

**THE RELATIONSHIP BETWEEN SERVICE QUALITY, CUSTOMER SATISFACTION
AND CUSTOMER LOYALTY IN THE RETAIL SUPERMARKET INDUSTRY**

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ABSTRACT

The increasingly competitive business environment has influenced contemporary organisations to build mutual beneficial relationships with their customers indicating a paradigm shift from transactional marketing. In order to compete in this intense competitive environment, organisations are creating competitive advantage over their rivals through service quality that will influence customer satisfaction which subsequently leads to customer loyalty. Service quality has been found to be the key strategy of success and survival for most organisations like retail supermarkets who want to win the loyalty of their customers because of its positive effect on customer satisfaction.

The purpose of this research was to determine the relationship between service quality, customer satisfaction and customer loyalty in the retail supermarket industry. An empirical study was conducted in Grahamstown between two main supermarkets through a survey that determined customers' perceptions on service quality, customer satisfaction and customer loyalty respectively.

The empirical findings of this research study revealed that moderate to strong positive linear relationships exist between the dimensions of service quality (namely physical aspects, reliability, personal interaction, problem solving and policy) and customer satisfaction at the 5% level of significance. Furthermore, this study showed that dimensions of service quality (namely physical aspects, reliability, personal interaction and problem solving) have weak negative linear relationships with price sensitivity dimension of customer loyalty. The study further showed that the dimensions of service quality (namely physical aspects, reliability, personal interaction, problem solving and policy) have weak to moderate positive linear relationships with the purchase intentions dimension of customer loyalty. In addition, all the dimensions of service quality (namely physical aspects, reliability, personal interaction, problem solving and policy) showed moderate positive linear relationships with word of mouth communication dimension of customer loyalty.

A weak negative linear relationship between price sensitivity dimension of customer loyalty and customer satisfaction was revealed in this study. Purchase intentions dimension of customer loyalty was also found to have a moderate positive linear relationship with customer satisfaction.

In addition, word of mouth communication dimension of customer loyalty showed a strong positive linear relationship with customer satisfaction.

There is sufficient evidence that the customers of the two supermarkets in this study have different perceptions on problem solving dimension of service quality. This study further provides sufficient evidence of the significant difference between gender on the levels of customer satisfaction. In addition, this study showed that customers of various levels of education and occupations differ in price sensitivity dimension of customer loyalty. The average scores for word of mouth communication, purchase intentions and price sensitivity dimensions of customer loyalty were found to be significantly different between the two supermarkets investigated in this study.

Therefore, for supermarkets to compete effectively in the intense retail supermarket industry in South Africa they have to manage their service quality dimensions so as to influence customer satisfaction and customer loyalty respectively.

Key words

Retail supermarkets; service quality; customer satisfaction; customer loyalty; relationship marketing; biographic variables.

DEDICATION

To my LORD JESUS CHRIST...who gave me strength up to the end and also to my lovely parents (Gabriel and Simayedwa) for their emotional and spiritual support.

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CHAPTER ONE

INTRODUCTION, PURPOSE AND BACKGROUND

1.1 INTRODUCTION

The prevailing global competitive business environment has influenced contemporary organisations to move away from transactional based marketing activities to relationship centred methods of marketing (West, Ford & Ibrahim, 2006:158). The South African retail supermarket industry is one example of a competitive industry and is dominated by large supermarkets, namely Pick 'n Pay, Shoprite, Checkers, Woolworths and Spar. These supermarkets function in close proximity to each other and for them to compete in this industry they have to create competitive advantage over their competitors. Competitive advantage in a competitive environment can be attained through pursuing strategic tools like relationship marketing (Rowe & Barnes, 1998:281). The formal marketing programmes of most organisations has been more concentrated on attracting new customers than on retaining and developing relationships with existing ones (Berry, 2002:60).

A common practice has developed among contemporary organisations to change their marketing strategies of attracting new customers and transacting with them only, to retaining and developing profitable relationships with them (Beneke, Lykiardopulos, De Villiers & Rawoot, 2011:30). Better quality relationships with customers, offers service organisations various benefits that include greater profitability and increase in revenue in today's competitive environment (Yuen & Chan, 2010:223).

Contemporary organisations are using service quality as a survival weapon of success to gain customers' loyalty (Zeithaml, Berry & Parasuraman, 1996:31). Service quality is an attitude to overall superiority of a product or service that an organisation offers its customers (Parasuraman, Zeithaml & Berry, 1988:12) and has been identified as the only competitive advantage that is sustainable for a long period of time and is an important construct of maintaining and sustaining long term relationships between organisations and customers (Lamb, Hair, McDaniel, Boshoff, Terblanche, Elliot & Klopper, 2012:23; Ojo, 2010:89). Organisations should offer higher levels of service quality, which the competition cannot match, and should provide consumers with a reason for selecting and remaining with them (Ennew & Binks, 1996:219). Dabholkar, Thorpe

and Rentz (1996: 3) proposed five dimensions of service quality (namely physical aspects, reliability, personal interaction, problem solving and policy) that customers can use as a measure of a retail store's service quality offering. Service quality has become of utmost importance to contemporary organisations because of the influence that it exerts upon customer satisfaction, profitability, performance of the organisation and customer loyalty (Seth, Deshmukh & Vrat, 2005:913). The positive perceptions of service quality increase the chance of customers being involved in supporting the organisation and developing loyalty behaviour (Yuen & Chan, 2010). Considerable attention has been given to the relationship between service quality and customer satisfaction (Sureshchandar, Rajendran & Anantharaman, 2002:363). Academic researchers who study consumer evaluations and the practitioners who want to create competitive advantages and customer loyalty have found the constructs of service quality and customer satisfaction to be highly important (Iacobucci, Ostrom & Grayson, 1995:277). Although service quality and customer satisfaction have similar things in common, it has been proven that customer satisfaction is influenced by service quality (Beneke, Hayworth, Hobson & Mia, 2012:28).

Most successful organisations have made customer satisfaction their main objective (Brink and Berndt, 2008:70). Customer satisfaction occurs when a consumer makes a "post-choice evaluative judgement" that pertains to a particular purchase decision (Beneke *et al.* 2012:28). Customer satisfaction has become the key factor to most organisations as it leads directly to customer loyalty and is an important determinant of maintaining long term relationships (Ranaweera & Prabhu, 2003).

There is no arguing that customer satisfaction is important in influencing the loyalty of customers. However, customers may well be satisfied but not become loyal. Sivadas and Barker-Prewitt (2000:79) reveal in their study that, though satisfaction influences relative attitudes, repurchases, and recommendations, it has no direct effect on customer loyalty. Beneke *et al.* (2011:41) assert that "behaviourally loyal patronage to supermarkets does not imply customer satisfaction with supermarkets, as frequent patronage to a store may often be due to convenience and not as a result of customer satisfaction". It then follows that additional expenditure on ever-increasing customer satisfaction may not always translate into greater loyalty. Bloemer, De Ruyter and Wetzels (1998: 1086) refined the four dimensions to measure customer loyalty

(namely word of mouth communication, purchase intentions, price sensitivity and complaining behaviour), which were proposed by Zeithaml *et al.* (1996).

In the supermarket industry customer loyalty is important and is more than having customers make repeat purchases and being satisfied with their experiences, and the products or services they purchased (Beneke *et al.* 2011:30). Loyalty reflects the commitment that customers show in purchasing products and services from a particular organisation and, in the process, resisting the activities of competitors attempting to attract their patronage (Brink & Berndt, 2008:41). Service quality positively affects customers' repurchase intentions which lead to more interactions and transactions (Venetis & Ghauri, 2004:1577).

In South Africa, poor service quality has been particularly common in the food and retail industry (Brink & Bendt, 2008) and in their research Beneke *et al.* (2011:41) found that South African retail customers have a "shallow commitment" to the store at which they shop. This calls for retailers, especially the management of supermarkets, to face the realities of today's market where there are changing demographics, more sophisticated competitors and overcapacity of the industry (Beneke *et al.* 2011:30).

Building customer loyalty is vital, particularly in the competitive South African retail supermarket industry, because there is an emotional connection between loyal customers and a retailer (Beneke *et al.* 2011:31).

Accordingly, this research project will aim to determine the relationship between service quality, customer satisfaction and customer loyalty in the South African retail supermarket industry by undertaking an exploratory study of two retail supermarkets in Grahamstown. The project aims to gain a better insight into the industry and to make recommendations that can be utilised in the supermarket industry.

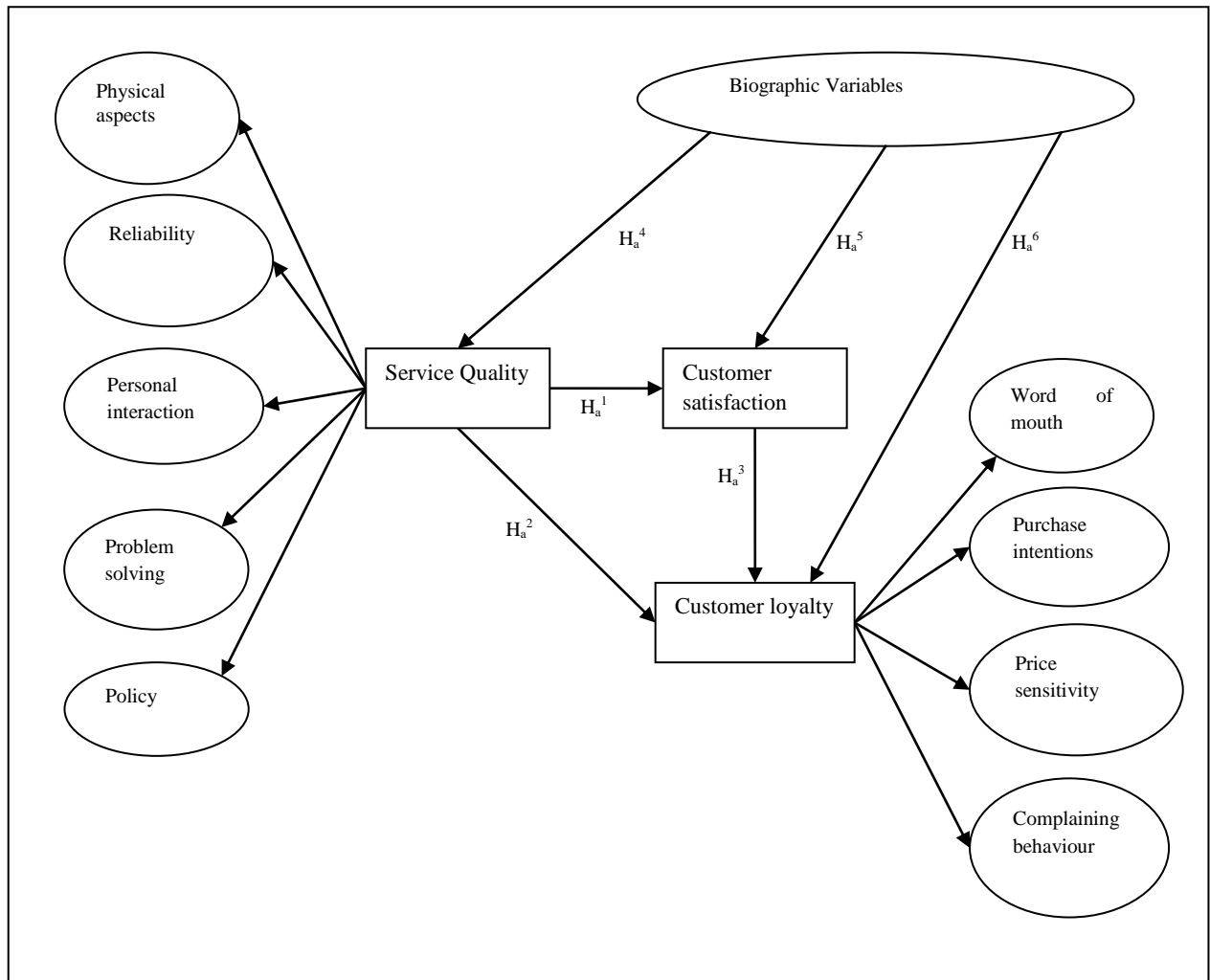
1.2 PURPOSE OF THE STUDY

This research study seeks to understand the relationships among service quality, customer satisfaction and customer loyalty in the retail supermarket industry. In consideration of the competitive nature of the retail supermarket industry in South Africa, the following purpose was developed:

To determine the relationships among service quality, customer satisfaction and customer loyalty in the retail supermarket industry as illustrated in Figure 1.1. The effect of biographical variables upon service quality, customer satisfaction and customer loyalty will also be investigated. Thorough literature review was conducted to establish the conceptual framework (Figure 1.1) of this study. The conceptual framework was built based on the previous studies that focused on service quality (Dabholkar *et al.* 1996), customer satisfaction (Taylor & Baker, 1994) and customer loyalty (Bloemer *et al.* 1998).

The conceptual framework in Figure 1.1 depicts the relationships between service quality, customer satisfaction and customer loyalty and their related hypotheses in the selected retail supermarket industry.

Figure 1.1 Conceptual framework



Source: Dabholkar *et al.* (1996); Taylor and Baker (1994); Bloemer *et al.* (1998)

1.3 RESEARCH AIMS AND OBJECTIVES

1.3.1 Aim

The main aim of this research study was to determine the relationships among service quality, customer satisfaction and customer loyalty.

1.3.2 Objectives

To achieve the main purpose of this study, the following research objectives were stated, namely to:

- provide a literature overview pertaining to relationship marketing, service quality, customer satisfaction and customer loyalty, as well as the relationships among them, with particular reference to the retail supermarket industry in Grahamstown;
- determine customers' perceptions of service quality in the retail supermarkets;
- assess levels of customer satisfaction of the retail supermarkets' customers;
- ascertain the customer loyalty levels of the retail supermarkets' customers;
- determine the relationships between service quality, customer satisfaction and customer loyalty;
- determine the difference in average scores of service quality, customer satisfaction and customer loyalty dimensions on selected biographic variables, namely age, population groups, gender, education, occupational levels, monthly income and supermarkets; and
- provide recommendations that can be used in the Grahamstown supermarket industry.

1.3.3 Hypotheses

Based on the above mentioned research objectives, the following hypotheses were stated for this study, namely:

Hypothesis One: Relationship between service quality and customer satisfaction

- H_0^1 : There is no statistically significant linear relationship between the various dimensions of service quality and customer satisfaction.
- H_a^1 : There is a statistically significant linear relationship between the various dimensions of service quality and customer satisfaction.

Hypothesis Two: Relationship between service quality and customer loyalty

- H_0^2 : There is no statistically significant linear relationship between the various dimensions of service quality and customer loyalty.
- H_a^2 : There is a statistically significant linear relationship between the various dimensions of service quality and customer loyalty.

Hypothesis Three: Relationship between customer satisfaction and customer loyalty

- H_0^3 : There is no statistically significant linear relationship between customer satisfaction and the dimensions of customer loyalty.
- H_a^3 : There is a statistically significant linear relationship between customer satisfaction and the dimensions of customer loyalty.

Hypothesis Four: The difference in average scores of service quality dimensions and selected biographic variables

- H_0^4 : There is no significant difference in the average scores of the respective service quality dimensions between the selected biographical variables.
- H_a^4 : There is a significant difference in the average scores of the respective service quality dimensions between the selected biographical variables.

Hypothesis five: The difference in average scores of customer satisfaction and selected biographic variables

- H_0^5 : There is no significant difference in the average scores for customer satisfaction between the selected biographical variables.
- H_a^5 : There is a significant difference in the average scores for customer satisfaction between the selected biographical variables.

Hypothesis Six: The difference in average scores of customer loyalty dimensions and selected Biographic variables

- H_0^6 : There is no significant difference in the average scores for customer loyalty between the selected biographical variables.
- H_a^6 : There is a significant difference in the average scores for customer loyalty between the selected biographical variables.

1.4 RESEARCH DESIGN AND METHODOLOGY

1.4.1 Paradigm

This research was conducted from a positivist approach, because it is essentially quantitative in nature and assumes that social phenomena can be measured (Collis & Hussey, 2003:55). A positivistic paradigm is based on the assumption that social reality is independent and the

objective is to test theory through empirical research (observation and experiment) (Collis & Hussey, 2009:56).

1.4.2 Sampling

This research was conducted in two main retail supermarkets in Grahamstown. The sample size consisted of 285 respondents. The sample for this research study was identified by means of the non-probability sampling method. Convenience sampling was used because it was the easiest way to obtain the sample population of this study and is less expensive (Welman, Kruger & Mitchell, 2005:69-70). Zikmund (2003:426) explains that the convenience sampling method allows researchers to obtain sampling units that are available and convenient, and so it is used when researchers need to obtain data quickly and inexpensively.

1.4.3 Research instruments

The questionnaire used in this study consisted of three sections. In Section A, customers had to indicate the supermarket where they most frequently did their shopping. Section B comprised of items measuring service quality, customer satisfaction and customer loyalty adapted from previous tested measuring instruments, as explained in section 4.6.1 in Chapter four. This section consisted of 57 items presented in a five-point Likert type scale format. Section C gathered biographic information of customers, namely age, population group, gender, education, occupation and monthly income.

1.5 DATA COLLECTION

Quantitative data was collected from the customers. The survey with customers was conducted by the researcher at the respective retail supermarkets after the customers had completed their transactions. A covering letter explaining the purpose of this research accompanied the questionnaire, ensuring that respondents were well-informed of the purpose of this research study (Refer to Appendix A).

1.6 DATA ANALYSIS

The data analysis of this research study was captured in Excel and then imported into R Language and Environment for Statistical Computing programme (R Development Core Team,

2013). Data in this study was analysed using two types of statistical analyses, namely descriptive statistics and inferential statistics. The researcher interpreted the results of the statistical analysis and drew up conclusions and recommendations.

1.7 STRUCTURE OF THE THESIS

- Chapter 1 - Introduction and background to the study

This chapter introduces the research and its background. A brief snapshot of what the study is all about and how it will be conducted is given. This chapter reveals the purpose, aims and objectives of the study and the methodology in summary.

- Chapter 2 - Relationship marketing, service quality and customer satisfaction.

Chapter 2 provides an overview of relationship marketing, service quality and customer satisfaction. A detailed discussion on the theory of relationship marketing, service quality and customer satisfaction is given.

- Chapter 3 - Customer loyalty

This chapter provides a detailed discussion of customer loyalty. Customer retention is briefly discussed, and then the concept of customer loyalty is outlined and discussed in terms of its definition, dimensions, benefits, types of loyalty and types of customers that a supermarket may serve. Finally, the relationships among customer loyalty, service quality, customer satisfaction and biographic variables are examined.

- Chapter 4 - Research methodology

This chapter presents the research design and methodology. The research paradigm within which the study was conducted is discussed. The research design, research method, data collection process and how data was analysed are also explained. Furthermore, the documentation and storage of data, data analysis and the reliability and validity of the research instruments are discussed.

- Chapter 5- Data analysis and empirical findings

In this chapter the research findings are presented according to the research hypotheses of this study.

- Chapter 6- Discussion, conclusions and recommendations

This chapter provides a discussion of the findings in chapter five, comparing the results with the literature review discussed in Chapter 2 and 3. The summary, recommendations and conclusions of this study are made.

CHAPTER TWO
RELATIONSHIP MARKETING, SERVICE QUALITY AND CUSTOMER
SATISFACTION

2.1 INTRODUCTION

Today's marketplace has become intensely competitive as customers continuously expect retailers to meet or exceed their expectations (Wong & Sohal, 2003:495). The South African supermarket industry, as previously mentioned in Chapter one, is highly competitive with large supermarket chains dominating the supermarket environment, namely Pick n Pay, Woolworths, Shoprite, Checkers and Spar (Beneke *et al.* 2012:27). As indicated in Chapter one, these supermarkets operate in an intense competitive environment, often located in close proximity of each other, and are fully aware that failure to meet the needs and demands of customers will result in customers defecting to their competitors (Marx & Erasmus 2006:57). This intensity of competition in the market place has made organisations change their strategy from acquiring new customers to keeping existing customers through developing relationships with them.

Over the past decade, business-to-consumer organisations have significantly moved from transaction-based to relationship-centred approaches in their marketing, reflecting a shift of focus in the discipline (West *et al.* 2006:178). This shift to building long term relationships with customers as opposed to strategies to attract new customers has become a common practice in the contemporary competitive market, and is generally accompanied by improved customer satisfaction, increased loyalty and ultimately retaining of customers (Mostert & De Meyer, 2010:27).

