

**CUSTOMER SATISFACTION AT A SELECTED  
RETAIL PHARMACY CHAIN IN THE GREATER  
DURBAN AREA**

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**CUSTOMER SATISFACTION AT A SELECTED RETAIL PHARMACY CHAIN IN  
THE GREATER DURBAN AREA**

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**Dissertation submitted in fulfillment of the requirement for the Masters Degree  
in Technology (Marketing)  
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## **DECLARATION**

I, Nafisa Adat, hereby declare that this research dissertation is my own work and that all sources I have used or quoted to the best of my knowledge have been indicated and acknowledged by means of complete references.

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N. Adat

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## **ABSTRACT**

South Africa is experiencing an expansion of pharmacy chains. Globalization and deregulations have increased competition within the retail pharmacy sector. In this highly competitive sector, the most important strategy for a pharmacy chain to obtain customer satisfaction and maintain market profitability is attributed to customer-focus. The pharmacy chain needs to ensure that the customer remains the cornerstone of their business strategy and that they are able to “delight” the customer. Customer satisfaction has many benefits for the pharmacy chain, such as higher revenues, higher customer retention and increased market shares. Superior service quality and customer satisfaction must be promoted and maintained in order for the pharmacy chain to be the pharmacy of choice.

The aim of this study is to measure levels of customer satisfaction at a selected pharmacy chain within the greater Durban area. The instrument to assess the customer's expectations and perceptions of customer satisfaction is the SERVQUAL questionnaire, measuring expectations and perceptions according to five quality dimensions. These quality dimensions include tangibles, reliability, responsiveness, assurance and empathy. Four hundred customers were surveyed using the SERVQUAL questionnaire. The respondents were selected using non-probability sampling within which convenience sampling was applied. Data is analyzed using descriptive and inferential statistical techniques. Conclusions and recommendations are drawn from the literature and the findings of the study.

The study shows that customers' expectations exceeded their perceptions on the five service quality dimensions used in the SERVQUAL questionnaire. Improvements are necessary in certain customer satisfaction dimensions. Therefore, it is recommended that the selected retail pharmacy chain attend to these gaps and ensure that necessary strategies are implemented in order to offer superior customer service in the face of growing competition.

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 INTRODUCTION**

This chapter highlights the rationale for this study and provides an overview of the research problem, objectives and the research methodology that guides the study. The limitations as well as an overview of the study are also outlined in this chapter.

#### **1.2 CONTEXT OF THE STUDY**

Customer satisfaction is a business philosophy which relates to the creation of value for customers, anticipating and managing their expectations, and demonstrating ability and responsibility to satisfy their needs. According to Kotler and Armstrong (2010: 33), for businesses to deliver, customers need satisfying goods and services. They need to meet or exceed the customers' expectations of value. As Valdani (2009: 163) points out, enterprises exist because they have a customer to serve. Service quality and customer satisfaction are key factors in the battle to obtain competitive advantage and customer retention.

As South Africa fully integrates into the international market, it is essential that local businesses recognise the importance of delivering top quality service. It is, after all, what can differentiate businesses "for better or for worse" in global commerce. South Africa, with its attractive exchange rate for foreign investment, fairly well established infrastructure and educated work force in the retail sector (in relation to other emerging markets) has numerous attractions for global business investment. However, shoddy customer service is a substantial risk to South Africa's future in the retail world economy. Guzzo (2010: 86) states that in order to achieve customer satisfaction, it is important to recognize and to anticipate customers' needs and to be able to satisfy them. Enterprises which are able to rapidly understand and satisfy customers' needs, make greater profits than those which fail to understand and satisfy them (Molina, Consuegra and Esteban, 2009: 260).

In light of the fierce competition within the retail pharmaceutical sector, the pharmacy chain needs to ensure that the customer remains the cornerstone of their business strategy and that they are able to “delight” the customer. Superior service quality and customer satisfaction must be promoted and maintained in order for the pharmacy chain to be the pharmacy of choice.

### **1.3 PROBLEM STATEMENT**

Customer satisfaction plays a key role in a successful business operation and influences the business strategy of any business. Customer satisfaction is the mediator in the relationship between relational benefits, customer loyalty and word-of-mouth publicity (Molina, Consuegra and Esteban, 2009: 262). Retail stores operate in a competitive environment facing changes in customer needs, demographics, technology improvement and retail ownership through mergers and acquisitions. In such an environment, the understanding and prediction of customer satisfaction is fast becoming a competitive advantage factor (Theoridis and Chatzipanagiotou, 2009: 725). Hence, the key focus of business activity should be to serve customer needs and wants more efficiently than competitors.

The long term survival of a business enterprise depends not only on the sales volume and the variety of business enterprise’s products but also on the former’s ability to satisfy the needs of customers efficiently. A business enterprise’s ability to deliver superior value is thus the starting point in efficient customer need satisfaction. A satisfied customer is the only true asset of the business enterprise and represents the sole justification of the business enterprise’s existence (Cant, Strydom, Jooste and Du Plessis, 2006: 231).

Whilst research has been conducted on general aspects of customer service quality in various industries, there appear to be few studies on customer satisfaction within the South African retail pharmaceutical sector in particular. In addition to this, corporate ownership of pharmacies is resulting in a rapid expansion of pharmacy chains including Clicks Pharmacy and Dis-chem (Lowe and Montagu, 2009: 36). In

light of this, the study is undertaken with the objective of measuring and evaluating customer satisfaction at a selected pharmacy chain within the greater Durban area.

#### **1.4 AIM AND OBJECTIVES OF THIS STUDY**

The aim of this study is to measure levels of customer satisfaction at a selected pharmacy chain within the greater Durban area.

The objectives of this study are:

- To identify customers' expectations of services provided;
- To identify customers' perceptions of services provided; and
- To evaluate customer satisfaction at a selected pharmacy chain within the greater Durban area, using the SERVQUAL instrument.

#### **1.5 RATIONALE FOR THE STUDY**

Clicks Pharmacy is chosen as the subject of the research on customer satisfaction, based on the fact that Clicks Pharmacy is experiencing tremendous growth and success since its first retail pharmacy in March 2004. To date, Clicks has the largest retail pharmacy chain with over 283 in-store dispensaries in South Africa (ClicksPharmacy, 2012). As competition from other retail giants like Dis-chem pharmacy and Checkers pharmacy becomes more intense (Lowe and Montagu, 2009: 37), there is a need to measure and evaluate the customer service being offered to customers at the selected pharmacy chain. This study enables the researcher to ascertain customer satisfaction as perceived by the selected pharmacy chain customers. The analysis of results of the study will assist the management of the selected pharmacy chain to identify customer perceptions, ensure customer satisfaction and maintain a competitive edge in the face of growing competition. Furthermore, the study contributes to academic knowledge concerning service quality and customer service within a retail South African context. Ultimately, it is

envisaged that this research will assist both government and business in trying to improve the economic climate within the South African retail sector.

## **1.6 LIMITATIONS**

The research is limited to stores of the selected pharmacy chain within the greater Durban area and therefore the results of the study cannot be generalised to all other stores of the selected pharmacy chain in South Africa. Furthermore, the results are only valid for the period in which research is conducted, due to fluctuations and new developments in this dynamic retail environment.

## **1.7 RESEARCH METHODOLOGY**

### **1.7.1 STUDY TYPE**

The research is a quantitative and descriptive study evaluating customer service at a selected pharmacy chain in the greater Durban area. Zeithaml, Bitner and Gremler (2006: 269) state that quantitative data collection is important to assess and improve customer service and is normally used in direct observation of service transactions. The study makes use of a cross-sectional methodology which is the most frequently used descriptive design in marketing research. Cross-sectional designs involve the collection of information from any given sample of population elements at approximately the same time (Welman, Kruger and Mitchell, 2005: 86).

### **1.7.2 TARGET POPULATION SELECTION**

Welman, Kruger and Mitchell (2005: 46) define a population as the study object, which may be made up of individuals, groups, organizations, human products and events. The target population for this study are customers of the selected pharmacy chain within the greater Durban area. Stores of the selected pharmacy chain are selected using non-probability convenience sampling. These include stores at



Gateway; Musgrave; Pavilion and City View respectively. The researcher believes that these stores provide a cross-spectrum of customers who fall within varied demographic categories of age, gender and educational levels. The inclusion criteria for respondents is customers making a purchase at the pharmacy section specifically. Hence, customers making purchases of other non-pharmaceutical items at the store are not included in the study. Convenience sampling is used in the selection of respondents.

Kent (2007: 236) argues that for any kind of quantitative analysis, a minimum sample size of 100 or so is needed even to be able to calculate simple percentages for each variable. The total number of respondents sampled is 400 as this sample size is believed to be large enough for the study given the purpose and goals of the study (Sekaran and Bougie, 2010: 296). Each of the four stores selected is allocated 100 questionnaires respectively.

### **1.7.3 DATA COLLECTION**

Permission to conduct this study was granted by the selected pharmacy chain (see Annexure 2). Third-year marketing students were used to administer the questionnaire. They were fully trained on matters relating to the questionnaire in order to answer any questions that arose. Quality was ensured by the researcher conducting a percentage of the questionnaires first in the presence of the trained students and thereafter doing regular check-backs to ensure consistency.

Reliability was measured using Cronbach's Alpha. Kent (2007: 141) states that reliability is the extent to which the application of a scale produces consistent results if repeated measures are taken. In terms of its reliability and validity, SERVQUAL is a generic and universally applicable instrument that can be administered on a repeated and regular basis (Javadi and Gol, 2011: 118). In light of the above, the SERVQUAL instrument was chosen for this study. Permission to use the SERVQUAL instrument for this study was granted by Professor Parasuraman on behalf of the respective authors (see Annexure 4).

#### **1.7.4 CHARACTERISTICS OF THE QUESTIONNAIRE**

For this study, an adapted SERVQUAL questionnaire was administered and made up of 44 questions covering the five dimensions of service quality namely tangibles, reliability, responsiveness, assurance and empathy. The questionnaire was in the form of closed-ended questions in which respondents make choices from a list of possible responses. A five-point Likert scale was used to measure the attitudinal variables with 1 (strongly disagree) to 5 (strongly agree). Research questions were structured in the simplest terms, making them easy to understand by respondents. The questionnaire also included demographic questions such as age, gender, education and the frequency of shopping at Clicks Pharmacies. A covering letter informed respondents of the nature and purpose of the research (see Annexure 1).

#### **1.7.5 DATA ANALYSIS**

The data was analysed using the latest version of the Statistical Package for the Social Sciences (SPSS). Descriptive statistics such as frequencies and percentages were used. The descriptive part of this study described the gaps between customers' expectations and perceptions (in relation to the five service quality dimensions) in order to measure their levels of customer satisfaction. Graphical representations and frequency tables were used to depict the results of the data. The results help offer recommendations for future service quality performance and customer satisfaction.

## **1.8 CHAPTER OUTLINE**

The research study is structured as follows:

### **CHAPTER 1: INTRODUCTION**

Chapter one provides an introduction to the study. The goal and objectives of the study are outlined together with the rationale, research methodology and limitations of the research. The structure of the dissertation is also discussed in this chapter.

### **CHAPTER 2: LITERATURE REVIEW**

This chapter provides a literature review relative to the study and establishes a theoretical foundation for the study. Various concepts and theories relating to customer satisfaction and service quality are explored. Furthermore, SERVQUAL and the five quality dimensions are explained in terms of its applicability as a research tool. The drivers of quality services are also discussed and a contextual background to pharmacies in South Africa is highlighted.

### **CHAPTER 3: RESEARCH METHODOLOGY**

Chapter three focuses on the research methodology. It provides an insight into the research and questionnaire design. The data collection methods and sampling are described. Statistical techniques to analyse the data are also highlighted.

### **CHAPTER 4: DATA ANALYSIS AND DISCUSSION OF RESULTS**

This chapter presents the results of the study using tables and graphs. Significant findings are also discussed in light of the literature review.

## **CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

Chapter five provides a synthesis of the previous chapters together with recommendations based on the findings of the study. Future research recommendations are also highlighted.

### **1.9 CONCLUSION**

Chapter one focuses on the background to customer satisfaction at a selected pharmacy chain within the greater Durban area. This chapter also provides the rationale for investigating customers' perceptions of customer satisfaction at a selected pharmacy chain and outlines the objectives. It also highlights the research methodology, limitations and overview of the study.

Chapter two will present a literature review relating to customer satisfaction in the retail pharmaceutical sector.

## **CHAPTER 2**

### **SERVICE QUALITY AND CUSTOMER SATISFACTION IN RETAIL SERVICES**

#### **2.1 INTRODUCTION**

In chapter one, the reasons for the study, objectives and the research design are discussed. This chapter provides a review of the literature related to customer satisfaction. A brief analysis of the retail pharmaceutical sector in South Africa is provided. The definition of service quality and customer satisfaction as seen by varied academics together with the characteristics of services are also discussed. The SERVQUAL instrument as well as the quality gaps are highlighted in terms of offering a means to measure customer satisfaction. Furthermore, the five service quality dimensions are discussed and related to the investigation of customer satisfaction at a selected pharmacy chain within the greater Durban area. Finally, the link between service quality and customer satisfaction is explained.

Organizations always look forward to long lasting success. In order to be successful in the long run, they need to keep abreast with all of their stakeholders. Out of the stakeholders, customers are considered to be the most important one. According to Kotler and Armstrong (2010:33), for businesses to deliver, customers need satisfying goods and services. They need to meet or exceed the customers' expectations of value. Where a business enterprise's value proposition meets or exceeds consumer expectations, customer satisfaction is high and this impacts positively on the performance of the business.

#### **2.2 RETAIL PHARMACY SERVICES IN SOUTH AFRICA**

South Africa has the largest economy and the most regulated pharmaceutical industry on the continent (Lowe and Montagu, 2009: 35). All of the major pharmaceutical companies are represented, alongside strong local players, and the market is also attracting strong interest from newcomers, particularly Indian generics companies looking to expand outside of their home territory. With the largest

economy on the African continent, South Africa is aiming to take its pharmaceutical sector to the next level (Lawrence and Ortellet, 2009:85).

According to Intercontinental Medical Statistics (IMS), a leading global market research firm, the total pharmaceutical market is expected to grow at a compound annual growth rate of 10% in the period 2008-2013. This will see an increase in sales from R18 billion in 2008 to R29 billion by 2013 (Lawrence and Ortellet, 2009: 86).

### **2.2.1 Regulations impacting the retail pharmacy sector**

Formal pharmaceutical retailing in most countries in the world is governed by regulations concerning ownership, staffing, medicines, prescriptions and prices. Market consolidation through shared ownership, franchise arrangements or formal collaboration is usually impeded by ownership laws. Consolidation in South Africa has resulted from a recent legislative change in 2003 that permits corporate ownership of pharmacies for the first time (Pharmacy Act 153, 1974. Amended 1997, Enacted 2003). The new statute allows non-pharmacists to own pharmacies, provided that a registered pharmacist is employed to run them at all times (Lowe and Montagu, 2009: 35).

There are big changes occurring at the dispensing- end led by retail pharmacy chains such as Clicks and Dis-chem. David Kneale, chief executive officer of the Clicks group, explains the developments on the retail front since 2004 and states that before that time, the law prevented corporate ownership of pharmacies. When the law changed, bigger business moved into pharmacy (Lawrence and Ortellet, 2009: 85-86). Since the legislative changes, a number of pharmacy chains have appeared in grocery outlets. The Clicks group began opening in-store dispensaries in some of its 590 stores soon after deregulation. It now has over 283 in-store dispensaries and is adding additional services such as screening and basic health care in some of its stores (Clicks Pharmacy, 2012).

The 34-year-old company Dis-Chem, the second largest pharmacy group in the country, plans to expand through franchising in an attempt to speed up growth in the smaller cities and retain young pharmacy graduates. Franchises are not limited to

pharmacists but also open to retailers, in recognition of the fact that the bulk of revenues from Dis-Chem stores are derived from retail and not the pharmacy sales (Lowe and Montagu, 2009: 35). A number of other grocery and general retail chains such as Pick n' Pay and Shoprite have also opened in-store pharmacies. Pick n' Pay has also experimented with twenty four pharmacy-clinics in their stores, which provide basic health care diagnostics along with full pharmacy services (Lowe and Montagu, 2009: 36-37). Shoprite Checkers Medi-Rite pharmacies have grown to 129 branches nationwide (MediRite, 2012).

Recent changes have permitted rapid expansion of pharmacy chains. The early effects of these chains appear to be lowered prices, greater competition, an initial balance between newly opened stores in shopping centers and the closure of independent pharmacies (Lowe and Montagu, 2009: 37). The change in legislation and subsequent entrance of chain stores in the retail pharmacy market has added pressure to small retail pharmacies that were already struggling. It is not clear if the addition of corporate chain pharmacies has led to the closure of independent pharmacies, but it seems likely.

Clicks chief executive officer, David Kneale, emphasises the important role that independent pharmacies play in South Africa and states that globally, independent pharmacists provide a valuable service for their customers and it is important that South Africa retains a strong and thriving profession. Kneale emphasizes that if the profession withers, healthcare will be less accessible (Laschinger, 2006: 32). Nonetheless, Kneale cautions that it will be tougher in future for the independents and to survive they will have to raise their game. Corporate pharmacies are expected to increase their market share at the expense of independents (Laschinger, 2006: 33).

### **2.2.2 Benefits and drawbacks of corporate pharmacies**

Corporate pharmacies present both benefits and drawbacks for a customer and these are detailed in Table 2.1.

**Table 2.1 Benefits and drawbacks of chain retail pharmacies**

<b>BENEFITS</b>	<b>DRAWBACKS</b>
Standardized quality	Profit driven and business focused
Improved efficiencies and expansion of new services	Less personalized service – decrease in quality of care
Increased accessibility	Possible decrease in pharmacist accountability
Encourages effective competition	Additional investment in infrastructure required
Increase in pharmacies and pharmacists	Potential loss of services in rural areas
Lower costs to consumers	Opposition from Pharmacy Councils

**(Source: Adapted from Lowe and Montagu, 2009: 37)**

Despite the drawbacks, overall pharmacy numbers are increasing. In the first four years after ownership deregulation the total number of pharmacies in South Africa has increased by 15% (Lowe and Montagu, 2009: 37). Hence, customer satisfaction should be seen as paramount to gain competitive advantage in this competitive market sector.

David Kneale, chief executive officer of Clicks, stresses a return to basics and a focus on the customer as the cornerstone of his turnaround strategy. Kneale hopes to "delight" the business's customers and stresses that the strategy should be delivery (Laschinger, 2006: 32).

## **2.3 MEANING OF SERVICE QUALITY CONCEPTS**

Strong arguments exist in support of the view that service quality is an antecedent of customer satisfaction (Carrillat, Jaramillo and Mulki, 2009: 96). Hence, both definitions of service quality and customer satisfaction are explained below.



### **2.3.1 Service Quality**

Service quality is one of the most important and widely researched topics in services (Carrillat, Jaramillo and Mulki, 2009: 96). Ladhari (2009: 174) states that service quality, per se, is difficult to define and measure and has been widely debated over the last twenty years. In the service quality literature, it is generally agreed that different people understand different things regarding service quality as a multi-dimensional notion. Parasuraman, Zeithaml and Berry (1988:17) characterise perceived service quality as the degree and direction of discrepancy between customers' perceptions and expectations.

Chin (2010: 32) broadly defines service quality as a global judgment or attitude relating to overall excellence or superiority of the service. Zeithaml, Bitner and Gremler (2006:81) define service quality as the delivery of excellent or superior service relative to customer expectations. The study in the banking sector by Parasuraman, Zeithaml and Berry (1985:45) suggests that customers' perceptions of quality are influenced by various gaps which lead to service quality shortfalls and, in particular, that the quality perceived in a service is a function of the gap between customers' desires or expectations and their perceptions of the service that is actually received.

According to Newman (2001:127), service quality is the degree and direction between customer service expectations and perceptions. Perceived service quality is the evaluation of the service across the episodes when compared to some explicit or implicit standard (Svensson, 2004: 279). Further, it is seen as how well a service satisfies the expectations of customers (Ekinici, 2004:198). Service quality can thus be defined as the difference between customer expectations of service and perceived service. If expectations are greater than performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs (Dehghan, Zenouzi and Albadvi, 2012:4).

From the above definitions of service quality, one can conclude that service quality is an assessment by customers about how well the service fulfils their expectations in terms of perceptions of the actual service delivery. The researcher will use this as a

premise when evaluating customer satisfaction at a selected pharmacy chain within the greater Durban area.

### **2.3.2 Customer Satisfaction**

Customer satisfaction is fundamental to the marketing concept, which holds that satisfying customer needs is the key to generating customer satisfaction. The last few decades have seen growing interest and importance placed on research in the definition, modeling and measurement of customer satisfaction. According to Chin (2010: 32), customer satisfaction measurements give a better indication of the future performance of a company.

Definitions of customer satisfaction are widely discussed from the view of many researchers and organizations who increasingly desire to measure it. Dehghan, Zenouzi and Albadvi (2012: 5) conceptualize that satisfaction is based on the customer's experience of both contact with the organization(the moment of truth) and personal outcomes. According to these researchers, satisfaction can be experienced in a variety of situations and is connected to both goods and services. They view satisfaction as a highly personal assessment that is greatly influenced by individual expectations. This definition views the "individual" element as a powerful force to create satisfaction.

Likewise, many researchers (Kotler and Keller, 2006:16) conceptualize customer satisfaction as an individual's feeling of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectations. Customer satisfaction is a pleasurable fulfillment response while dissatisfaction is an unpleasurable one (Buttle, 2004:212). Satisfaction and dissatisfaction are two ends of a continuum, where the location is defined by a comparison between expectations and outcome. Customers are satisfied if the outcome of the service meets expectations. When the service quality exceeds the expectations, the service provider has won a delighted customer (Dehghan, Zenouzi and Albadvi, 2012: 4).Dissatisfaction will occur when the perceived overall service quality does not meet expectations. Sometimes customer's expectations are met, yet

the customer is not satisfied. This occurs when expectations are low (Buttle, 2004: 213).

Customer satisfaction is the outcome of customer perceptions of the value received in a transaction or relationship, where value equals perceived service quality, compared to the value expected from transactions or relationships with competing vendors. Since the cost of attracting new customers is higher than the cost of retaining the existing ones, in order to be successful managers must concentrate on retaining existing customers by implementing effective policies of customer satisfaction (Orth and Green, 2009: 50).

Yi and La (2004:362), on the other hand, define satisfaction into two general conceptualizations: transaction-specific satisfaction and cumulative satisfaction. Transaction-specific satisfaction is a customer's evaluation of his or her experience and reactions to a particular service encounter. Cumulative satisfaction refers to the customer's overall evaluation of the consumption experience to date.

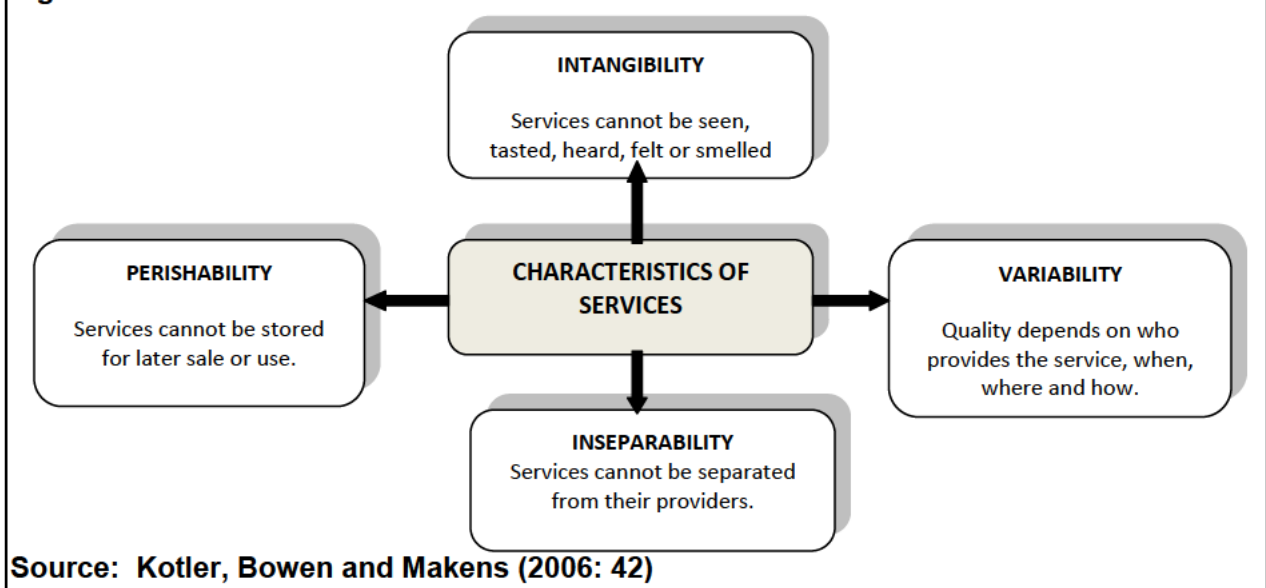
Customer satisfaction can also be thought of as an ongoing evaluation of a firm's ability to deliver the benefits a customer is seeking. Satisfaction is likely to be multi-dimensional and based on all encounters and experiences with that particular service firm. Overall, satisfaction is defined as an evaluation of experience (Ekinci, 2004:202). Customer satisfaction is based on a customer's cognitive and affective evaluation of their personal experience across all service within the relationship (Vibha, Ravichandran and Jain, 2011: 22).

Customer satisfaction at a retail pharmacy is influenced by perceptions of service quality, perceptions of the cost of medication, the efficiency and knowledge of staff as well as the emotional state of the customer (Laschinger, 2006: 33). Customer satisfaction is a highly variable assessment individuals do based on their experiences with specific features of products and services they receive. It therefore makes sense for servicing organizations to involve customer satisfaction measurement as their meaningful benchmark for development.

## 2.4 CHARACTERISTICS OF SERVICES

Lee, Delene, Bunda and Kim (2000: 235) observe that unlike physical products, quality of services is an elusive and abstract concept that is difficult to define and measure. This is largely because services have some inherent characteristics that differentiate them from physical goods. The characteristics of service quality are not objective, but subjective for each customer (Bruhn and Georgi, 2006: 11). Service quality has gained importance in the last decade due to its unique characteristics of services involving intangibility, inseparability, variability and perishability. These characteristics make the process of service purchase and delivery very complex for both customer and seller (Vibha, Ravichandran and Jain, 2011:20). The four characteristics of services are illustrated in Figure 2. 1.

**Figure 2.1: Characteristics of Services**



The characteristics include:

- Intangibility

Services, unlike physical goods, cannot be tasted or touched prior to consumption. Intangibility refers to the absence of tangible assets which cannot be seen, touched, smelt, heard or tasted prior to purchase (Bruhn and Georgi, 2006: 13). Intangibility suggests that services are performances only experienced by the customer. Bruhn and Georgi (2006: 14) further elaborate that the intangibility of services results in the importance of employees and communications in the quality evaluation process of a

customer. Within the pharmacy context, this refers to varied services that the selected pharmacy chain offers the customer, for example vaccinations, wellness screening tests, HIV counselling and testing which are intangible services offered.

Intangibility raises issues of risk and uncertainty faced by the customer. Padma, Rajendran and Sai (2009:158) caution that it is important for service providers to give attention to the tangible elements associated with their services as they may provide a clue to customers as to the type of service to expect. The tangible elements may include consulting rooms, equipment and advertising material used in a retail pharmacy chain.

- Inseparability

Lamb, Hair, McDaniel, Boshoff and Terblanche (2008:218) state that products are produced, sold and then consumed. Services on the other hand are often sold, produced and consumed at the same time. What this means is that consumption of services is often inseparable from its means of production. Hence, production and consumption are two inseparable activities of a service and the customer has to be present during the production of services.

The producer and consumer often must interact in order for the producer to pass on the benefits of the service. At the selected pharmacy chain, this means that customers experience the quality of the service while they are receiving it, for example a blood cholesterol test. Inseparability of services makes the evaluation of service before making the purchase rather difficult. Thus in order to reduce the risk associated with poor service, customers may seek the opinions of others before deciding on a service provider (Ladhari, 2009: 172).

- Variability

This is also referred to as heterogeneity. Services involve the human element and as such is seen as highly variable. Services are heterogeneous because for different customers, service processes might differ (Bruhn and Georgi, 2006: 15).

Their quality is dependent on who provides the service as well as when, where and how they are provided (Kotler, Bowen and Makens, 2006: 44). As services are performed by human beings, it is difficult to ensure uniformity. Service performance levels are likely to vary depending on the employee providing the service and from time to time even if the same employee is involved. Weber and Chathoth (2008:139) state that people may differ in their performance from day to day or even from hour to hour. Services are "heterogeneous" because they can differ from day to day, from place to place, from producer to producer and from customer to customer (Ladhari, 2009: 173).

In a retail pharmacy chain context, this implies that no two pharmacy employees will deliver the exact standard of service to the customer. Also, no two customers will rate the standard of service of the same employee identically. Employee levels of service vary and the challenge for a service provider is to ensure that there are minimum service standards that all employees must adhere to. This can be achieved through training and development, providing incentives and conducting quality assurance.

