57
3. Staff dress code	4.45	3.77
4. Visually appealing materials	3.81	3.67
5. Promise to do something by a certain time	4.26	3.59
6. Sincere interest in solving problems	4.23	3.55
7. Perform service right the first time	4.10	3.64
8. Error free records	3.81	3.32
9. Inform customers when a service will be provided	4.10	3.45
10. Prompt service to customer	4.65	4.30
11. Willingness to help	4.68	3.88
12. Never be too busy to respond to requests	4.45	3.49
13. Confidence in staff behaviour	4.61	3.99
14. Safety in transaction with pharmacy	4.61	3.87
15. Staff courtesy	4.45	3.67
16. Staff knowledge to answer questions	4.35	3.90
17. Individual attention to customers	4.16	3.55
18. Convenient operating hours	4.23	3.20
19. Patients best interest at heart	4.39	3.78
20. Understand specific needs of patients	4.26	3.68

Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Unsure, 4 = Agree, 5 = Strongly Agree

CHAPTER 5 – RESEARCH CONCLUSION AND RECOMMENDATIONS

1. RESEARCH CONCLUSION

The research explored 3 objectives:

- Identifying the factors that influence customer expectations of a retail pharmacy

Factor analysis of expectations revealed 7 factors that could influence customer expectations of retail pharmacy. These include understanding patient needs, assurance, reliability, efficiency, tangible, attention and staff presentations. Understanding patient needs and assurance accounted for the majority of the variance. As retail pharmacy managers, it is important to have a sound knowledge of the factors that influence customer expectations. These factors can serve as a basis of developing the relevant marketing plans to meet these expectations. The aim is not only to deliver quality service to meet expectations but also to exceed them and in so doing result in customer satisfaction, loyalty and retention.

- Identifying the factors that influence customer perceptions of a retail pharmacy

Six factors were isolated that could influence customer perceptions. Respondents believe that patient individualisation, pharmacy staff competence, efficiency, staff presentation and convenient operating hours, aesthetic appeal and a modern pharmacy are important factors in providing good, quality service from a retail pharmacy.

Understanding customer perceptions lends a hand in maintaining the current level of service at the pharmacy, as well as, also taking the necessary corrective measures to raise service levels to the expected standards.

- Identifying market segments

Cluster analysis did not reveal any substantive difference in market segments.

This indicates that the customers selected were very similar in their expectations and perceptions of the service quality attributes.

The overall SERVQUAL Gap scores (see Table 6) is only slightly negative. This indicates that perceptions of the service are slightly below expectations. However, important dimensions such as reliability and empathy need to be investigated, as they are important factors to consider in pharmacy service. Patients require empathy and reliability to boost their confidence and trust in their pharmacist as this concerns their health and thus their quality of life.

BIBLIOGRAPHY

Baron, S. & Harris, K. 1995, *Services Marketing Texts and Cases*. Macmillan Press Ltd. Great Britain.

Bebko, C.P. 2001, *Service intangibility and its impact on consumer expectations of service quality*. Journal of Services Marketing. 14(1): 9-26.

Berry, L.L. *Services Management is different*. Business magazine. Vol. 30. May-June 1980.

Carman, J.M. 1990. *Consumers perceptions of service quality: An assessment of the SERVQUAL dimensions*. Journal of Retailing. Vol. 66., No. 1.

Coulter, K.S. & Coulter, R.A. 2002. *Determinants of trust in the service provide: the moderating role of length relationship*. Journal of Services marketing, 16(1): 35-50.

Edvardsson, B., Thomasson, B. & Qvertveit, J. 1994. *Quality of service - making it really work*. Macgraw-Hill Book Company. England.

Frost, F.A. and Kumar, M. 2000. *Intservqual – An internal adaptation of the gap Model in a large service organisation*. Journal of Services Marketing. 14(5): 358-377.

Gronroos, C. 2000. *Services management and Marketing - A customer relationship management approach*. 2nd Edition, John Wiley and Sons Ltd. England.