Relationship marketing's development was influenced by previous developments in marketing that included consumer marketing, industrial marketing, non-profit and societal marketing and services marketing, which led to different academic viewpoints from which relationship marketing theory was to develop (Egan, 2001:5). Since its development, the relationship marketing concept has emerged as an effective weapon for gaining the continual patronage and loyalty of customers (Berry, 1995:237; Bennett & Barkensjo, 2005:81). It has become common practice amongst organisations to use relationship marketing as an effective way to grow and

retain profitable loyal customers (Beneke *et al.*, 2011:30). An industry that can benefit from developing relationships with its customers so as to gain their patronage is the competitive retail supermarket industry. Today's supermarkets are increasingly offering high service quality as their competitive advantage to gain the patronage of customers (Beneke *et al.* 2012:27). service quality has been distinguished as an important pre-requisite for and determinant of competitiveness for establishing sustainable relationships with customers (Ojo, 2010:89), and is defined as a subjective judgement or attitude that relates to the overall superiority of the service (Parasuraman *et al.* 1988:15). The competitiveness of the South African supermarket industry challenges supermarkets to provide high levels of service quality as perceived by customers so as to differentiate them from competition, as the competitive advantage of an organisation is dependant upon the quality and value of its products and services (Grönroos, 2000:66).

Ojo (2010:88) endorses that service quality is a strong indicator of customer satisfaction and is supported by Cronin & Taylor (1992:55) who note that service quality is an antecedent of customer satisfaction. Customer satisfaction has been found to influence the development of long term relationships between the organisation and its customers by having a positive effect on customer loyalty intentions (Gustafsson, Johnson & Roos, 2005:210). In the competitive retail supermarket industry, it is imperative that supermarkets provide services that will satisfy the needs and demands of customers.

Organisations need also to understand the impact of various biographical variables such as age, income, gender and others on customers' perceptions of service quality (Ganesam-Lim, Russell-Bennet & Dagger, 2008:552). Ott (2008:32) suggests that researchers who are studying the relationship of service quality, customer satisfaction and customer loyalty should collect biographic data on customers so as to better understand them and also to develop marketing strategies that meet their needs.

This chapter, therefore, will provide a detailed discussion of the theory of relationship marketing, service quality and customer satisfaction. The change of focus by marketers from transactional marketing to relationship marketing will be analysed. Service quality and how it is measured will be explored and customer satisfaction and its measurement will be elaborated accordingly. The

effect of customers' biographic variables on service quality and customer satisfaction will be discussed.

2.2 RELATIONSHIP MARKETING

The concept of relationship marketing is not new in the marketing discipline; as the idea of a business winning customers' favour and loyalty by satisfying their needs and expectations was known by the earliest merchants (Berry, 1995:236). Relationship marketing has emerged at the forefront of the marketing discipline and the idea of marketing to existing customers so as to win their continued patronage and loyalty is being embraced in all different sub-disciplines of marketing (Berry, 1995:237).

Relationship marketing is defined as establishing, developing, and maintaining successful relational exchanges which imply attracting, maintaining, and enhancing customer relationships (Morgan & Hunt, 1994:20; Berry, 1995:236). Boone & Kurtz (1999:34) further refer to relationship marketing as the establishment, "growth and maintenance of long-term cost-effective relationships" between stakeholders for mutual benefit. Attraction of new customers should be viewed as an intermediary step in the marketing process, with the key components to the whole marketing process being consolidating customer relationships, transforming indifferent customers into loyal ones and serving customers as clients Berry (1995:236).

The primary objective of relationship marketing is to create a long term interactive relationship between the organisation and customers, with an understanding that both the customer and the organisation will benefit in the relationship (Rahman, 2006:61). Given the importance of relational exchanges between the organisation and its customers in enhancing customer relationships, the importance of customer loyalty, which will be discussed in the next chapter, comes to the fore. By creating loyal customers a mutually stable, profitable and long term relationship would be enhanced (Ravald & Grönroos, 1996:19).

Five strategies of practicing relationship marketing were identified namely; development of a key service around which to establish the customer relationship, customization of the relationship to the individual customer, augmenting the key service with extra benefits, relationship pricing to encourage customer loyalty and marketing to employees so that they will

perform well for customers (internal marketing) (Berry, 1983:62). In implementing the above strategies organisations can use all of them simultaneously as they are not wholly independent. Taking into consideration that most organisations are using relationship marketing as a strategy of retaining and winning customers' loyalty; it is important for the purposes of this research to understand how relationship marketing has developed from its origins in transactional marketing.

Transactional marketing has been used by organisations as a strategy for targeting customers in making a "once off or point of sale transaction" (Business Dictionary, 2013). In transactional marketing, the fact that a customer has purchased an item from the organisation does not guarantee or forecast any chance of yet another purchase of the same item (Brink & Berndt, 2008:4). The main purpose of transactional marketing is to maximise an organisation's sales efficiency by increasing individual sales volume rather than establishing long term relationships with customers (Business Dictionary, 2013). In contrast, relationship marketing has been identified as an alternative strategy to the traditional transactional marketing, as its purpose is not only to make a transaction but also to win customers' continued patronage and loyalty by satisfying their needs through improving service quality (Berry, 1995:236). The next section will focus on how relationship marketing has evolved from transactional marketing.

2.2.1 A paradigm shift from Transactional to relationship marketing

Transactional based marketing has dominated marketing thought, research and practice for many years. Since organisations began to interact and develop relationships with their customers, the transactional approach to marketing has been losing its position (Grönroos, 1994:4; Boone & Kurtz, 1999:34). Prominent writers of relationship marketing believe that there has been a paradigm shift in the marketing field from the traditional transactional marketing to relationship marketing (Sheth & Parvatiyar, 1995; Grönroos, 1994:4; Morgan & Hunt, 1994; Brink & Berndt, 2008; Gummesson, 1994; Buttle, 1996). Raval and Grönroos (1996:19) confirmed that marketing has had a paradigm shift from the strategies of attracting new customers to strategies which focus on developing long term relationships with existing customers.

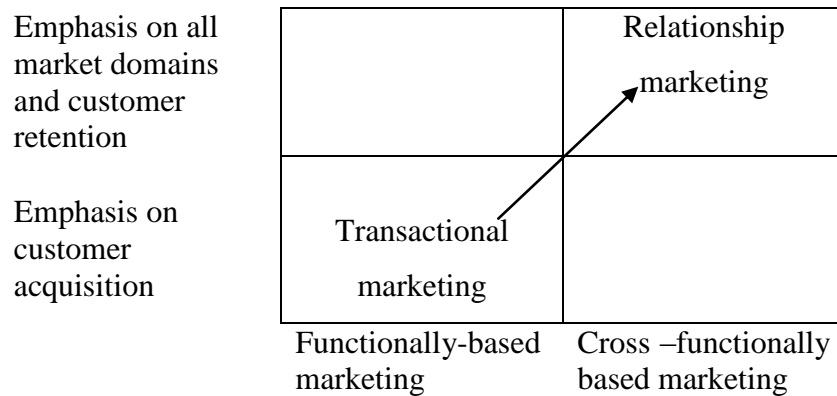
Previously, organisations have been using traditional transactional marketing which is based on attracting new customers whereby the main objective was to identify prospects, transform them into customers and complete a sales transaction which signals the end of the marketing process

(Boone & Kurtz, 1999:34; Brink & Berndt, 2008:4). Even though attracting new customers is essential, it is now being understood as an intermediary step in the whole marketing process as marketing practitioners are currently focusing their initiatives on developing and maintaining equally “beneficial relationships with existing customers” (Boone & Kurtz, 1999:34). Relationship marketing emphasises establishing long term relationships with customers (Gummesson, 1994:9; Brink & Berndt, 2008:4) and offers organisations the opportunity of gaining a competitive advantage by moving customers up the loyalty ladder from “new customers to regular purchasers, to loyal customers”. Loyal customers become the advocates and do not only purchase the organisation’s products but also recommend them to others (Boone & Kurtz, 1999:35). The main difference between the transactional and relationship paradigms pertain to how customer loyalty is defined, the roles of the seller and buyer and the needs of the consumer.

Even though relationship marketing has been elevated to the top of marketing theory, there are still doubts as to whether organisations would find it feasible or suitable to develop relational strategies (Egan, 2001:76). In consideration of the view that relationship marketing and transactional marketing can co-exist, Egan (2001:76) argues that relationship marketing should not be viewed as a replacement of transactional marketing but as another marketing perspective.

The transition from transactional marketing to relationship marketing, as illustrated in Figure 2.1, shows that transactional marketing is functionally based marketing, placing the emphasis on the acquisition of new customers and the completion of sales transactions. On the other hand, organisations that are using relationship marketing are using cross-functionally based marketing whereby emphasis is placed on retaining existing customers and winning their loyalty so that they can do more than just transacting with the organisation (Christopher, Payne & Ballantyne, 2002:4).

Figure 2. 1 The transition from transactional to relationship marketing.



Source: Christopher *et al.* (2002:4)

Figure 2.1 can also be applied to the retail supermarket industry, in which a particular supermarket will move away from just acquiring customers and transacting with them without knowledge of their needs to developing relationships with them with the aim of retaining them by gaining their loyalty. Supermarkets can achieve this by providing high levels of service quality which can satisfy customers leading to their loyalty. The organisation's existing customers are the best marketers for the organisation; which is why offering high standards of service quality as well as having satisfied customer are important as it will lead to positive word of mouth referral (Christopher *et al.* 2002:87; Payne, 2000:20; De Meyer, 2008:70). Berry (1995:237) suggests that service quality has enhanced the growing interest in relationship marketing, as the main objective of improving service quality is to create customer loyalty. The following section will focus on service quality, its dimensions and its measurement.

2.3 SERVICE QUALITY

The concept of service quality has been acknowledged as an important factor of competitiveness in the development and maintenance of satisfying relationships with customers (Ojo, 2010:89). The main strategy of survival and success for contemporary organisations in the highly competitive and dynamic environment is to deliver higher levels of service quality (Zeithaml *et al.* 1996:31). This has been influenced by the rise of informed consumers who have moved from

just accepting services without a question to demanding higher levels of service quality than before (Parasuraman, Zeithaml & Berry, 1985:41). For the purposes of this research it is important to provide an in-depth discussion of the concept of service quality according to its definition, frameworks, measurements and its importance to an organisation in the creation of long term relationships.

2.3.1 Service quality defined

The concept of service quality emerged in the late 1970s and since then it has received considerable attention from researchers and practitioners alike (Grönroos, 2000:62). Over the past decades the concept of service quality has become important for organisations because of its strong effect on business performance, customer satisfaction, customer loyalty and profitability (Seth *et al.* 2005:913).

Service quality has been described as an “elusive and abstract” concept that is difficult to define and measure (Cronin & Taylor, 1992:55). Organisations have been urged to view service quality the way customers perceives it to be as this enables them to channel their resources on the right quality programmes (Grönroos, 2000:63). Parasuraman *et al.* (1988:15) provide a brief but incorporating definition of service quality whereby they define service quality as “a global judgement or attitude relating to the overall superiority of the service”.

The various definitions of service quality have influenced different frameworks that are used to measure customers’ perceptions of service quality in various contexts. Three service quality frameworks have been developed to conceptualize the service quality concept, namely Grönroos’s (1984) two service quality dimensions framework; Parasuraman *et al.*’s (1985) service quality gap framework and Cronin and Taylor’s (1992) SERVPERF framework. In order to better understand the concept of service quality, it is thus imperative that the three frameworks be evaluated and discussed in the following sections.

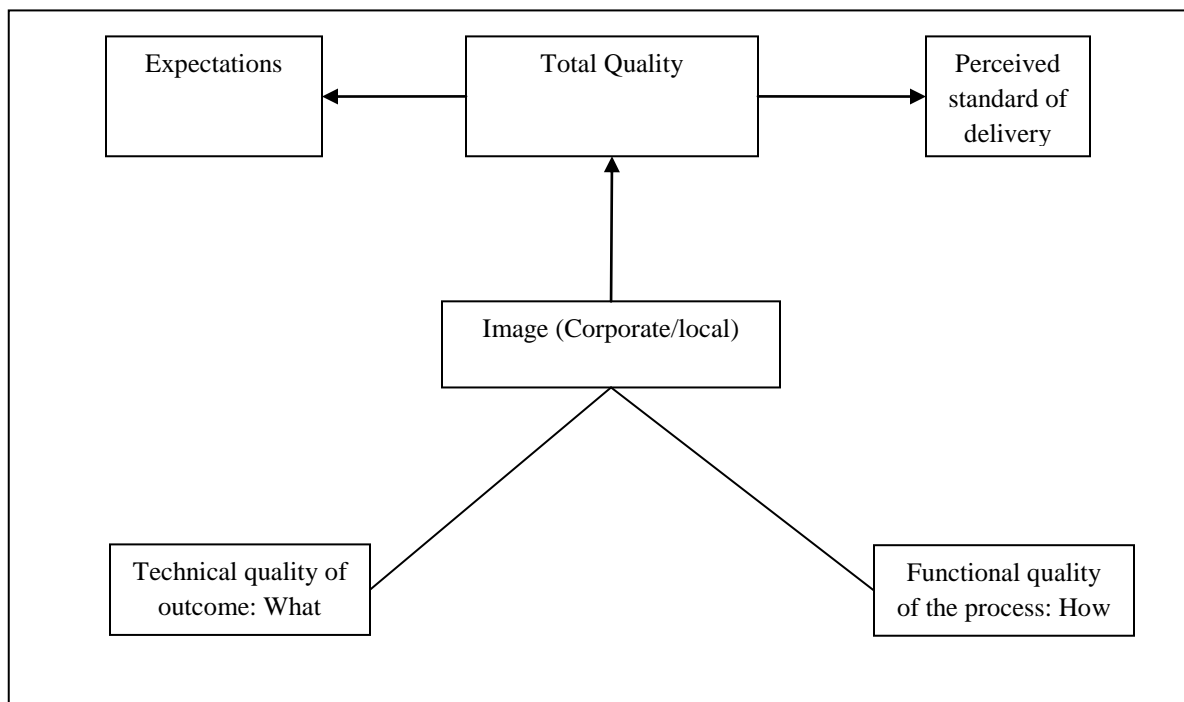
2.3.2 Grönroos’s two service quality dimensions framework

According to Grönroos (1984:36-44) service quality should be conceptualised from a customer orientated perspective. This framework of service quality as perceived by customers consists of two dimensions, namely the technical (outcome) dimension and functional (process) dimension

as indicated in Figure 2.2. The technical dimension focuses on “what” the customer receives after their interaction with the organisation, whereas the functional dimension touches on “how” the service is performed by the organisation (Grönroos, 2000:63-64). For example, in the retail supermarket industry, the type of service and products that a customer receives from a particular supermarket will determine the technical dimension; while the behaviour of the supermarket’s till operators towards customers will determine the functional dimension.

Besides the technical and functional quality dimensions, the image of the organisation (supermarket A or B) also influences the quality judgement of a customer. This leads to total quality which is the difference between service expectations and perceived standard delivery. If the actual performances of the organisation, based on the two dimensions, meet the expectations of customers, total quality will be attained as illustrated in Figure 2.2.

Figure 2. 2 Grönroos’s two dimensions framework



Source: Grönroos (2000:65)

Building on the foundation laid by Grönroos’s (1984) two dimensions framework as shown in Figure 2.2, Parasuraman *et al.* (1985) began to study factors that influence service quality and

how customers determine service quality based on the perceived service quality concept (Grönroos, 2000:74). The Parasuraman-Zeithaml-Berry service quality gap framework will subsequently be explained.

2.3.3 The Parasuraman-Zeithaml-Berry service quality gap framework

The gap framework, developed by Parasuraman, Zeithaml and Berry (1985) focused on determining the factors that influence service quality and how the customers perceived the quality of services (Grönroos, 2000:74). After having examined previous research on service quality, Parasuraman *et al.* (1985:42) identified three underlying themes, namely:

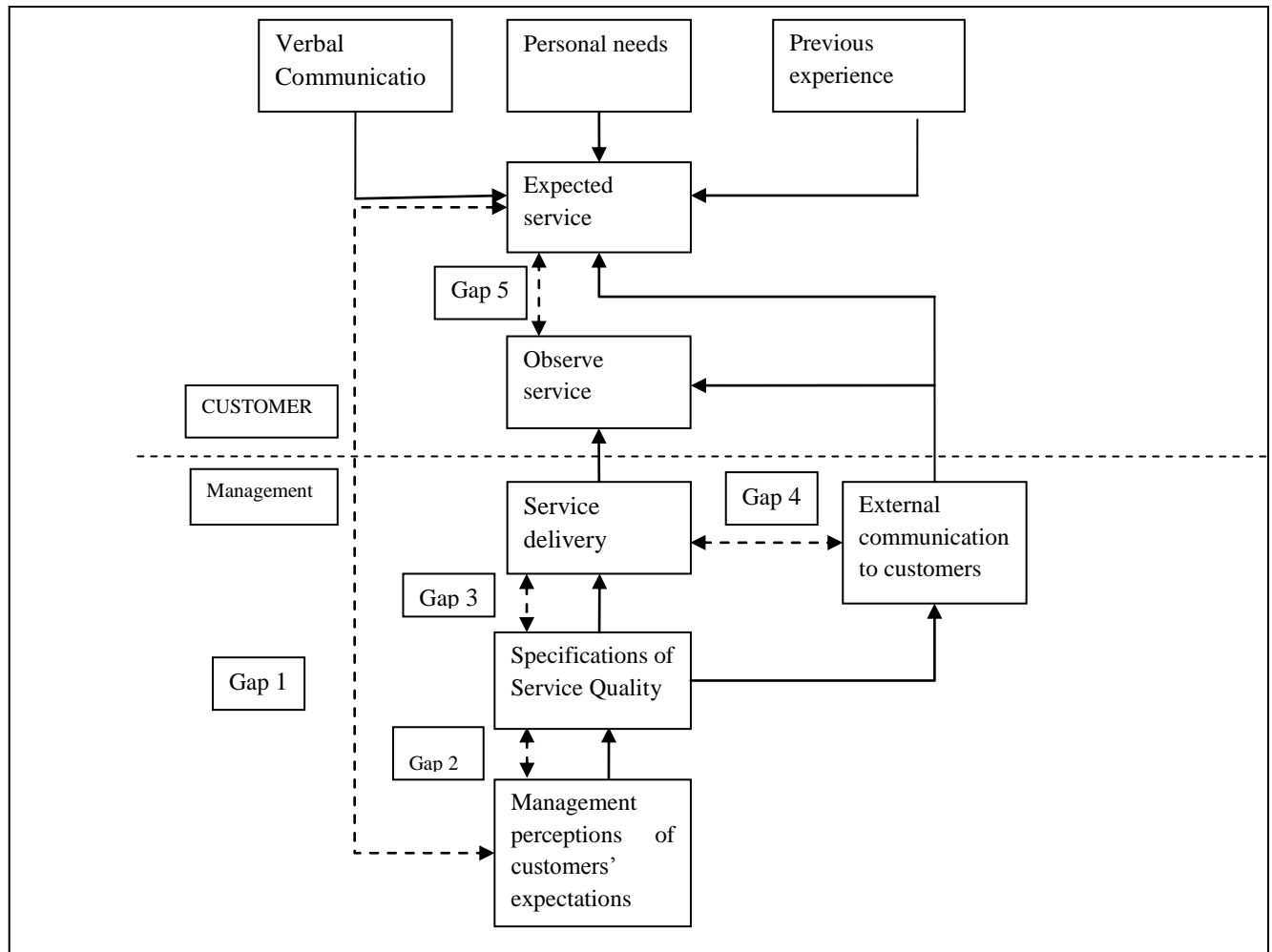
- the difficulty of customers evaluating service quality compared with assessing the quality of products;
- perceived service quality as an outcome based on the difference between the consumer expectations and the actual service delivered; and
- Service quality evaluations, based on what the service produces and how the service is rendered.

The service quality gap framework defines service quality from the perspective of the customer and the organisation's management (Parasuraman *et al.* 1985:41-50). This is in contrast to Grönroos's (1984) two dimensions service quality framework that defines service quality from the perspective of the customer. In their research Parasuraman *et al.* (1985:41-50) proposed the service quality gaps framework as depicted in Figure 2.3 to understand service quality delivery of an organisation. The framework views service quality in terms of five potential gaps that reflect areas where service quality shortfalls could occur (Rootman, 2006:48).