- Perishability

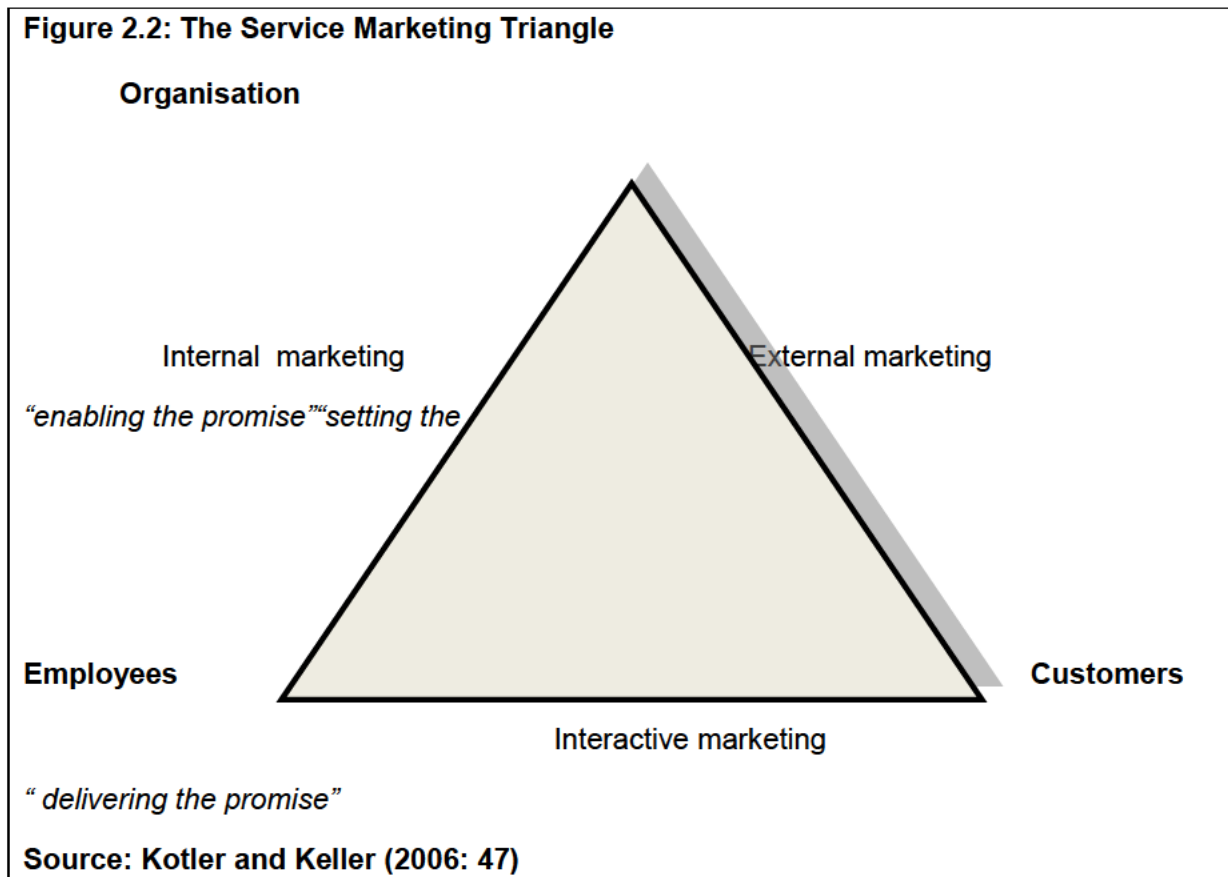
Because services are performances, they cannot be stored, saved, resold or returned (Padma, Rajendran and Sai, 2009:158). This implies that service providers have one chance to get things right: the first time round. Zeithaml, Bitner and Gremler (2006:53) explain that because services cannot typically be returned or resold, this implies a need for strong recovery strategies when things go wrong. In a pharmacy chain context, medication and clinic services need to be accurate the first time round.

## **2.5 SERVICE TRIANGLE**

According to Bruhn and Georgi (2006:77), the service marketing triangle suggests three different marketing strategies, which should be implemented for successful customer service delivery. Internal marketing refers to enabling the promise,

external marketing represents making a promise to the customer while interactive marketing is keeping a promise to the customer.

Figure 2.2 illustrates the service marketing triangle.



The left side of the triangle highlights the role of internal marketing. This refers to treating employees in the same way as external customers in order to ensure that employees are motivated and the business can deliver its promises to external customers. The right side of the triangle reflects the external marketing activities in setting the promise to customers. The four “P’s” as well as tangibles are included here. The base of the triangle is where the actual service delivery takes place. This is where employees engage directly with customers and where expectations are either met or not.

The triangle model summarizes the added complexities of marketing services relative to marketing goods. It suggests that in addition to external marketing,

activities pertaining to the four “P’s” (product, price, promotion, and place or channels of distribution) that are emphasized in the marketing of goods, the effective marketing of services requires internal and interactive marketing as well. Internal marketing deals with providing employees with appropriate training, support, motivation, and rewards to serve external customers well. Interactive marketing deals with making a good impression on customers during their encounters with employees (Kotler and Keller, 2006: 47).

Zeithaml, Bitner and Gremler (2006: 35) state that employees can enhance customer satisfaction if the organisation has a full complement of staff; staff are trained to complement their service and have knowledge of the products. Employees represent the company and are therefore, major contributors to customer satisfaction and marketers of the organisation. Employees are considered as walking billboards. In a retail pharmacy chain context, staff should be able to offer advice to customers regarding the varied services offered, suitability for the particular needs of that customer and any possible side-effects of medication. When employees provide efficient services to customers it is advantageous to the company. Conversely, if the quality of the service is poor, it is to the detriment of the company.

## **2.6 THE IMPORTANCE OF SERVICE QUALITY**

The importance of service quality is seen in the effect that it has on the organisation as a whole. It is seen in the following ways:

- Service quality has an effect on customer satisfaction (Arasli, Mehtap- Smadi and Katircioglu, 2005:43). Using the disconfirmation model, satisfaction is experienced by the customer when the perceptions (of the actual experience) exceed the expectations of customers;
- Service quality has an effect on customer loyalty. Loyalty is experienced by the organisation when the perceived service quality experienced by the customers exceeds that which is offered by the competitors. The delivery of service quality to customers is required in the long term if the organization is to experience the benefits of customer loyalty (Ahmed, Ahmed, Nawaz, Usman and Shaukat, 2010:156);



- Service quality creates competitive advantage for organisations and is associated with successful organizations. Many organisations sell a similar product of similar quality and the differentiator between them is the service quality that is offered to the customer (Arasli, Mehtap- Smadi and Katircioglu, 2005:43);
- Service quality affects relationships and relationship marketing, as customers are willing to build relationships with organisations that provide service quality (Zeithaml, Bitner and Gremler, 2006:109); and
- Service quality has an effect on profitability and costs. As service quality impacts on customer satisfaction, this also impacts on customer retention, reduction of costs and increased profitability (Perez, Abad, Carillo and Fernandez, 2007: 136).

Dehghan, Zenouzi and Albadvi (2012: 5) state that the starting point in developing quality in services is analysis and measurement. Having realized the importance of service quality, the researcher will now turn to the importance of customer satisfaction measures.

## **2.7 CUSTOMER SATISFACTION MEASURES**

Always there exists an important question: why should customer satisfaction be measured? Measurement allows for comparison before and after changes, for the location of quality related problems and for the establishment of clear standards for service delivery. Parasuraman, Zeithaml and Berry (1985: 41-50) initiated a research stream that many consider to be the most comprehensive investigation into quality.

With these concerns of service quality measurement, Parasuraman, Zeithaml and Berry developed SERVQUAL, which is the most widely used tool to measure service quality to date (Dehghan, Zenouzi and Albadvi, 2012:5). SERVQUAL is based on the Disconfirmation Model which proposes that satisfaction is a function of the disconfirmation of perception from expectation. These theorists explain how consumers acquire perceptions of the quality of service firms. Parallel with their theory development, Parasuraman, Zeithaml and Berry experiment with various

ways of measuring the hypothetical dimensions of service quality. Their effort results in a set of scales named SERVQUAL (Javadi and Gol, 2011: 118).

### **2.7.1 SERVQUAL instrument**

Central to the customer satisfaction theory, is the expectations or predictions made by customers as compared to the actual delivered value (Parasuraman, Zeithaml and Berry, 1993:141). This implies that a measurement is required for customer satisfaction. The SERVQUAL model provides the basis for the measurement of customer satisfaction with a product or service by assessing and comparing both perceptions and expectations across a range of different service characteristics. Carrillat, Jaramillo and Mulki (2009:97) state that superior service quality leads to customer satisfaction. Therefore, service quality, as measured by the SERVQUAL model cannot be separated from customer satisfaction analysis.

Parasuraman, Zeithaml and Berry identified 97 attributes found to have an impact on service quality. These attributes were categorized into ten dimensions and later subjected through two stages in order to purify the instruments and select those with significant influences (Parasuraman, Zeithaml and Berry, 1988: 20). The first purification stage came up with ten dimensions for assessing service quality namely: tangibles, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding, knowing customers and access. In the second purification stage, these ten dimensions are summarized into five dimensions which are tangibles, reliability, responsiveness, assurance and empathy (Javadi and Gol, 2011: 119).

Assurance and empathy involve some of the dimensions that have been done away with like communication, credibility, security, competence, courtesy, understanding customers and access. This is because these variables did not remain distinct after the two stages of scale purification (Parasuraman, Zeithaml and Berry, 1988: 18). To test the adequacy of this theory, measures of the constructs are needed. Parasuraman, Zeithaml and Berry (1988: 23) describe a series of iterations identifying 22 items that measure the five dimensions. SERVQUAL is comprised of 22 pairs of questions: one question from each pair asks consumers to describe their

expectations, the other question asks for their perceptions. The instructions for using SERVQUAL are to subtract the expectations score from the perceptions score and to use the result as one of 22 measurement items (Zhao, Bai and Hui, 2002: 243).

Parasuraman, Zeithaml and Berry hypothesize that the five dimensions of service quality are, themselves, related to the discrepancy between consumers' expectations and perceptions. Specifically, they propose that service quality, as perceived by consumers, stems from a comparison of what consumers feel service firms should offer (i.e., from their expectations) with their perceptions of the performance of firms providing the services (Parasuraman, Zeithaml and Berry, 1988:16). Their theory holds that perceived service quality is a function of the magnitude and direction of five specific perceptual discrepancies.

This scale has been tested for reliability with the use of five independent samples in five different service industries. The variables prove to be very reliable and display very low levels of correlation between each other in the five independent samples. This qualifies them as independent or linear factors that can be used to assess service quality (Parasuraman, Zeithaml and Berry, 1988: 24).

Further a validity test has been carried out on this scale using the same samples. Normally, reliability is a first criterion for validity. To be able to determine content validity, they analyzed the thoroughness with which the construct to be scaled were explicated and then the extent to which the scales items represent the construct domain. The procedures in developing SERVQUAL satisfy these conditions assuring content validity (Parasuraman, Zeithaml and Berry, 1988: 28).

Primarily, the SERVQUAL model is developed for service and retail businesses and its objective is to know how customers of a business rate the services offered to them. This is crucial for growth and profitability. Parasuraman, Zeithaml and Berry (1988: 31) propose that this model be used on a company three to four times a year to measure the quality of its service over different times, to know the discrepancies between perceived and actual services so as to know what reaction is possible. They also recommend that the model be used in conjunction with other models like

in a retail business, another model could be used to rate the perception of service quality by the employees, and try to find out from these employees what they recommend to improve service quality. They equally require that in applying the model, we should try to measure the relative importance of each dimension. This refers to the weighted SERVQUAL model (Andronikidis and Bellou, 2010: 572).

SERVQUAL views the customer's assessment of service quality as paramount. This assessment is conceptualized as a gap between what customers expect from a class of service providers and their evaluations of the performance of a particular service provider (Vibha, Ravichandran and Jain, 2011:21). The GAP model is discussed below.

### **2.7.2 GAP model**

Measuring service quality is one of the most recurrent topics in management literature. This is because of the need to develop valid instruments for the systematic evaluation of the firm's performance from the customer point of view and the association between perceived service quality and other key organizational outcomes. The GAP model (also called the PZB model) opens new horizons to the understanding of service quality. This model serves as a conceptual framework for understanding service quality delivery (Baker, Cronin and Hopkins, 2009: 116).

The GAP model states that the service quality shortfall (gap 5, the gap between customers' service expectations and perceptions) is a result of a series of shortfalls within the service provider's organization (gaps 1-4). Thus, improving the quality of service experienced by customers (closing gap 5) requires diagnosing the causes of and correcting the internal deficiencies, namely gaps 1-4 (Chin, 2010: 33). Each of these gaps is explained below.

#### **Gap 1: Consumer expectation - management perception gap**

Service quality is not reached when there is a gap between customer expectations and the management's perceptions of these expectations (Bruhn and Georgi: 2006: 50). Service firms may not always understand what features a service must have in

order to meet consumer needs and what levels of performance on those features are needed to deliver high quality service. This affecting the way consumers evaluate service quality.

In a retail pharmacy chain context, managers may think that they are aware of what customers want, but in reality, customers expect something different. Hence, the vaccinations and wellness clinic services offered might not be what customers want. Ongoing research can help identify customer needs.

### **Gap 2: Management perception - service quality specification gap**

This gap arises between the management's perceptions of customers' expectations and the defined service specifications (Bruhn and Georgi, 2006: 50). This gap occurs when the company identifies what the consumers want but the means to deliver the expectation does not exist. Some factors that affect this gap could be resource constraints, market conditions and management indifference.

Pharmacies might recruit fewer staff or have limited clinic hours in order to remain competitive and increase profitability. However, these could adversely affect the service quality perception of the consumer ultimately leading to decreased market competitiveness.

### **Gap 3: Service quality specifications – service delivery gap**

This refers to the gap between the defined service specifications and the delivered service (Bruhn and Georgi, 2006: 50). Companies could have guidelines for performing service well and treating consumers correctly but these do not mean high service quality performance is assured. Employees play an important role in assuring good service quality perception and their performance cannot be standardised. This affects the delivery of service which has an impact on the way consumers perceive service quality. Therefore, pharmacy employees need to consistently deliver an excellent service as per company guidelines (Javadi and Gol, 2011: 122).

#### Gap 4: Service delivery – external communications gap

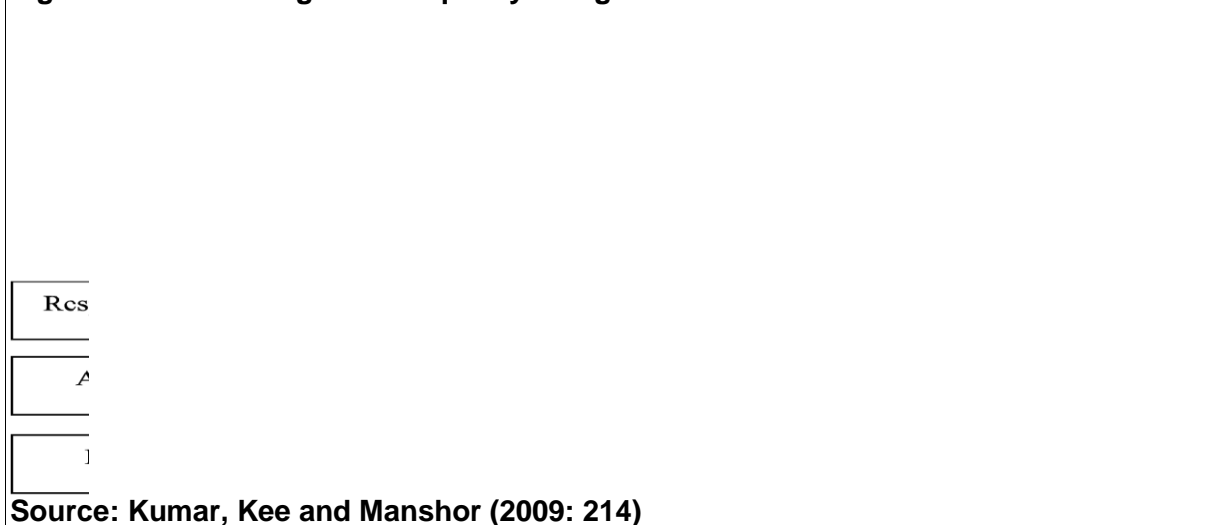
This occurs when there is a gap between the communicated service and the delivered service (Bruhn and Georgi, 2006: 50). External communications can affect not only consumer expectations of service but also consumer perceptions of the delivered service. This gap means that promises made by market communication activities are not in keeping with the services delivered. This could be due to market communication planning not being integrated with service operations and a propensity to exaggerate and promise too much.

Retail pharmacies should not advertise sales promotions including buy one-get one free promotions when there is no stock availability. Also, convenient home delivery for chronic medication should not be promised if not delivered timeously. Solutions here include creating a system that co-ordinates planning and execution of external marketing campaigns with service operations and delivery.

#### Gap 5: Expected Service – perceived service gap

This gap represents the difference between customers' expectations and customers' perceptions which is referred to as the perceived service quality. The main purpose of service quality improvement is to minimize the fifth gap, named the quality gap (Javadi and Gol, 2011: 121). Gap five is shown in Figure 2.3

**Figure 2.3: Measuring service quality using the SERVQUAL model**



The above diagram provides an indication of the level of service quality at a retail pharmacy chain. The expected quality is what the customer expects to receive from the company and the perceived service is what the customer perceives he or she received from the company. If the customer receives the service quality expected, he or she is satisfied. If the customer perceives service as below their expectation, the customer is dissatisfied (Kumar, Kee and Manshor, 2009: 214). The key to ensuring good service quality is meeting or exceeding what consumers expect from the service and that judgement of high and low service quality depends on how consumers perceive the actual performance in the context of what they expect.

Gap five is influenced by gaps one to four, which are all within the control of an organisation and therefore need to be analysed to identify any changes that should be implemented to reduce or eliminate gap five. Ladhari (2009: 174) argues that such "gap analyses" are critical for identification of discrepancies between the provider's perceptions of service quality dimensions and the consumers' perceptions of those dimensions. This study focuses on gap five, the difference between the selected pharmacy chain customers' expectations and perceptions of service quality.

## **2.8 EMPIRICAL EVIDENCE OF THE SERVQUAL INSTRUMENT**

SERVQUAL is used in various industries, however, the findings of these studies indicate that the number of dimensions of service is not unique (Parikh, 2006: 47). Parasuraman, Zeithaml and Berry (1993: 145) suggest that SERVQUAL provides a basic skeleton through its expectations/perceptions format and when necessary, the skeleton can be adapted or supplemented to fit the characteristics or specific research needs of a particular organization. Research has been conducted by various authors forwarding different views.

Published studies include several service fields: retailing (Alzola and Robaina, 2005: 46-57; Gaur and Agrawal, 2006:317-330), the health sector (Kilbourne, Duffy and Giarchi, 2004:524-533; Ramsaran-Fowdar, 2008: 104-124),hotels (Al Khattab and Aldehayyat, 2011:226-223;Guzzo, 2010: 85-97), airline industry (Chau and Kao, 2009:106-134), banking (Arasli, Mehtap- Smadi and Katircioglu,2005: 41-56; Kumar, Kee and Manshor, 2009: 211-228), information service business (Van der Wal,

Pampallis and Bond, 2002: 323-335) amongst others. Without doubt, SERVQUAL has been widely applied and highly valued.

Gaur and Agrawal (2006: 318) indicate that SERVQUAL is extensively used to measure service quality in the retail sector. They state that Carman (1990) was the first to apply the SERVQUAL measure in motor vehicle tyre surroundings. The findings indicated that the five dimensions of the SERVQUAL were not generic and that new dimensions should be added to prevailing situations.

Cronin and Taylor (1992: 55-68) were the first to provide a theoretical justification for discarding the expectations part of SERVQUAL in favour of performance-only measures included in the scale. The term 'performance-only measures' has thus come to refer to measured service quality that is based only on consumers' perceptions of the performance of a service provider, as distinct from a gap between the consumers' performance perceptions and their expectations. The authors named their scale SERVPERF (Al Khattab and Aldehayyat, 2011: 227). Several studies have shown that the performance-only SERVPERF scale outperforms the disconfirmation-based SERVQUAL scale (Andronikidis and Bellou, 2010: 570-587; Vibha, Ravichandran and Jain, 2011: 20).

As an answer to the critique, Parasuraman, Zeithaml and Berry (1993: 145) affirm that the expectations part provides the benefits of richer, more accurate diagnostic information. The effect of customers' prior expectations on their perception and processing of information has likewise been revealed by other studies (Sheth, Sisodia and Sharma, 2000: 55-66), but these authors have considered expectations as an important influencing factor among others, not as a component of perceived quality.

Several studies using the SERVQUAL or SERVPERF scales in different service settings, for example libraries and retailing, show that the standardized scales are not generic. This indicates they are not applicable in different service contexts, failing to capture industry-specific dimensions underlying the quality perceptions. Therefore it can be suggested that the determinants and measurement of service



quality may be unique in different service sectors, depending on the specific features of the services provided (Gaur and Agrawal, 2006:317-330).

Al Khattab and Aldehayyat (2011: 229) argue that the domain of service quality may be factorially complex in some industries and very simple and uni-dimensional in others. In effect, they claim that the number of service quality dimensions is dependent on the particular service being offered. Buttle (2004: 215) also raises the question about the effect of consumer involvement in service quality dimensionality and states that in the case of services with low consumer involvement, customers use fewer attributes or dimensions in the evaluation than in the case of higher-involvement services.

According to Jain and Gupta (2004: 25), there are various scales to measure service quality which is an important determining factor to improve business performance. SERVQUAL and SERVPERF are two major service quality measurement scales. A survey conducted at a fast food restaurant in Delhi, India, using both service scales, found that the SERVPERF scale provides a more convergent and discriminant valid explanation of service quality construct, deficient to its diagnostic power. By virtue of its diagnostic powers, the SERVQUAL scale out-performed the SERVPERF scale by indicating to management the shortcomings of their service quality. The major setback to the SERVQUAL scale is the data collection requirements (Jain and Gupta, 2004: 25).

For the purpose of this study, the SERVQUAL model is used as it is the most appropriate measuring instrument in the context of this research. The SERVQUAL model provides the study with a guide of 22 expectation and perception questions respectively as well as the sampling methods used. The SERVQUAL model is a method that is used to uncover poor performing departments and provides the organisation with measures to rectify the situation (Parasuraman, Zeithaml and Berry, 1991: 445).

## **2.9 CRITICISMS OF THE SERVQUAL INSTRUMENT**

Despite its extensive use in measuring service quality, the SERVQUAL instrument is not without criticism. A considerable number of criticisms about SERVQUAL focuses on the use of expectations as a comparison standard in the measurement of service quality (Al Khattab and Aldehayyat, 2011: 228). Cronin and Taylor comment on the measurement of the expectations and perceptions in the SERVQUAL instrument stating that the instrument is based on the gaps model approach to service quality, which does not have an empirical basis (Cronin and Taylor, 1992:53).

Further operational and theoretical criticisms relate to the interpretation and implementation of the instrument. Svensson (2004: 280) argues that SERVQUAL does not have a universal applicability. The focus of SERVQUAL is also criticised, as it focuses on the service-delivery process, rather than the service-encounter outcomes (Kang, 2006: 38).

Another criticism against SERVQUAL is the inability to connect the perceptions in the model to specific attitudes, and also not connecting to fields of study such as psychology and economics. According to O'Neill and Palmer (2003: 188), SERVQUAL's five dimensions (reliability, assurance, tangibility, empathy and responsiveness) are not universals and the model fails to draw on established economic, statistical and psychological theory.

Lages and Fernandes (2005: 1564) in the article "The SERPVAL scale: A multi-item instrument for measuring service personal values" suggest that consumer final decisions are taken at a higher level of abstraction. Similar to the SERVQUAL scale, the Service Personal Values (SERPVAL) scale is also multi-dimensional. It presents three dimensions of service value to 1) peaceful life, 2) social recognition, and 3) social integration. All three SERPVAL dimensions are associated with consumer satisfaction.

In spite of these criticisms, Ladhari (2009:189) argues that the SERVQUAL measuring tool remains the most complete attempt to conceptualize and measure service quality. The main benefit to the SERVQUAL measuring tool is the ability of

researchers to examine numerous service industries such as healthcare, retail, banking, financial services and education.

The fact that SERVQUAL has critics does not render the measuring tool moot. SERVQUAL and its alternative measures, namely, SERVPERF, weighted SERVQUAL, and Weighted SERVPERF are the most widespread in the service quality literature. Research has not concluded regarding the relative superiority of any of these measures (Andronikidis and Bellou, 2010: 570). Rather, the criticism received concerning the SERVQUAL measuring tool may have more to do with how researchers use the tool. Ladhari (2009:172-198) reviewed a range of studies that applied the SERVQUAL scale in a twenty year period (1988-2008) and discovered that few researchers concern themselves with the validation of the measuring tool.

The issue of how best to conceptualize and operationalize service quality is still a subject of heated debate. However, it is generally agreed that service quality is a multi-dimensional or multi-attribute construct (Zhao, Bai, Hui, 2002: 243). Despite the criticisms against SERVQUAL, it remains an instrument that is used in all areas of business and industry such that its use has largely been “institutionalised” (Bruhn and Georgi, 2006: 54).

## **2.10 FIVE QUALITY DIMENSIONS**

Various views on the dimensions of service quality can be identified. The process orientation of Gronroos views service quality from the perspective of what the customer receives. This orientation identifies other components to service quality, namely technical quality, functional quality and reputational quality (Perez, Abad, Carillo and Fernandez, 2007: 137). Technical quality is concerned with the outcome of the service received by the customer. In the retail pharmacy chain context, the evaluation refers to whether the customer receives the necessary medication or service requested.

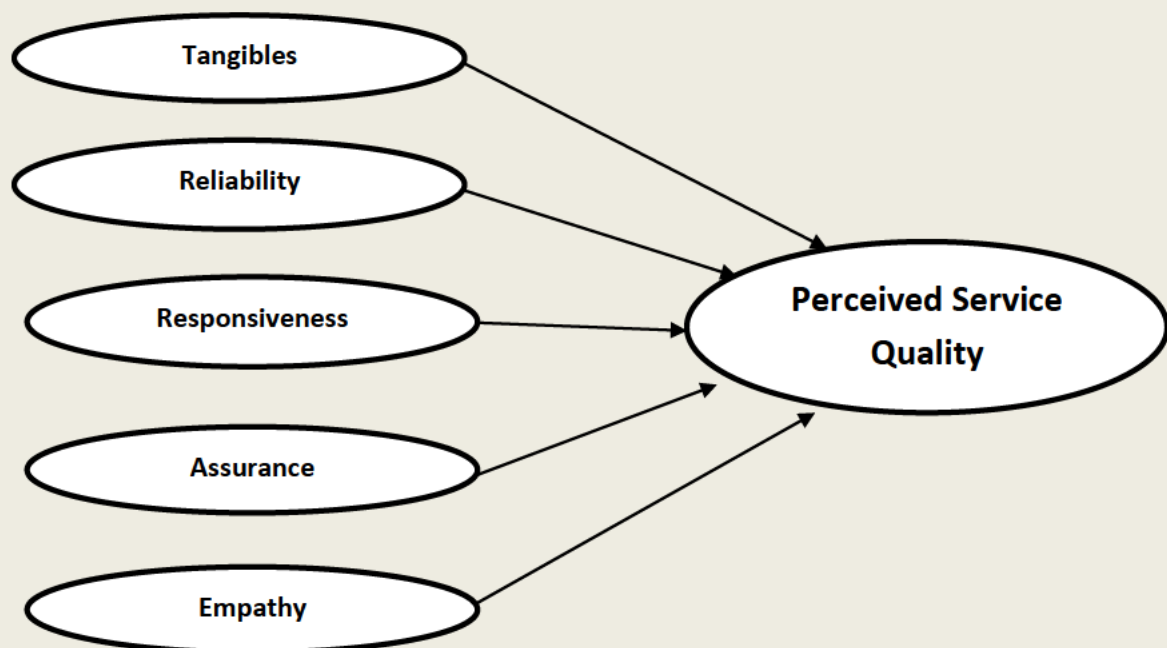
Functional quality refers to the way in which the service is offered and the actions of the employees in this interaction. With retail pharmacies, this refers to the customer indicating if the employees are courteous and friendly. Reputational quality refers to

the image of the organisation in the marketplace with respect to the service quality offered (Perez, Abad, Carillo and Fernandez, 2007: 137). This refers to the reaction of others (such as family and friends) when the particular pharmacy chain is mentioned.

The abovementioned perspective of service quality has not received the same attention and empirical testing as the SERVQUAL scale which remains one of the most commonly used scales to date. The scale consists of twenty two items grouped in five main underlying dimensions. According to Parasuraman, Zeithaml and Berry (1988:15), the difference between customer expectations and perceptions on the five dimensions is what makes up service quality.

The dimensions include reliability, responsiveness, assurance, empathy and tangibles (Zeithaml, Bitner and Gremler, 2006:115). This is illustrated in Figure 2.4.

**Figure 2.4: Five Service Quality Dimensions**



**Source: Adapted from Parasuraman, Zeithaml and Berry (1988: 12-40)**

### **2.10.1 Reliability**

Reliability is the most important factor impacting satisfaction (Vibha, Ravichandran and Jain, 2011: 24). This refers to the extent to which the service provider delivers on the promises made to the customer. Reliability is defined as the ability to perform the promised service dependably and accurately (Dehghan, Zenouzi and Albadvi, 2012: 5). Furthermore, reliability refers to providing a service within a specified time or a promised service is executed dependably (Blose and Tankersley, 2004: 78). Javadi and Gol (2011: 120) define reliability as the ability to do and provide the promised services in an appropriate, accurate and reliable manner, doing what is expected by the customer.

Within the retail pharmacy chain context, this relates to ensuring that prescriptions are ready for collection, appointments for clinic services are consistently on time, and medication is always available. Reliability is regarded as the most important dimension of service quality (Chowdhary and Prakash, 2007: 495).

### **2.10.2 Responsiveness**

Responsiveness is about being willing to help. This refers to the willingness on the part of the service provider to deliver assistance to the customer (Chowdhary and Prakash, 2007: 497). Zeithaml, Bitner and Gremler (2006: 118) state that this dimension emphasises attentiveness as well as promptness in handling customer questions, complaints, requests and problems. It also refers to the ability to develop customised solutions for customers. Dale (2003: 240) elaborates that responsiveness refers to the willingness to assist customers and to provide prompt service on a continuous basis. Keeping the customer waiting, especially for no good reason, will result in a customer's dissatisfaction and negative perception of service quality (Javadi and Gol, 2011: 120).

In a retail pharmacy chain, this includes providing advice to medically-related questions and prompt service on a continuous basis. Furthermore, customers do not wait in long queues to get served and receive advice on medical-aid related or other

queries promptly. Pharmacies also respond to the changing needs of customers, for example, extending trading hours in response to customer requests.

### **2.10.3 Assurance**

Assurance is about inspiring trust and confidence. The assurance dimension of service quality refers to the ability of retail staff to provide trust and confidence to customers. This refers to the degree of confidence and trust that the retail pharmacy chain is able to engender in the customer, based on the interactions between the parties (Chowdhary and Prakash, 2007:496).

Assurance is known as the level of service delivered to customers that is believable and can be trusted (Parasuraman, Zeithaml and Berry, 1988: 31). In addition, it is also expected that the ability to show credibility and courtesy play an important role in the process (Ramsaran-Fowdar, 2008: 107). Furthermore, Dehghan, Zenouzi and Albadvi (2012: 5) highlight the knowledge and competence of staff in assuring customers as a critical factor.