Hoyer, W.D. & MacInnis, D.J. 1997. *Consumer behaviour*. Houghton Mifflin Company. USA.

Kinney T.C. & Taylor J.R. 1991. *Marketing research: An applied approach*, McGraw – Hill. USA.

Kotler, P. 1991. *Marketing Management*. 7th Edition, Prentice-Hall. New Jersey.

Kurtz, D.L. & Clow, K.E. 1998. *Service Marketing*. John Wiley and Sons Ltd. USA

Lasser, W.M., Manolis, C & Winsor, R.D. 2000. *Service quality perspectives and satisfaction in private banking*. Journal of Services Marketing. 14(3): 244-271

Lee, H., Lee, Y. & Yoo, D. 2000. *The determinants of perceived service quality and its relationship with satisfaction*. Journal of Services Marketing, 14(3): 217-231

Loudon, D.L. & Della Bitta, A.J. 1993. *Consumer Behavior*. 4th Edition, McGraw-Hill Book Company. Singapore.

Manning, T. 1991. *World Class*. 2nd Edition, Juta & Co.Ltd. South Africa.

Mudi, P. & Cottam, A. 1999. *The Management and Marketing of Services*. 2nd Edition, Butterworth-Heinemann, Great Britain.

Parasuraman, A., Zeithaml, V.A. & Berry, L.L. 1985(Fall). *A conceptual model of service quality and its implications on future research*. Journal of Marketing, 49, 14-50.

Peter, J.P. & Olson, J.C. 1996. *Consumer behaviour and Marketing Strategy*. 4th Edition, Richards D.Irwin, USA

Regan, W.J. 1963. *The service revolution*. Journal of Marketing. Vol. 27.

Sureshchandar, G.S., Rajendran, C. & Anantharaman, R.N. 2002. *The relationship between service quality and customer satisfaction - a factor specific approach*. Journal of Services Marketing. 16(4): 363-379.

Tse, A.Q.C.B. 2001. *How much more are consumers willing to pay for a higher level of service? A preliminary survey*. Journal of Services marketing. 15(1): 11-17.

Walker, J. and Baker, J. 2000. *An exploratory study of a multi-expectation framework for services*. Journal of Services Marketing. 14(5): 411-431.

Wilkie, W.L. 1990. *Consumer behaviour*. 2nd Edition. John Wiley and Sons, Inc.USA

Internet sites

<http://www.ukppg.co.uk/outside-units.html>

<http://www.caredatareports.com/pharmacy/surveyproduce/html>

APPENDIX A: COLLAGE OF EXPECTATIONS OF SERVICE FROM
RETAIL PHARMACY

4 patients were issued with a magazine and were requested to prepare a collage by cutting out pictures from a magazine that symbolised their expectations of service from retail pharmacy. The results are as follows:

APPENDIX A1 - COLLAGE 1

PICTURE 1: TRUST

Patients must be able to trust the honesty of the pharmacist and also get support from the other contact staff.

PICTURE 2: VERSATILITY

The pharmacist must have a sound knowledge of new products and also be well versed in the use of conventional and alternate medicine in order to provide holistic patient care.

PICTURE 3: UNDERSTANDING

This includes the understanding of the different health need of patients and the difficult and debilitating problems of patients. In so doing displaying empathy is important.

PICTURE 4: GUIDANCE

Guidance through the proper and safe use of medication, and also in selecting over-the-counter medication.

PICTURE 5: CHEERFULNESS

In most cases patients are ill and low-spirited. A bright smile to enkindle cheerfulness and uplifting words would be appreciated to uplift spirits.

PICTURE 6: EFFICIENCY

Patients expect to be served quickly and do not want to wait for long periods for their medication to be dispensed or delivered.

1

6

5

2

4

KWAZULU-NATAL

3

APPENDIX A2 - COLLAGE 2

PICTURE 1: BALANCE SERVICE

Expect to be treated and offered the same service all the time. Pharmacy should also cater for the provision of alternate therapies in term of products stocked, in-store naturopath etc. By incorporating both conventional and alternate therapies a well-balanced level of service can be achieved.