Parasuraman *et al.* (1985:44) suggest that there are gaps that exist pertaining to an organisation's perceptions of service quality and the activities that are related to service delivery to consumers. These gaps as shown in Figure 2.3 were found to be major obstacles to the organisation in trying to provide services that customers will perceive as of high quality. The upper part of the service quality gap framework shows the consumer side of perceiving service quality, while the lower

part of the framework shows the organisation's side of perceiving service quality. Gaps 1 to 4 are from the organisation's perspective while gap 5 is the consumer's perspective.

Figure 2. 3 Parasuraman-Zeithaml-Berry service quality gap framework



Source: Parasuraman *et al.* (1985)

The service quality gaps framework by Parasuraman *et al.* (1985) in Figure 2.3 led to the development of ten dimensions of service quality which were later reduced to five (Parasuraman *et al.*, 1985:47; Parasuraman *et al.*, 1988:12-40). These five dimensions of service quality were used in the development of the SERVQUAL instrument that measures customers' perceptions of service quality (gap five in the framework) (Parasuraman *et al.* 1988:12-40). The measurement of service quality using the SERVQUAL will subsequently be discussed.

2.3.3.1 Measurement of service quality using the SERVQUAL

Service quality is viewed as a multi-dimensional construct and Parasuraman *et al.* (1985:47) identified ten dimensions of assessing and evaluating service quality, namely reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding and tangibles.

The ten dimensions of service quality and their descriptions served as the basic structure of the service quality domain, from which the SERVQUAL instrument was developed. Parasuraman *et al.* (1988:23) refined the ten dimensions of service quality into five dimensions, namely tangibles, reliability, responsiveness, assurance and empathy. Three dimensions of the original ten dimensions (tangibles, reliability and responsiveness) were retained and two new dimensions (assurance and empathy) were developed from the seven original dimensions (communication, credibility, security, competence, courtesy, understanding/knowing customers and access). The five dimensions of service quality are explained in Table 2.1.

Table 2. 1 Service quality dimensions

Service quality Dimensions	Explanation
Tangibles	Tangibles include the appearance of physical facilities, appearance of staff, equipment and anything physical that reflects the quality of the service/product that customers will receive.
Reliability	Reliability involves consistency and dependability in the provision of services by the organisation. This means that the organisation offers its customers accurate service for the first time without errors and delivers on its promises at the time that has been agreed upon.
Responsiveness	Responsiveness is the willingness of the organisation's employees to help the customers and respond to their needs in a timely manner. The organisation has to provide prompt services to its customers especially when customers have requests, questions, complaints and problems pertaining to the service.
Assurance	Assurance means the employees of an organisation are knowledgeable and courteous and will inspire confidence and trust in the customers.
Empathy	Empathy is when the organisation gives its customers caring and individualised attention. The organisation understands its customers' problems and provides personalised attention to its customers. The business in this instance will have to confirm to their customers that their unique needs and requirements will be met.

Source: Parasuraman *et al.* (1988:23); Grönroos (2000:75); Brink and Berndt (2008:73)

Parasuraman *et al.* (1988:23) developed the SERVQUAL instrument from the five dimensions outlined in Table 2.1. The instrument consists of 22 items that measure customers' expectations and perceptions (E and P) of each of these five dimensions. The SERVQUAL is administered twice in varying forms, by measuring expectations first and then followed by the measure for perceptions. SERVQUAL is based on the fifth gap as shown in Figure 2.3 and is designed to measure the perceived service quality gap by distinguishing between customers' actual perceptions on a service and their expectations, for example (P1-E1; P2-E2, P3-E3) (Buttle, 1995:10; Grönroos, 2000:76; Bloemer *et al.* 1998:1084).

Even though SERVQUAL has been widely used, Grönroos (2000:76) suggests that it should be implemented with care, and the dimensions and attributes should be reassessed in any situation before utilizing the instrument. Buttle (1995:10) avers that despite its popularity, SERVQUAL has been subjected to intense scrutiny and criticism both theoretical and operational as shown in Table 2.2.

Table 2. 2 Theoretical and operational criticisms of the SERVQUAL

Theoretical	Operational
<ul style="list-style-type: none"> ● Paradigmatic objections: SERVQUAL established on disconfirmation paradigm rather than on an attitudinal paradigm. ● Gaps model: There is not enough evidence that suggests that customers evaluate service quality in terms of P-E gaps. ● Process orientation: The focus on SERVQUAL is on the process of service delivery, instead of the outcomes of the service encounter. ● Dimensionality: The five dimensions of SERVQUAL cannot be universally applied; contextualization of the number of dimensions comprising service quality; items at times do not load on to the factors which one would highly expect; higher degree of inter-correlations between the five service quality dimensions. 	<ul style="list-style-type: none"> ● Expectations: Customers utilize standards other than expectations to evaluate service quality; and SERVQUAL fails to measure absolute service quality expectations. ● Item composition: Four and five items cannot reflect the variability with each particular dimension. ● Scale points: the seven Likert- point scale is flawed. ● Two administrations: Two administrations of the SERVQUAL cause boredom and confusion to the respondents.

Source: Buttle (1995:11)

The most notable criticism came from Cronin and Taylor (1992:55-68) who suggest that the measurement of service quality should be based on performance only rather than performance minus expectations measures of service quality. Cronin and Taylor (1992:58) are in agreement with Parasuraman *et al.* (1988:12-40) that the 22 performance items in the SERVQUAL instrument adequately define the domain of service quality, but they suggested the use of performance only scale known as SERVPERF, which will be discussed in the next section, rather than the SERVQUAL instrument.

Bloemer *et al.* (1998:1084) indicate that even though the SERVQUAL instrument has been widely used, questions have been raised about the validity and reliability of the variation between the expectations and the actual performance. Several authors (Cronin & Taylor, 1992; Teas, 1993) have suggested that the “perceptions only” scores are the best indicators of service quality. This leads to the discussion of the performance (perceptions-only) scale known as the SERVPERF promoted by Cronin and Taylor (1992:55-68), in the next section.

2.3.4 Cronin and Taylor's performance only framework

Cronin and Taylor (1992:55) challenged the previous research studies done by Parasuraman *et al.* (1985; 1988) who had suggested that a customer's perceived service quality is the variation between expectations and actual performance by suggesting an alternative framework that measures performance only. The difference formulation of the gap theory is basically flawed because customers use standards to evaluate service quality other than expectations (Buttle, 1995:11). Therefore, Cronin and Taylor (1992:58) suggest that service quality should be measured by perceptions on performance only. The "performance only" framework is based on the assumption that respondents automatically compare performance perceptions with performance expectations and that measuring expectations directly is unnecessary (Culiberg & Rojsek, 2010:153).

Zeithaml *et al.* (1996:40) suggest that the "perceptions only operationalisation is appropriate if the primary purpose of measuring service quality is to attempt to explain variance in some dependant construct. Whereas the perceptions minus expectations difference score measure is appropriate if the primary purpose is to diagnose accurately service shortfalls". Cronin and Taylor (1992:55-56) further argue that the gap theory postulated by Parasuraman *et al.* (1988) had little theoretical or empirical evidence that supports it as a basis for measuring service quality. In supporting their arguments Cronin and Taylor (1992:55-56) proposed the use of SERVPERF, as an instrument to measure service quality rather than the SERVQUAL instrument.

2.3.4.1 Measuring service quality using the SERVPERF

The SERVPERF instrument was developed as an alternative to the SERVQUAL instrument, after it was noted that there was less empirical evidence that supports the relevance of the expectations-performance gap as the basis for measuring service quality (Cronin & Taylor, 1992:56). The instrument uses the same 22 items of the SERVQUAL instrument but does not measure the difference between expectation and actual perception; it only measures performance (Meng, Summey, Herndon & Kwong, 2009:776).

The SERVPERF instrument was found to have greater validity, reliability and methodological soundness than the SERVQUAL instrument (Jain & Gupta, 2004:25). A lot of criticisms have been raised against the SERVQUAL instrument in terms of its convergent validity (the degree to

which numerous efforts to measure the same concept are in agreement) and discriminant validity (the degree to which measures of different concept are dissimilar), the use of difference scores and the use of negatively phrased items (Boschoff & Terblanche, 1997:123). With the SERVQUAL instrument having deficiencies in terms of its validity and reliability, the SERVPERF instrument has been proven to be an improved means of measuring service quality (Cronin & Taylor, 1992:55). Grönroos (2000:78) asserts that SERVPERF is easier to administer and its data is easier to analyse.

Since the SERVPERF and the SERVQUAL instruments do not specifically measure service quality of a specific context but are generalised to various services, Dabholkar *et al.* (1996) developed a generalised scale for the retail industry called the Retail Service Quality Scale (RSQS), which will be discussed in the next section.

2.3.5 Retail Service Quality Scale (RSQS)

Dabholkar *et al.* (1996:3) suggest that the available measures of service quality do not wholly capture customers' perceptions of service quality, especially for retail organisations. A multi-item scale was developed by Dabholkar *et al.* (1996:3-16) measuring five dimensions of retail service quality, as highlighted in Table 2.3 (page 32). Dabholkar *et al.* (1996:8) proposed a measure of retail service quality which consisted of 28 item scales consisting of 17 items from the original SERVQUAL scale and 11 items developed from the service quality literature review. The Retail service quality Scale was used in this research study.

The Retail Service Quality Scale (RSQS) is a generalized scale that is specifically used to study a retail organisation that provides customers with a mix of services and products (Yuen & Chan, 2010:224). The development of the Retail Service Quality Scale was influenced by lack of empirical studies suggesting the successful adaptation and validation of the SERVQUAL instrument to the retail context (Dabholkar *et al.* 1996:3). The proposed five new dimensions by Dabholkar *et al.* (1996:3) which are relevant to a retail setting are: physical aspects, reliability, personal interaction, problem solving and policy, as outlined in Table 2.3 (page 32).

- **Physical aspects:** According to Dabholkar *et al.* (1996:6-7), the physical aspects dimension has a wider meaning than the SERVQUAL tangibles dimension. The dimension includes not

only the appearance of physical facilities but also the convenience provided the customer by the store layout. The appearance of the shop (decoration, fixtures, equipment, cleanliness, design of product and visible advertising material) and the convenience of shopping (interior design, store layout of each section and product position) have been found to be highly valued by consumers (Vazquez, Rodriguez-Del Bosque, Diaz & Ruiz, 2001:4). The store environment, its physical facilities and image have become critical factors which retailers can utilise to gain the competitive edge and influence customer satisfaction (Beneke *et al.* 2012:29).

- **Reliability:** The reliability dimension is the ability of an organisation to offer services they have promised to customers in an accurate manner without errors (Beneke *et al.* 2012:29). The reliability dimension is similar to the SERVQUAL reliability dimension, the difference being that it has two sub-dimensions of promise and doing it right (Dabholkar *et al.* 1996:7). In the supermarket industry environment, supermarkets must have enough inventories of the products they have advertised to attract customers to the retail organisation and also to guarantee the quality of products being sold, allowing returns and exchanges (Vazquez *et al.* 2001:5). Beneke *et al.* (2012:29) note that any shortages of stock and long queues at the cash register indicate the lack of reliability on behalf of the supermarket and create negative perceptions and decreased customer satisfaction among the customers. Furthermore, a failure by the supermarket to keep its promises or do things right might result in customers defecting to competition and, in the process, spreading negative opinions by word of mouth.
- **Personal interaction:** Customers are not only interested in what is being sold but also value the contact that they have with the staff members of a retail organisation during the process of making a sale and after the service has been rendered (Vazquez *et al.* 2001:5). The personal interaction dimension is the grouping of SERVQUAL's responsiveness, assurance and empathy dimensions. This dimension measures customers' perceptions of whether store employees do inspire confidence by being courteous and helpful (Dabholkar *et al.* 1996:7). Huang (2009:246) notes that employees of a retail organisation who possess the knowledge to answer customers' questions, give quick service to customers, are never too busy to respond to customers' requests, have confidence and are helpful to customers may increase shoppers' satisfaction with the store's services.

- **Problem solving:** The dimension of problem solving involves the handling of problems and complaints (for example, handling of returns and exchanges). Even though this dimension involves personal interaction between the customer and the employees, it specifically deals with handling of potential problems and complaints; hence it deserves to be treated as a separate dimension (Dabholkar *et al.* 1996:7). Problem solving refers to an organisation's ability to show genuine and sincere interest in solving customers' problems and the employees' ability to handle complaints directly and instantly (Beneke *et al.* 2012:30). Customers develop positive and favourable perceptions of the organisations that show genuine interest in solving their problems and complaints than those who do not (Huang, 2009:46).

Retail organisations need to establish effective measures that can be implemented in order to handle customer problems and complaints and these measures can take the form of customer care lines, helpful staff, and customer service desks, or even a website (Beneke *et al.* 2012:30).

- **Policy:** The fifth dimension of the Retail Service Quality Scale (RSQS) is policy which gathers together those aspects of service quality that are influenced by the store's policy, namely quality of the merchandise, loyalty programmes and credit facilities, operating hours, parking facilities and other miscellaneous customer services offered (Beneke *et al.* 2012:30). Huang (2009:247) suggests that a retail organisation that offers good quality merchandise, convenient parking and credit card usage may reap positive perceptions which lead to satisfaction. Retail organisations that are perceived to offer high quality products (merchandise) are highly likely to be preferred by customers (Beneke *et al.* 2012:31).

Table 2. 3 The five dimensions of RSQS

Dimensions	Sub dimensions
Physical Aspect	Store appearance
	Convenience of store layout
Reliability	Promises
	Doing things right
Personal Interaction	Courteous and helpful
	Inspire confidence and trust
Problem Solving	
Policy	

Source: Dabholkar *et al.* (1996)

Dabholkar *et al.* (1996:13) suggest that the RSQS is better suited for the retail environment than the SERVQUAL scale. Boshoff and Terblanche (1997:127) reveal that the RSQS instrument is a valid and reliable instrument to measure retail service quality in South Africa.

The dimensions of service quality differ in terms of the service researched; therefore, it is appropriate to adapt the scale to the service being studied (Vazquez *et al.* 2001:2). For this research study the RSQS instrument was adapted because it is more specific to the retail supermarket industry and previous research by Vazquez *et al.* (2001) and Huang (2009) found that within the supermarket industry physical aspects, reliability, personal interaction, problem solving and policy were prominent. Furthermore, previous research studies by Beneke *et al.* (2012) and Terblanche and Boshoff (1997) found the RSQS to be a reliable and credible instrument in the South African context.

To avoid psychometric problems encountered in previous research studies (Dabholkar *et al.* 1996; Cronin & Taylor, 1992; Parasuraman, Zeithaml & Berry, 1994a) with difference scores, only the perceptions will be presented and analysed in this research study.

The RSQS will be discussed further in Chapter four (Methodology chapter) of this research study. In the next section, customer satisfaction and how it relates to service quality will be discussed.

2.4 CUSTOMER SATISFACTION

The concept of customer satisfaction has received much attention within the context of relationship marketing (Henning-Thurau & Klee, 1997:738.) It is every organisation's duty to proactively define and measure customer satisfaction as it will be inappropriate to gauge the organisation's success by customers' complaints (Hoffman, Czinkota, Dickson, Dunne, Griffin, Hutt, Krishnan, Lusch, Ronkainen, Rosenbloom, Sheth, Shimp, Siguaw, Simpson, Speh & Urbany, 2005:329). The state of the organisation's stability and its long term prospects are determined by the extent to which the organisation satisfies the needs of its customers (Fornell, 1992:6).

Customer satisfaction has been found to be important to an organisation because of its influence on customer loyalty and the organisation's profitability (Fornell, 1992:7; Hallowell, 1996:28). Hoffman *et al.* (2005:329) suggest that for organisations to achieve customer satisfaction they have to effectively manage customer perceptions and expectations, for example, if the perceived service is of better quality than the expected service, then customers are satisfied. In a competitive business environment like the retail supermarket industry, customer satisfaction is regarded as a key differentiating element and important factor in the business strategy (Munusamy, Chelliah & Mun, 2010:399).

2.4.1 Definition of customer satisfaction

The definition of customer satisfaction is unclear but the majority of definitions include evaluative, affective or emotional responses (Spreng & Mackoy, 1996:202). Customer satisfaction has been defined as the state in which the needs, wants and expectations of customers are met or exceeded leading to repurchase, brand loyalty and willingness to recommend (Beneke *et al.* 2011:32). Kotler and Armstrong (1999:546) describe satisfaction as the "extent to which an organisation's perceived performance matches a buyer's expectations". This definition is supported by Hoffman *et al.* (2005:329) who assert that customer satisfaction is a short term, transaction specific measure of whether customers' perceptions match or exceed their expectations.

Oliver (1980 cited in Taylor & Baker, 1994:164) further defines customer satisfaction as a customer's "cognitive and affective reaction to a service incident which results from experiencing a service quality encounter and comparing that encounter with what was expected". Beneke, Adams, Demetrious and Solomons (2011b:63) give a comprehensive definition of a retail organisation's customer satisfaction in which they describe customer satisfaction as the consumer's overall evaluation of the experience with a particular supermarket.

The above definitions might seem similar to those of service quality but, in reality, the two constructs are not similar. This assertion is supported by Cronin and Taylor (1992:56) who suggest that the perceived service quality is a form of attitude and long term overall evaluation; whereas satisfaction is based on an overall evaluation that occurs after the transaction has been completed (Fornell, 1992:11).

2.4.2 Measurement of customer satisfaction

Measurement of customer satisfaction should be a continuous process that translates what customers want (their needs and expectations) into strategic information that can be used by management in decision making (Lamb *et al.* 2012:5). Customer satisfaction can be classified in two forms: transaction specific satisfaction and general overall satisfaction (Deng, Lu, Wei & Zhang, 2010:290). Transaction-specific satisfaction refers to customers' own evaluation of their experience after a specific service encounter; while the overall satisfaction refers to the customers' overall assessment of their consumption experience over a period of time (Deng *et al.* 2010:290; Munusamy *et al.* 2010:399). For example, in the retail supermarket industry, customers can be satisfied after completing a transaction in a supermarket and also have an overall satisfaction after they have assessed their consumption experience over a period of time.

Customer satisfaction measurement should reflect on factors that are important to a particular industry or organisation, namely price perceptions of customers, reliability of a service and the image of the brand (Lamb *et al.* 2012:6). Fornell (1992:11) asserts that there is no consensus among authors on how to measure customer satisfaction. Customer satisfaction has been measured as a single item scale or used as a multiple item scale (Sureshchandar *et al.* 2002:363). Various studies (Cronin & Taylor, 1992:60; Spreng & Mackoy, 1996:206; Rootman, 2006) have used a single item measure of customer satisfaction to indicate the customer's overall satisfaction

about the organisation's overall service quality. In contrast, Terblanche and Boshoff (2001:11) used a five dimension measure of importance in assessing customers' satisfaction with an in-store shopping experience. The dimensions included merchandise value, personal interaction, merchandise variety, internal store environment and complaint handling. Hallowell (1996:40) also used a multi-item measure of customer satisfaction which included the service and price indices, and an item measuring the overall satisfaction of customers.

Sureshchandar *et al.* (2002:363) are of the notion that customer satisfaction is a multi-dimensional scale, which is measured by using similar items used to measure service quality. This means that customer satisfaction is measured from the same items used to measure service quality. Taylor and Baker (1994:168) used a multi-item measure of customer satisfaction which included four measures of customer satisfaction. The four measures of customer satisfaction seek to capture customers' feelings and perceptions about the overall service offering of an organisation. The four measures are outlined in Table 2.4.

Table 2. 4 Direct measures of customer satisfaction

Satisfaction	Direct measures of customer satisfaction
SAT1	If I needed-----services, I believe that I will be satisfied with XYZ's services.
SAT2	Overall, in purchasing-----services, I believe that I would be satisfied with XYZ's services.
SAT3	I believe that purchasing service from XYZ is usually a satisfying experience.
SAT4	My feelings towards XYZ's services can be characterised as satisfied.

Source: Taylor and Baker (1994:175)

In this research the four measures of customer satisfaction by Taylor and Baker (1994) were used to measure customer satisfaction with other measures developed by the researcher from the service quality items and one item to measure overall satisfaction with the service quality offered adapted from Rootman (2006).