In a retail pharmacy chain context, the main source of assurance is with the pharmacist, nurse or pharmacy personnel. Their knowledge and manner of interaction with the customer inspires trust in the organisation. This dimension is considered particularly important for services that may be perceived to be associated with high levels of risk as well as where the customer may be unable to properly evaluate the service as is often the case in health care services. Hence, in a pharmacy chain context, assurance is seen as critical to the customer given their limited knowledge of medicinal properties and generic medicines available.

### **2.10.4 Empathy**

Empathy is about treating customers as individuals. Here, the customer is treated in such a way that they feel important to the organisation, and that their needs are seen as important to the organization (Zeithaml, Bitner and Gremler, 2006: 134). Customers should receive caring, individualized and emphatic attention (Javadi and Gol, 2011: 123). In the case of the selected retail pharmacy chain, this is seen

in the interactions between the organisation and the customer, and the nature of this interaction.

Perez, Abad, Carillo and Fernandez (2007: 137) define empathy as the care and individualised attention that an organisation provides its customers. To show empathy, service providers need to demonstrate that they understand that each customer is a unique individual with individual needs. Service provision needs to thus, as far as possible, be customized to customers' unique needs (Dehghan, Zenouzi and Albadvi, 2012: 5).

At the selected pharmacy chain, each customer's personal medical details and prescriptions are recorded on a database and purchases made are also recorded. By swiping a customer's ClubCard at the dispensary, the pharmacist can call up their medication profile for easy accessibility and total convenience. This highlights the selected pharmacy chain's commitment to providing caring, individualised attention making the customer feel special.

#### **2.10.5 Tangibles**

These are physical representations of the service. This refers to the physical cues that are part of the service delivery process (O'Neill and Palmer, 2003: 189). Tangibles refer to the appearance of the visible facilities and equipment that are used to communicate to the customer about the service that can be expected (Perez, Abad, Carillo and Fernandez, 2007: 137). Furthermore, Javadi and Gol (2011: 123) define tangibles as the appearance of physical facilities and equipment, the personnel, and the communication devices existing in service organisations.

Hoffman and Bateson (2006:136) observe that customers utilise tangibles in evaluating services and that service organisations can use them to enhance their image and signal quality to customers. Tangible cues that form part of this dimension include the retail layout, seating areas, consultation rooms, equipment used, advertising material and personal appearance of employees which customers use to perceive the service quality of a retail pharmacy chain. Table 2.2 provides a brief description of each dimension discussed.

**Table 2.2: Five broad dimensions of service quality**

Dimension	Definition
Tangibles	Appearance of physical facilities, equipment, personnel and written materials
Reliability	Ability to perform the promised service dependably and accurately
Responsiveness	Willingness to help customers and provide prompt service
Assurance	Employees' knowledge, courtesy and their ability to inspire trust and confidence
Empathy	Caring, good communication, customer understanding and individualised attention

**Source: Adapted from Zeithaml, Bitner and Gremler (2006: 117-122)**

Of the five service quality dimensions, reliability is the most critical dimension, based on both direct measures of relative importance and weights derived from regression analyses (Parasuraman, Zeithaml and Berry, 1991: 420-449). Chowdhary and Prakash (2007: 495) further state that regardless of the kind of services provided to the customers, reliability is considered as the most significant aspect in providing customers with services. On the other hand, the organizational facilities and appearance are the least significant dimensions compared to other dimensions of quality. Three other dimensions gained different ranks depending on the type of service (Javadi and Gol, 2011: 123). Providing reliable service is thus the core element of service quality. Chowdhary and Prakash (2007: 496) conclude that the SERVQUAL approach has widespread empirical support resulting in this approach being “institutionalised”.

## **2.11 SERVICE QUALITY AND CUSTOMER SATISFACTION**

Studies suggest that there is a positive relationship between service quality and the satisfaction of customers. Service quality is regarded as the impression customers give to the superiority and inferiority of the service provider (Tsoukatos and Rand, 2006: 502). Chau and Kao (2009: 106) state that service quality and its dimensions have a direct bearing on customers' evaluation of a company. These authors stress that all elements of service quality directly influence satisfaction of customers and value the service offers to them. Cavana, Corbett and Lo (2007: 9) report that



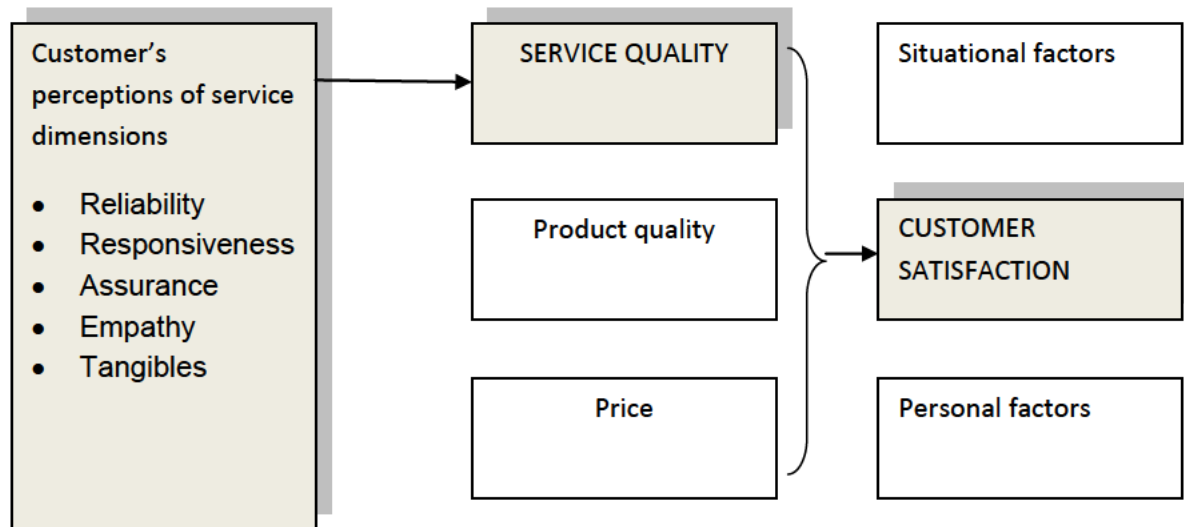
service quality dimensions (tangibles, responsiveness, empathy, assurance and reliability) should be considered in order to see its impact on customers of the service provider. Out of the outcomes that better service offers, customers' satisfaction is said to be the pioneer one. All the firms that want to create and maintain competitive advantage against rivals should offer superior services to their customers.

Various researchers give different views regarding the relationship between dimensions of service quality and customer satisfaction. Cavana, Corbett and Lo (2007: 9) suggest that convenience and reliability do not have any significant relationship with customer satisfaction, while assurance, empathy and responsiveness have a strong relationship with the satisfaction level of customers. Lai (2004:353) emphasises a significantly positive relationship between satisfaction of customers and service quality dimensions of tangibles, empathy and assurance. Ahmed, Ahmed, Nawaz, Usman and Shaukat (2010:156) stress that there is no significant relationship with empathy and customer satisfaction, but service quality dimensions of assurance, reliability, tangibles and responsiveness have a positively significant relationship with satisfaction.

Baumann, Burton, Elliott and Kehr (2006: 104) state that the effectiveness of the service provider's attitude and empathy of staff leads to a higher degree of customer satisfaction. They further state that effective attitude has a long term impact on customer satisfaction, while empathy has a short term relationship with satisfaction.

As stated above, several service marketing literature indicate that service quality is an antecedent of customer satisfaction. The implications of the research findings regarding the relationship between service quality and customer satisfaction are huge. Businesses need to ensure that the customer perceptions of service quality are consistently higher than their expectations so that customers remain satisfied. This will ensure greater profitability for the business and stronger market competitiveness. The association between service quality and customer satisfaction is illustrated in Figure 2.5 below.

**Figure 2.5: The association between service quality and customer satisfaction**



**Source: Zeithaml, Bitner and Gremler (2006: 107)**

Figure 2.5 shows that perceived service quality is a component of customer satisfaction. Service quality focuses specifically on the customers' perceptions of specific dimensions of service whilst customer satisfaction is a broader concept. As seen in the diagram, customer satisfaction is influenced by perceptions of service quality, product quality and price as well as situational and personal factors (Zeithaml, Bitner and Gremler, 2006: 107).

Customer satisfaction at a retail pharmacy chain is influenced by perceptions of service quality, perceptions of the quality of medication purchased, the price of medication and clinic services. Also, personal factors such as the customer's emotional state and even uncontrollable situational factors such as experiences to and from the pharmacy influence overall customer satisfaction.

## **2.12 KEY DRIVERS OF QUALITY SERVICES**

According to Jones (2004: 56), key drivers of customer service that will ensure superior services within retail organisations, are excellent staff, who are efficient, have knowledge about their product, speed and efficiency of service by staff and the staffs' attitude towards customers during transactions. Furthermore, the availability of a full

range of products and services and the staff's efficiency and accuracy in the way they conduct customers' transactions, as well as deal with complaints in an efficient and effective manner, also promote quality services rendered in retail organisations. The location of store, abundant parking, and providing fast and efficient services would make any service organisation popular, as would clean stores that conform to world class standards and provide a friendly environment for their customers.

The organisation should provide a reliable and dependable service with quick solutions to problems. Furthermore, the organisation should stock quality products and their prices should be competitive. The availability of stock is of paramount importance and the company image should be impeccable.

Sam (2011: 41) states that customer satisfaction is important to organisations and that they should conduct research on ways to manage customer relationships by creating a competitive advantage. Needs and wants of the customer should be understood before different strategies and improvements by the organisation on service quality can be applied in order to satisfy customers. Hu, Kandampully and Juwaheer (2009: 114) advocate that the perceived level of service that a customer receives normally determines whether the organisation retains or loses customers. Both situations would create a financial impact on the organisation. If the company provides quality service, they will retain customers and customers act as a mouthpiece for the organisation. Superior quality service is a determining factor in customer satisfaction.

Siu and Cheung (2001:90) indicate that superior service quality include the following:

- The appearance and convenience of the store layouts are adaptable to customer requirements;
- The retailer keeps to their promises from advertised lines and delivers on their promises;
- Service interaction between employees and customers is conducted in a polite and amicable manner by employees;
- Employees are equipped to handle any customer queries; and

- All company policies and materials relating to various details are easily accessible for customers.

The balance of customer service, service quality, customer satisfaction and customer retention should be intertwined in any service industry in order to create a successful and profitable organisation. Siu and Cheung (2001: 89) realise the presence of fierce competition within the retail sector, which results in management adopting customer service quality as a differentiation and competitive strategy against their counterparts.

## **2.13 CONCLUSION**

The retail arena today is very different to the way business was conducted in the past. The opportunities are incredible but exploiting them is extremely tough. Shoppers are aware of all the rules of the game. Their expectations are tough to meet but for retailers aiming to maintain a competitive edge, there is not much of a choice but to find ways to win customers over and keep them permanently happy.

Service quality is one of the major factors that affect customer satisfaction. Ensuring good service quality and customer satisfaction as perceived by customers should, therefore, be the focus of attention of the selected pharmacy chain in order to effectively differentiate itself from competitors and thus give it a competitive advantage over others. Having knowledge of what the customer expects is the first, and possibly the most critical step in delivering a quality service. The importance of providing good quality services to customers cannot be over-emphasized. However, provision of quality service demands knowledge of what constitutes good service quality.

Chapter two therefore presents literature on service, service quality dimensions and customer satisfaction. The chapter focuses on the current situation within the retail pharmaceutical sector in South Africa. The literature review also highlights the fact that customer service is a key issue to induce customer satisfaction and sustain the retail pharmacy chain's profitability in the long-term.

The chapter also presents the five service quality dimensions, developed by Parasuraman, Zeithaml and Berry (1988: 13). The SERVQUAL instrument is discussed and various studies supporting the use of SERVQUAL are highlighted. Customer satisfaction, as a result of customer service in the retail pharmacy sector, is also identified. The Gap Model of service quality indicates how the gaps can occur. Gap 5, the difference between customers' expectations and perceptions of service quality, is highlighted as the most important gap to close to improve customer satisfaction within a service organization.

The research methodology will be discussed in chapter three.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 INTRODUCTION**

Chapter two presents literature on customer satisfaction, the characteristics of services, customer perceptions and expectations and the five dimensions of service quality. The Gaps Model of service quality, developed by Parasuraman, Zeithaml and Berry (1988), is also discussed in the previous chapter.

This chapter discusses the research methodology that guides the research and enables the researcher to collect and analyse the data. The chapter covers instrument design, sampling, data collection procedure and data analysis, questionnaire design and the target population. Instrument evaluation, regarding the reliability and validity of SERVQUAL, is also addressed.

#### **3.2 STUDY TYPE**

Primary data was collected in this study using the survey method. A questionnaire consisting of 44 items each testing customer expectations and perceptions respectively was used to gather the needed information.

A survey is a method of collecting primary data based on communication with a representative sample of individuals. Surveys provide a snapshot at a given point in time and have a high rate of usage in marketing research (McDaniel and Gates, 2010: 7). A new survey of marketing research professionals found that the most common source of market research information is survey data, used by 94 percent of companies surveyed (McDaniel and Gates, 2010: 170). Surveys provide a quick, inexpensive, efficient and accurate means of assessing information about a population (Zikmund and Babin, 2007: 187).

The questionnaire consists of close-ended questions and a number of alternative choices are provided to respondents. Closed-ended questions require the respondent to make a selection from a list of responses (Kent, 2007: 155). Trained fieldworkers administer the questionnaires.

### **3.3 RESEARCH DESIGN**

This study was quantitative and descriptive measuring levels of customer satisfaction at a selected pharmacy chain in the greater Durban area. Cameron and Molina-Azorin (2011: 256) researched business and management discipline journals in seven fields and conclude that quantitative studies dominate all seven fields (76 per cent of empirical articles) followed by mixed methods (14 per cent of empirical articles) and qualitative studies (10 per cent of empirical articles). Hence, quantitative research is by far the most popular.

Descriptive studies are conducted to answer who, what, when, where and how questions (McDaniel and Gates, 2010: 77). McGivern (2006: 54) states that descriptive research aims to build a picture – of a market, a set of customers, a social phenomenon or a set of experiences. The descriptive part of this study describes the gaps between the selected pharmacy chain customers' expectations and perceptions (in relation to the five service quality dimensions) in order to measure their levels of customer satisfaction.

The study uses a cross-sectional methodology which is the most frequently used descriptive design in marketing research. Cross-sectional designs involve the collection of information from any given sample of population elements at approximately the same time (Welman, Kruger and Mitchell, 2005: 86).

### **3.4 POPULATION**

The population, or population of interest, is the entire group of people about whom the researcher needs to obtain information. One of the first steps in the sampling process is defining the population of interest. A population is any complete group –

for example, of people, sales territories, stores, or organizations that share some common set of characteristics (McGivern, 2006: 274).

Properly defining the target population is a crucial step in the design of the research project. The target population in this research are customers of the selected pharmacy chain within the greater Durban area.

### **3.5 SAMPLING METHOD**

A sample is a subset, or some part, of a larger population. Sampling refers to the process of obtaining information from a subset (a sample) of a larger group (the population). The researcher then takes the results from the sample and makes estimates of the characteristics of the larger group (McDaniel and Gates, 2010: 414). A decision on which sampling technique to use depends on the research question being addressed. Non-probability sampling refers to a sampling technique in which units of the sample are selected on the basis of convenience (Kent, 2007: 231). A non-probabilistic approach (such as “convenience sampling”) is to be preferred if the purpose is to describe a particular phenomenon such as similarities and differences in perceived service quality (Morales and Ladhari, 2011: 245).

Convenience samples are primarily used, as the name implies, for reasons of convenience. Researchers generally use convenience samples to obtain a large number of completed questionnaires quickly and economically. Some believe that the use of convenience sampling is growing at a faster rate than the growth in the use of probability sampling (Zikmund and Babin, 2007: 412).

Stores of the selected pharmacy chain are chosen using non-probability convenience sampling. These include stores at Gateway; Musgrave; Pavilion and City View respectively. The researcher believes that these stores provide a cross-spectrum of customers who fall within varied demographic categories of age, gender and educational levels. The inclusion criteria for respondents include customers making a purchase at the pharmacy section specifically. Hence, customers making purchases of other non-pharmaceutical items at the store are not included in the study. Convenience sampling is also used in the selection of respondents at each of



the stores selected. Cook (2008: 101) states that sampling allows companies to gain information from a small number of customers who will represent the total universe of their customer base, thus ensuring shorter timescales for research and reduced costs.

**Table 3.1: Selected stores of the pharmacy chain in the greater Durban area**

<b>SELECTED STORE</b>	<b>SHOPPING MALL ADDRESS</b>
1. Pharmacy at Gateway	Newtown Centre, 1 Palm Boulevard, Umhlanga.
2. Pharmacy at Musgrave	155 Musgrave Road, Musgrave, Durban.
3. Pharmacy at Pavilion	Dawncliffe, Westville, Durban.
4. Pharmacy at City View	10 Mathews Mejiwa Rd, Greyville, Durban.

### **3.6 SAMPLE SIZE**

Once a sampling method has been chosen, the next step is to determine the appropriate sample size. It has been shown time and again that sampling a small percentage of a population can result in very accurate estimates (McDaniel and Gates, 2010: 414). Kent (2007: 236) argues that for any kind of quantitative analysis, a minimum sample size of 100 or so is needed even to be able to calculate simple percentages for each variable. According to Sekaran (2000: 295), sample sizes larger than 30 and less than 500 are appropriate for most research. The total number of respondents interviewed comprise 400 as this sample size is believed to be large enough given the purpose and goals of the study (Sekaran and Bougie, 2010: 296). Each of the four stores selected were allocated 100 questionnaires respectively.

### **3.7 QUESTIONNAIRE DESIGN**

According to Morales and Ladhari (2011: 253), who reviewed forty studies between 1995 and 2009, a self-administered questionnaire is the most commonly utilised method for gathering data. All forms of survey research require a questionnaire. Questionnaires ensure that all respondents will be asked exactly the same series of questions (Lamb, Hair, McDaniel, Boshoff and Terblanche, 2008: 138). The questionnaire design refers to a set of questions designed to generate the data

necessary to accomplish the objectives of the research project. They are also referred to as the survey instrument (McDaniel and Gates, 2010: 406).

Questionnaires, in short, systematize the data collection process so that the data obtained is consistent and can be analysed in a coherent manner (Kent, 2007: 152). If done correctly, the questionnaire can reduce field researcher and consumer confusion, increase consumers' speed of completion, and promote easy transfer from questionnaire to electronic data (Payne and Wansink, 2011: 384).

For the purposes of this study, Parasuraman, Zeithaml and Berry's (1991:446-449) SERVQUAL questionnaire was adapted and administered. Permission to use the SERVQUAL instrument for this study was granted by Professor Parasuraman on behalf of the respective authors (see Annexure 4). The SERVQUAL instrument was developed by Parasuraman, Zeithaml and Berry as an instrument to collect information regarding service quality. Twenty two questions were used to assess customer expectations and perceptions of service quality respectively, designed to cover the five dimensions of service quality namely tangibles, reliability, responsiveness, assurance and empathy. A five-point Likert scale was used to measure the attitudinal variables with 1 (strongly disagree) to 5 (strongly agree).

The five dimensions and their respective statements in the questionnaire are shown in Table 3.2:

**Table 3.2: The Five Dimensions of Service Quality**

<b>DIMENSIONS</b>	<b>ATTRIBUTE</b>	<b>CORRESPONDING STATEMENTS (Section A)</b>
1. Tangibles	Physical representations	Statements 1-4
2. Reliability	Delivering on service	Statements 5- 10
3. Responsiveness	Willingness to help	Statements 11 - 13
4. Assurance	Inspiring trust and confidence	Statements 14 - 17
5. Empathy	Caring, individualized attention	Statements 18 -22

The questionnaire was in the form of closed-ended questions in which respondents were asked to make choices from a list of possible responses. Kotler and Armstrong

(2010: 111) state that closed-ended questionnaires include all the possible answers, and subjects make choices among them.

The questionnaire consisted of four pages (refer to Annexure 1). A covering letter ensured that the respondents were informed of the nature and purpose of the research and a consent form was signed by participants. Research questions were structured in the simplest terms, making them easy understand by respondents. The questionnaire included demographic questions such as age, gender, education and the frequency of shopping at the selected pharmacy chain. Trained fieldworkers were used to administer the questionnaire. The questionnaire consisted of the following sections:

- Section A: respondents' expectations and perceptions of services provided;
- Section B: demographic data of respondents.

### **3.8 PRE-TEST**

Pre-testing of the questionnaire is an essential step in the research process. McDaniel and Gates (2010: 232) define pre-testing as a screening procedure that involves a trial run with a group of respondents to iron out fundamental problems in the survey design. In a pretest, researchers look for misinterpretations by respondents, lack of continuity, and general respondent reaction to the interview.

The pilot interviews should be conducted face-to-face with members of the target population. A face-to-face interview enables the interviewer to observe and note the respondent's physical reaction to the questions and get first hand feedback on the questionnaire. McGivern (2006: 376) recommends conducting at least about twelve interviews in a pre-test.

The questionnaire was given to academics to review to ensure that ambiguity was avoided. Changes were made before the research was conducted. The results of the pre-test offered valuable insight for avoiding ambiguous questions and the instrument was amended accordingly for the final stage in the questionnaire construction.

### **3.9 DATA COLLECTION**

Primary data collection refers to data constructed specifically for the research at hand (Kent, 2007: 569). The role of primary research is to generate data to address the information needs in relation to a specific problem or issue (McGivern, 2006: 61). An adapted SERVQUAL questionnaire was used to ascertain levels of customer satisfaction at selected stores of the pharmacy chain in the greater Durban area. Trained third year marketing students were used to administer the questionnaires. Fieldworkers were trained on matters relating to the questionnaire in order to answer any questions that arise. The participant letter of information and consent form was presented and explained to respondents. Furthermore, they were made aware that there are separate sealed boxes for the completed questionnaires and consent forms respectively, only to be opened by the researcher. The questionnaire and its contents were carefully discussed and reviewed with respondents. Respondents were made aware that their participation is voluntary and responses will remain anonymous. Thereafter, customers were given the consent forms and questionnaires to complete and these were posted into the respective boxes. The researcher conducted a percentage of the questionnaires first in the presence of the trained students and thereafter did regular check-backs to ensure quality and consistency. New sealed boxes were replaced and collected daily by the researcher until 100 questionnaires per store were completed.

Field researchers may also have to obtain permission from top-level managers at marketplace contexts such as school districts, malls and stores (Payne and Wansink, 2011: 380-381). In light of this study, permission was granted from the pharmacy chain's head office in Cape Town prior to the commencement of the research (see Annexure 2). Also, the management of each store selected for this research was informed of the study and made aware when questionnaires were to be completed. Thus permission and kind co-operation was forthcoming in order to achieve the objectives of this research.

### **3.10 DATA ANALYSIS**

This is the first step after the data has been collected. Data analysis is the process whereby researchers take the raw data that have been entered into the data matrix and create information that can be used to tackle the objectives for which the research is undertaken. The raw data is of little value in itself until it has been structured and summarized and a range of conclusions drawn from it.

In this study, the collected data was analysed using the latest Statistical Package for the Social Sciences (SPSS) which reflects the data as graphical representations. Frequency tables were used to contribute to the accuracy and efficiency of data processing. Marketing researchers have traditionally used SPSS more than any other statistical software tool. SPSS has been viewed as very user-friendly (Zikmund and Babin, 2007: 515).

#### **3.10.1 DESCRIPTIVE STATISTICS**

Data display and data summaries are components of what is commonly referred to as descriptive statistics (Kent, 2007: 296). Descriptive statistics are the most efficient means of summarizing the characteristics of large sets of data. Furthermore, descriptive statistics describe characteristics of a sample. Thus, calculating a mean and a standard deviation to 'describe' or profile a sample is a commonly applied descriptive statistical approach (Zikmund and Babin, 2007: 457).

The mean or arithmetic mean is the average most often used. The standard deviation is a statistic that summarises the average distance of the values from the mean. The bigger the standard deviation the greater the variation or spread in the sample or distribution. The standard deviation is a very useful statistic, particularly when used alongside the mean (McGivern, 2006: 468). In this research, descriptive statistics, such as frequencies and percentages, were used.

### **3.10.2 FREQUENCIES AND PERCENTAGES**

A frequency count is a count of the number of times a value occurs in the dataset, the number of respondents who give a particular answer (McGivern, 2006: 463). A frequency distribution shows how frequently each response or classification occurs (Kent, 2007: 566).

Frequencies can be shown on pie charts or bar diagrams. Percentages are used to simplify data into a standard numerical range and allows easy comparability. A percentage tells us the relative proportion or incidence in every 100 cases (Mazzocchi, 2008: 99). Graphs were used in this study to depict results obtained.

### **3.10.3 INFERENCE STATISTICS**

Inferential statistical tests enable us to determine if relationships between variables or the differences between means or proportions or percentages are real or whether they are more likely to have occurred by chance (McGivern, 2006: 487). Inferential statistics were used in this study to test the chi-square and also calculate the expectation and perception mean.

### **3.10.4 CHI-SQUARE TEST**

A chi-square test is one of the most basic tests for statistical significance and is particularly appropriate for testing hypotheses about frequencies arranged in a frequency or contingency table. This test is associated with goodness-of-fit. The chi-square test for a contingency table involves comparing the observed frequencies with the expected frequencies in each cell of the table (McDaniel and Gates, 2010: 537).

The chi-square test produces a contingency coefficient, which has a range of values between 0 and 1, and tells us the strength of the association between the variables. The higher the value of the chi-square test, the less likely it is that the expected and observed values are the same (McGivern, 2006: 483). The Chi-square test was

used to calculate significance of the expectation and perception means of all five dimensions.

### **3.10.5 FACTOR ANALYSIS**

The aim of factor analysis is to reduce or summarise a large number of variables into a smaller set of factors. The analysis does this by looking for correlations or similarities between all of the variables in the particular set of data. Factor analysis examines the relationships between all attributes and summarises or reduces these to a smaller set of factors that tell us what is driving perceptions of the service (McGivern, 2006: 485). Factor analysis was used in this study to draw conclusions.

### **3.10.6 CRONBACH'S ALPHA**

Cronbach's alpha is not a statistical test – it is a coefficient of reliability (or consistency). Alpha has effectively become the measure of choice for establishing the reliability of multi-item scales. According to Kent (2007: 142) it has been referenced in over 2200 articles in 278 different journals in the past twenty years.

Cronbach's alpha takes the average correlation among items in a summated rating scale and adjusts for the number of items. Reliable scales are ones with high average correlation and a relatively large number of items. The coefficient varies between zero for no reliability to unity for maximum reliability. A reliability coefficient of 0.8 or higher is seen as being acceptable (Mazzocchi, 2008: 10). Cronbach's Alpha was used to measure internal consistencies and the reliability of the items included in the questionnaire.

Cronbach's alpha can be written as a function of the number of test items and the average inter-correlation among the items. Below is the formula for Cronbach's alpha:

$$\alpha = \frac{N \cdot \bar{r}}{1 + (N - 1) \cdot \bar{r}}$$

Here N is equal to the number of items and  $\bar{r}$  is the average inter-item correlation among the items. One can see from this formula that if one increases the number of items, one increases Cronbach's alpha. Additionally, if the average inter-item correlation is low, alpha will be low. As the average inter-item correlation increases, Cronbach's alpha increases as well.

### **3.11 RELIABILITY**

Good measures should be both precise and accurate. Reliability represents the consistency and repeatability of a measure (Zikmund and Babin, 2007: 322). Kent (2007: 141) further elaborates that reliability is the extent to which the application of a scale produces consistent results if repeated measures are taken.

The SERVQUAL instrument was chosen for this study. This is based on the fact that the SERVQUAL questionnaire is the most widely used tool to measure service quality to date (Dehghan, Zenouzi and Albadvi, 2012: 5). SERVQUAL and adaptations have been utilized in various contexts. This includes hospitals, banks and real estate brokers (Zeithaml, Bitner and Gremler, 2006: 153). In terms of its reliability, SERVQUAL is a generic and universally applicable instrument that can be administered on a repeated and regular basis (Javadi and Gol, 2011: 118).

### **3.12 VALIDITY**

Validity refers to the degree to which the instrument measures the concept the researcher wants to measure. The question of validity expresses the researcher's concern with accurate measurement (Zikmund and Babin, 2007: 323).

Researchers have attempted to assess validity in many ways. The three basic approaches to establishing validity are:



- Face (content) validity: a scale's content logically appears to reflect what was intended to be measured;
- Criterion validity: the ability of a measure to correlate with other standard measures of similar constructs or established criteria; and
- Construct validity: exists when a measure reliably measures and truthfully represents a unique concept (Zikmund and Babin, 2007: 323).

Brandon-Jones and Silvestro (2010: 1308) researched the practical effectiveness of the SERVQUAL model and found that the internal service measure based on gap-scores appears to meet all the criteria to be considered reliable and valid. Furthermore, these authors state that the benefits of the SERVQUAL model are:

- Valid and reliable;
- Data richness;
- Improved understanding of expectations; and
- Increased diagnostic value: effective in identifying improvement priorities.

In light of the above, the SERVQUAL questionnaire was the instrument of choice used in this study.

### **3.13 ETHICS**

Good ethical standards is good business. Ethics in marketing research is concerned with professional standards of conduct and with the use of techniques in ways that avoid harm to respondents, to clients or to other parties (McGivern, 2006: 27).

According to Kent (2007: 38), the main ethical issues that arise in client-based marketing research concern:

- Privacy;
- Confidentiality;
- Deception;
- Imposition;
- Integrity; and
- Misrepresentation.

For this study, an ethical clearance was first obtained from the University's Ethics Committee before research was conducted. This ensured that all the above ethical concerns were taken into account. Furthermore, a letter of introduction and consent form was attached to the questionnaire. Respondents were made aware of the purpose of the research, assured of their anonymity when completing questionnaires and trained fieldworkers ensured that respondents were willing to co-operate in completing questionnaires. Also, statistical data was accurately computed to prevent skewed or misrepresented results.

### **3.12 CONCLUSION**

Marketing research has grown in importance because of management's focus on customer satisfaction and retention. It is also a key tool in proactive management (McDaniel and Gates, 2010: 18).