PICTURE 2: NEATNESS

Expect the pharmacy environment to be neatly arranged, acquire up-to-date devices to do various tests like blood pressure, cholesterol, glucose, AIDS and malaria testing.

PICTURE 3: PROFESSIONALISM

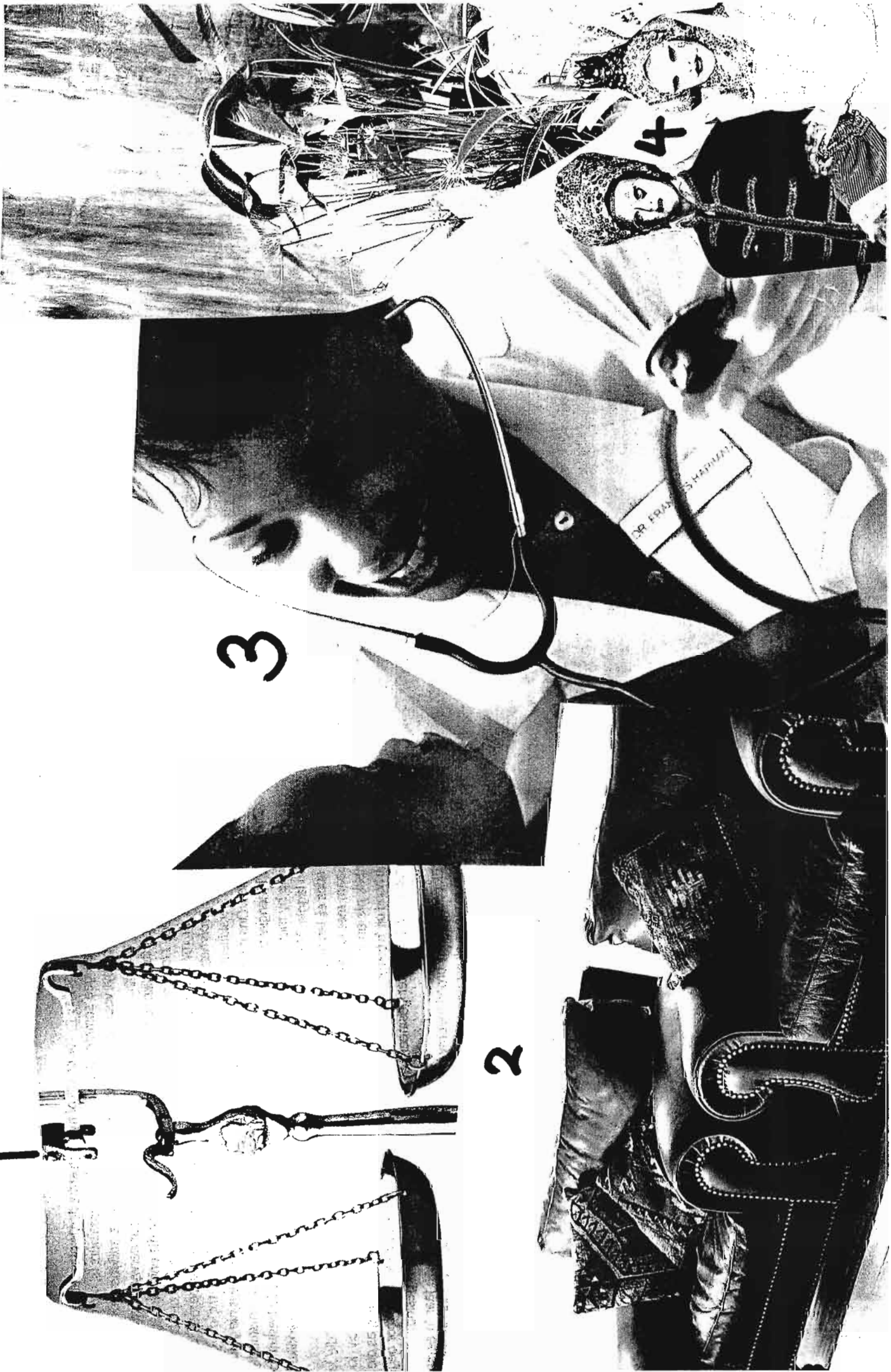
All staff should carry themselves in a professional manner and also be appropriately and neatly dressed.