As most successful organisations consider customer satisfaction as their key objective, service quality has to be measured by how well these organisations satisfy their customers (Brink &

Berndt, 2008:70). The following section provides a brief discussion on the relationship between perceived service quality and customer satisfaction.

2.4.3 The relationship between customer satisfaction and service quality

The concepts of service quality and customer satisfaction have been the centre of attention in both marketing theory and practice over the past two decades (Sureshchandar *et al.* 2002:363; Spreng & Machoy, 1996:201). In previous research studies (Cronin & Taylor, 1992; Patterson & Johnson, 1993) on service quality and customer satisfaction, there appears to be an agreement among the researchers that service quality and customer satisfactions are separate variables that have a close relationship. Cronin and Taylor (1992:56) note that the difference between the perceived service quality and customer satisfaction is based on the notion that service quality is an attitude associated with a long term, overall evaluation, whereas customer satisfaction is associated with both transaction and long term relationship.

The results by Sureshchandar *et al.* (2002:363) indicate that service quality and customer satisfaction are independent but closely related variables (highly correlated), which means that an increase in one will lead to an increase in another. The research study conducted by Taylor and Baker (1994:172) in four service industries found that there is a positive relationship between service quality and customer satisfaction. The positive relationship of service quality and customer satisfaction is further reinforced by Sivadas and Baker-Prewitt (2000:78) who suggest that service quality influences customer satisfaction within retail stores. A research study done in the telecommunications industry also found that service quality has effects upon customer satisfaction, as the results of the study revealed a positive relationship between the two variables (Ojo, 2010:88). Customer satisfaction has been found to be dependent on service quality (Sureshchandar *et al.* 2002:373), while Cronin and Taylor (1992:65) found that service quality is an antecedent of customer satisfaction. For example, in the retail supermarket industry, an organisation that offers high levels of service quality is likely to have highly satisfied customers.

A research study done in the supermarket industry in South Africa by Beneke *et al.* (2012:37) revealed that there is no strong direct relationship between some service quality dimensions and customer satisfaction. The results of the research study by Beneke *et al.* (2012) found that only

service quality dimensions of physical aspects and personal interaction had a direct relationship to customer satisfaction; while reliability was found to be weakly related to customer satisfaction and the two dimensions of problem solving and policy had no significant effect on customer satisfaction.

The strong relationship between physical aspects and customer satisfaction concurs with the notion that supermarket customers want to shop in an environment which is clean, well structured (with particular emphasis on convenience in moving around the shop) and safety (Beneke *et al.* 2012:37). The research by Beneke *et al.* (2012:37) indicates that personal interaction had a significant relationship with customer satisfaction which shows that customers like to shop in an environment where employees are knowledgeable, friendly and willing to assist. In contrast to the research by Beneke *et al.* (2012) in South Africa, a research conducted by Singh (2013:94) in India found that policy, problem solving and reliability had a significant relationship with customer satisfaction.

2.5 THE INFLUENCE OF BIOGRAPHIC VARIABLES ON SERVICE QUALITY AND CUSTOMER SATISFACTION

Biographic information is important to an organisation as it provides managers with strategies of determining which market segment is profitable in terms of achieving greater market penetration (Ganesam-Lim *et al.* 2008:558). Biographic variables or demographics are very important to marketers to the extent that Lazer (1994:4 cited in Stratford, 1996:7) asserted the following:

“Effective marketing and pertinent, timely demographic data are inextricably intertwined. Demographic data are among the most significant marketing intelligence inputs. They are central to formulating marketing plans and strategies and are basic to the development of competitive advantage”.

Stratford (1996:8) suggests that there are three main biographic variables, namely age, gender and household income. Perceptions of service quality may differ amongst the population groups because individual consumers have different perceptions about services (Ganesam-Lim *et al.* 2008:550). The perceptions of customers on the organization’s service quality offering can be influenced by factors such as age, gender, race and income (Gagliano & Hathcote, 1994:60). The

research in Australia's train industry revealed that there was no significant effect for gender and income on perceived service quality, while age showed a significant effect as results indicated that mature respondents showed higher perceptions of service quality as compared with younger counterparts (Ganesam-Lim *et al.* 2008:556). Another research in the retail apparel specialty stores revealed that there was a significant difference in the mean scores of service quality (reliability and convenience) among the biographical variables of race, marital status and income levels with no significant difference for age and gender (Gagliano & Hathcote, 1994:60). The failure to find any gender differences in perceptions of service quality has implications for the treatment of customers in these service contexts (Ganesam-Lim *et al.* 2008:558).

Zeithaml (1985:68) found that in the supermarket industry gender, income and age influenced customers' preparation for and execution of supermarket shopping. Caruana (2002:821) reports that, as the level of education increases, the mean scores of service quality, customer satisfaction and customer loyalty decreases. Higher mean scores were reported for service quality, customer satisfaction and customer loyalty as age increases and there was no effect of gender and marital status.

Age and income were found to be the main moderators between the customer satisfaction and Customer loyalty link (Homburg & Giering, 2001:57). A study by Seiler, Rudolf & Krume (2001:137) in the banking sector revealed that there was significant difference in the mean scores of employment status, type of bank used and size of liquid assets on customer satisfaction and customer loyalty. This indicates that these biographic variables had a significant effect upon customer satisfaction and customer loyalty. The study by Seiler *et al.* (2001:137) in the banking sector further revealed that there was no significant difference in the mean scores for gender, age, length of customer relationship and number of banking relationships on customer satisfaction and customer loyalty. In their research of automobile purchases Mittal and Kamakura (2001:137) found that women had higher satisfaction levels than men at the same level of customer satisfaction, while women had a higher probability of repurchasing than men. The study further revealed that satisfaction levels increase with age and also that customers with a postgraduate degree have higher satisfaction levels than customers with only a high school certificate or less.

2.6 SUMMARY

In this chapter, the concepts of relationship marketing, service quality and customer satisfaction were explained. Relationship marketing was defined and discussed in terms of the transition from the traditional transactional marketing to relationship marketing. It is evident that for organisations to establish long term relationships with customers they have to offer higher levels of service quality. Service quality was comprehensively defined and the various frameworks developed to understand the concept were discussed. Measuring scales of service quality (SERVQUAL, SERVPERF and Retail service quality Scale) were explored. Customer satisfaction and how it is measured were examined. The chapter concluded by describing and analysing the relationship between customer satisfaction and service quality.

Since most organisations' key objective is to establish long term relationships with their customers by winning their loyalty through service quality and customer satisfaction, the next chapter will focus on customer loyalty.

CHAPTER THREE

CUSTOMER LOYALTY

3.1 INTRODUCTION

In the previous chapter relationship marketing, service quality and customer satisfaction were discussed and the literature on these three concepts revealed how important they are for an organisation to win customer loyalty, which is the customer's commitment to re-patronize and re-purchase (Brink & Berndt, 2008:41). As mentioned in the previous chapter, relationship marketing has been found to be an effective tool to win the continual patronage and loyalty of customers (Berry, 1995: 237; Bennett & Barkensjo, 2005:81).

The key pre-requisite in establishing and sustaining relationships with customers that encourages them to be loyal is service quality (Ojo, 2010:89). service quality has been found to be an important element in enhancing customers' desires to re-patronize, do repeat purchases, become less price sensitive and to spread word of mouth information to others regarding customers' positive experiences (Zeithaml *et al.* 1996:31). The influence of service quality on customer loyalty is enhanced by customer satisfaction (Caruana, 2002: 821). When customers of an organisation are satisfied, they tend to re-patronize the organisation by carrying out more transactions. As revealed by Gerpott, Rams and Schindler (2001:252), there is a direct relationship between customer satisfaction and customer loyalty.

The concept of customer loyalty has been increasingly viewed to be an important construct in the success of organisations, as there is a growing realisation that attracting new customers is much more costly than retaining existing ones (Too, Souchon & Thirkell, 2001:287). Customer retention has been found to be the key construct in the development of business relationships between the organisation and the customer (Eriksson & Vaghult, 2000:363). An organisation has to retain existing customers who are loyal to the organisation and are frequent buyers (Roberts-Lombard, 2009:71) as this can lead to an increase in income, market share and the organisation's profitability (Yuen & Chan, 2010:226).

Customer loyalty as an important construct to most contemporary organisations is shown either by behavioural intentions that include: giving recommendations to others, doing more

transactions with the organisation and the willingness to pay more; or by attitudinal intentions that include attitudinal commitment and psychological bond reflected by a customer to an organisation (Venetis & Ghauri, 2004:1577; Zeithaml *et al.* 1996:38; Yuen & Chan, 2010:225). Considering the competitive retail supermarket industry, Beneke *et al.* (2011:30), suggest that building and establishing customer loyalty is important for supermarkets, as loyal customers have an emotional bond with the organisation. It is imperative for organisations, including retail supermarkets, to understand and have in-depth knowledge on the subject of customer loyalty and how it is measured.

This chapter will, therefore, present a detailed discussion on customer loyalty, which will commence with a brief discussion of customer retention. Thereafter the relationship between customer loyalty, service quality, customer satisfaction and biographic variables will be examined.

3.2 CUSTOMER RETENTION

In an environment where markets are saturated and marketing costs are rising, the value of retaining existing customers has become more important for contemporary organisations (Hoffman *et al.* 2005:339). Gerpott *et al.* (2001:253) define customer retention as maintaining the business relationship developed between the organisation and the customer.

Customer retention has been interpreted in different ways by both academics and marketing practitioners (Gerpott *et al.* 2001:252) and has evolved over the years as an important managerial subject, especially in a market which has reached its limit of attracting new customers (Ahmad & Buttle, 2002:149). Contemporary organisations who are applying relationship marketing in their management practices are using customer retention as their primary objective (Ang & Buttle, 2006:84).

Organisations that have made customer retention their main objective have created a competitive advantage over their competitors, as customers will develop loyalty through re-patronising and recommending the organisation to others. The beneficial effects of customer retention have enticed most organisations to focus on developing relationships with their existing customers (Ennew & Binks, 1996:219).

3.2.1 Benefits of customer retention

Various benefits of customer retention (namely, lower costs of acquiring new customers, improved profitability, free referrals from customers, sale of products at a premium) have been identified in the field of relationship marketing (Ahmed & Buttle, 2001:36). Hoffman *et al.* (2005:339) suggest that customer retention has a more significant effect on the organisation's profits than the firm's market share, economies of scale and other constructs that enhance an organisation's competitive advantage.

Customer retention enables the organisation to increase its revenue because of the increase in sales volume and the reduction of costs in generating those revenues (Ahmad & Buttle, 2001:36). When customers are retained, the costs of maintaining the relationship between the organisation and the customer decrease as both parties understand each other (Ang & Buttle, 2006:85). The most important benefit of retaining customers is the potential of developing a partnership between the organisation and the customer, rather than engaging in a mere transaction. This collaborative partnership has been found to be profitable to the organisation (Eriksson & Vaghult, 2000:36).

3.2.2 The link between customer retention and customer loyalty

There has been confusion in the use of the concepts of customer retention and customer loyalty. Some organisations view customer retention as a substitute for customer loyalty (Colgate, Stewart & Kinsella, 1996:24), while others suggest that customer retention and customer loyalty are not the same (Kumar & Reinartz, 2006:98) as organisations have to retain existing customers who are loyal to the organisation and are frequent buyers (Roberts-Lombard, 2009:71). Prior to developing loyalty to an organisation, a customer has to go through a process of forming good relationships with that particular organisation (De Meyer, 2008:160). For example, in the retail supermarket industry, a customer may frequently visit a certain supermarket because of convenience or inertia, not necessarily because they are loyal to it. In order for the customer to be loyal to that supermarket, a relationship will have to be developed.

A customer's re-patronising of an organisation does not guarantee the organisation that the customer is loyal; instead, the customer might stay with the organisation because of habit,

convenience or inertia without any loyalty to it (Hill & Alexander, 2000:19; Kumar & Reinartz, 2006:98). This argument is supported by Gerpott *et al.* (2000:25) who suggest that a business relationship can be “maintained involuntarily” because customers have barriers that prevent them from switching organisations or getting rid of a service. An example in the retail supermarket industry is of customers who frequently visit a supermarket because it is closer to where they reside and they have no other alternative supermarket but given a better alternative to choose from, they would opt for it.

The distinction between customer loyalty and customer retention can be derived from their meanings whereby ‘retention’ points to customers repurchasing again from the organisation, whereas ‘loyalty’ refers to a customer having a positive emotional or psychological disposition toward the organisation (Kumar & Reinartz, 2006:98). Beneke *et al.* (2012:31) suggest that the key variable in explaining customer retention is customer loyalty. Customer loyalty will be further discussed in the following section.

3.3 CUSTOMER LOYALTY

The ascendancy of relationship marketing has caused customer loyalty to become an increasingly valuable aspect of marketing in the 21st century (Beneke *et al.* 2011:31). Customer loyalty provides an organisation with a competitive edge and is important for the growth and performance of the organisation (Beneke *et al.* 2012:31). Customer loyalty management has become more significant in order to maintain not only customers’ repeat purchase trends but also to maintain lifetime patronage to the supermarket (Beneke *et al.* 2011:30). The survival of an organisation is dependant upon established loyalty among customers (Gremler & Brown, 1996:171) as loyal customers are believed to be the most powerful “marketing force” that an organisation may have because they provide recommendations and positive word of mouth information about the organisation (Bowen & Chen, 2001:213). In the next section customer loyalty will be defined, its dimensions and benefits discussed, and various types of loyalty will be examined.

3.3.1 Customer loyalty defined

Bowen and Chen (2001:213) suggest that customer loyalty is difficult to define. Gremler and Brown (1996:171) are also of the opinion that academic and marketing practitioners have had difficulties in defining what a loyal customer means and little progress has been made to determine variables that influence customer loyalty. In spite of these assertions several authors have attempted to define customer loyalty in various ways as outlined below:

- Brink and Berndt (2008:41) define customer loyalty as the “biased behavioural response, expressed over time by customers with respect to one supplier out of a set of suppliers, which is a function of decision making and evaluative processes resulting in brand or store commitment”. For example, in the retail supermarket industry a customer will favour a certain supermarket over other supermarkets after going through an evaluative process of the supermarket’s service offerings.
- Thureau and Hansen (2000:31) define customer loyalty as a positive attitude that a customer has towards an organisation combined with a willingness to do more transactions. For example, in the retail supermarket industry a customer will show a positive attitude towards a particular supermarket with the willingness to continue doing more transactions with that supermarket.
- Oliver (1999:34) gives a detailed definition of customer loyalty, taking into consideration all the factors that influence customer loyalty. He defines it as a total commitment to repurchase or re-patronize a favoured product/service consistently in the future, thereby causing repetitive buying of the same brand or same brand set despite situational influences and marketing efforts having the potential to cause switching behaviour. For example, in the retail supermarket industry a customer will show total commitment to repurchase from the favoured supermarket consistently despite factors that can cause him/her to switch supermarkets.

The above definitions of customer loyalty reveal the total commitment that customers show to a particular organisation, with the willingness to do more transactions and further refer the organisation to others. Customer loyalty is of utmost importance to contemporary organisations

because of the benefits that it brings (Beneke *et al.* 2011:31; Too *et al.* 2001:287; Bloemer *et al.* 1998:1085). Benefits of customer loyalty will be briefly discussed in the following section.

3.3.2 Benefits of customer loyalty

Customer loyalty is viewed as the underlying objective of marketing planning and is the foundation for establishing competitive advantage (Dick & Basu, 1994:99). Kumar and Reinartz (2006:86) suggest that the best customers that an organisation can have are those who are loyal to the organisation because they are less costly, and are price insensitive as they are willing to pay more than other customers pay. These loyal customers are believed to be the ‘word of mouth’ marketers for the organisation, as they will refer the organisation to their friends and relatives (Kumar & Reinartz, 2006:86). Some of the benefits of customer loyalty, as briefly described below, include increased revenue and decrease in costs of serving loyal customers, word of mouth marketing and the organisation’s stability.

- ***Increased revenue and decrease in costs of serving loyal customers***

Reichheld (1993:64;71) suggests that an organisation that provides quality services to its customers will gain their loyalty and market share which will lead to revenue growth because of repeat purchases and referrals, while the cost of acquiring and serving customers decreases. Maharaj (2008:2) further notes that customers who are loyal can provide the business with consistent revenue. For example, in the retail supermarket industry loyal customers will tend to do most of their groceries at a respected supermarket, thereby increasing the supermarket’s sales revenue.

- ***Word of mouth marketing***

Loyal customers can be the strongest advocates for an organisation because they can be word of mouth marketers who go around spreading positive message about the organisation’s activities to their friends and family members; this lessens the cost of acquiring new customers for the organisation (Kumar & Reinartz, 2006:88). For example, in the retail supermarket industry loyal customers will refer the supermarket to their friends and relatives, and this will lessen the respective supermarket’s cost of acquiring new customers.

- ***Business stability***

As previously mentioned, customer loyalty is a crucial component for the growth and success of an organisation as it provides the base for a sustained competitive advantage (Beneke *et al.* 2012: 31). For example, in the retail supermarket industry a supermarket with loyal customers will experience sustained stability and profitability as customers will continue to frequent the supermarket.

Therefore, it is important for organisations to understand the dimensions that measure customer loyalty and these dimensions are further discussed in the next section.

3.3.3 Dimensions of measuring customer loyalty

The definitions above illustrate that customer loyalty may take the form of behavioural loyalty and attitudinal loyalty. Behavioural loyalty has been described as the observed action that customers show towards a certain product or service; whereas attitudinal loyalty is described as customers' perceptions and attitudes towards a certain product or service (Kumar & Reinartz, 2006:163). Srinivason, Anderson and Ponnayolu (2002:42) suggest that both factors of attitudinal and behavioural loyalty should be included whenever loyalty is being considered as customers' favourable attitudes will be reflected in repeat buying behaviour.

3.3.3.1 Behavioural loyalty

Loyalty has been described as some form of behaviour (such as repeat purchasing) that is directed towards a particular entity or brand over a certain period of time (Gremler & Brown, 1996:172). The behavioural dimension of loyalty takes into consideration consistent, repetitious purchase behaviour as an indicator of loyalty (Beneke *et al.* 2011:31). Zeithaml *et al.* (1996:34) note that behavioural loyalty occurs when customers of an organisation (supermarket) speak positively about and recommend the organisation to others, choose the organisation over other organisations (supermarkets), increase the quantity of their purchases and pay prices above the normal.

Dick and Basu (1994:100) argue that the description of loyalty in terms of behavioural dimensions is not enough to explain the underlying factors of repeat purchase. This is further

argued by Gremler and Brown (1996:71) who suggest that, although some researchers continue to measure loyalty in terms of behavioural dimension only, the concept is more than just a behavioural dimension because repeat purchases are influenced by a “strong internal disposition” that forms a customer’s attitude towards an organisation (Dick & Basu, 1994:100).

3.3.3.2 Attitudinal loyalty

The use of behaviour only as an indicator of loyalty has been criticised (Gremler & Brown, 1996:71). Gremler and Brown (1996:172) argue that loyalty is born out of a conscious evaluation of competing organisations. Uncles, Dowling and Hammond (2003:295) assert that a strong attitudinal commitment is the key to true loyalty. Gremler and Brown (1996:295) describe preferences and intentions as two dimensions of attitudinal loyalty. This means that attitudes are measured by asking how much customers say they like a particular organisation, feel committed to it, will recommend it to others, and the positive beliefs and feelings they have about it compared with other competing organisations (Uncles *et al.* 2003:296).

Customer loyalty is, therefore, a combination of customers’ behaviour and attitudes towards an organisation.

3.3.3.3 Combined dimensions of customer loyalty

Dick and Basu (1994:100) describe customer loyalty as the relationship between relative attitude toward a store and patronage behaviour. This is illustrated in Figure 3.1 which shows four specific conditions related to loyalty. The nature of the attitude that a customer reflects towards an organisation can be a strong influencer of repeat patronage, rather than when the attitude toward an organisation is determined in isolation (Dick & Basu, 1994:101). The extent of the relative attitude of the customer and their repeat patronage determines whether the customer is loyal to the organisation or not, as indicated in Figure 3.1 (Dick & Basu, 1994:101).

The four conditions are briefly described:

- *No loyalty*

Figure 3.1 show that a customer with low repeat patronage and low relative attitude has no loyalty to an organisation. This is attributed to the dynamics of the market place where

competing organisations are regarded as similar (Dick & Basu, 1994:101). For example, in the retail supermarket industry customers may show no loyalty to a supermarket as they consider all supermarkets in a certain environment similar in terms of service provision.