This chapter highlights the research methodology used to measure levels of customer satisfaction at a selected pharmacy chain in the greater Durban area. The purpose was to analyse the data and identify any gaps between the expectations and perceptions of the respondents.

The study findings will be discussed in Chapter four.

## CHAPTER 4

### DATA ANALYSIS AND DISCUSSION OF RESULTS

#### 4.1 INTRODUCTION

In chapter three, the research design, data collection methods and questionnaire design are discussed. The purpose of this chapter is to present, interpret and discuss the findings obtained from the questionnaire in this study.

This chapter commences with a detailed analysis of data that provides an insight into the findings of the study, accompanied by numerical and graphical representations of the data and interpretation of the results. The presentation of the detailed analysis and the findings taken from questionnaires administered to the pharmacy chain's customers of the four stores in the greater Durban area are also discussed in this chapter. The data collected from the responses are analysed with the Statistical Package for the Social Sciences (SPSS) version 20.0.

#### 4.2 RESPONSE RATE

The questionnaires were administered at four stores of the pharmacy chain in the greater Durban area. The total number of respondents that completed the questionnaires was 400. Table 4.1 illustrates the responses from the four selected stores.

**Table 4.1 Response rate from the four pharmacy chain stores selected**

<b>Selected store</b>	<b>Planned sample</b>	<b>Achieved sample</b>	<b>Response rate</b>
City View	100	100	100%
Musgrave	100	100	100%
Gateway	100	100	100%
Pavilion	100	100	100%
<b>Total Responses</b>	<b>400</b>	<b>400</b>	<b>100%</b>

From table 4.1, it is clear that the overall response rate for the study was high as the desired response rate of 100 percent was achieved. 400 questionnaires were completed in total (100 questionnaires per selected store).

### 4.3 DESCRIPTIVE STATISTICS

This section presents the descriptive statistics based on the biographical information of the respondents. According to Welman, Kruger and Mitchell (2005: 231), descriptive statistics refer to the organizing, summarizing and describing of quantitative data. Demographic information, which includes characteristics like gender, age and education are explained in figures 4.1, 4.2, table 4.2 and figure 4.3 respectively.

#### 4.3.1 Gender of respondents per location

The figure below indicates the gender composition of the sample by location.

**Figure 4.1 Gender of respondents per location**

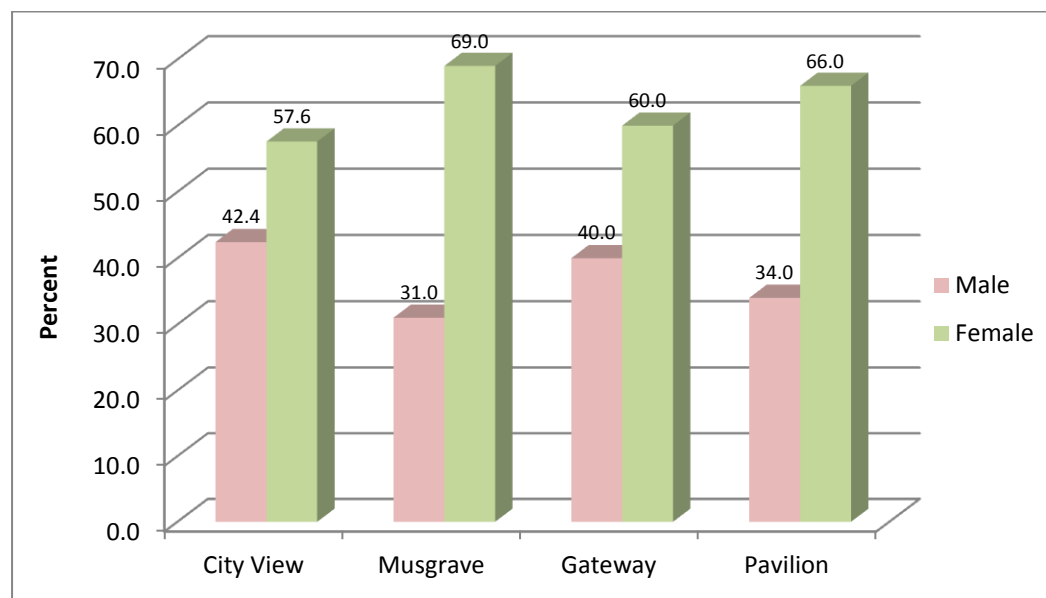


Figure 4.1 reveals the gender of respondents per location in this study. The overall pattern indicates that there are more female respondents per location than male respondents. The levels of female respondents are fairly similar for Musgrave and

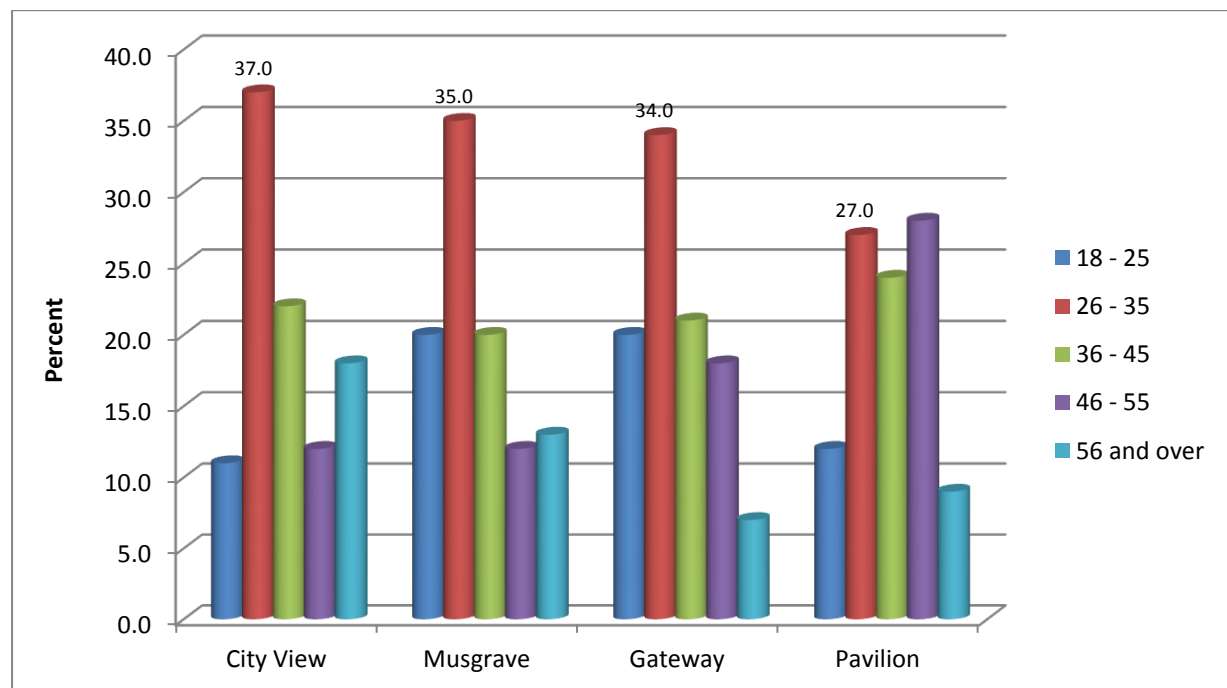
Pavilion (69% and 66% respectively), as well as for City View and Gateway with 57.6% and 60% respectively.

Overall, the gender composition of females to males was 63.2% to 36.8% female to male respondents. The results reveal that women are the predominant shoppers. This could be attributed to women buying products for the entire household.

#### 4.3.2 Age of respondents per location

Figure 4.2 below indicates the age distribution of the respondents per location.

**Figure 4.2 Age of respondents per location**



All locations indicate that the most frequent age group is the 26 to 35 year old age category. This age group constitutes 37% of the total respondents at City View, 35% of the respondents at Musgrave, 34% of the respondents at Gateway and 27% of the respondents at Pavilion. On average, this grouping constitutes nearly one-third of the respondents at each location. These findings indicate that the pharmacy chain has quite a young clientele at these stores on average.

It is noted that at Pavilion, however, there are as many 46 to 55-year-old respondents as there are 26 to 35-year-old respondents. Respondents in these age categories constitute 28% and 27% of the respondents respectively. Hence, the pharmacy needs to cater for the 46 to 55-year-age group at Pavilion as well since this location has an older clientele.

### 4.3.3 Cross-tabulation of the respondents' age and gender

Cross tabulation is a data summarization tool. It allows one to reorganize and summarize selected columns and rows of data to obtain a desired report. Cross-tabulation does not change the underlying data. Rather, it allows one to “slice and dice” the data and view it from different perspectives (Mazzocchi, 2008: 276).

The cross tabulation results are presented in table 4.2 and indicates the overall spread of the ages by gender.

**Table 4.2 Cross-tabulation of the respondents' age and gender**

			Gender		Total
			Male	Female	
Age	18 - 25	Count	31	32	63
		% of Total	7.8%	8.0%	15.8%
	26 - 35	Count	49	83	132
		% of Total	12.3%	20.8%	33.1%
	36 - 45	Count	31	56	87
		% of Total	7.8%	14.0%	21.8%
	46 - 55	Count	19	51	70
		% of Total	4.8%	12.8%	17.5%
	56 and over	Count	17	30	47
		% of Total	4.3%	7.5%	11.8%
Total	Count	147	252	399	
	% of Total	36.8%	63.2%	100.0%	

The table illustrates the cross-tabulation, in finer composition, of the respondents' gender by age at all four stores overall. It is noted that 33.1% of the respondents are in the 26 to 35 year old age category and are the most frequent age group. Within

this age category, 12.3% of the respondents are male and 20.8% are female indicating that there are predominantly female shoppers within this age group.

Within the 18 to 25 year age group, in comparison, 7.8% are male compared to 8% female. This finding reveals an almost 1:1 ratio of men to women within this age group. Hence, the expectations of both males and females within this age category needs to be understood and met by the pharmacy chain.

#### 4.3.4 Educational levels of respondents per location

The figure below indicates the educational distributional pattern of the respondents.

**Figure 4.3 Educational levels of respondents per location**

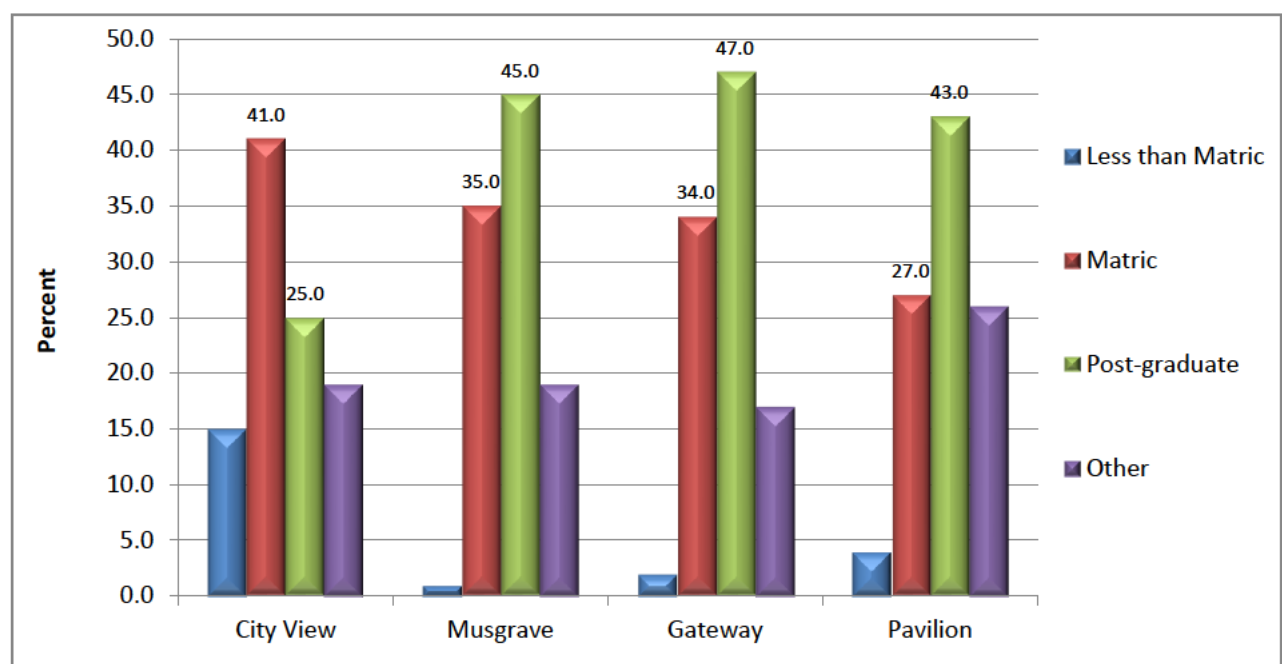


Figure 4.3 illustrates that there are similar and more qualified respondents visiting Musgrave, Gateway and Pavilion than there are who visit City View. 45% of the respondents at Musgrave have a post-graduate qualification, 47% of the respondents at Gateway have a post-graduate qualification and 43% of the respondents at Pavilion have a post-graduate qualification. In contrast, 25% of the respondents at City View have a post-graduate qualification.

This finding implies that location of the store does have an impact on the educational patterns of customers. City View is located closer to the taxi ranks and train stations and hence have higher levels of less qualified clientele.

According to Yang and Yu (2008: 1329), characteristics including education, age and interviewing experience do not have significant effects on the non-substantive responses. They suggest that respondents' decisions on giving answers to complex questions is not solely based on their characteristics. The findings in this study in terms of the Chi-square results indicate that respondent's education levels has no significant effects.

#### 4.3.5 Frequency of shopping per location

The figure below indicates the frequency of visits to the different locations.

**Figure 4.4 Frequency of shopping per location per month**

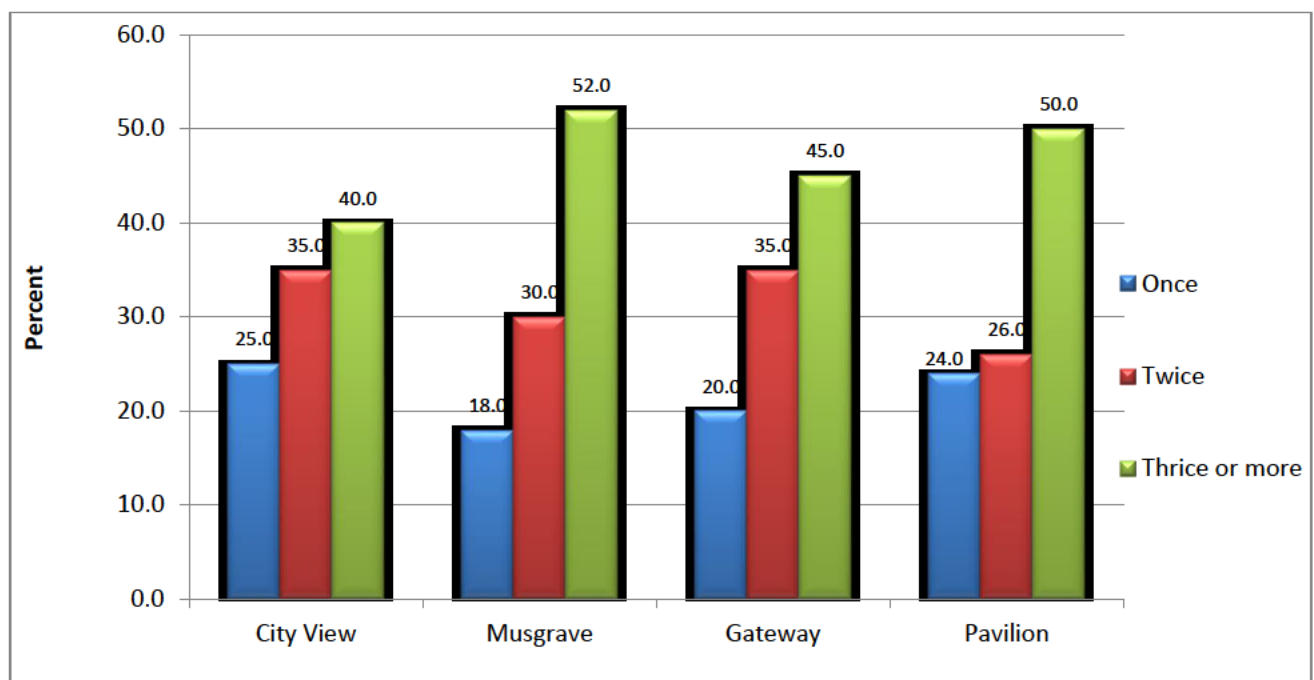


Figure 4.4 reflects the frequency of respondents' visits per location per month. The overall pattern indicates higher results for shopping thrice or more in a month for respondents visiting Musgrave, Gateway and Pavilion. 52% of respondents at Musgrave indicate that they shop thrice or more in a month, 45% of respondents at



Gateway indicate that they shop thrice or more in a month and 50% of respondents at Pavilion indicate that they shop thrice or more in a month.

This finding implies that location of the store does have an impact on the frequency of shopping. Musgrave, Gateway and Pavilion attract more affluent customers who shop more frequently at these stores. The findings by Clottey, Collier and Stodnick (2008: 37) indicate that consumers, who frequently shop, are more favourably inclined toward that specific store and its merchandise quality. Overall, the results show that customers shop more often at the pharmacy chain.

#### 4.4 RELIABILITY

The researcher made use of Cronbach's alpha to evaluate the reliability of the overall results. Cronbach's alpha measures how well a set of items (or variables) measures a single uni-dimensional latent construct. When data has a multidimensional structure, Cronbach's alpha will usually be low. Technically speaking, Cronbach's alpha is not a statistical test - it is a coefficient of reliability (Kent, 2007: 141).

Reliability is computed by taking several measurements on the same subjects. A reliability coefficient of 0.70 or higher is considered as "acceptable" (Kent, 2007: 141). The results are presented in Table 4.3.

**Table 4.3 Reliability statistics for expectations and perceptions**

Dimension	Cronbach's Alpha	
	Expectations	Perceptions
Tangibles	.887	.923
Reliability	.913	.933
Responsiveness	.935	.935
Assurance	.922	.940
Empathy	.940	.940
<b>Overall</b>	.973	.977

Table 4.3 is a summary of Cronbach's alpha reliability for the expected and perceived customer satisfaction levels for the retail pharmacy chain stores selected. The overall reliability scores for each section are high (0.973 for expectations and 0.977 for perceptions). This finding indicates a high degree of acceptable, consistent scoring of the different categories for this study. All of the categories have high, acceptable reliability values.

Therefore, the results show that the research instrument (questionnaire) has internal consistency and reliability.

## **4.5 DIMENSION ANALYSIS WITH GAP SCORES**

This section focuses on the dimension analysis with gap scores. The tables and graphs below indicate the mean scores for each statement, as well as the gap scores (which are the differences between the expectations and perceptions) for each component. This is done for each of the five service quality dimensions and is analysed per store. The gap scores indicate how closely customers' perceptions are to their expectations of service delivery across each service quality dimension. Large gaps between expectations and perceptions reveal areas that the pharmacy chain needs to improve on in order to achieve customer satisfaction.

### **4.5.1 Dimension: Tangibles**

According to Javadi and Gol (2011: 123), the quality dimension of tangibles is related to the appearance of physical facilities, equipment, personnel and the communication devices existing in service organizations. Tangibles provide physical representation or images of the service that customers will use to evaluate quality.

**Figure 4.5 Tangibles- Mean Scores**

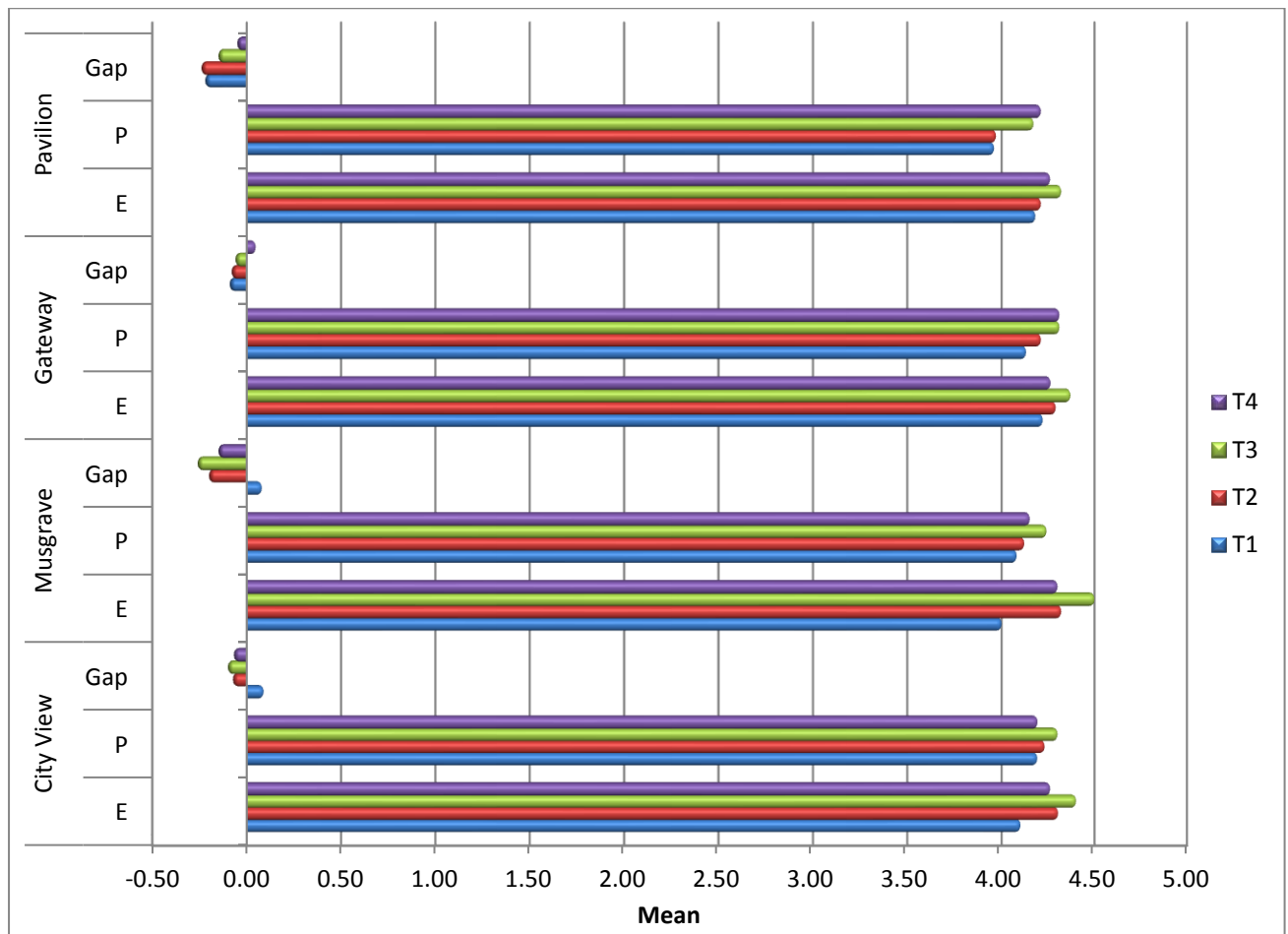


Figure 4.5 reflects the tangible factors expected and perceived by the pharmacy chain customers at each of the selected stores, in addition to the relevant gap for each question. The average gap for this dimension is -0.10. The small gap implies that there is not much difference between what respondents expect and what they really receive.

The gap scores for City View and Gateway are much smaller than for Musgrave and Pavilion. The mean gap scores at City View and Pavilion are -0.04 and -0.05 respectively. Musgrave has a gap score of -0.13 and Pavilion has a gap score of -0.17. This implies that respondents at City View and Gateway show a greater satisfaction with the statements that constitute this dimension than respondents at Musgrave and Pavilion.

The largest gap at Musgrave regards the appearance of employees. The mean gap score is -0.26 implying that the respondents did not score employees highly on

appearance. Dhurup, Singh and Surujlal (2006: 42) state that the personal appearance of staff at pharmacies is an important factor to the customer in their assessment of the service provider.

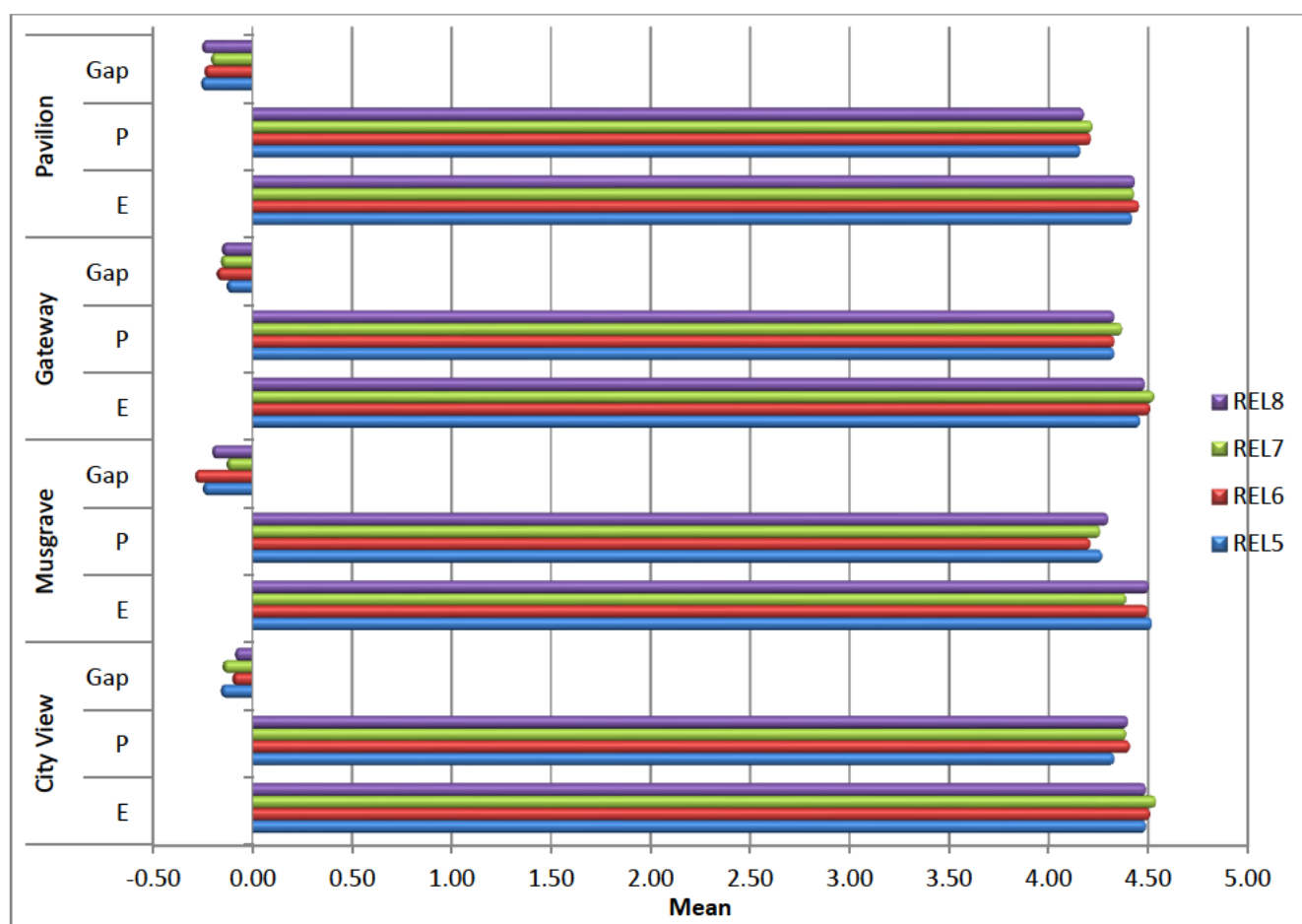
At Pavilion, the largest gaps are for equipment and physical facilities. The mean gap scores are -0.22 for modern-looking equipment and -0.24 for visually appealing physical facilities respectively. Hoffman and Bateson (2006: 136) observe that customers utilise tangibles in evaluating services and that service organisations can use them to enhance their image and signal quality to customers.

This finding reveals that the gaps per store are relatively small and, therefore, it can be concluded that the pharmacy chain customers are satisfied with this service quality dimension of tangibles.

#### **4.5.2 Dimension: Reliability**

Javadi and Gol (2011: 120) define reliability as the ability to do and provide the promised services in an appropriate, accurate and reliable manner, doing what is expected by the customer. This dimension measures the timelines to solving and giving attention to customer problems. Figure 4.6 reveals the expected and perceived customers' scores for the reliability dimension, in addition to the gap for each question per store.

**Figure 4.6 Reliability- Mean Scores**



As reflected in figure 4.6, the mean scores for expected values for reliability are 4.51 for City View, 4.48 for Musgrave, 4.50 for Gateway and 4.43 for Pavilion. These findings reveal that the respondents at all stores are in agreement that the pharmacy chain should have high levels of reliability. The perceived mean scores are 4.38 for City View, 4.26 for Musgrave, 4.34 for Gateway and 4.19 for Pavilion.

The gap mean scores are -0.13 for City View, -0.22 for Musgrave, -0.16 for Gateway and -0.24 for Pavilion. There are larger gaps for most of the statements for all of the various locations. The gaps for Musgrave and Pavilion are larger than for the other two stores. The largest gap at Musgrave and Pavilion regards staff showing a sincere interest in solving customer problems. The gap score for this question is -0.29 at Musgrave and -0.24 at Pavilion respectively. This finding reveals that staff at Musgrave and Pavilion need to solve customer problems more efficiently in future.