PICTURE 4: SINCERITY

Expect sincere and genuine advice- and not “wear masks”. There should be no reluctance in providing a service.

PICTURE 5: PHYSICAL FACILITY

There should be up-to-date devices to do various testing e.g. glucose, cholesterol, AIDS and malaria testing. The shop-layout should be inviting with bright colours to resemble freshness and warmth that would want you to spend time in browsing. There should be captivating display material to re-inforce health and well being.



APPENDIX A3 - COLLAGE 3

PICTURE 1: ON-THE-SPOT ADVICE

Expect good advice and assistance with big or small problems

PICTURE 2: FOLLOW-UP

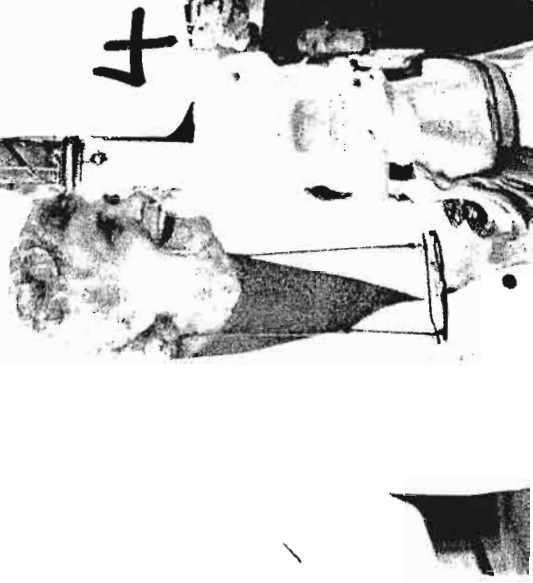
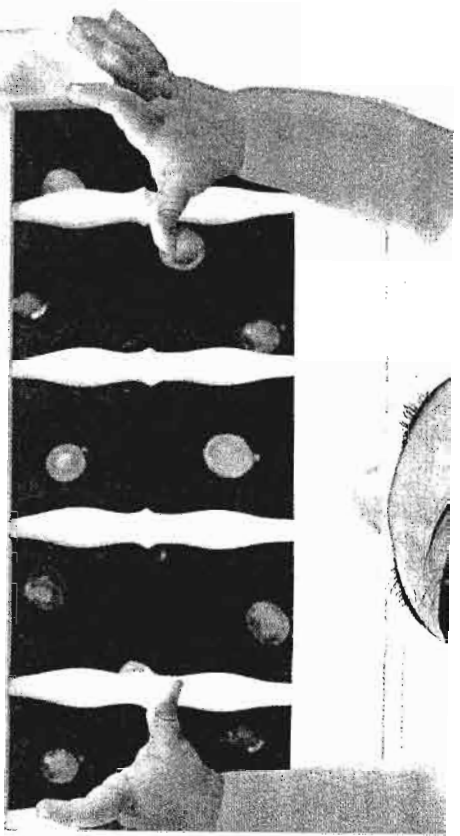
Expect the pharmacist to keep a watchful eye on a patient's health progress/decline by follow-ups. Expect a degree of individualised care.

PICTURE 3: OPEN COMMUNICATION

Patients should be able to openly discuss problems, queries and seek advice. There should be no barriers to communication. Pharmacist should be viewed in light of a trusted friend rather than "the man in a white coat"

PICTURE 4: SPECIALISED INDIVIDUALISED CARE

This is especially for the elderly. Also includes importance of the cost of medication and specialised care of the elderly due to problems that arise due to age.