- *Spurious loyalty*

A situation where there is low relative attitude accompanied with high repeat patronage represents spurious loyalty as is reflected in Figure 3.1. This condition is characterised by non attitudinal influences on behaviour (Dick & Basu, 1994:102). For example, in the retail supermarket industry customers may do repeat patronage to a particular supermarket because of convenience (ease of accessing the supermarket).

- *Latent loyalty*

A customer with high relative attitude and low repeat patronage has latent loyalty as shown in Figure 3.1. This condition is influenced by subjective values and situational factors in determining the customer's patronage behaviour (Dick & Basu, 1994:102). For example, in the retail supermarket industry a customer may have a high relative attitude towards a particular supermarket but may decide to patronise other supermarkets because of other external factors like shopping companions who have different shopping preferences than them.

- *Loyalty*

The most preferred condition occurs when there is high relative attitude and high repeat patronage. This condition represents loyalty as depicted in Figure 3.1 (Dick & Basu, 1994:104). For example in the supermarket retail industry, a customer will be driven by a strong internal disposition to repeatedly purchase at a particular supermarket compared with others.

Figure 3. 1 Four specific conditions related to loyalty

		Repeat Patronage	
		High	Low
Relative Attitude	High	Loyalty	Latent loyalty
	Low	Spurious loyalty	No loyalty

Source: Adapted from Dick and Basu (1994:101)

3.3.4 Measurement of customer loyalty

Customer loyalty can be measured by using three approaches, namely behavioural measures, attitudinal measures and composite measures (Beneke *et al.* 2011:31). Bloemer *et al.* (1998:1082) developed the composite scale of measuring customer loyalty. A composite measure of loyalty consists of a combination of behavioural and attitudinal dimensions (Figure 3.1) as proposed by Dick and Basu (1994), who suggest that loyalty is determined by the strength of the relationship between relative attitude and repeat patronage (Beneke *et al.* 2011:32).

In previous studies customer loyalty has been measured not according to the composite measurement of loyalty but as a measure of re-purchase intentions of customers (Cronin & Taylor, 1992:67; Taylor & Baker, 1994:174). Zeithaml *et al.* (1996:34) argue that customer loyalty has been measured in a one dimensional way (for example, Cronin & Taylor, 1992; Taylor & Baker, 1994:174) rather than different dimensions that expose various types of behaviour.

Customer loyalty can be measured through customers' preference for an organisation over others, the willingness of a customer to do more transactions with the organisation in the future or through the recommendation of the organisation to others (Zeithaml *et al.* 1996:34). Repetitious purchasing behaviour is a good example of a behavioural measurement of customer

loyalty while the emotional and psychological bond that a customer has towards an organisation represents the attitudinal measurements of customer loyalty (Beneke *et al.* 2011:32).

Customer loyalty can also be measured through customers' complaining behaviour. Zeithaml *et al.* (1996:34) suggest that, when customers perceive an organisation's service as inferior, they will show behaviour that indicates negative intentions like defecting from the organisation to spending less. Such behaviour can be revealed through customer complaints which can be expressed to the organisation or to other customers. Therefore, in measuring customer loyalty, it is important for an organisation to understand both the favourable and unfavourable behavioural intentions of customers (Zeithaml *et al.* 2006:34).

In consideration of the inadequacies in measuring customer loyalty by previous researchers, Zeithaml *et al.* (1996:31-46) proposed a multi-dimensional framework for measuring customer loyalty in services. This framework was further refined and used by Bloemer *et al.* (1998:1086). The framework consists of four dimensions which include: word of mouth communications, purchase intentions, price sensitivity and complaining behaviour (Bloemer *et al.* 1998:1086; Zeithaml *et al.* 1996:31-46).

This framework of measuring customer loyalty as illustrated in Table 3.1 was adapted for this study. Since customer loyalty consists of behavioural and attitudinal dimensions, Bloemer *et al.* (1998:1086) notes that Zeithaml *et al.* (1996) included both of these aspects in their behavioural intentions battery to measure customer loyalty. A loyal customer for this study will be the one who has favourable attitudes towards the supermarket, commits to re-purchase from the supermarket, recommend the supermarket to others and is relatively price insensitive.

Table 3. 1 Dimensions of customer loyalty

Word of mouth communication:

- Say positive things about ABC to other people
- Recommend ABC to someone who seeks your advice.
- Encourage friends and relatives to do business with ABC

Purchase intentions:

- Consider ABC your first choice to buy.....services.
- Do more business with ABC in the next few years.
- Do less business with ABC in the next few years.

Price sensitivity:

- Take some of your business to a competitor who offers more attractive prices.
- Continue to do business with a competitor who offers attractive prices.
- Pay higher price than competitors charge for the benefits you currently receive from ABC.

Complaining behaviour:

- Switch to a competitor if you experience a problem with ABC's service.
- Complain to other consumers if you experience a problem with ABC's service.
- Complain to external agencies, such as the complaints commission, if you experience a problem with ABC's service.
- Complain to ABC's employees if you experience a problem with ABC's service.

Source: Bloemer *et al.* (1998:1086); Zeithaml *et al.* (1996:38)

3.4 THE RELATIONSHIP BETWEEN CUSTOMER LOYALTY AND SERVICE QUALITY

There has been little empirical research to study the relationship between service quality and customer loyalty (Bloemer *et al.* 1998:1086). The question of whether there is a direct relationship between service quality and customer loyalty has remained unclear (Bloemer *et al.*, 1998:1083). Different research studies came up with contrasting results, with Zeithaml *et al.* (1996:44) finding a direct relationship while Cronin and Taylor (1992:55) found that service quality has an indirect relationship with customer loyalty. This is supported by Caruana (2002:819) who argues that service quality is linked to customer loyalty via customer satisfaction. Sivadas and Baker-Prewitt (2000:79) assert that service quality has an influence on relative attitude (favourable) and the likelihood of a customer recommending the organisation to their friends; and the customers that recommend the organisation to others tend to be loyal. For example, in the retail supermarket industry a customer will show a favourable relative attitude towards a supermarket because of its good service quality, leading to his/her recommendation of the supermarket to others. Previous research studies (Perez, Abad, Carrillo & Fernandez, 2007:134; Choudhury, 2013:529) found various service quality dimensions to have a significant strong relationship with customers' purchase intentions.

Zeithaml *et al.* (1996:44) suggest that for an organisation to win the loyalty of customers, it has to improve service quality which can increase customers' favourable behavioural intentions. High levels of service quality lead to customer loyalty as it enhances customers' trust and satisfaction towards the organisation; in other words, positive perceptions of service quality increase the chance of customers being loyal to the organisation (Yuen & Chen, 2010:226). Bloemer *et al.* (1998:1089) suggest that there is a gap in the marketing literature pertaining to the relationship between service quality dimensions and customer loyalty dimensions. Since the relationship between service quality and customer loyalty has not been extensively explored, especially in the South African context, one of the objectives of this research is to determine the relationship between the dimensions of service quality and customer loyalty in the retail supermarket industry.

3.5 THE RELATIONSHIP BETWEEN CUSTOMER LOYALTY AND CUSTOMER SATISFACTION

Past research studies have revealed evidence of a positive relationship between customer satisfaction and customer loyalty. There is a general consensus among researchers that customer loyalty is determined by customer satisfaction though the relationship is not linear (Bowen & Chen, 2001; Grönroos, 2000; Hallowell, 1996:28; Jones & Sasser, 1995; Sivadas & Baker-Prewitt, 2000:73). For example, in the retail supermarket industry customers who are satisfied with the supermarket's offering will show commitment to a particular supermarket more than they do to other supermarkets.

The key to achieving customer loyalty is the complete satisfaction of customers which enhances the organisation's financial performance in the long term (Jones & Sasser, 1995:3). This is supported by Caruana (2002: 817) who suggests that complete satisfaction with a service does result in customer loyalty. Satisfaction enhances loyalty as it is the requirement for maintaining a positive attitude, recommending the organisation to others and for repurchasing from the organisation (Singh, 2006:3). A research by Grönroos (2000:128) found that "very satisfied" customers have a high repurchasing rate and a high tendency for positive word of mouth comments. Since the relationship between customer loyalty and customer satisfaction is nonlinear and asymmetric, repeat purchasing behaviour on its own will not lead to customer loyalty (Bowen & Chen, 2001:215; Sivadas & Baker-Prewitt, 2000:75).

Cronin and Taylor (1992:55) found that customer satisfaction has a direct effect on customers' repurchase intentions, while Caruana (2002:817) avers that customer satisfaction is a mediator in the relationship between service quality and customer loyalty. Although a direct relationship has been found in previous studies between customer satisfaction and customer loyalty (Bowen & Chen, 2001; Cronin & Taylor, 1992; Grönroos, 2000; Hallowell, 1996:28), a gap has been identified in marketing literature in which the relationship between customer satisfaction and customer loyalty has not been extensively tested in the South African retail supermarket context. In consideration of other factors like convenience, a customer may repurchase from a supermarket not because they are satisfied but because they reside close to the supermarket.

Hence one of the research objectives in this study is to determine the relationship between customer satisfaction and the dimensions of customer loyalty.

3.6 THE RELATIONSHIP BETWEEN CUSTOMER LOYALTY AND BIOGRAPHIC VARIABLES

Reichheld (1993:66) notes that customers' demographics and their purchase history will determine their intrinsic loyalty. People who have been referred to an organisation by others tend to be more loyal than those who purchase because of an advertisement. Customers who purchase at a standard price are more loyal than those who purchase on price promotion. Home owners, middle aged population groups and rural folks are more loyal than other demographic groups, while highly mobile individuals are naturally disloyal due to the interruptions in their business relations every time they migrate.

Caruana (2002:822) notes that education, occupation and income are all important elements of social class which have an influence on customer loyalty. Knowledge of whether different social class groupings have different customer loyalty levels has considerable marketing implications for a particular organisation. This may provide information to the organisation on the profitable market segments on which it should focus its resources (Caruana, 2002:823). For example, in the retail supermarket industry in Grahamstown the loyalty of customers to Supermarkets A and B is dependent upon the demographics of the town. It is highly likely that most customers who constitute the student population are inherently disloyal to the two supermarkets as they are mobile and mobile customers are highly disloyal (Reichheld, 1993:66). Home owners and permanent residents of the town are highly likely to be loyal to any of the two supermarkets.

3.7 SUMMARY

This chapter presented the concepts of 'customer retention' and 'customer loyalty', two concepts that are of high importance to contemporary organisations. The link between customer retention and customer loyalty was explained. The benefits of customer retention and customer loyalty to contemporary organisations were outlined. Customer loyalty measurement for this study was discussed according to behavioural and attitudinal dimensions that customers reflect towards an organisation. A framework proposed by Zeithaml *et al.* (1996) and further refined by Bloemer *et*

al. (1998) was adapted to measure customer loyalty for this study. The relationships between customer loyalty and service quality; customer loyalty and customer satisfaction and customer loyalty and biographic variables were discussed respectively.

The methods used to measure and determine customer loyalty and the relationship it has with other variables in this study will be discussed in the next chapter of Research Design and Methodology.

CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

In the previous chapters literature pertaining to relationship marketing, service quality, customer satisfaction and customer loyalty was discussed. This Chapter is an elaboration of the research design and methodology used in this study, as briefly introduced in Chapter one.

Firstly, the purpose, aim and objectives of this study will be stated, followed by the research hypotheses. The research design, which is the plan and structure of the empirical study to obtain solutions to research objectives, will be discussed. Thereafter an overview of positivist and phenomenological paradigms will be provided, with a detailed discussion on the positivistic paradigm relevant to this study. An overview of the methods that were used to collect and analyse the data will be discussed. Finally, ethical considerations that were applied during the whole research process and the chapter summary will be outlined.

4.2 PURPOSE OF THE RESEARCH

The main purpose of this research study, as stated in Chapter one, is to determine the relationships between service quality, customer satisfaction and customer loyalty within the retail supermarket industry in Grahamstown. The relationship between service quality, customer satisfaction and customer loyalty is depicted in Figure 4.1. To achieve the main purpose of this study, an empirical investigation was conducted with the two main retail supermarkets in Grahamstown.

The aim of the empirical investigation was to give effect to the research objectives as stated in the next section.

4.3 RESEARCH OBJECTIVES AND HYPOTHESES

In Chapter one the research objectives and hypotheses were stated and these will be elaborated on in this chapter. Research objectives are defined in terms of the necessary information that is desired to provide a solution to the research problem. In simple terms they are a “restatement of

what the researchers need to know so as to make a research decision” (McDaniel & Gates, 1996:40-41). Objectives are formulated into testable statements called hypotheses, which can be defined as a “logically conjectured relationship between two or more variables expressed in the form of testable statements” (Sekaran, 1992:79).

To achieve the main purpose of this study, the following research objectives were stated, namely to:

- provide a literature overview pertaining to relationship marketing, service quality, customer satisfaction and customer loyalty, as well as the relationships among them, with particular reference to the retail supermarket industry in Grahamstown;
- determine customers’ perceptions of service quality in the selected retail supermarkets;
- assess the perceptions of customer satisfaction levels of the selected retail supermarkets’ customers;
- ascertain the perceptions of customer loyalty levels of the selected retail supermarkets’ customers;
- determine the relationships between service quality, customer satisfaction and customer loyalty;
- determine the difference in average scores of service quality, customer satisfaction and customer loyalty dimensions on selected biographic variables, namely age, population groups, gender, education, occupational levels, monthly income and supermarkets; and
- provide recommendations that can be used by the Grahamstown supermarket industry.

Based on the above mentioned research objectives, the following hypotheses were stated for this study, namely:

Hypothesis One: Relationship between service quality and customer satisfaction

- H_0^1 : There is no statistically significant linear relationship between the various dimensions of service quality and customer satisfaction.
 H_a^1 : There is a statistically significant linear relationship between the various dimensions of service quality and customer satisfaction.

Sub-hypotheses

- $H_0^{1.1}$: There is no statistically significant linear relationship between service quality (physical aspects) and customer satisfaction.
 $H_a^{1.1}$: There is a statistically significant linear relationship between service quality (physical aspects) and customer satisfaction.
- $H_0^{1.2}$: There is no statistically significant linear relationship between service quality (reliability) and customer satisfaction.
 $H_a^{1.2}$: There is a statistically significant linear relationship between service quality (reliability) and customer satisfaction.
- $H_0^{1.3}$: There is no statistically significant linear relationship between service quality (personal interaction) and customer satisfaction.
 $H_a^{1.3}$: There is statistically significant linear relationship between service quality (personal interaction) and customer satisfaction.
- $H_0^{1.4}$: There is no statistically significant linear relationship between service quality (problem solving) and customer satisfaction.
 $H_a^{1.4}$: There is a statistically significant linear relationship between service quality (problem solving) and customer satisfaction.
- $H_0^{1.5}$: There is no statistically significant linear relationship between service quality (policy) and customer satisfaction.
 $H_a^{1.5}$: There is a statistically significant linear relationship between service quality (policy) and customer satisfaction.

Hypothesis Two: Relationship between service quality and customer loyalty

- H_0^2 : There is no statistically significant linear relationship between the various dimensions of service quality and the dimensions of customer loyalty.
 H_a^2 : There is a statistically significant linear relationship between the various dimensions of service quality and the dimensions of customer loyalty.

Sub-hypotheses

- $H_0^{2.1a-e}$: There is no statistically significant linear relationship between the various dimensions of service quality and customer loyalty (complaining behaviour).
 $H_a^{2.1a-e}$: There is a statistically significant linear relationship between the various dimensions of service quality and customer loyalty (complaining behaviour).
- $H_0^{2.2a-e}$: There is no statistically significant linear relationship between the various dimensions of service quality and customer loyalty (price sensitivity).
 $H_a^{2.2a-e}$: There is a statistically significant linear relationship between the various dimensions of service quality and customer loyalty (price sensitivity).
- $H_0^{2.3a-e}$: There is no statistically significant linear relationship between the various dimensions of service quality and customer loyalty (purchase intentions).
 $H_a^{2.3a-e}$: There is statistically significant linear relationship between the various dimensions of service quality and customer loyalty (purchase intentions).
- $H_0^{2.4a-e}$: There is no statistically significant linear relationship between the various dimensions of service quality and customer loyalty (word of mouth communication).
 $H_a^{2.4a-e}$: There is a statistically significant linear relationship between the various dimensions of service quality and customer loyalty (word of mouth communication).

Hypothesis Three: Relationship between customer satisfaction and customer loyalty

- H_0^3 : There is no statistically significant linear relationship between customer satisfaction and the dimensions of customer loyalty.

H_a^3 : There is a statistically significant linear relationship between customer satisfaction and the dimensions of customer loyalty.

Sub-hypotheses

- $H_0^{3.1}$: There is no statistically significant linear relationship between customer satisfaction and customer loyalty (word of mouth communication).

$H_a^{3.1}$: There is a statistically significant linear relationship between customer satisfaction and customer loyalty (word of mouth communication).

- $H_0^{3.2}$: There is no statistically significant linear relationship between customer satisfaction and customer loyalty (purchase intentions).

$H_a^{3.2}$: There is a statistically significant linear relationship between customer satisfaction and customer loyalty (purchase intentions).

- $H_0^{3.3}$: There is no statistically significant linear relationship between customer satisfaction and customer loyalty (price sensitivity).

$H_a^{3.3}$: There is a statistically significant linear relationship between customer satisfaction and customer loyalty (price sensitivity).

- $H_0^{3.4}$: There is no statistically significant linear relationship between customer satisfaction and customer loyalty (complaining behaviour).

$H_a^{3.4}$: There is a statistically significant linear relationship between customer satisfaction and customer loyalty (complaining behaviour).

Hypothesis Four: The difference in the average scores of service quality dimensions for the selected biographic variables

- H_0^4 There is no significant difference in the average scores of the respective service quality dimensions between the selected biographical variables.

H_a^4 There is a significant difference in the average scores of the respective service quality dimensions between the selected biographical variables.

Sub-hypotheses

- $H_0^{4.1a-e}$ There is no significant difference in the average scores of the respective service quality dimensions between the various age groups.

$H_a^{4.1a-e}$ There is a significant difference in the average scores of the respective service quality dimensions between the various age groups.

- $H_0^{4.2a-e}$ There is no significant difference in the average scores of the respective service quality dimensions between the various population groups.

$H_a^{4.2a-e}$ There is a significant difference in the average scores of the respective service quality dimensions between the population groups.

- $H_0^{4.3a-e}$ There is no significant difference in the average scores of the respective service quality dimensions between gender.

$H_a^{4.3a-e}$ There is a significant difference in the average scores of the respective service quality dimensions between gender.

- $H_0^{4.4a-e}$ There is no significant difference in the average scores of the respective service quality dimensions between the levels of education.

$H_a^{4.4a-e}$ There is a significant difference in the average scores of the respective service quality dimensions between the levels of education.

- $H_0^{4.5a-e}$ There is no significant difference in the average scores of the respective service quality dimensions between the various occupations.

$H_a^{4.5a-e}$ There is a significant difference in the average scores of the respective service quality dimensions between the various occupations.

- $H_0^{4.6a-e}$ There is no significant difference in the average scores of the respective service quality dimensions between the monthly incomes.
 $H_a^{4.6a-e}$ There is a significant difference in the average scores of the respective service quality dimensions between the monthly incomes.
- $H_0^{4.7a-e}$ There is no significant difference in the average scores of the respective service quality dimensions between the two supermarkets.
 $H_a^{4.7a-e}$ There is a significant difference in the average scores of the respective service quality dimensions between the two supermarkets.

Hypothesis five: The difference in average score of customer satisfaction and selected biographic variables

- H_0^5 There is no significant difference in the average scores for customer satisfaction between the selected biographical variables.
 H_a^5 There is a significant difference in the average scores for customer satisfaction between the selected biographical variables.

Sub-hypotheses

- $H_0^{5.1}$ There is no significant difference in the average scores for customer satisfaction between the various age groups.
 $H_a^{5.1}$ There is a significant difference in the average scores for customer satisfaction between the various age groups.
- $H_0^{5.2}$ There is no significant difference in the average scores for customer satisfaction between the various population groups.
 $H_a^{5.2}$ There is a significant difference in the average scores for customer satisfaction between the various population groups.
- $H_0^{5.3}$ There is no significant difference in the average scores for customer satisfaction between gender.
 $H_a^{5.3}$ There is a significant difference in the average scores for customer satisfaction between gender.