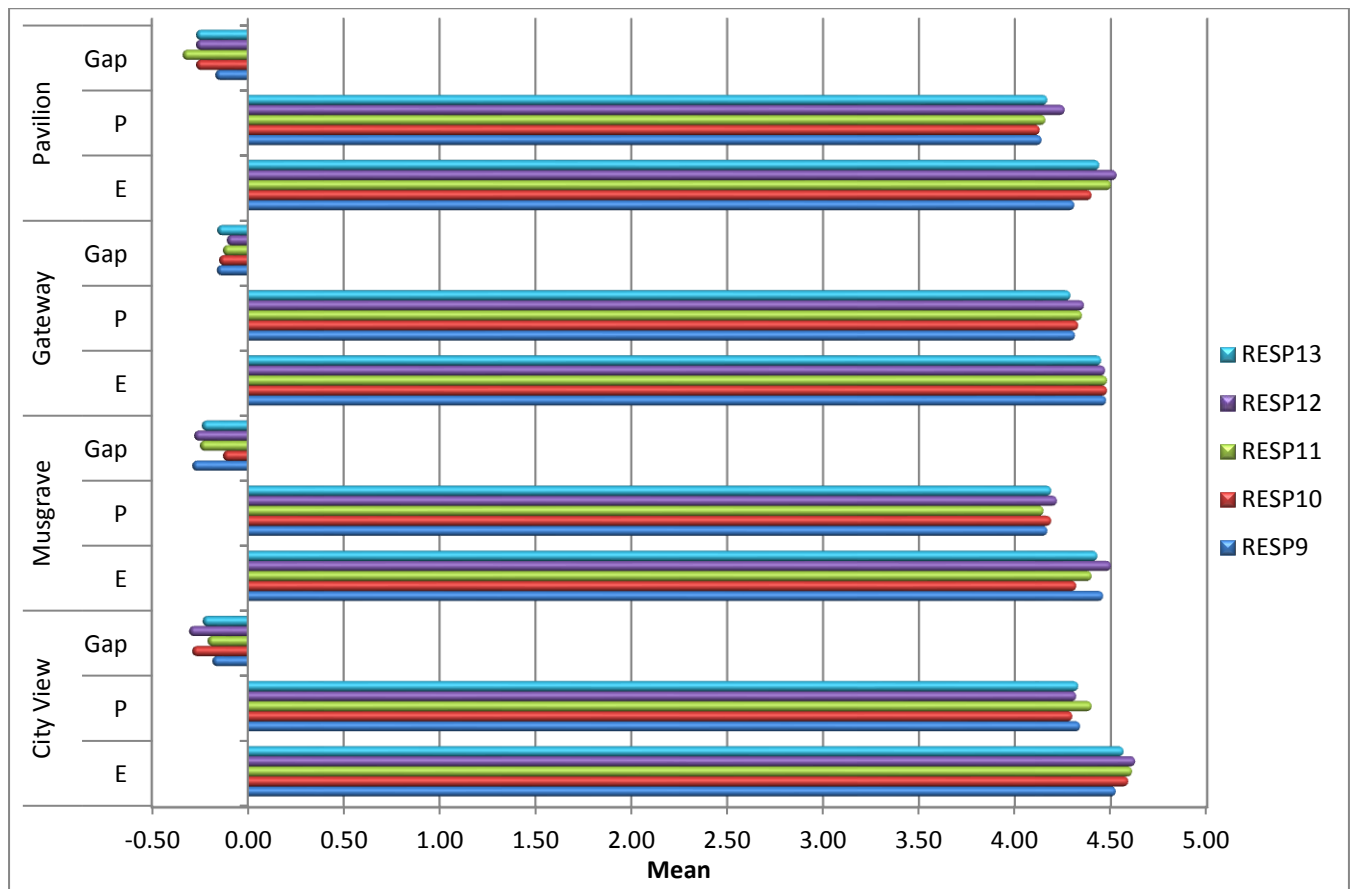
The average score for the reliability dimension is 4.48 for expected values. All of the variables that constitute this dimension have a similar score. The average perceived score is 4.29. The average gap score is -0.19 for all stores overall. The results, therefore, imply that the pharmacy chain has managed to achieve this service quality dimension of reliability.

Of the five service quality dimensions, reliability is the most critical dimension, based on both direct measures of relative importance and importance weights derived from regression analyses (Parasuraman, Zeithaml and Berry, 1991: 420-449). Chowdhary and Prakash (2007: 495) further state that regardless of the kind of services provided to the customers, reliability is considered as the most significant aspect in providing customers with services. This refers to the extent to which the service provider delivers on the promises made to the customer. Within the retail pharmacy chain context, reliability relates to ensuring that prescriptions are ready for collection, appointments for clinic services are consistently on time, and medication is always available. Therefore, the retail pharmacy chain needs to emphasise reliability as the cornerstone of superior service delivery.

#### **4.5.3 Dimension: Responsiveness**

Zeithaml, Bitner and Gremler (2006: 117) state that responsiveness is the willingness of employees to help customers and to provide prompt service. Questions in this factor primarily describe the willingness of the pharmacy chain to help customers and provide them with prompt service, and for employees' to have the necessary skills and abilities to interact with customers. Figure 4.7 illustrates the expected and perceived scores for the responsiveness dimension, in addition to the gap score per selected store.

**Figure 4.7 Responsiveness- Mean Scores**



As reflected in figure 4.7, the expected mean scores for responsiveness are 4.58 for City View, 4.42 for Musgrave, 4.47 for Gateway and 4.44 for Pavilion. These findings reveal that the respondents at all stores are in agreement that the pharmacy chain should have high levels of responsiveness. The perceived mean scores are 4.34 for City View, 4.18 for Musgrave, 4.33 for Gateway and 4.17 for Pavilion.

The gap mean scores are -0.25 for City View, -0.24 for Musgrave, -0.14 for Gateway and -0.26 for Pavilion. The gap scores for Gateway are lower than the other stores and could be attributed to this store having recently relocated to new premises within Gateway and staff are more willing to help and provide prompt service.

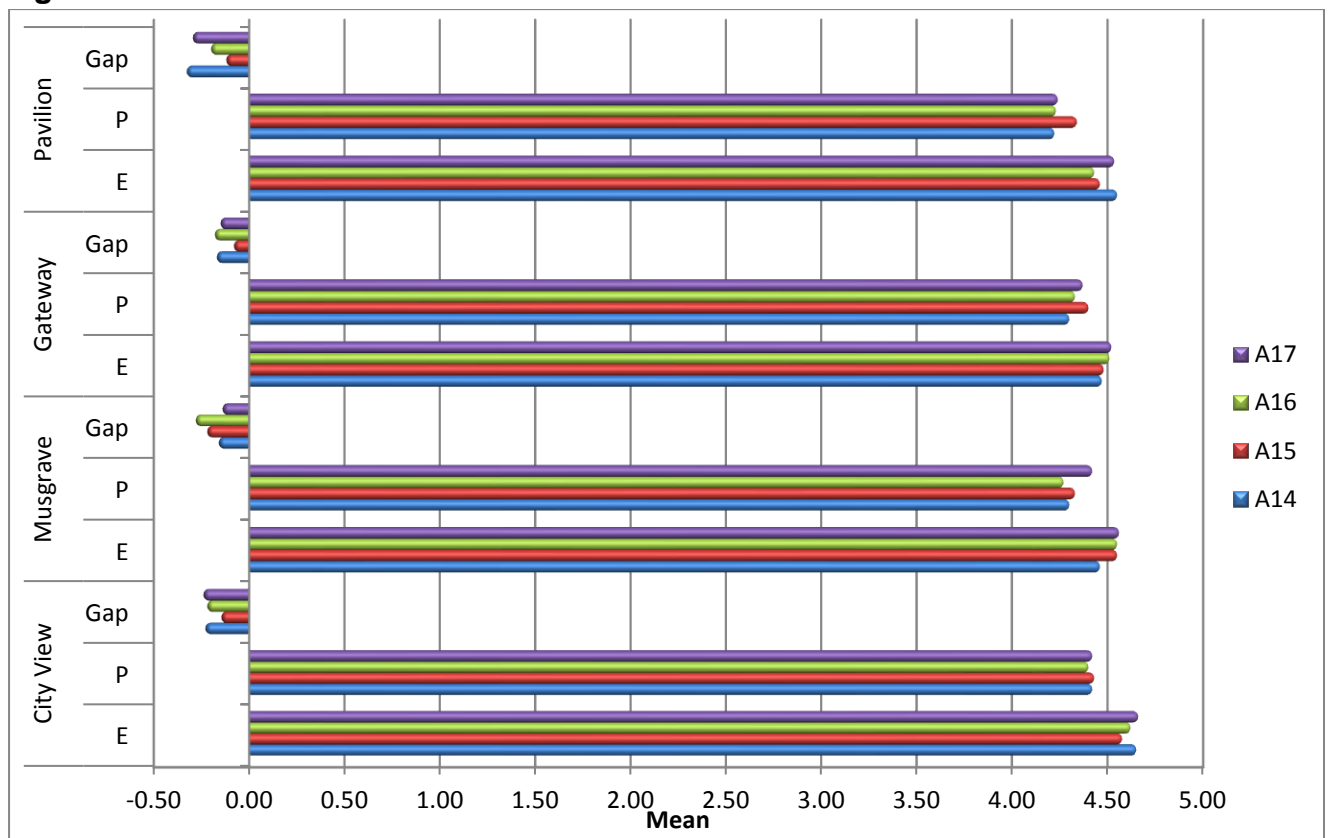
The overall gap for responsiveness is 0.22, which is the largest of the five service quality dimensions. This finding indicates that more focus should be put on staff providing a prompt service and be more willing to deal with customer requests. Keeping the customer waiting, especially for no good reason, will result in a

customer's dissatisfaction and negative perception of service quality (Javadi and Gol, 2011: 120).

#### 4.5.4 Dimension: Assurance

Assurance is about inspiring trust and confidence. The assurance dimension of service quality refers to the ability of retail staff to provide trust and confidence to customers. This refers to the degree of confidence and trust that the retail pharmacy chain is able to engender in the customer, based on the interactions between the parties (Chowdhary and Prakash, 2007: 496).

**Figure 4.8 Assurance- Mean Scores**



As reflected in figure 4.8, the expected mean scores for assurance are 4.63 for City View, 4.53 for Musgrave, 4.50 for Gateway and 4.49 for Pavilion. The perceived mean scores are 4.42 for City View, 4.33 for Musgrave, 4.35 for Gateway and 4.26 for Pavilion.



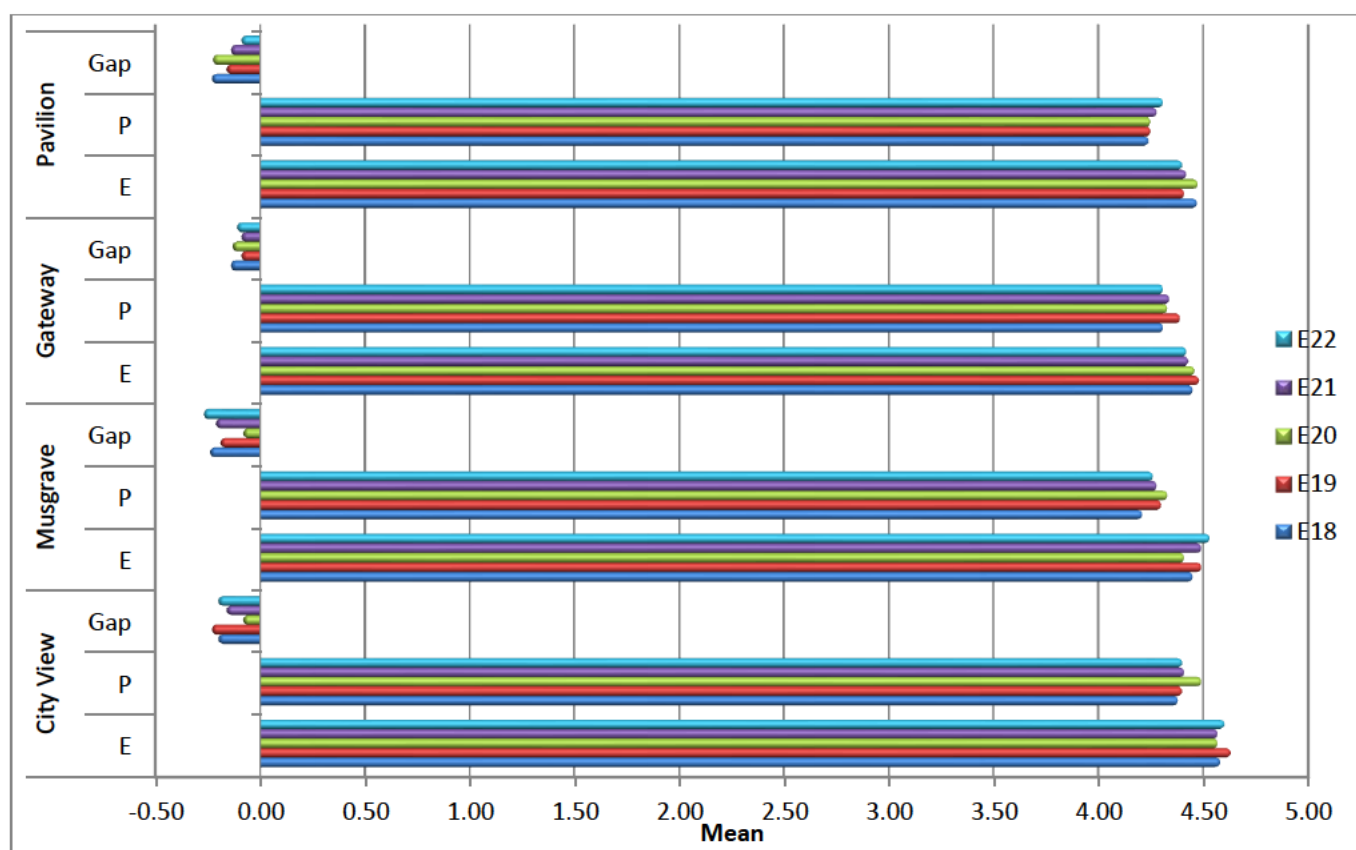
The gap mean scores are -0.21 for City View, -0.20 for Musgrave, -0.14 for Gateway and -0.24 for Pavilion. These findings indicate that Gateway has the lowest gaps compared to the other stores. Customers at Gateway have confidence in staff and feel that they have professional knowledge to answer customer queries. Dehghan, Zenouzi and Albadvi (2012: 5) highlight the knowledge of staff in assuring customers as a critical factor and the findings at Gateway supports this statement.

Overall, most of the statements have larger gaps than the second statement. The fact that the gap for A15 is the smallest implies that most respondents feel safe in their transactions with the pharmacies. Ramsaran-Fowdar (2008: 107) believes that organizations need employees to inspire trust and confidence in members, as these attributes form part of the evaluation of service quality.

#### **4.5.5 Dimension: Empathy**

Empathy is about treating customers as individuals. Here, customers are treated in such a way that they feel important to the organisation, and that their needs are seen as important to the organization (Zeithaml, Bitner and Gremler, 2006: 134). The essence of empathy conveys the message that customers are unique and special.

**Figure 4.9 Empathy- Mean Scores**



As reflected in figure 4.9, the mean scores for expected values for empathy are 4.59 for City View, 4.47 for Musgrave, 4.45 for Gateway and 4.43 for Pavilion. These findings reveal that the respondents at all stores are in agreement that the pharmacy chain should have high levels of empathy. The perceived mean scores are 4.42 for City View, 4.28 for Musgrave, 4.34 for Gateway and 4.27 for Pavilion.

The gap mean scores are -0.17 for City View, -0.20 for Musgrave, -0.11 for Gateway and -0.17 for Pavilion. The gap score at Musgrave is the highest and customers indicate less satisfaction for statements E18 and E22. These statements relate to staff giving customers more attention and the pharmacy having more convenient business hours.

Overall, this dimension has one of the smallest gaps (-0.16) and this finding indicates that respondents are satisfied with the statements that make up this dimension. Respondents believe that employees do show empathy towards customers. To show empathy, service providers need to demonstrate that they understand that

each customer is an unique individual with individual needs. Service provision needs to thus, as far as possible, be customized to customers' unique needs (Dehghan, Zenouzi and Albadvi, 2012: 5).

#### 4.6 OVERALL MEAN SCORES PER DIMENSION

Table 4.4 shows the expected and perceived scores in addition to the gap scores for each of the service quality dimensions overall for the four stores.

**Table 4.4 Overall Mean Scores per dimension**

Dimension	Expectation	Perception	Gap
Tangibles	4.27	4.17	-0.1
Reliability	4.48	4.29	-0.19
Responsiveness	4.48	4.26	-0.22
Assurance	4.54	4.34	-0.2
Empathy	4.49	4.32	-0.16
Overall	4.45	4.28	-0.17

An examination of the mean scores for all stores indicates that the overall expectation for all five service quality dimensions is 4.45. The perception mean score is 4.28. The average gap for all dimensions is -0.17. The small gap implies that there is not much difference between what respondents expect and what they really receive. This study shows that overall there is a high level of customer satisfaction across all four stores of the pharmacy chain and these results are very positive.

An examination of the mean scores for expectations and perceptions shows that 'tangibles' has the smallest gap of -0.1. The dimension of 'responsiveness' has the largest gap of -0.22. This study therefore indicates that the dimension of responsiveness needs greater emphasis by the pharmacy chain.

In a retail pharmacy chain, responsiveness includes providing advice to medically-related questions and prompt service on a continuous basis. Furthermore, customers do not wait in long queues to get served and receive advice on medical-

aid related or other queries promptly. Pharmacies should also respond to the changing needs of customers, for example, extending trading hours in response to customer requests.

#### **4.7 FACTOR ANALYSIS**

Factor analysis is used to study the patterns of relationship among many dependent variables, with the goal of discovering something about the nature of the independent variables that affect them, even though those independent variables are not measured directly(Kent, 2007: 174). A typical use of factor analysis is in survey research, where a researcher wishes to represent a number of questions with a small number of hypothetical factors.

For example, as part of a national survey on political opinions, participants may answer three separate questions regarding environmental policy, reflecting issues at the local, state and national level. Each question, by itself, would be an inadequate measure of attitude towards environmental policy, but *together* they may provide a better measure of the attitude. Factor analysis can be used to establish whether the three measures do, in fact, measure the same thing. If so, they can then be combined to create a new variable, a factor score variable that contains a score for each respondent on the factor. Factor techniques are applicable to a variety of situations. A researcher may want to know if the skills required to be a decathlete are as varied as the ten events, or if a small number of core skills are needed to be successful in a decathlon. You need not believe that factors actually exist in order to perform a factor analysis, but in practice the factors are usually interpreted, given names, and spoken of as real things(Kent, 2007: 176).

The communality for a given variable can be interpreted as the proportion of variation in that variable, explained by the factors that make up the variable. In this research, the five dimensions are the independent variables and the statements that constitute them are the dependent variables. The inferred independent variables are called *factors*. Certain components divided into finer components. This is explained in Table 4.5 (Rotated component matrix).

**Table 4.5 Rotated Component Matrix**

Component Matrix		Expectations					Perceptions				
		Component					Component				
		1	2	3	4	5	1	2	3	4	5
Tangibles	Excellent pharmacies should have modern looking equipment	.245	.208	.860	.098	-.152	.154	.810	.271	.150	.233
	The physical facilities at an excellent pharmacy should be visually appealing	.223	.258	.793	.232	.164	.222	.857	.241	.132	.147
	Employees at an excellent pharmacy should be neat in appearance	.259	.246	.650	.404	.272	.331	.771	.146	.257	.183
	Advertising material should be visually appealing at an excellent pharmacy	.266	.228	.605	.354	.344	.341	.733	.130	.259	.194
Reliability	When excellent pharmacies promise to do something by a certain time, they should do so	.296	.275	.363	.702	.213	.615	.414	.158	.292	.343
	When you have a problem, excellent pharmacies should show a sincere interest in solving it	.334	.303	.316	.738	.110	.647	.318	.307	.269	.333
	Employees at an excellent pharmacy should perform the service right the first time	.439	.540	.183	.533	-.122	.743	.249	.339	.210	.245
	Excellent pharmacies should deliver its services at the times it promises to do so	.359	.597	.245	.547	-.054	.744	.300	.354	.248	.218
Responsiveness	The staff should inform me about when services will be performed	.402	.451	.183	.413	.287	.692	.291	.270	.354	.146
	Excellent pharmacies should insist on error-free records	.373	.637	.255	.346	.070	.605	.299	.321	.240	.379
	Employees at an excellent pharmacy should give you prompt service	.359	.762	.300	.243	.083	.379	.348	.318	.272	.646
	Employees should always be willing to help you at an excellent pharmacy	.400	.730	.291	.254	.145	.310	.326	.306	.308	.721
	Employees at an excellent pharmacy should never be too busy to respond to customer requests	.432	.743	.188	.224	.125	.359	.252	.328	.349	.691
Assurance	The behaviour of employees should instil confidence in you	.431	.669	.278	.144	.294	.351	.277	.326	.701	.234
	You should feel safe in your transactions with an excellent pharmacy	.529	.461	.276	.222	.443	.343	.296	.350	.673	.253
	Employees at an excellent pharmacy should consistently be courteous to customers	.651	.325	.217	.304	.410	.325	.266	.398	.617	.366
	Staff should have the professional knowledge to answer your questions	.689	.359	.212	.347	.163	.289	.254	.395	.658	.328
Empathy	Staff should give personal attention to customers	.743	.338	.253	.252	-.036	.301	.238	.552	.400	.400
	Excellent pharmacies should have the customers best interests at heart	.778	.320	.194	.208	.116	.303	.255	.616	.380	.363
	Staff at an excellent pharmacy should understand customers' specific needs	.785	.326	.250	.217	.101	.418	.249	.644	.351	.294
	Employees at an excellent pharmacy should give you personal attention	.773	.304	.191	.234	.101	.335	.226	.732	.265	.311
	Excellent pharmacies should have convenient business hours	.734	.335	.300	.176	.069	.272	.254	.762	.255	.126

With reference to Table 4.5:

- The principle component analysis is used as the extraction method, and the rotation method is Varimax with Kaiser Normalisation. This is an orthogonal

rotation method that minimises the number of variables that have high loadings on each factor. It simplifies the interpretation of the factors;

- Factor analysis/loading show inter-correlations between variables; and
- Items of questions that are loaded similarly imply measurement along a similar factor. An examination of the content of items loading at or above 0.5 (and using the higher or highest loading in instances where items cross-loaded at greater than this value) effectively measured along a similar theme for the five dimensions.

It is noted that for expectations, three of the five factors (statements) loaded perfectly along a single dimension each. The dimensions that loaded perfectly for expectations include tangibles, responsiveness and empathy. This implies that these dimensions perfectly measured what they set out to measure. For perceptions, four out of the five dimensions also loaded perfectly. These include tangibles, reliability, assurance and empathy respectively. These results are very positive indicating that the questions (variables) that constituted these dimensions perfectly measured the dimensions.

The dimensions that did not align perfectly have factors that overlap, indicating a mixing of the factors. For expectations, these dimensions are reliability and assurance, and for perceptions the dimension that split is responsiveness. This means that the questions in the overlapping components did not specifically measure what it set out to measure or that the component split along themes. One possibility is that respondents did not clearly distinguish between the questions constituting the components. This could be with respect to interpretation or inability to distinguish what the questions are measuring.

#### **4.8 HYPOTHESIS TESTING**

The traditional approach to reporting a result requires a statement of statistical significance. A **p-value** is generated from a test statistic. A significant result is indicated with " $p < 0.05$ ". These values are highlighted in yellow. A paired t-test is performed to determine whether the differences between the overall expected

and perceived scores are significant. The null hypothesis claims that the means are the same. The results are presented in Table 4.6.

**Table 4.6 Paired T-Test Scores**

		Sig.
Pair 1	Excellent pharmacies should have modern looking equipment_E - Excellent pharmacies should have modern looking equipment_P	.452
Pair 2	The physical facilities at an excellent pharmacy should be visually appealing_E - The physical facilities at an excellent pharmacy should be visually appealing_P	.000
Pair 3	Employees at an excellent pharmacy should be neat in appearance_E - Employees at an excellent pharmacy should be neat in appearance_P	.001
Pair 4	Advertising material should be visually appealing at an excellent pharmacy _E - Advertising material should be visually appealing at an excellent pharmacy _P	.227
Pair 5	When excellent pharmacies promise to do something by a certain time, they should do so _E - When excellent pharmacies promise to do something by a certain time, they should do so _P	.000
Pair 6	When you have a problem, excellent pharmacies should show a sincere interest in solving it_E - When you have a problem, excellent pharmacies should show a sincere interest in solving it_P	.000
Pair 7	Employees at an excellent pharmacy should perform the service right the first time_E - Employees at an excellent pharmacy should perform the service right the first time_P	.000
Pair 8	Excellent pharmacies should deliver its services at the times it promises to do so_E - Excellent pharmacies should deliver its services at the times it promises to do so_P	.000
Pair 9	The staff should inform me about when services will be performed_E - The staff should inform me about when services will be performed_P	.000
Pair 10	Excellent pharmacies should insist on error-free records_E - Excellent pharmacies should insist on error-free records_P	.000
Pair 11	Employees at an excellent pharmacy should give you prompt service_E - Employees at an excellent pharmacy should give you prompt service_P	.000
Pair 12	Employees should always be willing to help you at an excellent pharmacy_E - Employees should always be willing to help you at an excellent pharmacy_P	.000
Pair 13	Employees at an excellent pharmacy should never be too busy to respond to customer requests_E - Employees at an excellent pharmacy should never be too busy to respond to customer requests_P	.000
Pair 14	The behaviour of employees should instil confidence in you_E - The behaviour of employees should instil confidence in you_P	.000
Pair 15	You should feel safe in your transactions with an excellent pharmacy_E - You should feel safe in your transactions with an excellent pharmacy_P	.000
Pair 16	Employees at an excellent pharmacy should consistently be courteous to customers_E - Employees at an excellent pharmacy should consistently be courteous to customers_P	.000
Pair 17	Staff should have the professional knowledge to answer your questions_E - Staff should have the professional knowledge to answer your questions_P	.000
Pair 18	Staff should give personal attention to customers_E - Staff should give personal attention to customers_P	.000
Pair 19	Excellent pharmacies should have the customers best interests at heart_E - Excellent pharmacies should have the customers best interests at heart_P	.000
Pair 20	Staff at an excellent pharmacy should understand customers' specific needs_E - Staff at an excellent pharmacy should understand customers' specific needs_P	.001
Pair 21	Employees at an excellent pharmacy should give you personal attention_E - Employees at an excellent pharmacy should give you personal attention_P	.000
Pair 22	Excellent pharmacies should have convenient business hours_E - Excellent pharmacies should have convenient business hours._P	.000

All highlighted values indicate that the differences between the expected and perceived values are significant. This implies that the means for expectations and perceptions are not the same and the direction of the differences can be determined from the frequencies and means as discussed under dimension analysis with gap scores. Even though the differences may seem small, most are significant.

In the above T-test results, the **p** significance value is .000 for the pair 22 statement regarding convenient business hours. As indicated under the empathy dimension analysis, the mean scores for expected values for statement 22 are 4.6 for City View, 4.53 for Musgrave, 4.42 for Gateway and 4.40 for Pavilion. The perceived mean scores are 4.40 for City View, 4.26 for Musgrave, 4.31 for Gateway and 4.31 for Pavilion.

The gap mean scores are -0.20 for City View, -0.27 for Musgrave, -0.11 for Gateway and -0.09 for Pavilion. The gap scores at City View and Musgrave are the highest and customers indicate less satisfaction for this statement relating to the pharmacy having more convenient business hours. This can be attributed to the shorter opening times for both City View and Musgrave as opposed to the extended business hours evident at both Gateway and Pavilion. The pharmacy chain needs to re-evaluate the possibility of extended business hours at both City View and Musgrave.

From the above T-test results, the **p** significance value is .000 for the pair 13 statement regarding staff being too busy to respond to customer requests. As indicated under the responsiveness dimension analysis, the mean scores for expected values for statement 13 are 4.57 for City View, 4.43 for Musgrave, 4.45 for Gateway and 4.44 for Pavilion. The perceived mean scores are 4.33 for City View, 4.19 for Musgrave, 4.29 for Gateway and 4.17 for Pavilion.

The gap mean scores are -0.24 for City View, -0.24 for Musgrave, -0.16 for Gateway and -0.27 for Pavilion. The gap scores at City View, Musgrave and Pavilion are the highest and customers indicate less satisfaction for this statement relating to staff responding to their requests. This can be attributed to fewer staff and less counters



available to deal with customer requests. The pharmacy chain needs to ensure that sufficient staff are on duty and customers receive prompt service.

For the pair 17 statement in the above T-test results, the **p** significance value is .000 regarding staff having professional knowledge to answer questions. As indicated under the assurance dimension analysis, the mean scores for expected values for statement 17 are 4.66 for City View, 4.56 for Musgrave, 4.52 for Gateway and 4.54 for Pavilion. The perceived mean scores are 4.42 for City View, 4.42 for Musgrave, 4.37 for Gateway and 4.24 for Pavilion.

The gap mean scores are -0.24 for City View, -0.14 for Musgrave, -0.15 for Gateway and -0.30 for Pavilion. The gap scores at City View and Pavilion are the highest and customers indicate less satisfaction for this statement relating to the staff having professional knowledge to answer questions. Staff at these stores need more product knowledge especially at the self-medication counters in order to offer more professional advice to customers on varied medication including generics sold.

Overall, assurance is about inspiring trust and confidence. The assurance dimension of service quality refers to the ability of retail staff to provide trust and confidence to customers. This refers to the degree of confidence and trust that the retail pharmacy chain is able to engender in the customer, based on the interactions between the parties (Chowdhary and Prakash, 2007: 496). Furthermore, Dehghan, Zenouzi and Albadvi (2012: 5) highlight the knowledge and competence of staff in assuring customers as a critical factor.

In a retail pharmacy chain context, the main source of assurance is with the pharmacist, nurse or pharmacy personnel. Their knowledge and manner of interaction with the customer inspires trust in the organisation. This dimension is considered particularly important for services that may be perceived to be associated with high levels of risk as well as where the customer may be unable to properly evaluate the service as is often the case in health care services (Javadi and Gol. 2011: 122). Hence, in a pharmacy chain context, assurance is seen as critical to the customer given their limited knowledge of medicinal properties and generic medicines available.

Furthermore, the customer should be treated in such a way that they feel important to the organisation, and that their needs are seen as important to the organization (Zeithaml, Bitner and Gremler, 2006: 134). To show empathy, service providers need to demonstrate that they understand that each customer is a unique individual with individual needs. Service provision needs to thus, as far as possible, be customized to customers' unique needs (Dehghan, Zenouzi and Albadvi, 2012: 5). Hence, the need for extended trading hours has to be addressed and met in order for the pharmacy chain to achieve customer satisfaction.

## 4.9 CHI-SQUARE TEST

The chi square test is performed to determine whether there is any relationship between the biographical factors and each of the statements.

The null hypothesis states that there is no relationship between the variables. The alternate states that there is a relationship.

The results are presented in Table 4.7.