2

4

3

1

APPENDIX A4 - COLLAGE 4

PICTURE 1: HIGH LEVEL OF CUSTOMISED CARE

Expect a high level of customised care because of varying health-related needs.

PICTURE 2: TRUST

This refers to the trust of confidentiality and trust in providing safe and effective use of medication.

PICTURE 3: PROFESSIONALISM

Expect to be professional when dealing with all age groups

PICTURE 4: UP-TO-DATE

The pharmacy must display a sense of a modern environment with respect to technology and also having up-to-date product knowledge and information at hand.

PICTURE 5: CHEERFULNESS

By creating a sense of cheerfulness makes it easy to approach the pharmacy.



APPENDIX B

Dear customer,

I am currently conducting a Masters research project at the University of Natal. In order for me to complete this research, I would appreciate it if you could kindly complete the attached questionnaire.

Quality of services refers to how well a customer is being served, including the extent to which the server helps the customer and the manner of the server. Hence this questionnaire is designed to assess the quality of service at community pharmacies.

I request that you answer as honestly as possible. Your time and co-operation is highly appreciated.

Thank you,

Shivani Ramith

QUESTIONNAIRE

SECTION A

1. Your gender is :

- a) male
- b) female

<input type="checkbox"/>	1
<input type="checkbox"/>	2

2. When do you seek the services of a pharmacy ?

- a) to fill in a prescription only
- b) for general accessories and medication (OTC)
- c) both

<input type="checkbox"/>	1
<input type="checkbox"/>	2
<input type="checkbox"/>	3

3. How long have you been a customer of the pharmacy ?

- a) under 1 year
- b) between 1 to 2 years
- c) between 2-3 years
- d) more than 3 years
- e) this is my first time

<input type="checkbox"/>	1
<input type="checkbox"/>	2
<input type="checkbox"/>	3
<input type="checkbox"/>	4
<input type="checkbox"/>	5

4. When you have any medical problem/concerns who do you contact FIRST?

- a) your doctor
- b) your pharmacist
- c) it depends on the type of medical problem
- d) other - specify _____

<input type="checkbox"/>	1
<input type="checkbox"/>	2
<input type="checkbox"/>	3
<input type="checkbox"/>	4

5. How often do you go to the pharmacy ?

- a) once weekly
- b) more than once a week
- c) monthly
- d) when necessary

<input type="checkbox"/>	1
<input type="checkbox"/>	2
<input type="checkbox"/>	3
<input type="checkbox"/>	4

6. Your total MONTHLY income is :

- a) under R2000
- b) between R2000 - R3999
- c) between R4000 - R5999
- d) more than R6000

<input type="checkbox"/>	1
<input type="checkbox"/>	2
<input type="checkbox"/>	3
<input type="checkbox"/>	4

SECTION B

Based on your experiences as a patient at the pharmacy, please think about the quality of service that you would EXPECT to receive. Show the extent to which you think such a pharmacy would possess the features described by each statement. If you feel that the feature is not at all essential, then circle 1. If you feel that it is absolutely essential, then circle 5. If the feelings are less strong then circle between 2 and 4

	STRONGLY DISAGREE		UNSURE	STRONGLY AGREE	
1. Excellent pharmacies should have modern looking equipment	1	2	3	4	5
2. The physical facilities should be visually appealing.	1	2	3	4	5
3. The staff should be neatly dressed.	1	2	3	4	5
4. Materials associated with the service should be visually appealing	1	2	3	4	5
5. When the pharmacy promise to do something by a certain time, they should do so.	1	2	3	4	5
6. When I have a problem, the staff should show a sincere interest in solving it.	1	2	3	4	5
7. The pharmacy should perform the service right the first time.	1	2	3	4	5
8. The pharmacy should insist on error free records.	1	2	3	4	5
9. The staff should inform customers when a service will be provided.	1	2	3	4	5
10. The staff should give prompt service to customers.	1	2	3	4	5
11. The staff should always be willing to help.	1	2	3	4	5
12. The staff should never be too busy to respond to customer requests.	1	2	3	4	5