- $H_0^{5.4}$ There is no significant difference in the average scores for customer satisfaction between the levels of education.
 $H_a^{5.4}$ There is a significant difference in the average scores for customer satisfaction between the levels of education.
- $H_0^{5.5}$ There is no significant difference in the average scores for customer satisfaction between the various occupations.
 $H_a^{5.5}$ There is a significant difference in the average scores for customer satisfaction between the various occupations.
- $H_0^{5.6}$ There is no significant difference in the average scores for customer satisfaction between the monthly incomes.
 $H_a^{5.6}$ There is a significant difference in the average scores for customer satisfaction between the monthly incomes.
- $H_0^{5.7}$ There is no significant difference in the average scores of customer satisfaction between the two supermarkets.
 $H_a^{5.7}$ There is a significant difference in the average scores of customer satisfaction between the two supermarkets.

Hypothesis Six: The difference in average score of customer loyalty dimensions and selected biographic variables

- H_0^6 There is no significant difference in the average scores for various dimensions of customer loyalty between the selected biographic variables.
 H_a^6 There is a significant difference in the average scores for various dimensions of customer loyalty between the selected biographic variables.

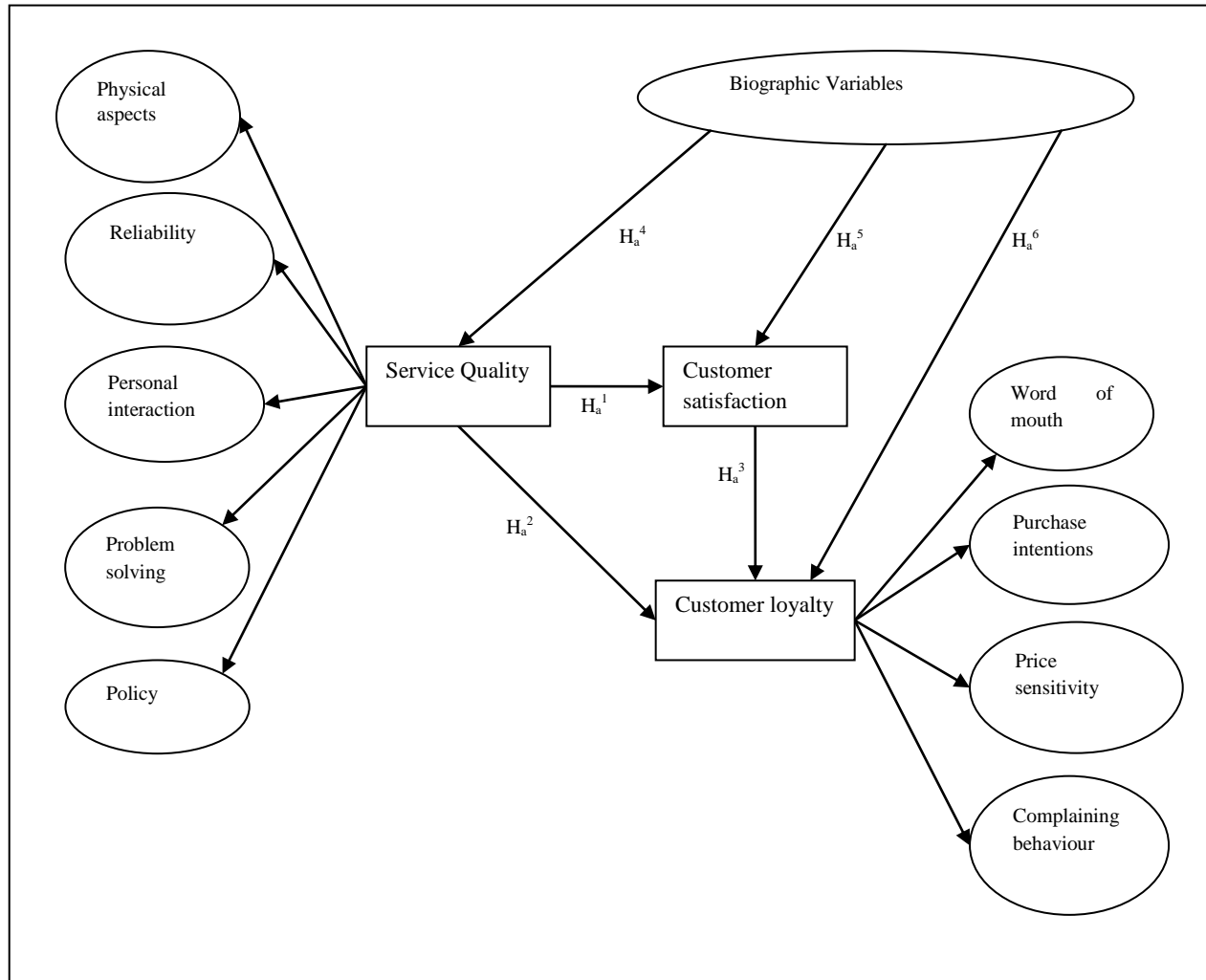
Sub-hypotheses

- $H_0^{6.1a-d}$ There is no significant difference in the average scores for customer loyalty between the various age groups.
 $H_a^{6.1a-d}$ There is a significant difference in the average scores for customer loyalty between the various age groups.

- $H_0^{6.2a-d}$ There is no significant difference in the average scores for customer loyalty between the various population groups.
 $H_a^{6.2a-d}$ There is a significant difference in the average scores for customer loyalty between the various population groups.
- $H_0^{6.3a-d}$ There is no significant difference in the average scores for customer loyalty between gender.
 $H_a^{6.3a-d}$ There is a significant difference in the average scores for customer loyalty between gender.
- $H_0^{6.4a-d}$ There is no significant difference in the average scores for customer loyalty between the levels of education.
 $H_a^{6.4a-d}$ There is a significant difference in the average scores for customer loyalty between the levels of education.
- $H_0^{6.5a-d}$ There is no significant difference in the average scores for customer loyalty between the various occupations.
 $H_a^{6.5a-d}$ There is a significant difference in the average scores for customer loyalty between the various occupations.
- $H_0^{6.6a-d}$ There is no significant difference in the average scores for customer loyalty between the monthly incomes.
 $H_a^{6.6a-d}$ There is a significant difference in the average scores for customer loyalty between the monthly incomes.
- $H_0^{6.7a-d}$ There is no significant difference in the average scores for customer loyalty between the two supermarkets.
 $H_a^{6.7a-d}$ There is a significant difference in the average scores for customer loyalty between the two supermarkets.

The hypotheses of this research are depicted in the conceptual framework, as shown in Figure 4.1.

Figure 4. 1 Conceptual framework



Source: Dabholkar *et al.* (1996); Taylor and Baker (1994); Bloemer *et al.* (1998)

4.4 RESEARCH DESIGN

The research design is defined as the “plan and structure of investigation so conceived as to obtain answers to research questions” (Copper & Schindler, 2006:138). It constitutes the planning procedures of collection, measurement and analysis of data (Copper & Schindler, 2006:138). Research design starts with the determination of the research paradigm, a framework that guides how research should be conducted (Collis & Hussey, 2009:11).

All research is based on a particular paradigm and there are two main paradigms of research that have been identified, namely the positivist and phenomenological research paradigms.

In the following sections the research paradigm, the methods of data collection, methods of data analysis and the research ethics that were utilised in this study will be discussed.

4.5 RESEARCH PARADIGM

A paradigm is defined as a “world view underlying the theories and methodology of a particular scientific subject” (Oxford Dictionaries, 2013). A research paradigm as a philosophical approach guides a researcher on how to conduct a scientific research based on the assumptions and beliefs that people ascribe to the world and the nature of knowledge (Collis & Hussey, 2009:55). A phenomenological paradigm is based on the assumption that social reality is in the perceptions of people, subjective and numerous (Collis & Hussey, 2009:57). This research paradigm searches for the real meaning of the experience associated with the problem (Han, 2006:30). The phenomenological paradigm tends to be associated with small samples, generation of theories, producing of rich subjective qualitative data and results that are low in reliability but high in validity (Collis & Hussey, 2009:62).

In contrast, a positivistic paradigm is based on the assumption that social reality is independent and the objective is to test theory through empirical research (observation and experiment). A positivistic paradigm, as compared with the phenomenological approach, uses large samples, is more concerned with testing of hypotheses and is related to quantitative methods of analysis as it is based on the assumption that social phenomena can be measured (Collis & Hussey, 2009:56). The differences between the phenomenological and positivistic research paradigms are summarised in Table 4.1.

Table 4. 1 Distinguishing characteristics of Positivistic and Phenomenological paradigms

Question	Positivistic (quantitative)	Phenomenological (qualitative)
What was the purpose of the research?	<ul style="list-style-type: none"> ● To explain and predict ● To confirm and validate ● To test theory 	<ul style="list-style-type: none"> ● To describe and explain ● To explore and interpret ● To build theory
What was the nature of the research process?	<ul style="list-style-type: none"> ● Focused ● Known variables ● Established guidelines ● Predetermined methods ● Somewhat context- free ● Detached view 	<ul style="list-style-type: none"> ● Holistic ● Unknown variables ● Flexible guidelines ● Emergent methods ● Context- bound ● Personal view
What was the nature of the data and how was it collected?	<ul style="list-style-type: none"> ● Numeric ● Representative, large sample ● Standardized instruments 	<ul style="list-style-type: none"> ● Textual and/or image-based data ● Informative, small sample ● Loosely structured or non-standardized observations and interviews
How was the data analysed to determine its meaning?	<ul style="list-style-type: none"> ● Statistical analysis ● Stress on objectivity ● Deductive reasoning 	<ul style="list-style-type: none"> ● Search for themes and categories ● Acknowledgement that analysis is subjective and potentially biased ● Inductive reasoning
How were the findings communicated?	<ul style="list-style-type: none"> ● Numbers ● Statistics, aggregated data ● Formal voice, scientific style 	<ul style="list-style-type: none"> ● words ● Narratives, individual quotes ● Personal voice, literary style.

Source: Leedy and Ormrod (2005:96)

According to Table 4.1 the positivistic paradigm as compared with the phenomenological paradigm was found to be more appropriate to the quantitative nature of this study. The distinguishing characteristics of the positivistic paradigm used in this study are explained in terms of the following questions, namely, what was the purpose; what was the nature of the research process; what was the nature of the data and how it was collected; how was the data analysed to determine its meaning and how were the findings communicated.

- ***What was the purpose of the research?***

As mentioned previously, the purpose of this study was to explain, predict, confirm, validate and test the theory of whether or not there is a relationship between service quality, customer satisfaction and customer loyalty.

- ***What was the nature of the research process?***

The nature of this research process was more focused on known variables, namely service quality, customer satisfaction and customer loyalty. The research methods were predetermined as further discussed in section 4.7 and the researcher had a detached view in the whole research process.

- ***What was the nature of the data and how was it collected?***

The research instrument used to collect quantitative data in this study was a standardised research instrument adapted from previous research studies, namely those of Dabholkar *et al.* 1996; Taylor and Baker, 1994; Rootman (2006) and Bloemer *et al.* 1998 (refer to section 4.7.1) and also included were customer satisfaction questions developed by the researcher . The research instrument had structured questions measured on a five-point Likert scale. The representative sample size was considered adequate for this kind of study as it consisted of 285 respondents.

- ***How was the data analysed to determine its meaning?***

Descriptive and inferential statistics were used to analyse the data in this research study as further discussed in section 4.8.

- ***How were the findings communicated?***

The findings of this research study, as presented in Chapter five were communicated through numbers which were illustrated in Tables. The aggregated data was hypothesised and written in a formal scientific style.

The positivistic paradigm has its origins in the natural sciences and applies the methods of natural science to the study of social reality and beyond (Bryman & Bell, 2003:16; Collis & Hussey, 2009:56).

Bryman and Bell (2003:16) suggest that positivism is built upon the following principles:

- Knowledge and phenomena comprehended by human senses are genuinely justified as knowledge (principle of phenomenalism).
- The main purpose of theory is to develop hypotheses that can be subjected to test and thereby allowing explanations of laws to be assessed (the principle of deductivism).
- Knowledge is reached by gathering facts that provide the basis for laws (the principle of inductivism).
- Science is conducted in an objective manner.
- The difference between scientific and normative statements is very clear and there is a belief that the scientific statements are the true domain of the scientists. This is based on the reason that senses cannot confirm the truth of normative statements.

Within the context of the positivistic research paradigm both primary and secondary data were collected.

Primary data is the data gathered from the original source through own experiments, surveys, interviews or focus groups (Collis & Hussey, 2009:23). The data is raw and is without interpretation that represents an official perspective or opinion (Cooper & Schindler, 2006:167). In this research study, primary data was collected from customers of the two supermarkets in Grahamstown by means of a survey. Although primary data is authoritative in nature, it has to be supported by secondary data which forms the basis of interpreting it (Cooper & Schindler, 2006:166).

Secondary data provides the basis for interpreting primary data (Cooper & Schindler, 2006:166). Secondary data is the data gathered from the existing sources such as publications, databases or internal records (Collis & Hussey, 2009:23). Secondary sources related to the subject disciplines of relationship marketing, service quality, customer satisfaction and customer loyalty were

consulted. The databases used to access secondary data at the Rhodes University library included: SFX, EXLIBRISGROUP, EBSCO HOST, EMERALD, JSTOR, GOOGLE SCHOLAR and the internet. The literature from secondary sources was used to provide the literature overview and the development of the research instrument so as to give effect to the research objectives and testing of hypotheses.

4.6 RESEARCH METHOD

Research method is defined as a “simple technique” of gathering data (Bryman & Bell, 2007:40). There are various research methods that are used in the field of research such as surveys, observations, experimentations and document analysis (Bryman & Bell, 2007:40; Zikmund, Babin, Carr & Griffin, 2010:59). For the purposes of this study a survey method using a self administered questionnaire was utilised to gather customers’ perceptions on service quality, customer satisfaction and customer loyalty in the retail supermarket industry in Grahamstown. The survey method will be discussed in the next section. Thereafter, the research instrument used in the study will be outlined with its reliability and validity described respectively.

4.6.1 Survey

A survey is a method that is developed to gather primary from a particular sample, with a view to generalize the outcome to a population (Collis & Hussey, 2009:77). Survey methods provide fast, less expensive, efficient and accurate ways of assessing data of a particular population (Zikmund *et al.* 2010:187). There are various survey methods used in the field of research, namely door to door, executive interview, mall intercept, telephone interview, direct computer interview, self-administered questionnaire, mail survey and electronic questionnaire (McDaniel & Gates, 1996:226).

For the purpose of this study a self administered questionnaire was used (Refer to Appendix A). A self administered questionnaire involves respondents taking responsibility for reading and completing the questions in the questionnaire (Zikmund *et al.* 2010:219). A questionnaire survey could consist of open ended or closed ended questions. Open ended questions gives respondents the freedom to answer the questions in any way they choose, while close ended questions

require of the respondents to make choices from a set of alternatives provided (Sekaran, 1992:203).

Rensis Likert developed a scale to measure an individual's attitude toward concepts called a Likert scale (McDaniel & Gates, 1996:381). The Likert scale is one of the most popular methods of scaling and comprises a sequence of statements that are followed by a number of ordered response choices (Monette, Sullivan & De Jong, 2010:354). In using Likert scales, respondents indicate the extent to which they agree or disagree with statements that represent a favourable or unfavourable attitude toward a certain concept being studied (McDaniel & Gates, 1996:380). All the responses in a Likert scale are given a numerical score that indicates the degree of attitudinal favourableness and the scores are summed to measure the respondent's overall attitude (Cooper & Schindler, 2006:339). The most popular number of alternatives in a Likert scale is five because it provides respondents enough range of choices "without requiring unnecessarily minute distinctions in attitudes" (Monette *et al.* 2010:354). The numbers reveal the value attached to each possible response, with "1" the least favourable attitude (strongly disagree) and "5" the most favourable (strong agree) (Cooper & Schindler, 2006:339). For the purpose of this study a five-point Likert scale was selected.

This research instruments used in this study consisted of closed ended questions in a five-point Likert scale format. The researcher distributed the questionnaires to the customers of the two supermarkets in Grahamstown by intercepting them after they had completed their transactions with their respective supermarkets. The purpose of the study, as provided in the cover letter (Refer to Appendix A), was explained to each potential respondent, and a consent form (Refer to Appendix A) was signed by each participant. Clarity was also provided by the researcher to respondents on how to complete the questionnaire and assistance was provided whenever they faced challenges in answering the questionnaire.

The questionnaire consisted of the three following sections:

- Section A: Choice of supermarket
- Section B: Service quality, customer satisfaction and customer loyalty instruments.
- Section C: Biographic variables

Firstly, in Section A, the respondents had to indicate the supermarket where they most frequently did their shopping.

Section B comprised of items adapted from previous tested measuring instruments, which will be discussed in the next section. This section consisted of 57 items pertaining to the customers' perceptions of the supermarket's service quality, customer satisfaction and customer loyalty. The respondents were requested to indicate to what extent they agreed or disagreed with each of the 57 statements (1- strongly disagree and 5-strong agree) according to the five-point Likert scale.

Section C consisted of six items pertaining to the respondents' biographic information. The questions were fixed alternatives pertaining to biographic variables, namely, age, population groups, gender, education, occupational levels and monthly income.

In the next three sub-sections the three measuring instruments that were the basis of the questionnaire used in this study (Refer to section B in the questionnaire) will be explained. Firstly, the Retail Service Quality Scale (RSQS) by Dabholkar *et al.* (1996) will be presented, followed by the customer satisfaction measures by Taylor and Baker (1994), Rootman (2006) and items developed by the researcher. Lastly, the customer loyalty measures by Bloemer *et al.* (1998) will be explained.

The reliability and validity of these previously tested research instruments will also be outlined. Reliability is defined as consistence in the results of a research if the research was to be conducted again (Collis & Hussey, 2009:64). According to Cooper and Schindler (2006:321) a measure is deemed reliable if it produces consistent results. The most known test of "inter-item consistency reliability" is the Cronbach's alpha coefficient which assesses the extent to which items of a certain measure are positively correlated to each other (Sekaran & Bougie, 2009:324; Sekaran, 1992:174).

Reliability coefficients, referred to as Cronbach's alpha scores, which are below 0.6 reflect poor reliability, while those which are between 0.6 and 0.70 reflect fair reliability and those coefficients which are above 0.8 are considered to have good reliability (Zikmund *et al.*, 2010:306).

4.6.1.1 Service quality measure

The statements on service quality are based on an existing research instrument called the Retail Service Quality Scale (RSQS) developed by Dabholkar *et al.* (1996). The purpose of this research instrument is to measure respondents' perceptions of the service quality of retail supermarkets. The RSQS consists of 28 items and one item was added to the instrument as it did not take into account the speed of performance that the supermarkets offer, which is an important factor in the retail supermarket industry.

The RSQS has five basic dimensions and six sub-dimensions (Dabholkar *et al.* 1996:6), as shown in Table 4.2, which includes the following:

- **Physical aspects** which consist of two sub-dimensions of *appearance and convenience*. The physical aspects dimension was measured based on the two sub-dimensions of store appearance and convenience of the store layout (Yuen & Chan, 2010:224). The physical aspects dimension in the questionnaire comprised items 1 to 6, in which items 1 to 4 reflected perceptions of the store appearance, while items 5 and 6 measured the perceptions of the convenience of the store layout.
- **Reliability** comprised the sub-dimensions of *promises* and *doing it right* (Dabholkar *et al.* 1996:6). Items 7 and 8 in the questionnaire measured perceptions on promise, while items 9 to 12 measured the respondents' perceptions of the supermarkets' ability to do things right.
- **Personal interaction** is made up of the two sub-dimensions of *inspiring confidence* and *being courteous/helpful* (Dabholkar *et al.* 1996:7). In the questionnaire, items 13 to 14 measured perceptions on the supermarket's ability to inspire confidence while items 15 to 21 measured perceptions of courteous/helpfulness.
- **Problem solving** focused on how employees of a supermarket handle potential problems like customer complaints, returns and exchanges (Dabholkar *et al.* 1996:7). The problem solving dimension was represented by items 22 to 24 in the questionnaire.
- **Policy** focused on items of service quality that were directly influenced by store policy (Dabholkar *et al.* 1996:7). The policy dimension was comprised of items 25 to 29 which

included aspects pertaining to the store's operating hours, payment options, parking and loyalty cards.