<b>Table 4.7 Chi- Square test</b>	Gender	Age	Qualification	Frequency
Excellent pharmacies should have modern looking equipment_E	0.908	0.121	0.36	0.295
The physical facilities at an excellent pharmacy should be visually appealing_E	0.524	0.404	0.412	0.17
Employees at an excellent pharmacy should be neat in appearance_E	0.347	0.526	0.563	0.178
Advertising material should be visually appealing at an excellent pharmacy _E	0.621	0.067	0.659	0.884
When excellent pharmacies promise to do something by a certain time, they should do so _E	0.523	.012*	0.236	0.333
When you have a problem, excellent pharmacies should show a sincere interest in solving it_E	0.281	0.056	0.786	0.555
Employees at an excellent pharmacy should perform the service right the first time_E	0.614	0.14	0.843	0.143
Excellent pharmacies should deliver its services at the times it promises to do so_E	0.101	0.599	0.916	0.119
The staff should inform me about when services will be performed _E	0.394	0.9	0.777	0.58
Excellent pharmacies should insist on error-free records_E	0.422	0.531	0.185	0.6
Employees at an excellent pharmacy should give you prompt service_E	0.179	0.062	0.983	0.417
Employees should always be willing to help you at an excellent pharmacy_E	0.784	0.269	0.943	0.697
Employees at an excellent pharmacy should never be too busy to respond to customer requests_E	0.85	0.163	0.814	0.441
The behaviour of employees should instil confidence in you_E	0.303	0.07	0.839	0.188
You should feel safe in your transactions with an excellent pharmacy_E	0.662	0.888	0.308	0.176
Employees at an excellent pharmacy should consistently be courteous to customers_E	.020*	0.638	0.475	0.069
Staff should have the professional knowledge to answer your questions_E	0.247	0.254	0.74	0.837
Staff should give personal attention to customers _E	0.272	0.057	0.634	.033*
Excellent pharmacies should have the customers best interests at heart_E	0.215	0.469	0.131	.011*
Staff at an excellent pharmacy should understand customers' specific needs_E	0.6	0.069	0.432	0.162

Employees at an excellent pharmacy should give you personal attention_E	0.976	0.14	0.44	0.28
Excellent pharmacies should have convenient business hours_E	0.804	0.09	0.384	0.169
Excellent pharmacies should have modern looking equipment_P	0.833	0.183	0.16	0.235
The physical facilities at an excellent pharmacy should be visually appealing_P	0.161	0.263	0.724	.028*
Employees at an excellent pharmacy should be neat in appearance_P	0.338	0.099	0.721	0.086
Advertising material should be visually appealing at an excellent pharmacy _P	0.554	0.053	0.346	0.267
When excellent pharmacies promise to do something by a certain time, they should do so _P	0.894	0.466	0.586	0.161
When you have a problem, excellent pharmacies should show a sincere interest in solving it P	0.871	.042*	0.203	0.09
Employees at an excellent pharmacy should perform the service right the first time_P	0.734	0.126	0.057	0.072
Excellent pharmacies should deliver its services at the times it promises to do so_P	0.327	0.065	0.336	0.104
The staff should inform me about when services will be performed_P	0.728	.034*	0.452	0.099
Excellent pharmacies should insist on error-free records_P	0.387	0.08	0.632	0.421
Employees at an excellent pharmacy should give you prompt service_P	0.951	0.521	0.063	0.229
Employees should always be willing to help you at an excellent pharmacy _P	0.913	.008*	0.12	.018*
Employees at an excellent pharmacy should never be too busy to respond to customer requests P	0.984	.015*	0.597	.003*
The behaviour of employees should instil confidence in you_P	0.756	0.859	0.326	0.715
You should feel safe in your transactions with an excellent pharmacy_P	0.77	0.208	0.428	0.779
Employees at an excellent pharmacy should consistently be courteous to customers_P	0.641	.001*	0.389	0.384
Staff should have the professional knowledge to answer your questions_P	0.833	0.274	0.38	0.062
Staff should give personal attention to customers_P	0.181	0.058	0.168	0.123
Excellent pharmacies should have the customers best interests at heart_P	0.307	0.266	0.327	0.52
Staff at an excellent pharmacy should understand customers' specific needs_P	0.237	0.063	0.179	.042*
Employees at an excellent pharmacy should give you personal attention_P	0.886	0.26	0.48	0.703
Excellent pharmacies should have convenient business hours._P	0.543	0.066	0.594	0.063

In Table 4.7, the p-value between "Staff at an excellent pharmacy should understand customers' specific needs\_P" and "Frequency" is 0.042. This is less than the level of significance of 0.05. It implies that the number of times respondents visit pharmacies does play a role in terms of how they perceive staff understanding customers' needs.

The p-value between "Excellent pharmacies should have the customers best interests at heart\_E" and "Frequency" is 0.011. This is less than the level of significance of 0.05. It implies that the number of times respondents visit pharmacies does play a role in terms of their expectations of staff having the customers best interests at heart.

The p-value between "Staff should give personal attention to customers\_E" and "Frequency" is 0.033. This is less than the level of significance of 0.05. It implies

that the number of times respondents visit pharmacies does play a role in terms of their expectations of staff giving personal attention to customers.

Furthermore, the p-value between “When excellent pharmacies promise to do something by a certain time, they should do so \_E” and "Age" is 0.012. This is less than the level of significance of 0.05. It implies that the age of respondents does play a role in terms of how they expect the pharmacy to deliver on its promises.

Also, the p-value between “Employees at an excellent pharmacy should consistently be courteous to customers \_E” and "Gender" is 0.020. This is less than the level of significance of 0.05. It implies that respondents’ gender does play a role in terms of how they expect staff to be consistently courteous. Hence, gender and the expectation of staff being courteous are inter-related.

From the above Chi-square results, the p-value between “Employees should always be willing to help you at an excellent pharmacy \_P” and "Age" is 0.008. Furthermore, the p-value between “Employees should always be willing to help you at an excellent pharmacy \_P” and "Frequency" is 0.018. Both these scores are less than the level of significance of 0.05. This implies that the number of times respondents visit

pharmacies as well as the age of respondents both play a role in terms of how they perceive staff willingness to help.

Furthermore, the p-value between “When you have a problem, excellent pharmacies should show a sincere interest in solving it \_P” and "Age" is 0.042. This is less than the level of significance of 0.05. It implies that the age of respondents does play a role in terms of how they perceive the pharmacy showing a sincere interest when a customer has a problem.

From the above Chi-square results, the p-value between “Employees at an excellent pharmacy should consistently be courteous to customers \_P” and "Age" is 0.001. This is less than the level of significance of 0.05. It implies that the age of respondents does play a role in terms of how they perceive staff being consistently courteous. Hence, age and the perception of staff being courteous are inter-related.

The above chi-square results highlight the significant correlations between the biographical factors and each of the statements. Hence, the alternate hypothesis should be accepted. Overall, customer satisfaction at a retail pharmacy is influenced by perceptions of service quality, perceptions of the cost of medication, the efficiency and knowledge of staff as well as the emotional state of the customer (Laschinger, 2006: 33). Because customer satisfaction is a highly variable assessment individuals do based on their experiences with specific features of products and services they receive, it makes sense for servicing organizations to involve customer satisfaction measurement as their meaningful benchmark for development.

#### **4.10 CONCLUSION**

The results of the study are presented and analysed in this chapter. The chapter presented a number of different methods of quantitative analysis applied to obtain descriptive statistics. The results were presented in the form of charts and tables which helps to provide a detailed analysis.

A comparison of the service quality expectations and perceptions for the pharmacy chain stores at City View, Musgrave, Gateway and Pavilion are determined and presented. According to the gap analysis of service dimensions, the gaps between the expectations and perceptions at all four selected stores were also presented and analysed. Moreover, the results identify service quality dimensions that require further attention.

The next chapter contains the conclusions and recommendations of the study.

## **CHAPTER 5**

### **CONCLUSION AND RECOMMENDATIONS**

#### **5.1 INTRODUCTION**

Chapter four focused on the analysis of data from the 400 questionnaires using both inferential and descriptive statistics. This chapter takes an in-depth look into the results and findings in relation to the objectives of this study. A theoretical and empirical summary of the study is presented. Furthermore, the study findings in relation to the service quality dimensions is discussed. The gap analysis in terms of the largest and smallest gaps attained in this study is highlighted. Responsiveness and assurance, being the largest gaps, are explained in greater detail in terms of its impact on customer satisfaction. Limitations of this study and important recommendations for improving customer satisfaction at the selected pharmacy chain are also discussed in this chapter. Further recommendations for future studies are also made.

#### **5.2 SUMMARY OF THE THEORETICAL STUDY**

The focus of this study was to determine customer satisfaction at a selected pharmacy chain in the greater Durban area with the objective of providing management greater insight into improving service quality. This will lead to greater retention of existing customers and the acquisition of new customers within the competitive retail pharmaceutical sector.

Chapter two provided an overview of the dynamic retail pharmaceutical sector in South Africa. Recent changes that have permitted rapid expansion of pharmacy chains were discussed. The early effects of these changes appear to be lowered prices, greater competition, an initial balance between newly opened stores in shopping centres and the closure of independent pharmacies (Lowe and Montagu, 2009: 37). The change in legislation and subsequent entrance of chain stores in the retail pharmacy market has added pressure to small retail pharmacies that were

already struggling. It is not clear if the addition of corporate chain pharmacies has led to the closure of independent pharmacies, but it seems likely.

The literature review also discussed the appropriate customer satisfaction literature relative to this study. The meaning of service quality and customer satisfaction were defined. Service quality was seen as an assessment by customers about how well the service fulfils their expectations in terms of perceptions of the actual service delivery. Customer satisfaction at a retail pharmacy was seen as influenced by perceptions of service quality, perceptions of the cost of medication, the efficiency and knowledge of staff as well as the emotional state of the customer (Laschinger, 2006: 33). Customer satisfaction is a highly variable assessment individuals do based on their experiences with specific features of products and services they receive. It therefore makes sense for servicing organizations to involve customer satisfaction measurement as their meaningful benchmark for development.

Furthermore, the characteristics and dimensions of service quality and the importance for retail pharmacy chains to maintain high standards in terms of customer expectations and perceptions were also discussed. Service quality has gained importance in the last decade due to its unique characteristics of services involving intangibility, inseparability, variability and perishability. These characteristics make the process of service purchase and delivery very complex for both customer and seller (Vibha, Ravichandran and Jain, 2011: 20). Services, unlike physical goods, cannot be tasted or touched prior to consumption. Hence, the intangibility of services raises issues of risk and uncertainty faced by the customer. Padma, Rajendran and Sai (2009: 158) caution that it is important for service providers to give attention to the tangible elements associated with their services as they may provide a clue to customers as to the type of service to expect. The tangible elements may include consulting rooms, equipment and advertising material used in a retail pharmacy chain. The literature review further highlighted that customer service is pivotal for increased customer satisfaction and long-term profitability.

Chapter two also discussed the SERVQUAL model which provides the basis for the measurement of customer satisfaction with a product or service by assessing and

comparing both perceptions and expectations across a range of different service characteristics. SERVQUAL views the customer's assessment of service quality as paramount. This assessment is conceptualized as a gap between what customers expect from a class of service providers and their evaluations of the performance of a particular service provider (Vibha, Ravichandran and Jain, 2011: 21).

Hence, the gap model of service quality was also discussed in the literature review. This model indicates how gaps can occur. Ladhari (2009: 174) argues that such "gap analyses" are critical for identification of discrepancies between the provider's perceptions of service quality dimensions and the consumers' perceptions of those dimensions. Gap 5, i.e. the gap between customers' expectations and perceptions of service quality, was stressed as the most important gap to be closed in order to improve customer satisfaction. This study focused on gap five, the difference between the selected pharmacy chain customers' expectations and perceptions of service quality.

The results of the gap analysis in Chapter four revealed that customers' perceptions are lower than their expectations at the selected stores of the pharmacy chain within the greater Durban area. The negative gaps showed that the delivered service falls below customers' expectations of service quality while the positive gaps reflected that delivered service surpasses customers' expectations. While the gaps are relatively small, they are significant in highlighting areas of improvement and are discussed in the summary findings below.

### **5.3 SUMMARY OF THE EMPIRICAL STUDY**

In chapter four, the results of the study were analysed, interpreted and presented. The study was a quantitative study. A total of 400 questionnaires were used to extract information from customers at the four selected stores of the pharmacy chain within the greater Durban area. The results revealed crucial aspects of service quality that need to be addressed by management of the retail pharmacy chain in order to improve customer service and satisfaction.



This study was conducted following the logical stages of planning and framing; gathering of primary and secondary data; the analysis of data from respondents and the interpretation of study results as well as report writing.

#### **5.4 ATTAINMENT OF RESEARCH OBJECTIVES**

Study objectives serve as the support of the entire study. A discussion of the attainment of research objectives is discussed below.

- **To identify customers' expectations of services provided**

Chapter two provided the literature review and understanding of the essential characteristics and the five dimensions of service quality. Customers' expectations were identified, tested and analysed in Chapter four. The gap between customers' expectations and perceptions were measured according to customers' expectations of the delivery of the five service quality dimensions: tangibles, reliability, responsiveness, assurance and empathy. The results revealed that customers' expectations at the four selected stores of the retail pharmacy chain exceeded their perceptions. This finding indicated that improvements are necessary across all five dimensions. The gaps pose a challenge to the management of the selected retail pharmacy chain to develop strategies to close these gaps. Therefore, the first objective has been achieved.

- **To identify customers' perceptions of services provided**

As indicated in the literature review, the process of service delivery is influenced by the five dimensions of service quality. The literature review explained all five dimensions and highlighted their importance in attaining customer satisfaction. In Chapter four, customers' perceptions of services were measured at the four selected stores of the pharmacy chain within the greater Durban area, according to customers' perceptions on the five service quality dimensions. The results indicated negative responses showing that customers' expectations exceeded their perceptions at all four stores selected. This showed that customers are not receiving quality service

delivery at the selected pharmacy chain in the greater Durban area. Therefore, this objective has been achieved.

- **To evaluate customer satisfaction at a selected pharmacy chain within the greater Durban area, using the SERVQUAL instrument**

In chapter four, a statistical analysis showed the calculations and measurements of the data collected from the 400 respondents. 44 items were measured using the SERVQUAL instrument. The analysis of the dimensions showed that there are gaps between expectations and perceptions. However, it must be noted that the smallest mean gap score overall was in tangibles (0.1) and the largest mean gap score was for responsiveness (0.22). It is positive to note that, while gaps did exist overall, these gaps were not large at all four stores. In the latter part of chapter five, the recommendations on how to improve customer satisfaction are presented and, therefore, this objective has also been achieved.

These gap scores together with the literature review on the five service quality dimensions will be discussed below in terms of evaluating levels of customer satisfaction.

## **5.5 DISCUSSION OF THE STUDY FINDINGS IN RELATION TO THE SERVICE QUALITY DIMENSIONS**

As discussed in chapter two (section 2.7.2), the GAP analysis is crucial for management to identify the service problems or service disappointments experienced by customers. Numerous research studies on service quality focus on Gap 5 i.e. how to reduce the gap between customers' expectations and their perceptions. The expected quality is what the customer expects to receive from the company and the perceived service is what the customer perceives he or she received from the company. If the customer receives the service quality expected, he or she is satisfied. If the customer perceives service as below their expectation, the customer is dissatisfied (Kumar, Kee and Manshor, 2009: 214). One of the prime

purposes of such performance measurement is to allow action to be taken to close significant gaps in service provision. Repeating the gap survey over time will allow the selected pharmacy chain to track whether actions taken have closed gaps and whether new gaps are appearing.

The Gap analysis reveals that customers' perceptions are lower than their expectations on all 44 statements. Table 4.4 shows the expected and perceived scores in addition to the gap scores for each of the service quality dimensions overall for the four stores. The results indicate that the overall expectation for all five service quality dimensions is 4.45. The perception mean score is 4.28. The average gap for all dimensions is -0.17. The small gap implies that there is not much difference between what respondents expect and what they really receive. The main purpose of service quality improvement is to minimize the fifth gap, named the quality gap (Javadi and Gol, 2011: 121). This study shows that overall there is a high level of customer satisfaction across all four stores of the pharmacy chain and these results are very positive.

However, the largest gap scores are for responsiveness and assurance with scores of -0.22 and -0.20 respectively. These negative gaps indicate that the delivered service is less than the customers' expectations of service quality at the selected pharmacy chain. This finding is in line with the global trends, which show that customers in the service industry demand high quality services. Responsiveness and assurance are the two major factors impacting on customers' satisfaction and these are discussed below.

### **5.5.1 Responsiveness**

The responsiveness dimension refers to the pharmacy chain's willingness to help customers and to provide prompt service. The statements in this dimension produced the largest gaps. The responsiveness dimension has the largest average gap score of -0.22. For the selected pharmacy chain to improve on the responsiveness dimension, the company needs to have knowledgeable staff who are able to deal with customer requests and complaints promptly and efficiently. Javadi

and Gol (2011: 120) stress that keeping the customer waiting, especially for no good reason, will result in a customer's dissatisfaction and negative perception of service quality. Hence, it is imperative for the pharmacy chain to improve customer satisfaction on the responsiveness dimension.

### **5.5.2 Assurance**

Assurance is about inspiring trust and confidence. This refers to the degree of confidence and trust that the retail pharmacy chain is able to engender in the customer, based on the interactions between the parties (Chowdhary and Prakash, 2007: 496).

The assurance mean scores of this study indicated that the gap mean scores are -0.21 for City View, -0.20 for Musgrave, -0.14 for Gateway and -0.24 for Pavilion respectively. The assurance dimension has the second largest average gap score of -0.20 for all stores overall and indicates that staff need to improve in terms of instilling confidence in customers. Ramsaran-Fowdar (2008: 107) believes that organizations need employees to inspire trust and confidence in members, as these attributes form part of the evaluation of service quality.

### **5.5.3 Other service related factors**

The other factors include tangibles, reliability and empathy respectively. Among these three factors, reliability has the third largest gap score of -0.19 while empathy has a gap score of -0.16. Tangibles has the smallest gap score of -0.1, which indicates a fair degree of agreement with the statements that constitute this dimension. This finding implies that overall, there are many respondents who are satisfied with the appearance of physical facilities, equipment and staff appearance at the selected pharmacy chain.

As with all businesses in South Africa, the pharmacy chain is facing strong competition to increase their market share and profitability. The marketing focus for management is to increase the number of repeat customers and attract new

customers. By analysing expectations and perceptions of customer satisfaction, it can provide a starting point for management to develop and formulate marketing strategies to meet the needs of each specific dimension more effectively. The limitations of this study and future recommendations are discussed below.

## **5.6 LIMITATIONS**

The present study has certain limitations:

- The study was conducted at four stores of the pharmacy chain within the greater Durban area; Gateway, Musgrave, Pavilion and City View. As such, the study may contain information specific only to these four stores selected. Thus, the results cannot be generalised to other stores of the retail pharmacy chain; and
- The results of this study may not be representative of the entire population since convenience sampling was used.

## **5.7 RECOMMENDATIONS**

By measuring customer satisfaction, the selected pharmacy chain is able to identify and close any gaps that exist in service delivery. Consistent and regular measurement of customers' perceptions of service quality helps management to improve customer satisfaction and customer loyalty, thereby making the pharmacy chain more competitive within the dynamic South African retail pharmaceutical sector. The following recommendations are suggested :

- Customer satisfaction is everybody's responsibility. Each employee should have the knowledge, resources and skills to provide the right customer service. Competent and skilled staff are vital in order to provide superior customer service. Findings indicate that customers do not feel that staff have sufficient professional knowledge. It is, therefore, imperative that training of employees should be addressed to enhance efficient and effective customer service. Regular customer service and product knowledge training should be encouraged;

- The results indicate that respondents are not satisfied with employees' willingness to serve them promptly, offer assistance and deal with customer requests. Findings reveal that the overall gap for responsiveness is the largest of the five service quality dimensions. Therefore, it is essential that more focus should be put on staff providing a prompt service and be willing to deal with customer requests. This improvement can be achieved by ensuring sufficient staff on duty and more counters to offer a prompt service to customers;
- The staff at the selected pharmacy chain should embrace the concept of empathy in their interaction with customers. The pharmacy staff, for example, need to show customers that they are interested and care about the customer's health and well-being. It is pivotal for staff at the selected pharmacy chain to add the human dimension in their interaction with customers. Management can develop creative strategies to ensure that customers receive caring, individualized attention. An example of this could be email notifications for repeat prescriptions or clinic appointments;
- Staff must possess the social skills to approach and understand customers' unique needs. It is recommended that the pharmacy chain in the greater Durban area take into consideration findings which indicate that customers encounter problems with employees who do not understand their individual needs and do not give individual attention;
- It is crucial to entrench the concept of reliability in the interest of customer satisfaction and offering superior customer service. This may be translated into adhering to deadlines, solving problems immediately and being faultless. The pharmacy chain can also focus on handling complaints in a professional manner with the customers' best interests at heart. Procedures in dealing with customer complaints should reflect a customer-centric approach;
- Personal appearance of employees is an important factor to the customer in their

assessment of the service provider. Findings indicate that employees' appearance is not to the satisfaction of customers' expectations. Therefore, it is recommended that employees at the pharmacy chain present themselves in a more visually appealing, professional manner;

- It is recommended that the pharmacy chain have convenient business hours. Findings indicate that customers do not feel that the pharmacy chains' business hours are convenient and management need to re-evaluate this in terms of providing enhanced customer satisfaction. By providing extended business hours, the pharmacy chain can attract more potential customers and retain existing ones;
- It is essential to promote the right mindset for delivering the 'right' customer service. Staff should be trained to be customer-centered rather than merely task-driven. This means the adoption of customer orientation rather than just rules and regulations. Some innovative ways of encouraging positive mental mindsets would be to inculcate a shared vision of service excellence. This can be accomplished by recognising and rewarding superior service and sharing best practices;
- Management must also undertake to collect and evaluate customer attitudes, expectations, needs and opinions on a regular basis. This will assist management to pinpoint areas of concern and help to eliminate problem areas. Employees should encourage customer feedback and respond to identified problems promptly. Problems should be seen as opportunities, and this way of thinking should be embraced by both management and employees; and
- The selected retail pharmacy chain should regularly benchmark by comparing its own organisation with other competitors and learning best practices and strategies within the retail pharmacy sector.

## **5.8 SCOPE FOR FUTURE STUDY**

It is suggested that further studies be conducted to include all stores of the retail pharmacy chain. This will enable the management of the pharmacy chain to understand what customers in other geographical regions expect and perceive. This should be done annually so that it will allow management to draw yearly comparisons and determine how service improvements have affected customers' expectations and perceptions of customer service over time.

This study focused on the external customers' perception of customer service. Future research should focus on the perception from internal customers as well. This will ensure a thorough and comprehensive study, which will help the selected pharmacy chain to review and strengthen its overall customer satisfaction levels.

## **5.9 CONCLUSION**

This study highlights the expectations and perceptions of customers at a pharmacy chain within the greater Durban area. Issues relating to the delivery of customer service and the gap scores are discussed. The recommendations which are discussed in this chapter represent some of the measures that could possibly be taken by management of the selected pharmacy chain to improve customer satisfaction levels.

Undoubtedly there are numerous players in the retail pharmacy sector in South Africa, all competing for increased market share. The importance of customer satisfaction, therefore, is of paramount importance. Today's business environment is fluid and turbulent. Providing superior customer service can give a company the competitive advantage. It is envisaged that this study will have a positive impact on the delivery of customer service, which in turn will assist management of the selected pharmacy chain to achieve superior customer satisfaction.



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## ANNEXURE 1: LETTER OF INFORMATION AND QUESTIONNAIRE



Dear Valued Customer

### INSTITUTIONAL RESEARCH ETHICS COMMITTEE (IREC) LETTER OF INFORMATION

**Title of the Research Study:** CUSTOMER SATISFACTION AT A SELECTED RETAIL PHARMACY CHAIN IN THE GREATER DURBAN AREA

**Principal Investigator/s/researcher:** Nafisa Mohamed Adat (MTech: Marketing student)

**Co-Investigator/s/supervisor/s:** Prof S. Penceliah (HOD: Marketing) – PhD: Marketing

**Brief Introduction and Purpose of the Study:** I am currently conducting a study as part of my Masters degree in Marketing at the Durban University of Technology. The research aims to evaluate customer satisfaction at a selected pharmacy chain within the Greater Durban area. Permission to conduct this survey has been obtained from the Pharmacy Chain and the Centre Management.

**Outline of the Procedures:** I would appreciate your co-operation in taking the time to complete this short 15 minute questionnaire as honestly as possible. The questionnaire is made up of closed-ended questions evaluating customer satisfaction at this selected pharmacy chain. Research questions are simply structured making them easy to understand. 400 customers across four chains of this pharmacy in Durban will be surveyed. Your participation is completely voluntary as a customer of this store and responses will remain anonymous.

**Risks or Discomforts to the Participant:** No foreseeable risks as a voluntary participant.

**Benefits:** This study will assist management of the selected pharmacy chain to ensure customer satisfaction. Furthermore, it will be published in an accredited journal and presented at a national or an international conference.

**Reason/s why the Participant May Be Withdrawn from the Study:** There will be no adverse consequences should you choose to withdraw as a participant.

**Remuneration:** None

**Costs of the Study:** Nil costs for the participant

**Confidentiality:** Completed questionnaires will be posted into a sealed box only opened by the researcher. Furthermore, consent forms will be posted into a separate sealed box and thus not be linked to the questionnaires.

**Research-related Injury:** Not applicable to this study.

**Persons to Contact in the Event of Any Problems or Queries:**

Please contact the researcher, Nafisa Adat (083 265 0786), my supervisor Prof S. Penceliah (031-3735425 / 0824472246/ pencelid@dut.ac.za) or the Institutional Research Ethics administrator on 031 373 2900. Complaints can be reported to the DVC: TIP, Prof F. Otieno on 031 373 2382 or dvctip@dut.ac.za.

**INSTITUTIONAL RESEARCH ETHICS COMMITTEE (IREC)  
CONSENT**

**Statement of Agreement to Participate in the Research Study:**

- I hereby confirm that I have been informed by the researcher, **Nafisa Mohamed Adat**, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: IREC 051/12.
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

_____	_____	_____	_____
<b>Full Name of Participant</b>	<b>Date</b>	<b>Time</b>	<b>Signature / Right Thumbprint</b>

I, **Nafisa Mohamed Adat** (researcher) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Nafisa Mohamed Adat

_____	_____	_____
<b>Full Name of Researcher</b>	<b>Date</b>	<b>Signature</b>

_____	_____	_____
<b>Full Name of Witness (If applicable)</b>	<b>Date</b>	<b>Signature</b>

_____	_____
<b>Full Name of Legal Guardian (If applicable) Date</b>	<b>Signature</b>

## SECTION A: CUSTOMER EXPECTATIONS & PERCEPTIONS

Kindly **rate the service you EXPECT and PERCEIVE** for each statement. The rating guide is as follows:

	RATINGS
1	STRONGLY DISAGREE
2	DISAGREE
3	UNCERTAIN
4	AGREE
5	STRONGLY AGREE

EXPECTATION STATEMENTS		RATINGS				
		1	2	3	4	5
1	Excellent pharmacies should have modern looking equipment.					
2	The physical facilities at an excellent pharmacy should be visually appealing.					
3	Employees at an excellent pharmacy should be neat in appearance.					
4	Advertising material should be visually appealing at an excellent pharmacy .					
5	When excellent pharmacies promise to do something by a certain time, they should do so.					
6	When you have a problem, excellent pharmacies should show a sincere interest in solving it.					
7	Employees at an excellent pharmacy should perform the service right the first time.					
8	Excellent pharmacies should deliver its services at the times it promises to do so.					
9	The staff should inform me about when services will be performed.					
10	Excellent pharmacies should insist on error-free records.					
11	Employees at an excellent pharmacy should give you prompt service.					
12	Employees should always be willing to help you at an excellent pharmacy.					
13	Employees at an excellent pharmacy should never be too busy to respond to customer requests.					
14	The behavior of employees should instill confidence in you.					
15	You should feel safe in your transactions with an excellent pharmacy.					
16	Employees at an excellent pharmacy should consistently be courteous to customers.					
17	Staff should have the professional knowledge to answer your questions.					
18	Staff should give personal attention to customers.					
19	Excellent pharmacies should have the customers best interests at heart.					
20	Staff at an excellent pharmacy should understand customers' specific needs.					
21	Employees at an excellent pharmacy should give you personal attention.					
22	Excellent pharmacies should have convenient business hours.					

## SECTION A: CUSTOMER EXPECTATIONS & PERCEPTIONS

PERCEPTION STATEMENTS		RATINGS				
		1	2	3	4	5
1	Excellent pharmacies have modern looking equipment.					
2	The physical facilities at an excellent pharmacy are visually appealing.					
3	Employees at an excellent pharmacy are neat in appearance.					
4	Advertising material is visually appealing at an excellent pharmacy .					
5	When excellent pharmacies promise to do something by a certain time, they do so.					
6	When you have a problem, excellent pharmacies show a sincere interest in solving it.					
7	Employees at an excellent pharmacy perform the service right the first time.					
8	Excellent pharmacies deliver its services at the times it promises to do so.					
9	The staff inform me about when services will be performed.					
10	Excellent pharmacies insist on error-free records.					
11	Employees at an excellent pharmacy give you prompt service.					
12	Employees are always willing to help you at an excellent pharmacy.					
13	Employees at an excellent pharmacy are never too busy to respond to customer requests.					
14	The behavior of employees instills confidence in you.					
15	You feel safe in your transactions with an excellent pharmacy.					
16	Employees at an excellent pharmacy are consistently courteous to customers.					
17	Staff have the professional knowledge to answer your questions.					
18	Staff give personal attention to customers.					
19	Excellent pharmacies have the customers best interests at heart.					
20	Staff at an excellent pharmacy understand customers' specific needs.					
21	Employees at an excellent pharmacy give you personal attention.					
22	Excellent pharmacies have convenient business hours.					

## SECTION B: GENERAL DEMOGRAPHIC INFORMATION

Please **tick only ONE box** for each question.