	STRONGLY DISAGREE		UNSURE	STRONGLY AGREE	
13. The behaviour of staff should instil confidence in the patient.	1	2	3	4	5
14. Patients should feel safe in their transactions with the pharmacy.	1	2	3	4	5
15. The staff should be consistently courteous with customers	1	2	3	4	5
16. The staff should have the knowledge to answer patient questions.	1	2	3	4	5
17. The pharmacy should give patient's individual attention.	1	2	3	4	5
18. The pharmacy should have convenient operating hours to all patients.	1	2	3	4	5
19. The pharmacy should have patient's best interests at heart.	1	2	3	4	5
20. The staff should understand the specific needs of their patients.	1	2	3	4	5

SECTION C

The following set of statements relate to your feelings and PERCEPTIONS about Pinelands pharmacy. For each statement, indicate the extent to which you believe that this pharmacy has the feature described by the statement. Once again, circling 1 means that you strongly disagree and circling 5 means that you strongly agree.

	STRONGLY DISAGREE		UNSURE		STRONGLY AGREE
1. Pinelands pharmacy has modern looking equipment	1	2	3	4	5
2. The physical facilities are visually appealing	1	2	3	4	5
3. The staff are neatly dressed.	1	2	3	4	5
4. Materials associated with the service are visually appealing	1	2	3	4	5
5. When the pharmacy promises to do something by a certain time, they do so.	1	2	3	4	5
6. When I have a problem, the staff show a sincere interest in solving it.	1	2	3	4	5
7. The pharmacy performs the service right the first time.	1	2	3	4	5
8. The pharmacy insists on error free records.	1	2	3	4	5
9. The staff informs customers when a service will be provided.	1	2	3	4	5
10. The staff give me prompt service.	1	2	3	4	5
11. The staff are always be willing to help.	1	2	3	4	5
12. The staff are never too busy to respond to customer requests.	1	2	3	4	5
13. The behaviour of staff instils confidence in me.	1	2	3	4	5
14. You will feel safe in your transactions with the pharmacy.	1	2	3	4	5

	STRONGLY DISAGREE		UNSURE	STRONGLY AGREE	
15. The staff are consistently courteous with you.	1	2	3	4	5
16. The staff have the knowledge to answer my questions	1	2	3	4	5
17. The pharmacy gives me individual attention.	1	2	3	4	5
18. The pharmacy has convenient operating hours to all patients.	1	2	3	4	5
19. The pharmacy has my best interests at heart.	1	2	3	4	5
20. The staff understands my specific needs.	1	2	3	4	5

APPENDIX C

RELIABILITY ANALYSIS OF EXPECTATIONS - SCALE (ALPHA)

Reliability Coefficients

N of Cases = 100.0

N of Items = 20

Alpha = .7007

RELIABILITY ANALYSIS OF PERCEPTIONS - SCALE (ALPHA)