A summary of the 28 items used to measure customers perceptions of service quality in the retail supermarkets in this study, is provided in Table 4.2.

Table 4. 2 RSQS statements, dimensions and sub-dimensions by Dabholkar *et al.* (1996)

Nr	Statement/Item	Dimensions	Sub-dimensions
1	This supermarket has modern looking equipment and fixtures.	Physical aspects	Appearance
2	The physical facilities at this supermarket are visually appealing.	Physical aspects	Appearance
3	Materials associated with this supermarket's service (such as shopping bags or catalogues) are visually appealing.	Physical aspects	Appearance
4	This supermarket has access to clean, attractive and convenient restrooms.	Physical aspects	Appearance
5	The supermarket layout at this supermarket makes it easy for customers to find what they need.	Physical aspects	Convenience
6	The layout makes it easy for customers to move around in the supermarket.	Physical aspects	Convenience
7	When this supermarket promises to do something by a certain time, it will do so.	Reliability	Promises
8	This supermarket provides its services at the time it promises to do so.	Reliability	Promises
9	This supermarket performs the service right the first time.	Reliability	Doing it right
10	This supermarket has merchandise available when the customers want it.	Reliability	Doing it right
11	This supermarket insists on error-free sales transaction and records.	Reliability	Doing it right
12	Employees in this supermarket have the knowledge to answer customers' questions.	Personal interaction	Inspiring confidence
13	The behaviour of employees in this supermarket instils confidence in customers.	Personal interaction	Inspiring confidence
14	Customers feel safe in their transactions with this supermarket.	Personal interaction	Courteous/helpfulness
15	Employees in this supermarket give prompt service to customers.	Personal interaction	Courteous/helpfulness
16	Employees in this supermarket help customers with packing and pushing the trolleys to the parking lot.	Personal interaction	Courteous/helpfulness

Nr	Statement/Item	Dimensions	Sub-dimensions
17	Employees in this supermarket are never too busy to respond to customer's requests.	Personal interaction	Courteous/helpfulness
18	This supermarket gives customers individual attention.	Personal interaction	Courteous/helpfulness
19	Employees in this supermarket are consistently courteous with customers.	Personal interaction	Courteous/helpfulness
20	Employees of this supermarket treat customers courteously at the till/check out point.	Personal interaction	Courteous/helpfulness
21	This supermarket willingly handles returns and exchanges.	Problem solving	-
22	When a customer has a problem, this supermarket shows a sincere interest in solving it.	Problem solving	-
23	Employees of this supermarket are able to handle customer complaints directly and immediately.	Problem solving	-
24	This supermarket offers high quality merchandise.	Policy	-
25	This supermarket provides plenty of convenient parking for customers.	Policy	-
26	This supermarket has operating hours convenient to all their customers.	Policy	-
27	This supermarket accepts most major credit cards.	Policy	-
28	This supermarket offers its own loyalty card.	Policy	-

Source: Dabholkar *et al.* (1996: 14-15)

One item measuring the reliability dimension of service quality was added to the original 28 items of the RSQS instrument (shown in Table 4.2) and is reflected as item 12 in the questionnaire (Refer to Appendix A).

a) Reliability and Validity of the RSQS

The Cronbach's alpha coefficient scores of the RSQS, based on research by Dabholkar *et al.* (1996), are provided in Table 4.3. These Cronbach's alpha coefficient scores of all the dimensions and sub dimensions of the RSQS, as conducted by Dabholkar *et al.* (1996:13), achieved Cronbach's alpha coefficient score of greater than 0.8. This measuring instrument's internal reliability can thus be regarded as being good.

Table 4. 3 Dabholkar *et al.* (1996) RSQS Cronbach's alpha coefficient

	Number of items	Reliability	Interpretation (Sekaran, 1992)
Overall scale	28	0.74	Acceptable
Dimensions			
Physical aspects	6	0.85	Good
Reliability	5	0.90	Good
Personal interaction	9	0.90	Good
Problem solving	3	0.87	Good
Policy	5	0.92	Good
Sub-dimensions			
Appearance	4	0.81	Good
Convenience	2	0.89	Good
Promises	2	0.83	Good
Doing it right	3	0.86	Good
Inspiring confidence	3	0.84	Good
Courteous/helpful	6	0.89	Good

Source: Dabholkar *et al.* (1996:13)

Research conducted in South Africa by Boshoff and Terblanche (1997:125) to replicate the study done by Dabholkar *et al.* (1996) reported that the RSQS has an overall high internal reliability of 0.93 which indicates that the instrument is highly reliable, as shown in Table 4.4. It should be noted that the Cronbach's alpha coefficient scores for reliability, problem solving and policy are at the acceptable level. In addition the Cronbach's alpha coefficient scores for physical aspects and personal interaction are good.

Table 4. 4 Boshoff and Terblanche (1997) RSQS Cronbach's alpha coefficient scores

Dimension	Cronbach's alpha	Interpretation (Sekaran, 1992)
Physical aspects	0.81	Good
Reliability	0.76	Acceptable
Personal interaction	0.90	Good
Problem solving	0.78	Acceptable
Policy	0.68	Acceptable
Overall: Retail Service Quality Scale	0.93	Good

Source: Boshoff and Terblanche (1997:128)

It can be concluded from the above discussion that the RSQS instrument is a reliable instrument as proven by Dabholkar *et al.* (1996) and as it has, in addition, also been previously used in the South African retail context by Boshoff and Terblanche (1997), these are the reasons it was used in this research study.

Another characteristic of a good measurement instrument is its validity (Cooper & Schindler, 2006:318). Validity is the accuracy or extent to which a score reflects what it states it measures (Zikmund *et al.* 2010:307). With regard to validity of the RSQS, Dabholkar *et al.* (1996:13) performed confirmatory factor analyses as shown in Table 4.5 by which all of the 28 items loaded highly on the factors on which they were assigned and this suggested the convergent validity and goodness of fit for all dimensions of the RSQS. Confirmatory factor analysis is a statistical method that is used to verify the factor structure of a set of observed variables and is characterised by its hypothesis driven nature (Brown, 2006:1). Dabholkar *et al.* (1996) used various absolute indexes of goodness of fit such as chi-square (χ^2), goodness of fit index (GFI), adjusted goodness of fit index (AGFI) and root mean square residual (RMSR) to evaluate the individual models. Doll, Raghunathan and Lim (1995:181) note that GFI and AGFI scores range from 0 to 1 and the scores in the range of 0.8 to 0.89 represent reasonable fit; scores of 0.9 or higher are evidence of good fit. Scores of RMSR below 0.05 are considered as evidence of good fit.

Table 4. 5 Confirmatory factor analyses as per RSQS research instrument

	X^2	df	p	AGFI	CFI	RSMR
First study (n=227)						
Five basic dimensions of retail service quality as first order factors.	48.92	30	0.02	0.92 (G)	0.99 (G)	0.03
Retail service quality as second order factor to the five basic dimensions.	59.11	30	0.01	0.90 (G)	0.98 (G)	0.03
Six sub-dimensions of RSQ as first order factors.	88.71	45	00	0.89 (R)	0.98 (G)	0.03
Six sub-dimensions of RSQ with corresponding dimensions as second order factors.	107.2	45	00	0.87 (R)	0.97 (G)	0.03
Cross-validation study (n=149)						
Five basic dimensions of retail service quality as first order factors	32.21	30	0.36	0.93 (G)	1.00 (G)	0.02
Retail service quality as second order factor to the five basic dimensions.	61.00	30	0.01	0.86 (R)	0.98 (G)	0.03
Six sub-dimensions of RSQ as first order factors.	81.03	45	0.01	0.87 (R)	0.97 (G)	0.04
Six sub-dimensions of RSQ with corresponding dimensions as second order factors.	76.11	45	0.01	0.87 (R)	0.98 (G)	0.04
R-Reasonable fit; G- Good fit.						

Source: Dabholkar *et al.* (1996)

All root mean square residual (RMSR) scores of the RSQS as shown in Table 4.5 were below 0.05, indicating a goodness of fit for all dimensions of the RSQS by Dabholkar *et al.* (1996).

4.6.1.2 Customer satisfaction measure

Customer satisfaction perceptions were gathered by making use of the three research instruments by Taylor and Baker (1994); Rootman (1996) and customer satisfaction items developed by the researcher. The four measures of customer satisfaction sought to gather customers' perceptions on how they feel about and the extent of their satisfaction with an organisation's services as generated by Taylor and Baker (1994:168). Consequently, items 30 to 33 in Table 4.6 are the measures of customer satisfaction used in this study based on previous research by Taylor and Baker (1994). The other measures of customer satisfaction, items 34 to 43, were developed by the researcher based on the service quality dimensions used in this study. According to Sureshchandar *et al.* (2002:366) customer satisfaction is a multi-dimensional construct in which items to measure it are similar to those used to measure service quality. In their study Sureshchandar *et al.* (2002:367) measured customer satisfaction using the same items for measuring service quality. In this research study, 10 items of the 28 that represent the dimensions of measuring retail service quality were used to measure customer satisfaction. These items are represented by items 34-43 in the questionnaire (Refer to Appendix A).

The last item in the questionnaire of this study, as shown in Table 4.6, number 44, measured customer satisfaction in terms of overall service quality offering of an organisation. This was adapted from a research conducted by Rootman (2006:120) in the banking sector of South Africa.

Table 4. 6 Customer satisfaction items

Nr	Statement	Researcher
30	I am satisfied with this supermarket in terms of its grocery services.	Taylor and Baker (1994:168)
31	Overall in the purchasing of products and services, I am pleased with this supermarket.	Taylor and Baker (1994:168)
32	Purchasing from this supermarket is usually a satisfying experience.	Taylor and Baker (1994:168)
33	My feeling toward this supermarket can best be characterised as satisfied.	Taylor and Baker (1994:168)
34	I am satisfied with the appearance of the physical aspects of this supermarket as compared to others.	Customer satisfaction- RSQS
35	I am satisfied with the layout of this supermarket as it makes it easy for customers to move around the supermarket.	Customer satisfaction- RSQS
36	I am satisfied that this supermarket does something they have promised to do.	Customer satisfaction- RSQS
37	I am satisfied that this supermarket performs its services right the first time.	Customer satisfaction- RSQS
38	I am satisfied that the employees of this supermarket have the knowledge to answer customers' questions.	Customer satisfaction- RSQS
39	I am satisfied that the employees of this supermarket are never too busy to respond to customers' requests.	Customer satisfaction- RSQS
40	I am satisfied that this supermarket shows sincere interest in solving problems that customers encounter.	Customer satisfaction- RSQS
41	I am satisfied that employees of this supermarket are able to handle customer complaints immediately.	Customer satisfaction- RSQS
42	I am satisfied that this supermarket offers convenient hours to all customers.	Customer satisfaction- RSQS
43	I am satisfied with this supermarket's parking area.	Customer satisfaction- RSQS
44	Overall I am satisfied with the service quality provided by this supermarket.	Rootman (2006:120)

The reliability and validity scores of Taylor and Baker (1994) customer satisfaction measure will be discussed.

a) Reliability of customer satisfaction measures

The overall Cronbach's alpha coefficient score of customer satisfaction in the study conducted by Taylor and Baker (1994:169) was 0.9367, which is considered to be very reliable, as outlined in Table 4.7.

Table 4. 7 Taylor and Baker's (1994) Cronbach's alpha coefficient scores for customer satisfaction

Variables	Scale mean if item deleted	Scale variance if item deleted	Corrected item -Total correlation	Squared Multiple correlation	Alpha if item deleted
Satisfaction	Coefficient Alpha= 0.9367				
SAT 1	15.0845	20.1528	0.8952	0.8372	0.9025
SAT2	15.1056	20.3441	0.8909	0.8394	0.9040
SAT3	15.2887	20.5870	0.8655	0.7560	0.9123
SAT4	15.3662	20.2421	0.7513	0.5690	0.9478

Source: Taylor and Baker (1994:169)

b) Validity of the customer satisfaction measures

Taylor and Baker (1994:168) calculated the correlation matrix presented in Table 4.8 for the four measures of customer satisfaction (SAT), three measures of service quality (SQ) and three measures of purchase intentions (PB) so as to investigate the convergent and discriminant validity of their research instrument. Convergent validity is shown by a strong relationship between the scores obtained from two different methods of measuring the same construct (Copper & Schindler, 2006:320). The results of the correlation analysis in Table 4.8 indicate that there is discriminant validity between the service quality and customer satisfaction variables especially if SAT4 and SQ1 are deleted from the analysis (Taylor & Baker, 1994:169). This means that the customer satisfaction measure by Taylor and Baker (1994) show good convergent validity. However for the purpose of this research study SAT4 was maintained since the correlation coefficient was above 0.70.

Table 4. 8 Taylor and Baker's (1994) correlation matrix of their research variables

Variable	PB1 ^A	PB2	PB3	SAT1 ^B	SAT2	SAT3	SAT4	SQ1 ^C	SQ2
PB2	0.827								
PB3	0.848	0.869							
SAT1	0.625	0.580	0.608						
SAT2	0.617	0.584	0.584	0.901					
SAT3	0.588	0.566	0.577	0.832	0.842				
SAT4	0.527	0.519	0.527	0.722	0.703	0.720			
SQ1	0.446	0.408	0.424	0.624	0.615	0.632	0.628		
SQ2	0.643	0.596	0.618	0.790	0.789	0.780	0.727	0.656	
SQ3	0.592	0.561	0.571	0.789	0.784	0.765	0.796	0.671	0.826

Source: Taylor and Baker (1992:168)

4.6.1.3 Perceptions of customer loyalty

Customer loyalty was measured by using four dimensions derived from behavioural intentions, namely *word of mouth communication, purchase intentions, price sensitivity and complaining behaviour* (Zeithaml *et al.* 1996:38; Bloemer *et al.* 1998:1086). The four dimensions, based on the previous research by Zeithaml *et al.* (1996) and Bloemer *et al.* (1998) are represented by 13 items numbered 45 to 57 in Table 4.9 for the purpose of this study.

In their research, Zeithaml *et al.* (1996:37) proposed a 13 item framework of measuring customers' behavioural intentions which was based on the four dimensions previously stated. In turn, Bloemer *et al.* (1998:1086) further refined the same framework and applied it in four different service industries. For the purposes of this research study, the refined instrument by Bloemer *et al.* (1998) was used and the 13 items and their respective dimensions are briefly described below:

The *word of mouth communication* dimension was represented by items 45 to 47 in the questionnaire used in this study, as shown in Table 4.9. This dimension pertains to the positive sentiments of customers, their recommendations and encouragements to other people (Bloemer *et al.* 1998:1086; Zeithaml *et al.* 1996:38).

The *purchase intentions* dimension is represented by items 48 to 50 in the questionnaire used in this study, as outlined in Table 4.9. The purchase intentions dimension is influenced by whether customers will choose a particular organisation as their first choice amongst similar organisations and whether the customer is willing to do more or less business with the organisation (Bloemer, *et al.* 1998:1086; Zeithaml *et al.* 1996:38).

The dimension of *price sensitivity* was represented by items 51 to 53 in the questionnaire used in this study, as shown in Table 4.9. In this dimension loyalty is measured according to customers' attitude towards different pricing conditions (Bloemer *et al.* 1998:1086; Zeithaml *et al.* 1996:38).

The *complaining behaviour* dimension was represented by four items, namely 54 to 57 in the questionnaire used in this study, as outlined in Table 4.9. This dimension sought to gauge customers' loyalty by determining how they responded to problems they encountered within the supermarket (Bloemer *et al.* 1998:1086).

Table 4. 9 Bloemer *et al.* (1998) customer loyalty

Nr	Statements	Dimensions
45	I say positive things about this supermarket to other people.	word of mouth communication
46	I recommend this supermarket to someone who seeks my advice.	word of mouth communication
47	I encourage friends and relatives to shop at this supermarket.	word of mouth communication
48	I will consider this supermarket as the first choice to buy my groceries.	Purchase intentions
49	I will do more business with this supermarket in the next few years.	Purchase intentions
50	I will do less business with this supermarket in the next few years.	Purchase intentions
51	I will do some of my shopping from supermarkets that offer more attractive prices	Price sensitivity
52	I will continue to shop at supermarkets that offer more attractive prices.	Price sensitivity
53	I will pay a higher price than other supermarkets charge for the benefits I currently receive from this supermarket.	Price sensitivity
54	I will switch to a competitor if I experience a problem with this supermarket's services.	Complaining behaviour
55	I will complain to other customers if I experience a problem with this supermarket's services.	Complaining behaviour
56	I will complain to external agencies if I experience a problem with this supermarket's services.	Complaining behaviour
57	I will complain to the employees of this supermarket if I experience a problem with this supermarket's services.	Complaining behaviour

Source: Bloemer *et al.* (1999 :1086)

a) Reliability of customer loyalty measure

The research conducted by Bloemer *et al.* (1998:1094) verified that the customer loyalty measures previously developed by Zeithaml *et al.* (1996) are reliable, with good Cronbach's alpha coefficient scores of 0.91 for word of mouth and 0.81 for purchase intentions, with acceptable scores of 0.76 for price sensitivity and 0.6 for complaining behaviour, as shown in Table 4.10.

Table 4. 10 Bloemer *et al.*'s (1998) reliability of their customer loyalty measure

Item	Reliability	Interpretation (Sekaran 1992)
Word of mouth	0.91	Good
Purchase intention	0.81	Good
Price sensitivity	0.76	Acceptable
Complaining behaviour	0.60	Acceptable

Source: Bloemer *et al.* (1999:1094)

b) Validity of customer loyalty measure

Bloemer *et al.* (1998:1094) subjected the 13 items of measuring customer loyalty to a confirmatory factor analyses as outlined in Table 4.11 and it yielded a four-factor solution, which is similar to a priori proposed four dimensional structure of service loyalty conducted by Zeithaml *et al.* (1996). All measures exceeded the recommended level of 0.9 as there was an adequate fit to the data on the basis of goodness of fit index (GFI of 0.93), adjusted goodness of fit index (AGFI) of 0.90, tucker lewis index (TLI) of 0.91, comparative fit index (CFI) of 0.96 and normed fit index (NFI) of 0.92. This suggested validity in the research instrument. In Table 4.11 the standardised factor loadings are indicated in the cells and corresponding t-values in parentheses.

Table 4. 11 Bloemer *et al.*'s (1998) confirmatory analysis for their customer loyalty items

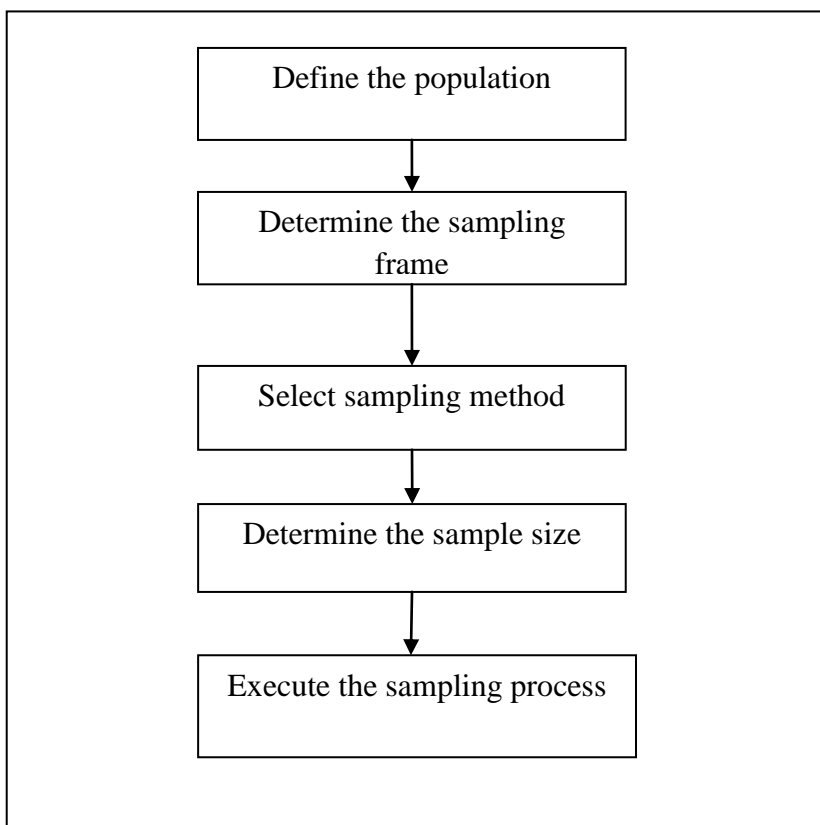
Item	Word of mouth communication	Purchase intentions	Price sensitivity	Complaining behaviour
1	0.75(22.45)			
2	0.93 (31.45)			
3	0.94 (32.08)			
4		0.83 (25.06)		
5		0.81 (24.38)		
6		0.61 (16.82)		
7			0.37 (9.30)	
8			0.91 (26.64)	
9			0.82 (23.65)	
10				0.37 (7.76)
11				0.66 (12.55)
12				0.56 (11.28)
13				0.44 (9.12)
V.E.	0.77	0.59	0.55	0.36
X ²	350.10 (p<0.001)			
Df	59			
GFI	0.93			
AGFI	0.90			
RMSR	0.07			
CFI	0.96			
TLI	0.91			
NFI	0.92			

Source: Bloemer *et al.* (1999:1093)

4.6.2 Sample selection

A sample is a portion or part of a target population which is selected to represent the population (Cooper & Schindler, 2006:72). There are various reasons why researchers use sampling and these include lower cost, greater accuracy of results, greater speed of data collection and availability of population elements (Cooper & Schindler, 2006:403). The process of designing a sample starts with defining the target population as shown in Figure 4.2.