1. Please indicate your gender

Male	Female
------	--------

2. Please indicate your age (in years)

18 - 25	26 - 35	36 - 45	46 - 55	56 and over
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3. Please indicate your highest educational level

Less than matric	Matric	Degree	Post-grad	Other (specify)
------------------	--------	--------	-----------	-----------------

4. How often do you shop at this pharmacy in a month?

Once	Twice	Thrice and more
------	-------	-----------------

**THANK YOU FOR YOUR CO-OPERATION.**

## ANNEXURE 2: CLICKS APPROVAL LETTER



28 May 2012

Durban University of Technology  
Marketing Department

**RE: MASTERS DISSERTATION – NAFISA ADAT**

To whom it may concern,

This letter serves as confirmation that Nafisa Adat has been granted permission to conduct her research fieldwork at the following Clicks Pharmacies:

Musgrave Centre  
Gateway  
Pavilion  
Game City

This access is granted in exchange for the results of her research.



DAVID HAZELL  
CLICKS CUSTOMER MARKETING MANAGER

NATIONAL STORES SUPPORT CENTRE  
6NR, SEARLE & PONTAC STREETS, PO BOX 5142, CAPE TOWN 8000, SOUTH AFRICA  
TELEPHONE: +27 (0)21 460 1911 FAX: +27 (0)21 461 8223

A TRADING DIVISION OF CLICKS RETAILERS (PTY) LTD  
DIRECTORS: M.J. HARVEY, D.A. KNEALE (BRITISH), M. FLEMING  
COMPANY SECRETARY: D.W. JANKS

REG. NO. 2006/013054/07

### **ANNEXURE 3: CENTRE MANAGEMENT DRAFT LETTER**

(Date)

**FOR ATTENTION:** The Centre Management  
(Name of Centre)  
Address

Dear Sir/ Madam

#### **PERMISSION TO CONDUCT RESEARCH AT (NAME OF CENTRE)**

I am completing my Master's Degree in Marketing at the Durban University of Technology. I am required to conduct research on a topic of my choice that will contribute positively to the body of knowledge and the industry as a whole.

**TITLE OF RESEARCH : Customer satisfaction at a selected retail pharmacy chain in the Greater Durban area.**

The concept of customer satisfaction is proving to be a critical component of the competitive advantage of retail pharmacy chains in South Africa. The research study will assist the management of the selected pharmacy chain to identify customer perceptions, ensure customer satisfaction and maintain a competitive edge in the face of growing competition. Furthermore, the study will contribute to academic knowledge concerning service quality and customer service within a retail South African context.

Permission has already been granted by Clicks Pharmacy in order to conduct this study (refer to Enclosure). I hereby request your permission to conduct research at the Clicks Pharmacy within your centre. Responses are highly confidential and will be treated as such.

I thank you in advance for your assistance and co-operation and await a positive response.

Yours faithfully

NafisaAdat  
Masters student (MTech: Marketing)  
Durban University of Technology  
Student number: 21242554  
Enc. Clicks Approval Letter

## ANNEXURE 4: PERMISSION TO USE SERVQUAL INSTRUMENT



NafisaAdat ndat123@gmail.com Nov 24 (2 days ago)

to parsu, valariez, berryle

### Request to use the SERVQUAL instrument

Dear Drs.Parasuraman, Zeithaml and Berry

This correspondence is to kindly request your permission for me to use the SERVQUAL instrument in my Masters research. The research aims to evaluate customer satisfaction at a selected pharmacy chain within the Greater Durban area (South Africa). The study is being conducted as a requirement for my M. Tech- Marketing from the Durban University of Technology, South Africa.

I look forward to hearing from you regarding my request.

Thank you for your consideration.

Yours sincerely

NafisaAdat

Masters student – Durban University of Technology (ZA)

Parasuraman, A aparasur@bus.miami.edu 3:29 AM (5 hours ago)

to **Len**, me, Valarie

Dear Nafisa,

Thanks for requesting permission to use the SERVQUAL instrument in your Masters research. On behalf of my coauthors (Professors Berry and Zeithaml) and myself, I am pleased to grant you that permission. The only condition is that you appropriately cite our work in all oral and written presentations of your findings. Good luck with your research.

Sincerely,

A. "Parsu" Parasuraman

Professor of Marketing & The James W. McLamore Chair

School of Business Administration

University of Miami

Coral Gables, FL 33124-6554

Tel: 305-284-5743/Fax: 305-284-6526

[parsu@miami.edu](mailto:parsu@miami.edu)

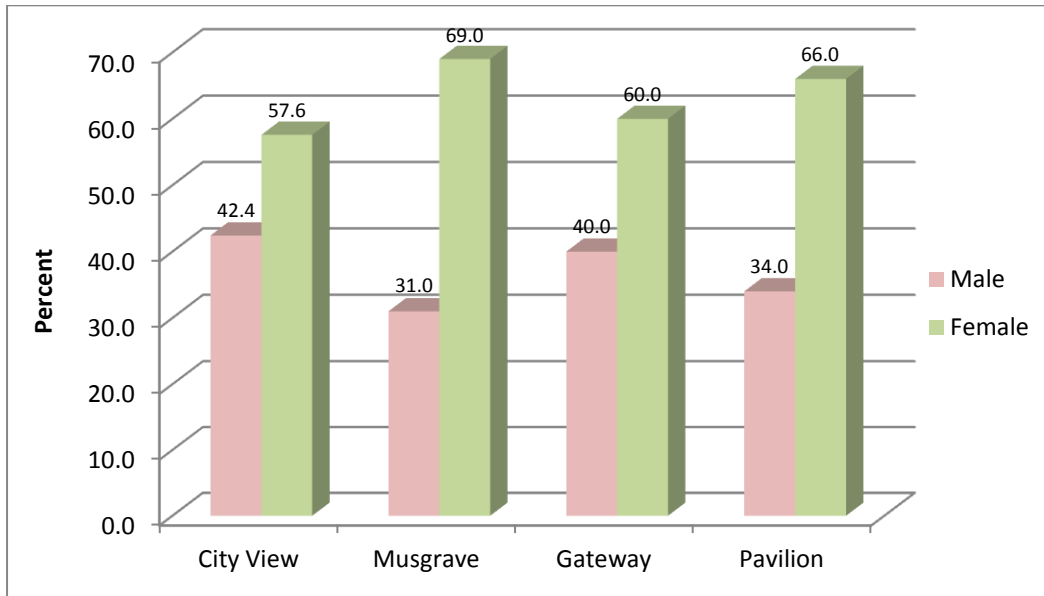
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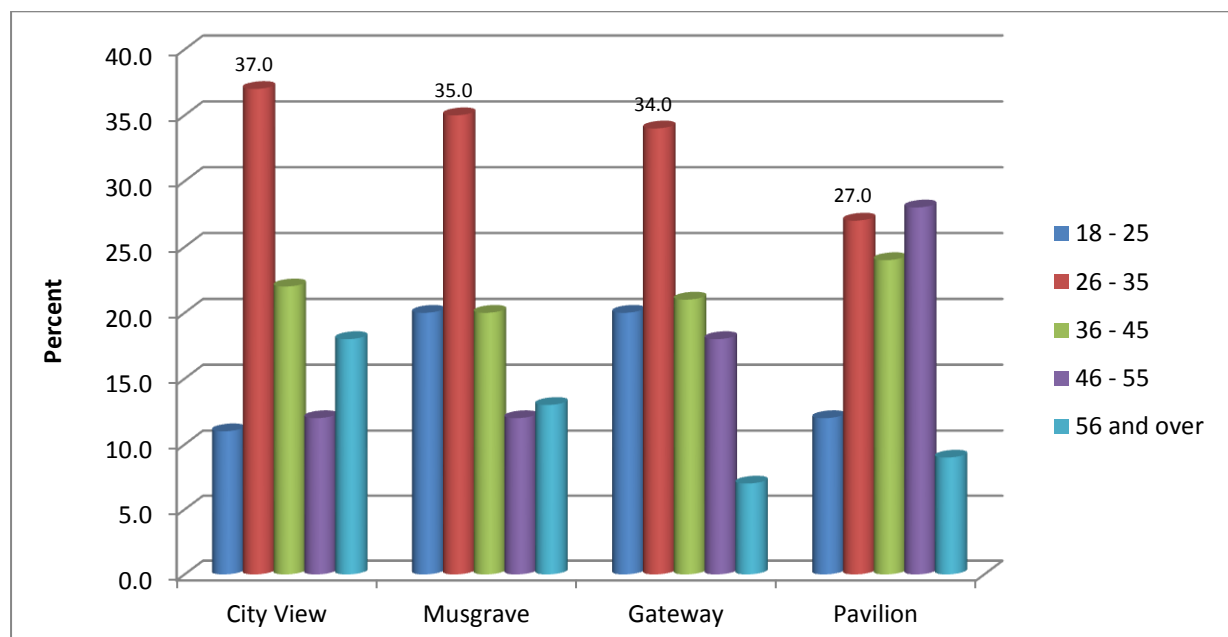
## ANNEXURE 5: STUDY FINDINGS

The figure below indicates the gender composition of the sample by location.



The figure below indicates the age distribution of the respondents.

		City View	Musgrave	Gateway	Pavilion
Age	18 - 25	11.0	20.0	20.0	12.0
	26 - 35	37.0	35.0	34.0	27.0
	36 - 45	22.0	20.0	21.0	24.0
	46 - 55	12.0	12.0	18.0	28.0
	56 and over	18.0	13.0	7.0	9.0

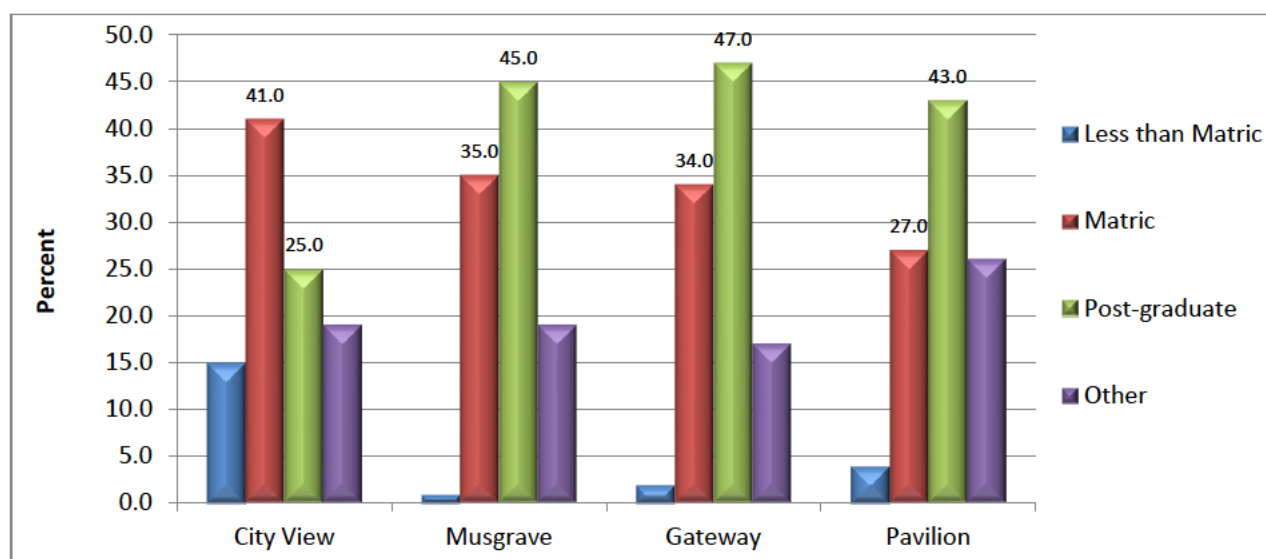


The table below indicates the overall spread of the ages by gender.

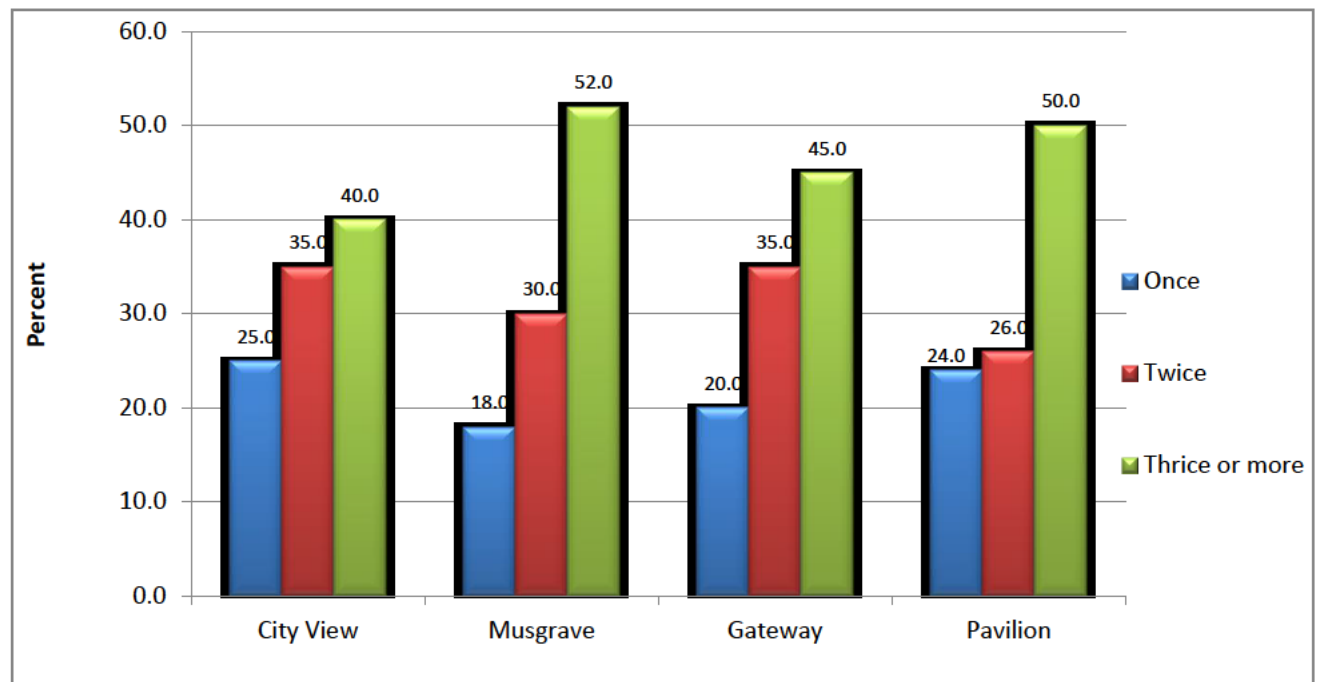
			Gender		Total
			Male	Female	
Age	18 - 25	Count	31	32	63
		% of Total	7.8%	8.0%	15.8%
	26 - 35	Count	49	83	132
		% of Total	12.3%	20.8%	33.1%
	36 - 45	Count	31	56	87
		% of Total	7.8%	14.0%	21.8%
	46 - 55	Count	19	51	70
		% of Total	4.8%	12.8%	17.5%
	56 and over	Count	17	30	47
		% of Total	4.3%	7.5%	11.8%
	Total	Count	147	252	399
		% of Total	36.8%	63.2%	100.0%

The figure below indicates the educational distributional pattern of the respondents.

		City View	Musgrave	Gateway	Pavilion
Educational Qualification	Less than Matric	15.0	1.0	2.0	4.0
	Matric	41.0	35.0	34.0	27.0
	Post-graduate	25.0	45.0	47.0	43.0
	Other	19.0	19.0	17.0	26.0



The figure below is in response to the frequency of visits to the different locations.



#### Reliability-Cronbach's alpha

Dimension	Cronbach's Alpha	
	Expectations	Perceptions
Tangibles	.887	.923
Reliability	.913	.933
Responsiveness	.935	.935
Assurance	.922	.940
Empathy	.940	.940
<b>Overall</b>	.973	.977

## Factor Analysis

Table: Rotated Component Matrix

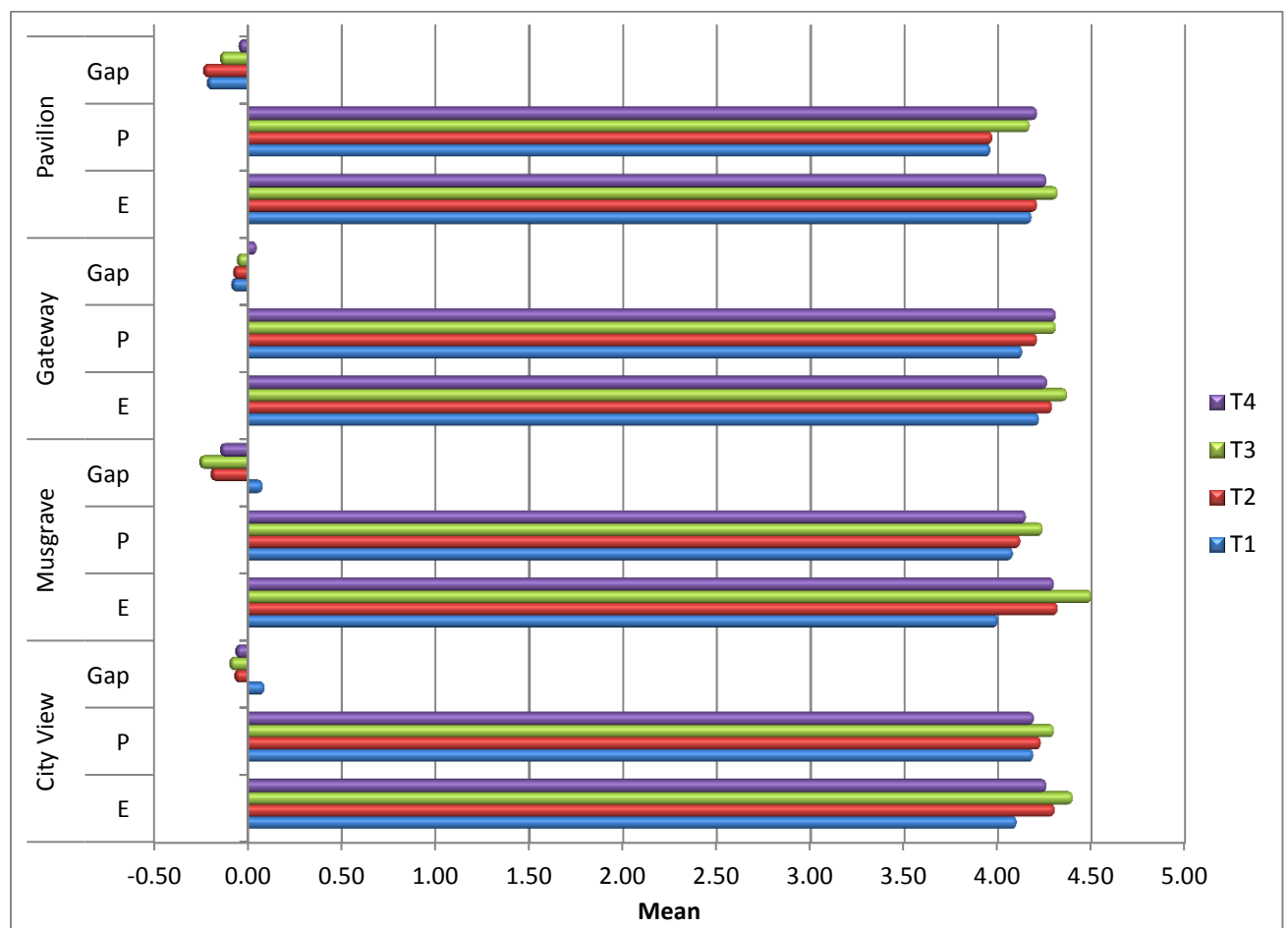
Component Matrix		Expectations					Perceptions				
		Component					Component				
		1	2	3	4	5	1	2	3	4	5
Tangibles	Excellent pharmacies should have modern looking equipment	.245	.208	.860	.098	-.152	.154	.810	.271	.150	.233
	The physical facilities at an excellent pharmacy should be visually appealing	.223	.258	.793	.232	.164	.222	.857	.241	.132	.147
	Employees at an excellent pharmacy should be neat in appearance	.259	.246	.650	.404	.272	.331	.771	.146	.257	.183
	Advertising material should be visually appealing at an excellent pharmacy	.266	.228	.605	.354	.344	.341	.733	.130	.259	.194
Reliability	When excellent pharmacies promise to do something by a certain time, they should do so	.296	.275	.363	.702	.213	.615	.414	.158	.292	.343
	When you have a problem, excellent pharmacies should show a sincere interest in solving it	.334	.303	.316	.738	.110	.647	.318	.307	.269	.333
	Employees at an excellent pharmacy should perform the service right the first time	.439	.540	.183	.533	-.122	.743	.249	.339	.210	.245
	Excellent pharmacies should deliver its services at the times it promises to do so	.359	.597	.245	.547	-.054	.744	.300	.354	.248	.218
Responsiveness	The staff should inform me about when services will be performed	.402	.451	.183	.413	.287	.692	.291	.270	.354	.146
	Excellent pharmacies should insist on error-free records	.373	.637	.255	.346	.070	.605	.299	.321	.240	.379
	Employees at an excellent pharmacy should give you prompt service	.359	.762	.300	.243	.083	.379	.348	.318	.272	.646
	Employees should always be willing to help you at an excellent pharmacy	.400	.730	.291	.254	.145	.310	.326	.306	.308	.721
	Employees at an excellent pharmacy should never be too busy to respond to customer requests	.432	.743	.188	.224	.125	.359	.252	.328	.349	.691
Assurance	The behaviour of employees should instil confidence in you	.431	.669	.278	.144	.294	.351	.277	.326	.701	.234
	You should feel safe in your transactions with an excellent pharmacy	.529	.461	.276	.222	.443	.343	.296	.350	.673	.253
	Employees at an excellent pharmacy should consistently be courteous to customers	.651	.325	.217	.304	.410	.325	.266	.398	.617	.366
	Staff should have the professional knowledge to answer your questions	.689	.359	.212	.347	.163	.289	.254	.395	.658	.328
Empathy	Staff should give personal attention to customers	.743	.338	.253	.252	-.036	.301	.238	.552	.400	.400
	Excellent pharmacies should have the customers best interests at heart	.778	.320	.194	.208	.116	.303	.255	.616	.380	.363
	Staff at an excellent pharmacy should understand customers' specific needs	.785	.326	.250	.217	.101	.418	.249	.644	.351	.294
	Employees at an excellent pharmacy should give you personal attention	.773	.304	.191	.234	.101	.335	.226	.732	.265	.311
	Excellent pharmacies should have convenient business hours	.734	.335	.300	.176	.069	.272	.254	.762	.255	.126

## Section Analysis

### Tangibles

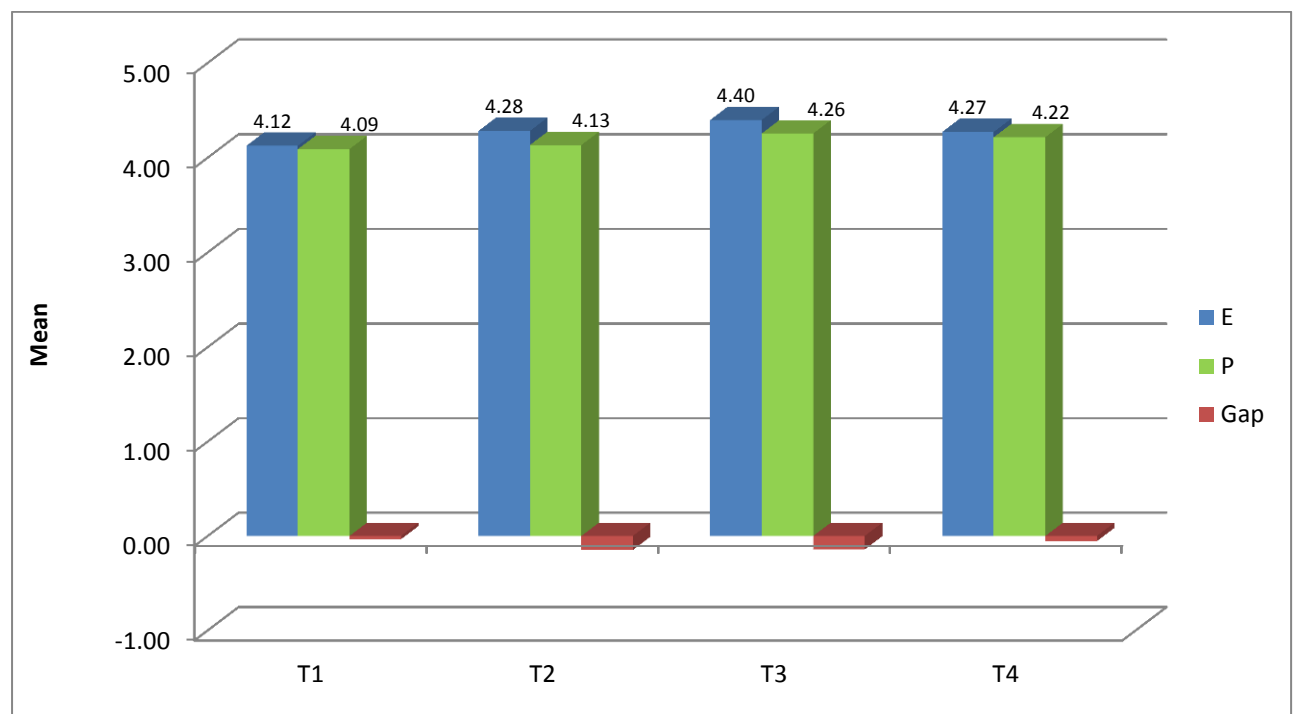
The graphical output of the table values are depicted in the figure below.

		City View			Musgrave			Gateway			Pavilion		
		E	P	Gap	E	P	Gap	E	P	Gap	E	P	Gap
Excellent pharmacies should have modern looking equipment	T1	4.10	4.19	0.09	4.00	4.08	0.08	4.22	4.13	-0.09	4.18	3.96	-0.22
The physical facilities at an excellent pharmacy should be visually appealing	T2	4.30	4.23	-0.07	4.32	4.12	-0.20	4.29	4.21	-0.08	4.21	3.97	-0.24
Employees at an excellent pharmacy should be neat in appearance	T3	4.40	4.30	-0.10	4.50	4.24	-0.26	4.37	4.31	-0.06	4.32	4.17	-0.15
Advertising material should be visually appealing at an excellent pharmacy	T4	4.26	4.19	-0.07	4.30	4.15	-0.15	4.26	4.31	0.05	4.26	4.21	-0.05



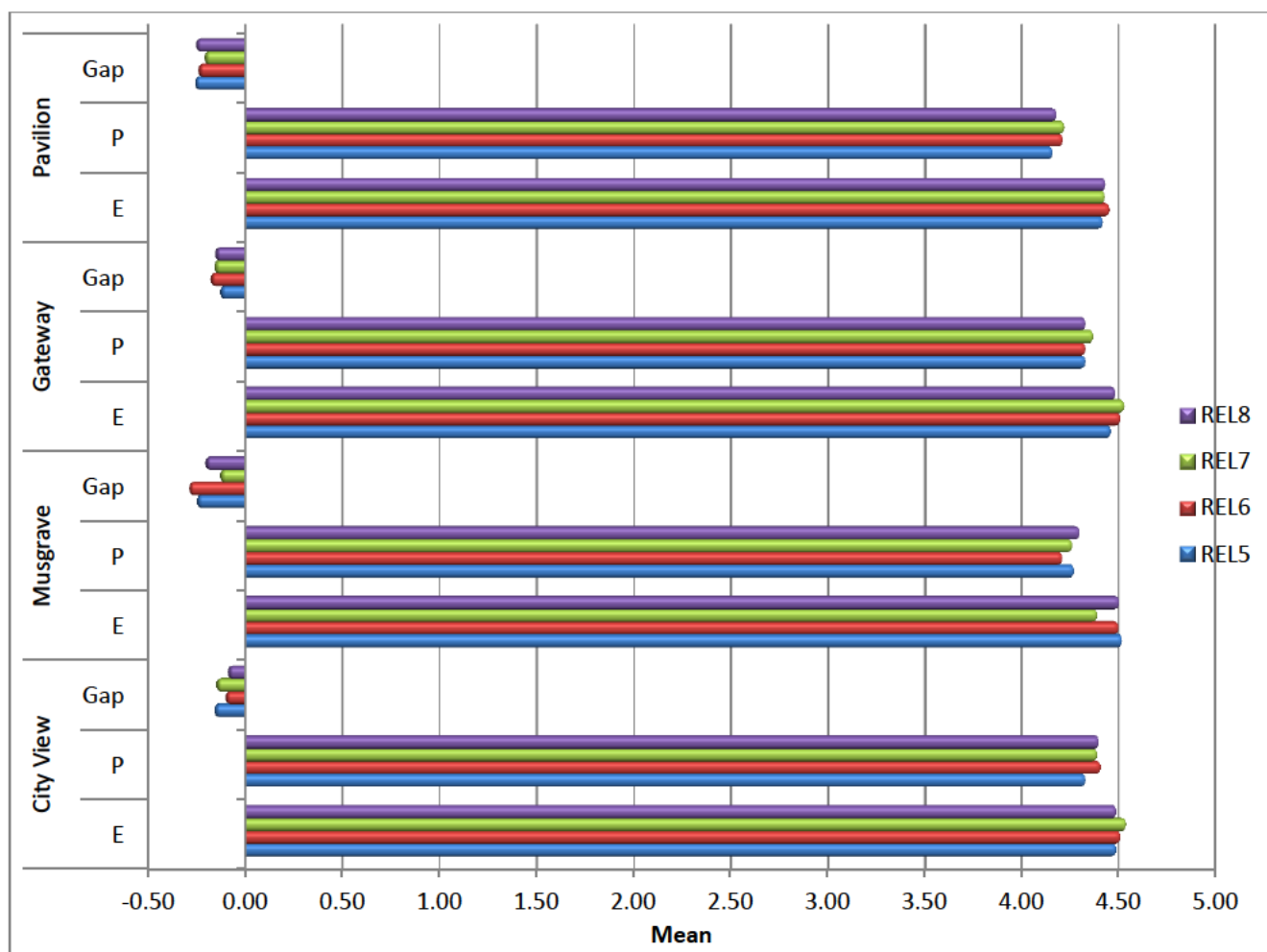
The figure below is for the overall score of the dimension.