Reliability Coefficients

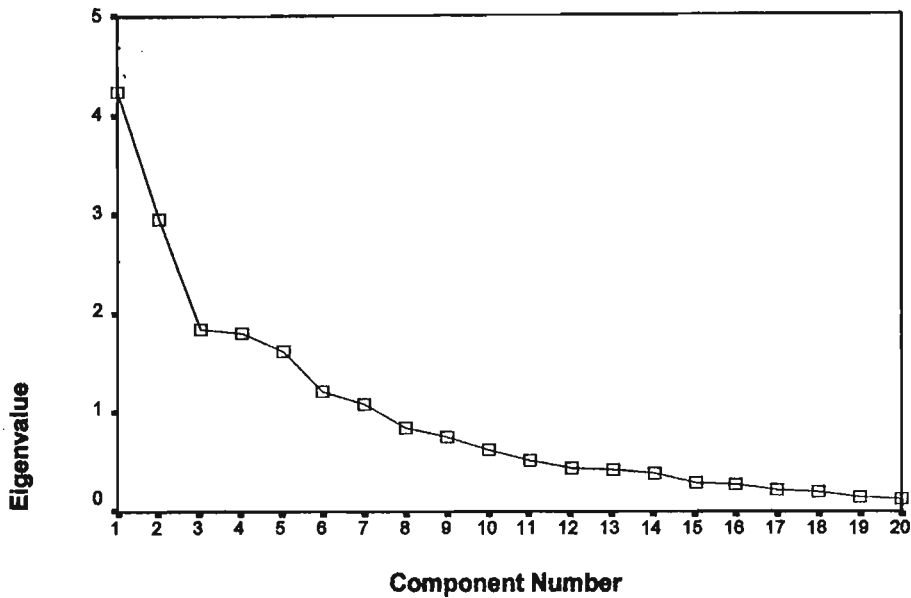
N of Cases = 100.0

N of Items = 20

Alpha = .4531

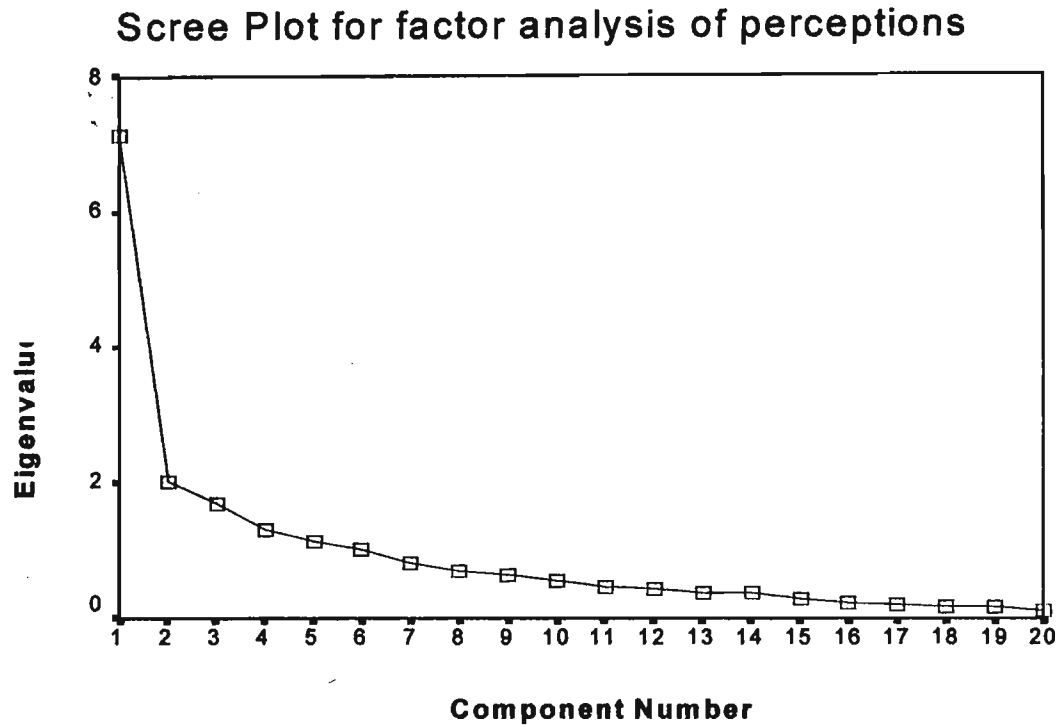
APPENDIX D

Scree Plot for factor analysis of expectations



The above scree plot indicates the factors that were extracted in the study of expectations of customers of retail pharmacy. As illustrated, there is a steep downward slope starting from factor 1 to factor 3. The plot then flattens out. The point at which the curve begins to flatten out is considered to indicate the maximum number of factors to extract. In this study, the first seven factors would qualify. Beyond the seventh factor the remaining factors do not yield any substantial information as their eigenvalues are less than 1.

APPENDIX E



In this study the first six factors would qualify because factors beyond the sixth factor have eigenvalues below 1 and therefore does not yield any substantial information.