		E	P	Gap
Excellent pharmacies should have modern looking equipment	T1	4.13	4.09	-0.04
The physical facilities at an excellent pharmacy should be visually appealing	T2	4.28	4.13	-0.15
Employees at an excellent pharmacy should be neat in appearance	T3	4.40	4.26	-0.14
Advertising material should be visually appealing at an excellent pharmacy	T4	4.27	4.22	-0.06



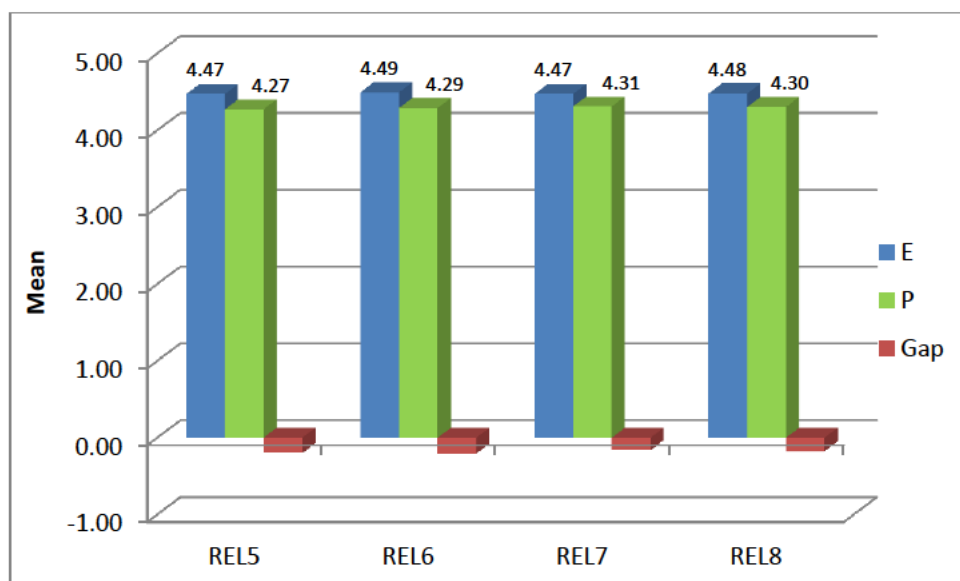
## Reliability

		City View			Musgrave			Gateway			Pavilion		
		E	P	G ap	E	P	G ap	E	P	G ap	E	P	G ap
When excellent pharmacies promise to do something by a certain time, they should do so	REL 5	4.49	4.33	-0.16	4.52	4.27	-0.25	4.46	4.33	-0.13	4.42	4.16	-0.26
When you have a problem, excellent pharmacies should show a sincere interest in solving it	REL 6	4.51	4.41	-0.10	4.50	4.21	-0.29	4.51	4.33	-0.18	4.45	4.21	-0.24
Employees at an excellent pharmacy should perform the service right the first time	REL 7	4.54	4.39	-0.15	4.39	4.26	-0.13	4.53	4.37	-0.16	4.43	4.22	-0.21
Excellent pharmacies should deliver its services at the times it promises to do so	REL 8	4.49	4.40	-0.09	4.51	4.30	-0.21	4.48	4.33	-0.15	4.43	4.18	-0.25



The figure below represents the overall scoring patterns for this dimension.

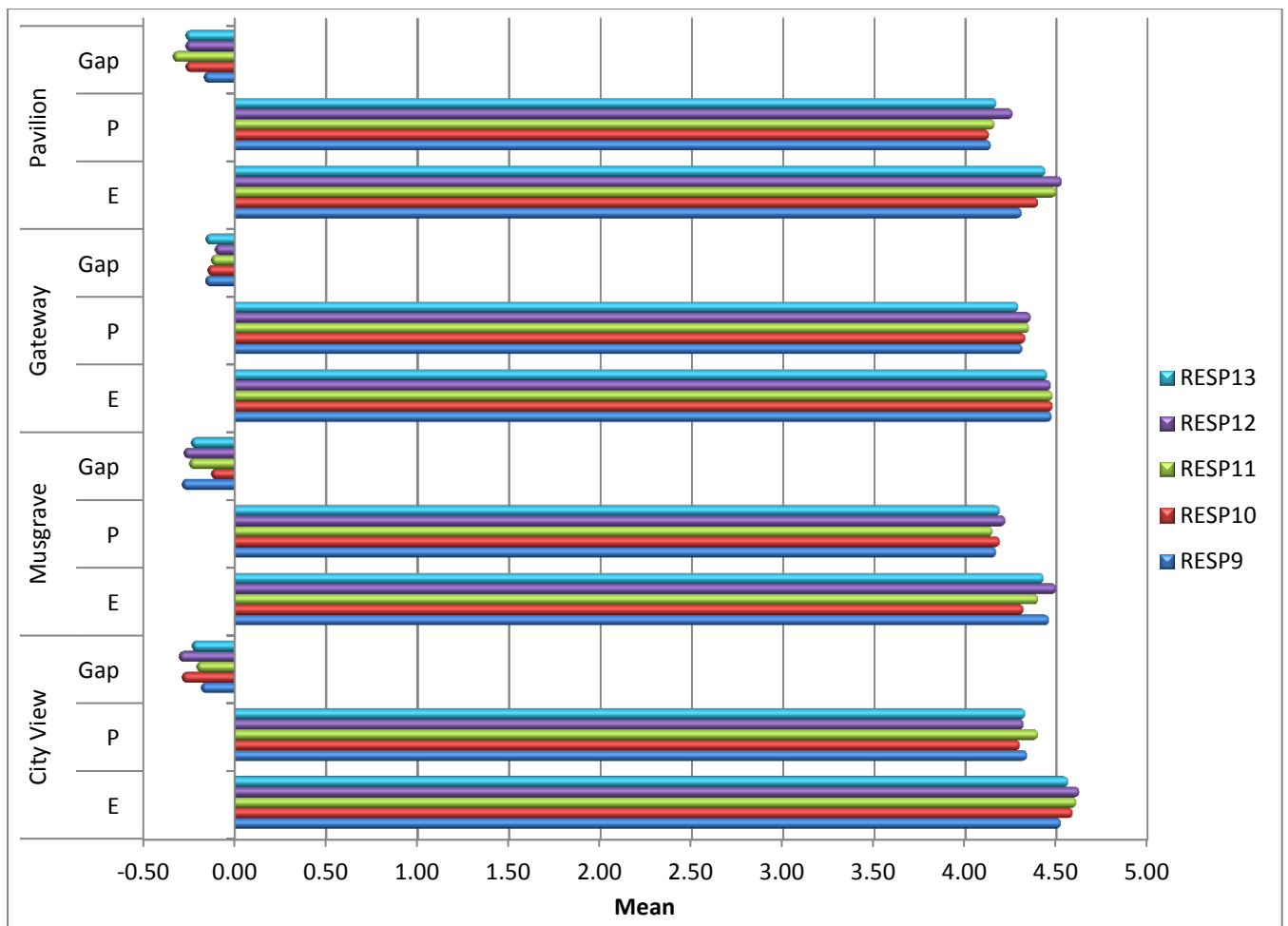
		E	P	Gap
When excellent pharmacies promise to do something by a certain time, they should do so	REL5	4.47	4.27	-0.20
When you have a problem, excellent pharmacies should show a sincere interest in solving it	REL6	4.49	4.29	-0.20
Employees at an excellent pharmacy should perform the service right the first time	REL7	4.47	4.31	-0.16
Excellent pharmacies should deliver its services at the times it promises to do so	REL8	4.48	4.30	-0.18



## Responsiveness

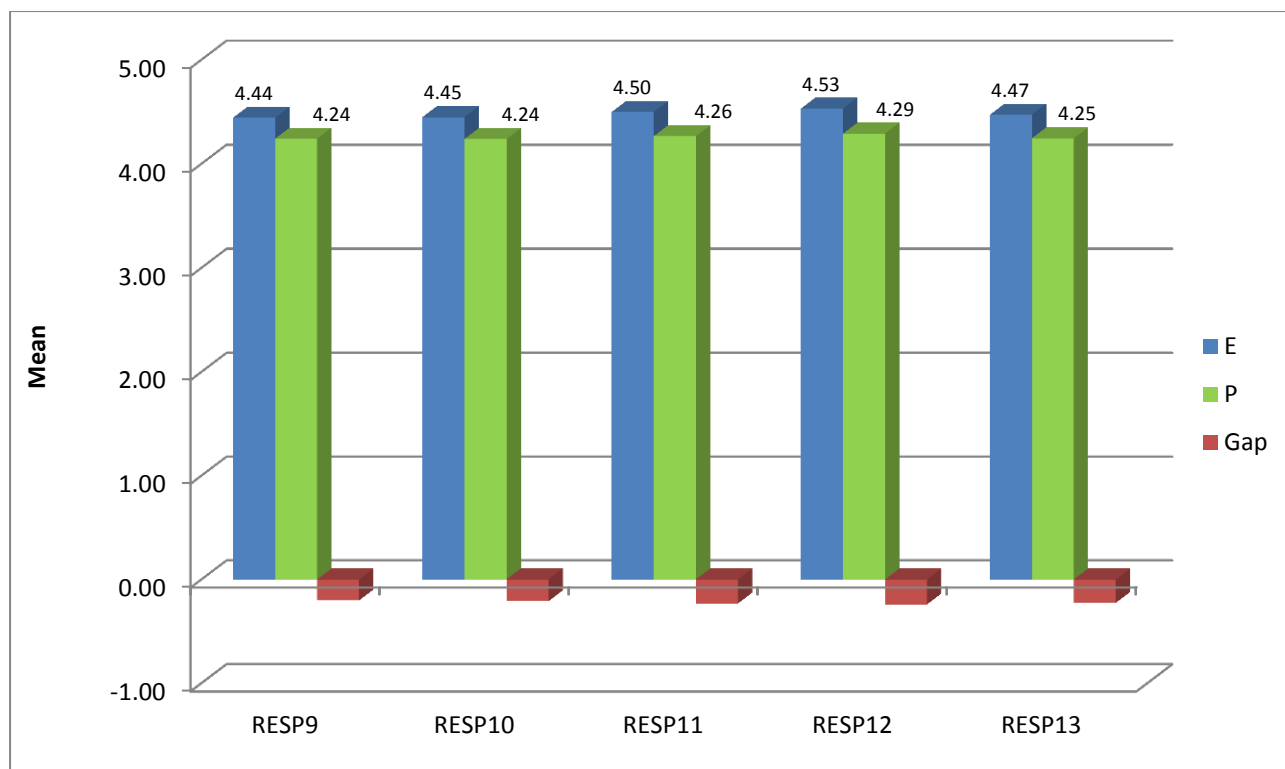
		City View			Musgrave			Gateway			Pavilion		
		E	P	Gap	E	P	Gap	E	P	Gap	E	P	Gap
The staff should inform me about when services will be performed	RE SP 9	4.53	4.34	-0.19	4.46	4.17	-0.29	4.47	4.31	-0.16	4.31	4.14	-0.17
Excellent pharmacies should insist on error-free records	RE SP 10	4.59	4.30	-0.29	4.32	4.19	-0.13	4.48	4.33	-0.15	4.40	4.13	-0.27
Employees at an excellent pharmacy should give you prompt service	RE SP 11	4.61	4.40	-0.21	4.40	4.15	-0.25	4.48	4.35	-0.13	4.50	4.16	-0.34
Employees should always be willing to help you at an excellent pharmacy	RE SP 12	4.63	4.32	-0.31	4.50	4.22	-0.28	4.47	4.36	-0.11	4.53	4.26	-0.27
Employees at an excellent pharmacy should never be too busy to respond to customer requests	RE SP 13	4.57	4.33	-0.24	4.43	4.19	-0.24	4.45	4.29	-0.16	4.44	4.17	-0.27





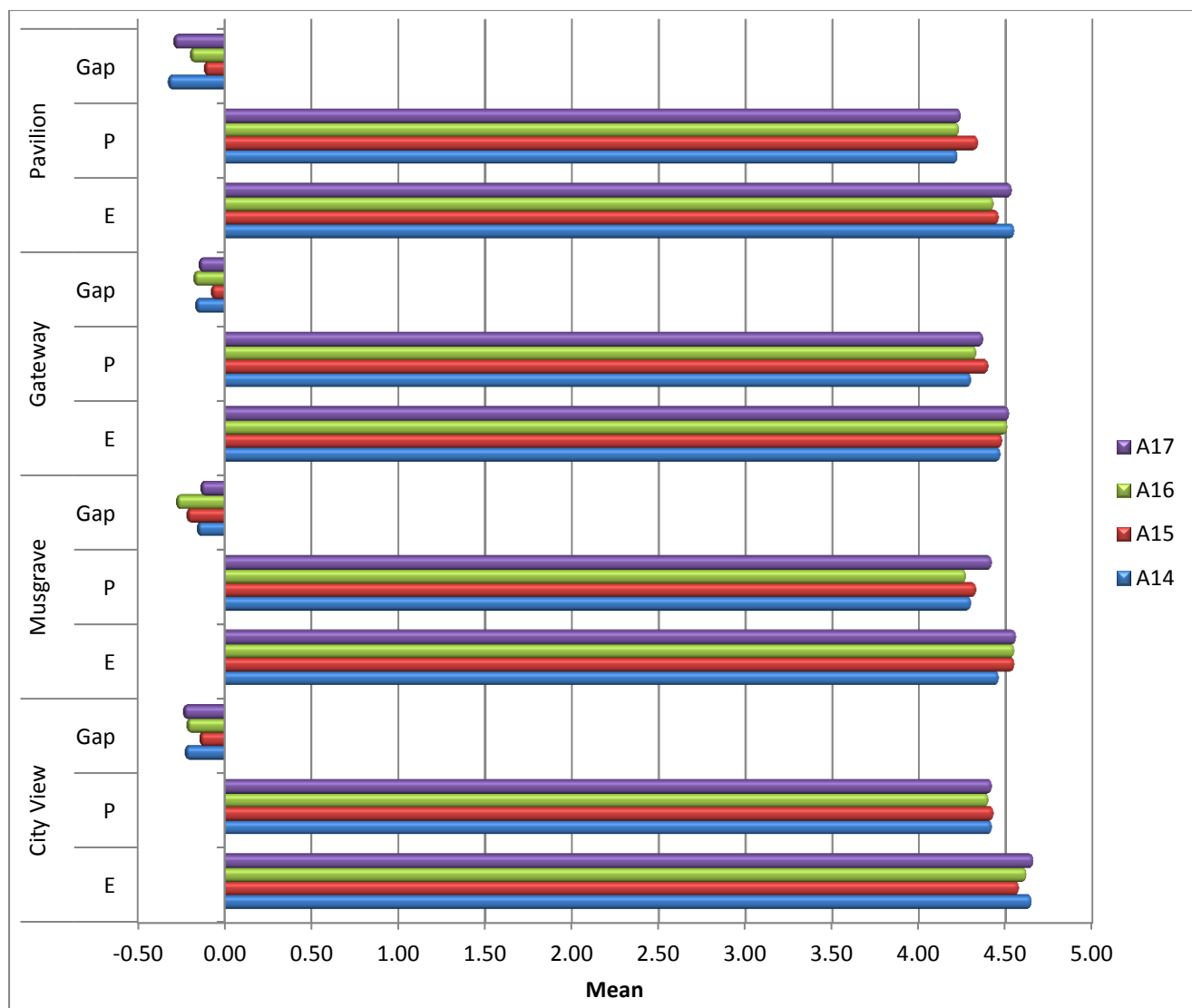
The figure below indicates the summary for the dimension.

		E	P	Gap
The staff should inform me about when services will be performed	RESP 9	4.44	4.24	-0.20
Excellent pharmacies should insist on error-free records	RESP 10	4.45	4.24	-0.21
Employees at an excellent pharmacy should give you prompt service	RESP 11	4.50	4.27	-0.23
Employees should always be willing to help you at an excellent pharmacy	RESP 12	4.53	4.29	-0.24
Employees at an excellent pharmacy should never be too busy to respond to customer requests	RESP 13	4.47	4.25	-0.23



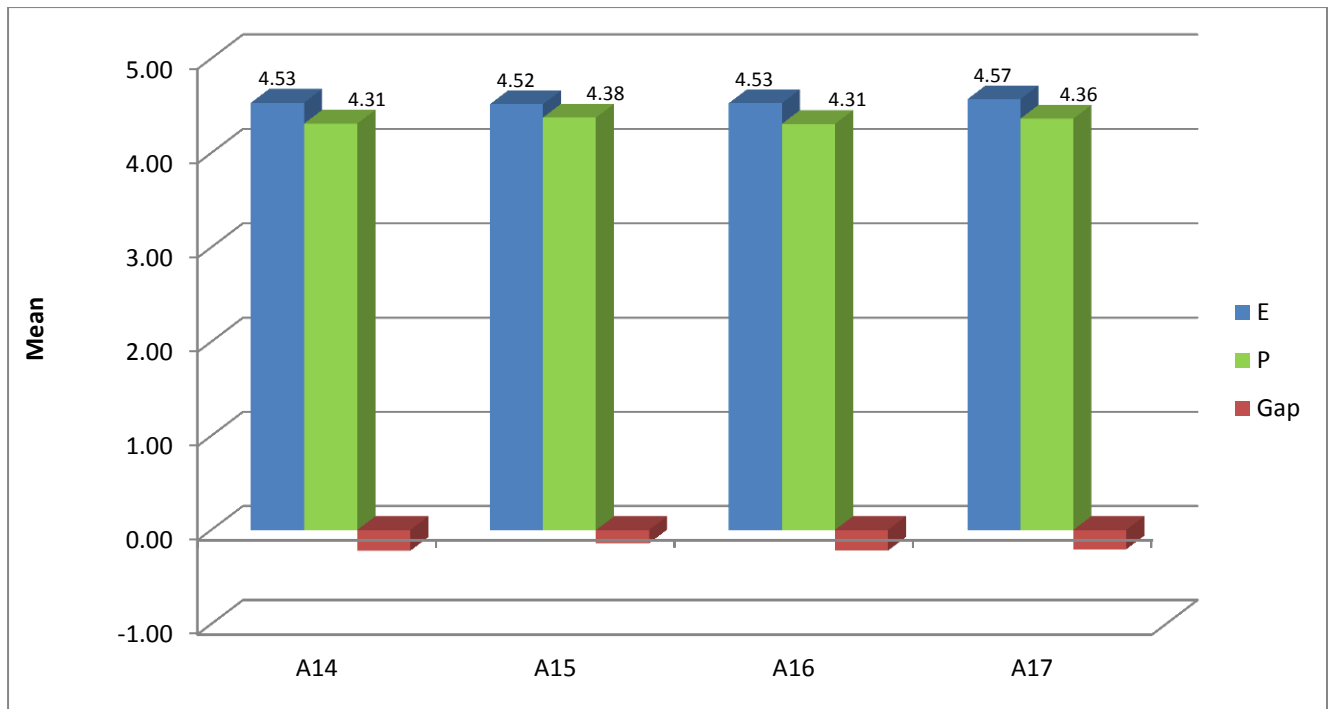
## Assurance

		City View			Musgrave			Gateway			Pavilion		
		E	P	G ap	E	P	G ap	E	P	G ap	E	P	G ap
The behaviour of employees should instil confidence in you	A	4.	4.	-	4.	4.	-	4.	4.	-	4.	4.	-
	1	6	4	0.	4	3	0.	4	3	0.	5	2	0.
	4	5	2	23	6	0	16	7	0	17	5	2	33
You should feel safe in your transactions with an excellent pharmacy	A	4.	4.	-	4.	4.	-	4.	4.	-	4.	4.	-
	1	5	4	0.	5	3	0.	4	4	0.	4	3	0.
	5	8	3	15	5	3	22	8	0	08	6	4	12
Employees at an excellent pharmacy should consistently be courteous to customers	A	4.	4.	-	4.	4.	-	4.	4.	-	4.	4.	-
	1	6	4	0.	5	2	0.	5	3	0.	4	2	0.
	6	2	0	22	5	7	28	1	3	18	3	3	20
Staff should have the professional knowledge to answer your questions	A	4.	4.	-	4.	4.	-	4.	4.	-	4.	4.	-
	1	6	4	0.	5	4	0.	5	3	0.	5	2	0.
	7	6	2	24	6	2	14	2	7	15	4	4	30



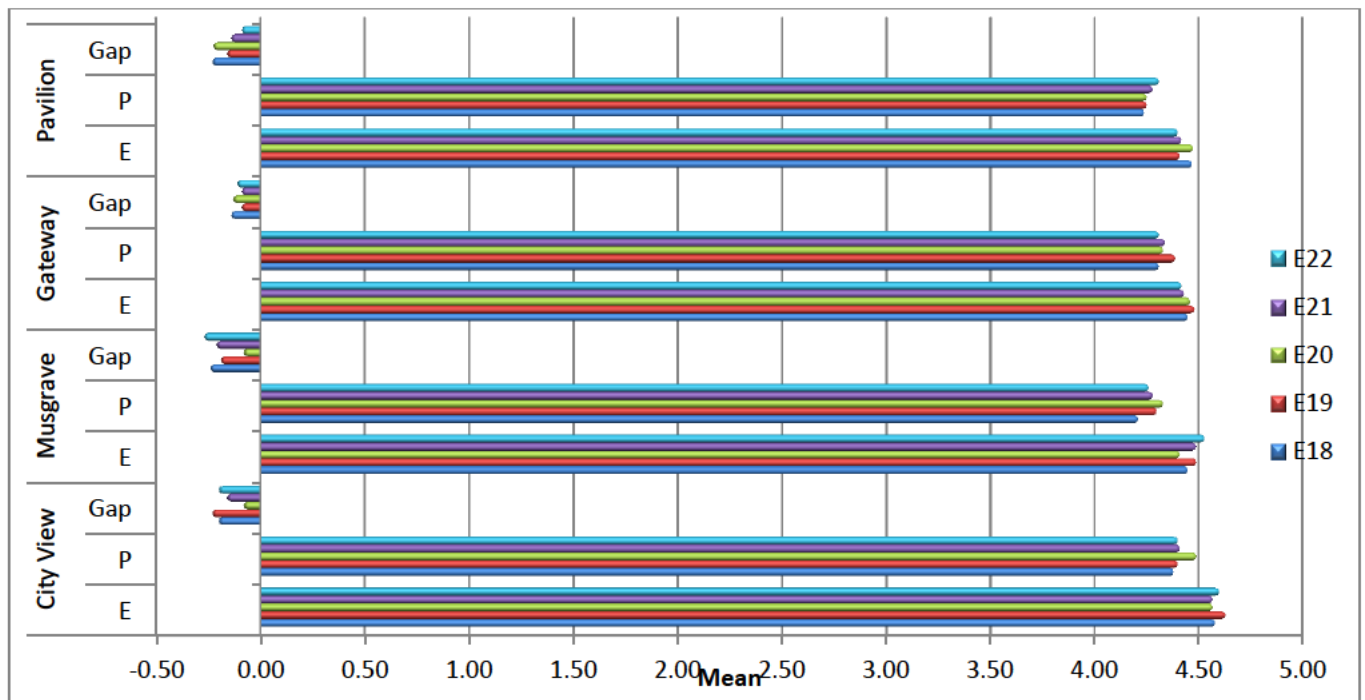
The figure below indicates the overall scoring pattern of the dimension.

		E	P	Gap
The behaviour of employees should instil confidence in you	A1 4	4.5 3	4.3 1	- 0.22
You should feel safe in your transactions with an excellent pharmacy	A1 5	4.5 2	4.3 8	- 0.14
Employees at an excellent pharmacy should consistently be courteous to customers	A1 6	4.5 3	4.3 1	- 0.22
Staff should have the professional knowledge to answer your questions	A1 7	4.5 7	4.3 6	- 0.21



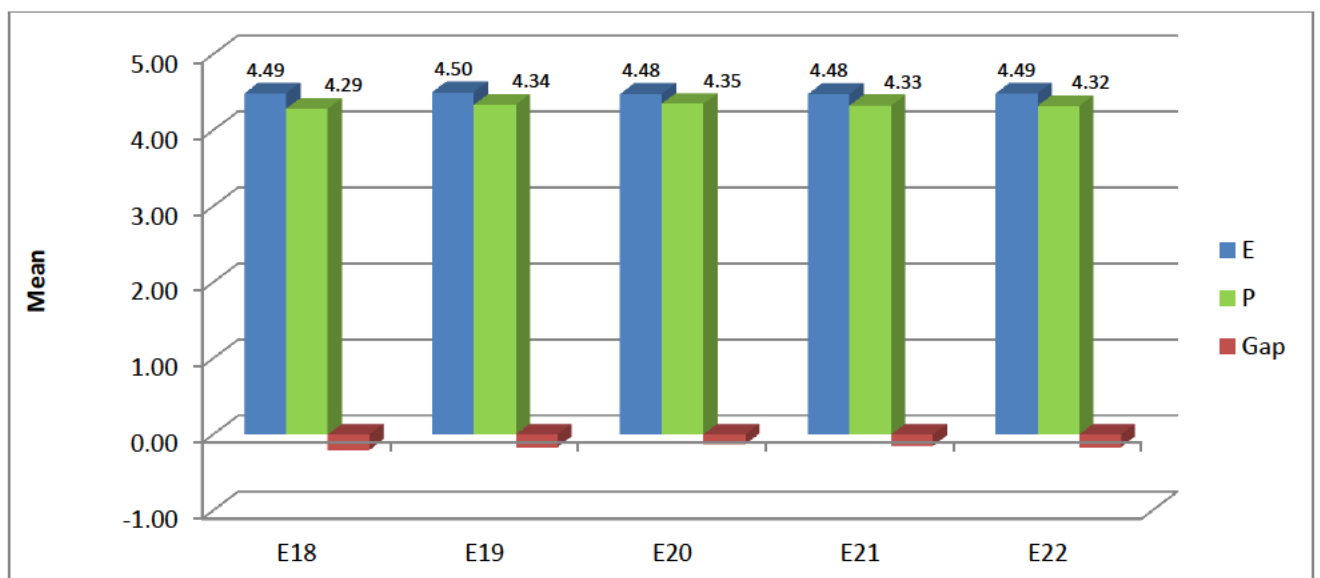
## Empathy

		City View			Musgrave			Gateway			Pavilion		
		E	P	G ap	E	P	G ap	E	P	G ap	E	P	G ap
Staff should give personal attention to customers	E 18	4.5	4.3	-0.20	4.4	4.2	-0.25	4.4	4.3	-0.14	4.4	4.2	-0.23
Excellent pharmacies should have the customers best interests at heart	E 19	4.6	4.3	-0.23	4.4	4.3	-0.19	4.4	4.3	-0.09	4.4	4.2	-0.16
Staff at an excellent pharmacy should understand customers' specific needs	E 20	4.5	4.4	-0.08	4.4	4.3	-0.13	4.4	4.3	-0.13	4.4	4.2	-0.22
Employees at an excellent pharmacy should give you personal attention	E 21	4.5	4.4	-0.16	4.4	4.2	-0.21	4.4	4.3	-0.09	4.4	4.2	-0.14
Excellent pharmacies should have convenient business hours	E 22	4.6	4.4	-0.20	4.5	4.2	-0.33	4.4	4.3	-0.11	4.4	4.3	-0.09



The figure below is a summary of the dimension.

		E	P	Gap
Staff should give personal attention to customers	E18	4.49	4.29	-0.20
Excellent pharmacies should have the customers best interests at heart	E19	4.50	4.34	-0.17
Staff at an excellent pharmacy should understand customers' specific needs	E20	4.48	4.35	-0.13
Employees at an excellent pharmacy should give you personal attention	E21	4.48	4.33	-0.15
Excellent pharmacies should have convenient business hours	E22	4.49	4.32	-0.17



## Hypothesis Testing

		Sig.
Pair 1	Excellent pharmacies should have modern looking equipment_E - Excellent pharmacies should have modern looking equipment_P	.452
Pair 2	The physical facilities at an excellent pharmacy should be visually appealing_E - The physical facilities at an excellent pharmacy should be visually appealing_P	.000
Pair 3	Employees at an excellent pharmacy should be neat in appearance_E - Employees at an excellent pharmacy should be neat in appearance_P	.001
Pair 4	Advertising material should be visually appealing at an excellent pharmacy _E - Advertising material should be visually appealing at an excellent pharmacy _P	.227
Pair 5	When excellent pharmacies promise to do something by a certain time, they should do so _E - When excellent pharmacies promise to do something by a certain time, they should do so _P	.000
Pair 6	When you have a problem, excellent pharmacies should show a sincere interest in solving it_E - When you have a problem, excellent pharmacies should show a sincere interest in solving it_P	.000
Pair 7	Employees at an excellent pharmacy should perform the service right the first time_E - Employees at an excellent pharmacy should perform the service right the first time_P	.000
Pair 8	Excellent pharmacies should deliver its services at the times it promises to do so_E - Excellent pharmacies should deliver its services at the times it promises to do so_P	.000
Pair 9	The staff should inform me about when services will be performed_E - The staff should inform me about when services will be performed_P	.000
Pair 10	Excellent pharmacies should insist on error-free records_E - Excellent pharmacies should insist on error-free records_P	.000
Pair 11	Employees at an excellent pharmacy should give you prompt service_E - Employees at an excellent pharmacy should give you prompt service_P	.000
Pair 12	Employees should always be willing to help you at an excellent pharmacy_E - Employees should always be willing to help you at an excellent pharmacy_P	.000
Pair 13	Employees at an excellent pharmacy should never be too busy to respond to customer requests_E - Employees at an excellent pharmacy should never be too busy to respond to customer requests_P	.000
Pair 14	The behaviour of employees should instil confidence in you_E - The behaviour of employees should instil confidence in you_P	.000
Pair 15	You should feel safe in your transactions with an excellent pharmacy_E - You should feel safe in your transactions with an excellent pharmacy_P	.000
Pair 16	Employees at an excellent pharmacy should consistently be courteous to customers_E - Employees at an excellent pharmacy should consistently be courteous to customers_P	.000
Pair 17	Staff should have the professional knowledge to answer your questions_E - Staff should have the professional knowledge to answer your questions_P	.000
Pair 18	Staff should give personal attention to customers_E - Staff should give personal attention to customers_P	.000
Pair 19	Excellent pharmacies should have the customers best interests at heart_E - Excellent pharmacies should have the customers best interests at heart_P	.000
Pair 20	Staff at an excellent pharmacy should understand customers' specific needs_E - Staff at an excellent pharmacy should understand customers' specific needs_P	.001
Pair 21	Employees at an excellent pharmacy should give you personal attention_E - Employees at an excellent pharmacy should give you personal attention_P	.000
Pair 22	Excellent pharmacies should have convenient business hours_E - Excellent pharmacies should have convenient business hours._P	.000