Figure 4. 2 The sampling design process



Source: Malhotra (1999:329)

4.6.2.1 Population

A population is defined as an entire group of people or collection of elements under consideration for statistical purposes (Collis & Hussey, 2009:209). In this research study the population was identified as all customers above the age of 18 years who do their shopping in

supermarkets A and B in Grahamstown. However, it was not possible to include the entire population in this study. Thus, a sample frame was used to identify the sampling unit.

4.6.2.2 Sampling frame

The sampling frame is defined as the list or record of the population elements where the sample is drawn (Collis & Hussey, 2009:209; Cooper & Schindler, 2006:411). The examples of the sampling frame include: business directory, telephone book, city directory or a map, geographic areas and individuals (Malhotra, 1999:330). The sampling frame was extracted from the two supermarkets in the CBD of Grahamstown. The sampling unit is defined as an element or group of elements subject to selection during the sampling process (Zikmund *et al.* 2010:393; Sekaran & Bougie, 2009:263). The unit of analysis comprised all individuals who did their transactions at the two supermarkets during the time when the research was conducted. When the sampling frame and unit had been determined, the sampling method suitable for this study was chosen.

4.6.2.3 Sampling method

The sampling methods can be categorised into two, namely probability and non-probability samples (Cooper & Schindler, 2006:412).

Probability sampling is described as a sampling method where every object in the population has a “known, non-zero probability of selection” (Zikmund *et al.* (2010:395). On the other hand, non-probability sampling is a sampling method that includes “the selection of specific objects from the population in a non-random manner” (McDaniel & Gates, 1996:456). In non-probability sampling the selection of a sample is based on personal judgement and convenience (Zikmund *et al.* 2010:395).

The most appropriate sampling method for this study was the non-probability sampling. Non-probability sampling methods include convenience sampling, judgement sampling, quota sampling and snowball sampling (McDaniel & Gates, 1996:456). Convenience sampling, a method which attempts to obtain people or elements that are available (Malhotra, 1999:335; Zikmund *et al.* 2010:396), was used in this study to select the sample population. The main reason behind choosing convenience sampling is because the sampling units are easy to access, easy to measure and co-operative. Above all, it is less expensive and least time consuming as

compared to other sampling methods (Malhotra, 1999:335). After the sampling method was chosen, the sample size was determined.

4.6.2.4 Sample size

A sample size is associated with the size of the population in consideration (Collis & Hussey, 2009:62). In quantitative research large samples are a better representation of the population and enable the researcher to make more accurate conclusions than a small sample (Collis & Hussey, 2009:210; Han, 2006:114).

Given a particular population, the sample size should, as a rule of thumb, be equivalent to the number of statements in the questionnaire multiplied by five (Roos, 2008:93). In this research study the questionnaire comprised 57 items. Thus a minimum of 285 respondents (57×5) were required to conduct the statistical analysis. A total of 260 usable questionnaires were collected from the respondents of the two supermarkets and a decision was made to proceed with analysing data.

4.7 DATA ANALYSIS

Data analysis is a process of understanding the data that has been collected by editing and reducing it into a meaningful size, developing summaries, searching for patterns and applying appropriate statistical methods (Cooper & Schindler, 2006:708; Zikmund *et al.* 2010:70). With regards to the data analysis of this research study, data was captured in Excel and then imported into R Language and Environment for Statistical Computing programme (R Development Core Team, 2013). Before the data was analysed the reliability of the research instrument used in this study was assessed. Data in this study was analysed using two types of statistical analyses, namely descriptive statistics and inferential statistics.

4.7.1 Reliability and validity

A well designed research should produce credible results and this can be achieved by using the two basic sets of criteria which are widely used to evaluate a well-developed research tool in a quantitative research, namely reliability and validity (Cooper & Schindler, 2006:318; Collis & Hussey, 2009:204). The two criteria are discussed in the following sub-sections.

4.7.1.1 Reliability

Reliability is defined as the absence of differences in the results of a study if the research was repeated (Collis & Hussey, 2009:64). The reliability of this research study's instrument was determined through the Cronbach's alpha reliability coefficient which assesses the extent to which items of a certain measure are positively correlated to each other (Sekaran & Bougie, 2009:324; Sekaran, 1992:174). Reliability of a measure should indicate internal stability and consistency and is important in assessing the goodness of a measure (Sekaran, 1992:173). A measure is deemed reliable if it produces consistent results (Cooper & Schindler, 2006:321).

The reliability that is less than 0.60 is considered to be poor, while those in the range of 0.7 are considered to be acceptable and those over 0.8 are deemed to be good (Sekaran, 1992:287). The Cronbach's alpha coefficient scores of this research study are shown in Tables 5.1 and 5.2 in Section 5.2.1 in Chapter five. All the Cronbach's alpha scores were greater than 0.6 and are regarded as being acceptable, which means that the research instrument is reliable.

4.7.1.2 Validity

Validity is the degree to which the results of a research study accurately reflect the phenomena under study (Collis & Hussey, 2009:65). There are several types of validity tests that are used to test the goodness of measures and can be classified into three major types, namely content validity, criterion-related validity and construct validity (Cooper & Schindler, 2006:318).

- **Content validity** is the degree to which the measuring instrument provides adequate representative set of the research questions guiding the study (Cooper & Schindler, 2006:318; Sekaran & Bougie, 2009:158). In brief, it includes measuring right things as well as having a large enough sample. In this research study the dimensions of service quality, customer satisfaction and customer loyalty were extensively represented in the questionnaire and the sample size was adequate for the study, indicating content validity.
- **Criterion-related validity**, measures the degree to which the outcome of an instrument correlates with another (Leedy & Ormrod, 2005:92). In other terms it "reflects the success of measures used for prediction or estimation" (Cooper & Schindler, 2006:319). The criterion-related validity can be established through concurrent validity or predictive validity (Sekaran & Bougie, 2009:15). The measurement of the concurrent validity is based on the description

of the present while for predictive validity it is based on the prediction of the future (Cooper & Schindler, 2006:319).

- **Construct validity** aims to test how well the outcome or results obtained from the use of the measuring instrument fit the theories around which the test is designed (Sekaran & Bougie, 2009:160). In essence when evaluating construct validity the researcher has to take into consideration both the theory and the measuring instrument being used (Cooper & Schindler, 2006:320). Construct validity is assessed through convergent and discriminant validity (Sekaran & Bougie, 2009:160; Cooper & Schindler, 2006:320; Zikmund *et al.* 2010:308). Convergent validity assess if two measuring instruments that measure a concept do correlate highly, while discriminant validity measure the degree to which the scores on a scale do not correlate with scores from a variable that is supposed to be unrelated to this variable (Sekaran & Bougie, 2009:160; Cooper & Schindler, 2006:320).

The research instrument in this study was adapted from previous instruments that were tested for validity (refer to section 4.6.1.1 (a), 4.6.1.2 (b) and 4.6.1.3 (b)) respectively. The validity of these instruments in the previous studies was regarded as being good. A confirmatory factor analysis was performed but did not load sufficiently most likely due to the relatively small sample size. Therefore, continuation on the assumption of validity based on the previous studies is upheld in this study.

4.7.2 Descriptive statistics

The gathered data was firstly analysed using the descriptive statistics. Descriptive statistics are used to summarise and describe data in a simple and understandable manner (Zikmund *et al.* 2010:413). Sekaran (1992:258-259) suggests that descriptive statistics are important in identifying the frequency of a certain phenomena occurring, calculation of average scores of a particular group (mean) and also the extent of variation of scores (standard deviation).

For this research study descriptive statistics were used to summarise the respondents' choice of a supermarket, perceptions of service quality, customer satisfaction and customer loyalty, and also to profile the biographical information of respondents. The descriptive statistics in this research study were presented by frequency tables, mean and standard deviation, where appropriate.

4.7.2.1 Frequency tables

Frequency tables represent the simplest ways of analysing categorical data (Saunders, Lewis & Thornhill, 2009: 429). They display data that has been “assigned numerical value with columns for percent, valid percent (percentage adjusted for missing data), and cumulative percentage” (Cooper & Schindler, 2006:473). Frequency tables, therefore, were used to statistically analyse all the three sections of the questionnaire in this study.

4.7.2.2 Mean

The mean or average is the most used measure of central tendency that provides an overview of the data without unnecessarily inundating one with each of the observations in a data set (Sekaran & Bougie, 2009:316). It is the average of a group of data in a sample and is calculated by dividing the sum of the observations by the number of observations (Collis & Hussey, 2009:240). For this study the mean values of different variables were calculated and presented in Chapter five.

4.7.2.3 Standard deviation

The standard deviation is another measure of dispersion that measures the variability in the data (Sekaran & Bougie, 2009:318). It summates the extent to which data values are far away from the average (Cooper & Schindler, 2006:467). Collis and Hussey (2009:245) further suggest that a large standard deviation in relation to the mean reflects that the mean does not represent the data well. Furthermore, standard deviation is the most frequently used measure of spread because it reveals the amount of variability within the data set and is simply the square root of the variance (Cooper & Schindler, 2006:467; Sekaran & Bougie, 2009:318). The use of the square root of variance to measure standard deviation eliminates disadvantages of “having the measure of dispersion in squared units than in its original measurement units” (Zikmund *et al.* 2010:420).

4.7.3 Inferential statistics

Inferential statistics is another form of statistics that is used to “project characteristics from a sample to the entire population” (Zikmund *et al.* 2010:413). Inferential statistics comprise a group of statistical techniques and models that are used to infer conclusions about a population from quantitative data relating to a sample population (Collis & Hussey, 2009:222). The

inferential statistics are important to the researcher because they aid in making decisions about the data (Leedy & Ormrod, 2005:30). The appropriate inferential statistics were calculated and analysed to test this research study's hypotheses.

Hypotheses are defined as formal statements of explanations which are testable (Zikmund *et al.* 2010:509). Typically there are three types of hypotheses tested in business research namely; relational hypotheses, hypotheses about differences between groups and hypotheses about differences from some standard (Zikmund *et al.* 2010:509).

In this study hypothesis testing was conducted to determine the significance of the linear relationships between the various dimensions of service quality, customer satisfaction and customer loyalty respectively; and also to test if there exists statistically significant differences in the average scores of service quality, customer satisfaction and customer loyalty dimensions between the various biographic variables, namely age, population, gender, education, occupational levels, monthly income as well as supermarkets /chain stores.

Correlation analysis was used to test the significance of the linear relationships between the dimensions of service quality, customer satisfaction and customer loyalty identified in hypotheses 1, 2 and 3 of this research study. Correlation is defined as "the relationship by which two or more variables change together, such that the systematic changes in one accompany systematic changes in the other" (Cooper & Schindler, 2006:70). The correlation coefficient, rho, is a statistical measure that is used to indicate the strength, magnitude and direction of the linear relationship between at least two variables (Sekaran & Bougie, 2009:322; Zikmund *et al.* 2010:559). The correlation coefficient, rho, ranges from negative one to positive one. A positive correlation coefficient indicates a positive linear relationship, whereas a negative correlation coefficient indicates a negative linear relationship between the two variables. When the correlation coefficient is zero there is no correlation indicated between the two variables (Zikmund *et al.* 2010:559). A correlation coefficient which is closer to one indicates a stronger positive correlation between the variables, while a correlation coefficient which is closer to a negative one indicates a weaker correlation (Saunders *et al.* 2009:459). Further clarification is provided in Section 5.4 in Chapter five.

The significance of the linear relationship was assessed based on the p-value of the sample

(Wackerly, Mendenhall & Scheaffer, 2002). The hypothesis testing procedure for this aspect of the research study was as follows: If the p-value is less than the level of significance, alpha, of 0.05 ($p\text{-value} < 0.05$), the alternative hypothesis will be supported and conclude that there is enough evidence of a significant correlation. Alternatively if the p-value is more than the level of significance, alpha, of 0.05 ($p\text{-value} > 0.05$), the alternative hypothesis will not be supported and conclude that there is not enough evidence of a significant correlation.

Either a one way ANOVA test, Kruskal Wallis rank sum test, Welch two sample test or two sample t test were performed to test hypotheses 4, 5 and 6 so as to give effect to the research objectives, namely to determine if there are significant differences in the average scores of the service quality, customer satisfaction and customer loyalty dimensions for the selected biographical variables.

The independent two sample t-test is a statistical method that is used in evaluating the significance of differences, due to variations, in the means between two independent groups (Saunders *et al.* 2009:456). This methodology is appropriate for testing the hypotheses 4, 5 and 6 for this study. An assumption of the t-test for difference of means is that the two groups are drawn from normally distributed populations (Zikmund *et al.* 2010:534).

The Shapiro Wilk test was utilised to test for normality, that is to test “whether a distribution of scores is significantly different from a normal distribution” (Field, Miles & Field, 2012:925). A Shapiro Wilk test which is non-significant ($p\text{-value} > .05$) indicates that the distribution of the population from which the sample is taken is not significantly different from a normal distribution. However if the test is significant ($p\text{-value} < 0.05$) then the distribution of the population from which the sample is drawn is significantly different from a normal distribution (Field *et al.* 2012:925).

In addition the two sample t-test methodology requires consideration of the equality of the population variances. The two sample t-test is used to compare whether there is a difference between two independent groups and is based on the assumption that both populations are normally distributed and have equal variances (homogeneity) (Boslaugh, 2013:167). If the assumption of homogeneity of variance is not met, meaning that the population variance are not equal or heterogeneous there is a risk of experiencing inflated Type 1 and Type 2 errors and

lower power (Boslaugh, 2013:167). In order to avoid such errors the unequal variance two sample t-test, known as Welch's two sample t-test, should be used (Boslaugh, 2013:167).

The equality of variances in this research study was tested using the F-test so as to compare the variances of two samples from normal populations (Sekaran & Bougie, 2010:347; Zikmund *et al.* 2010:345-346). As a result, in this study if the variances were not equal Welch's t-test was performed while if the variances were equal a two sample t-test was used to assess the significance of the differences between two independent variables means.

The analysis of variance (ANOVA) methodology is a hypothesis-testing method used to determine whether there exists a statistically significant difference in the means between three or more groups (Zikmund *et al.* 2010:541). In this research study, where three or more groups were considered, Bartlett's test was used to test for the equality of the population variances and the Shapiro-Wilks test was used to test for normality. The ANOVA test is based on the following assumptions stated by Copper and Schindler (2006:517):

- The samples are randomly selected from normal populations;
- The populations have equal variances

The Kruskal Wallis test is a non-parametric test that is equivalent to one way ANOVA test and is appropriate when data collected on an ordinal scale or interval data does not meet the ANOVA assumptions, that cannot be changed or that for other reasons prove to be unsuitable for a parametric test (Cooper & Schindler, 2006:523). If the variances were equal a parametric one way ANOVA test was performed to test for the equality of the population means. If the variances were not equal, a non-parametric test, namely the Kruskal Wallis test was performed to test if the populations had similar shape and distribution.

4.8 ETHICAL ISSUES

Cooper and Schindler (2006:116) suggest that all interested parties in a "research should exhibit ethical behaviour". During the data collection period they were several ethical issues that were addressed, namely debriefing participants, informed consent, confidentiality and the right to privacy.

The researcher has the mandate to debrief the participants by fully informing them about the purpose of the research study and not misrepresenting the nature of the study to the participants (Sekaran & Bougie, 2009:221). Debriefing also involves the description of the hypothesis being tested (Cooper & Schindler, 2006:121). The respondents were debriefed about the purpose of the research prior to completing the questionnaire.

Informed consent occurs when a participant in a research study understands what the researcher wants them to do and consents to the research study (Zikmund *et al.* 2010:90). In order to secure informed consent from a participant, the researcher has to disclose fully the procedures of the proposed study before requesting permission to proceed with the study (Cooper and Schindler, 2006:119). The consent forms that gave assurance that participation is voluntary and the covering letter informing the participants about the purpose of this research study are attached in Appendix A. Permission to conduct research in the two respective supermarkets was verbally granted by the management of the supermarkets prior to the commencement of the research study.

When a participant has voluntarily consented to participate in the research study, it means that he/she will provide honest answers, which is his/her main obligation, and in return the participant has the right to expect confidentiality (Zikmund *et al.* 2010:91). The researcher has to treat the participants' information with confidentiality, which means that their information is not shared with anyone (Zikmund *et al.* 2010:91). In this research the issue of confidentiality was taken into consideration as participants were guaranteed their anonymity and none of the individuals were made public. The two supermarkets were also guaranteed their anonymity as shown in this research by being described as supermarkets A and B respectively and their information was not shared with competitors. A signed confidentiality and non-disclosure statement (attached in Appendix A) was the guarantor that anonymity of the participants would be protected.

The data was submitted to the Department of Management (Rhodes University) for safe keeping and the research findings obtained from this research will solely be used for the researcher's academic purposes.

Lastly, this research study complied with all ethical research requirements of the Department of Management Human Ethics Research Committee prior to its commencement.

4.9 SUMMARY

This chapter focused on the research design and methodology of this study. The research purpose and objectives were outlined and described. Thereafter, the research paradigms used in research were identified and the positivist paradigm appropriate for this study was discussed. Research methods used were then examined and subsequently the survey method, which was used in this study, was discussed in detail including the reliability and validity of the instruments of previous studies adapted for this research study. Furthermore, the sample selection for this research study was explained. Following from this, data analysis techniques were examined in detail, in which descriptive and inferential statistics were discussed. Lastly, ethical considerations which the researcher ensured were in place in this study were explained.

The results of the empirical research will be discussed in Chapter 5.

CHAPTER FIVE

EMPIRICAL FINDINGS

5.1 INTRODUCTION

The previous chapter provided specific information about the research design and methodology of this study which outlined the purpose of the research, aims and objectives, research hypotheses, research design, research paradigms, research methods, research instrument, data collection, statistical procedures implemented and research ethical considerations. This chapter reports on the data analysis and the empirical findings of this study. More specifically, the main purpose of this chapter is to give effect to the set objectives which were outlined in Chapter one and Chapter four respectively. Therefore, the empirical findings comprising descriptive and inferential statistics will be presented in this chapter.

Data was captured in Ms Excel and was imported into the R language and environment for statistical computing (R Core Team, 2013). R was used to clean and analyse the data. A total of 260 out of 285 questionnaires were usable for the statistical analysis. This represented a response rate of 91.2%. All the returned questionnaires, namely 260, were used in the statistical analysis. Twenty five (25) of the 285 questionnaires were never returned by respondents, representing a non-response rate of 8.8%.

Furthermore, it was noted that no questions in the instrument were excluded from the analysis based on the criteria that respondents' never left more than 7 items (25%) blank. Also respondents never left more than 30% of the items (questions) blank for each scale and, therefore, based on this criterion no respondents were dropped from the analysis. Since there were no negative questions it was not necessary to reverse scores for any item.

Descriptive statistics were used to summarise respondents' choice of supermarkets found in section A of the questionnaire, and to summarise information pertaining to respondents' perceptions of service quality, customer satisfaction and customer loyalty found in Section B of the questionnaire (Refer to Section 5.3.2). In addition, descriptive statistics were utilised to create a profile using the biographical variables of respondents found in Section C of the

questionnaire (Refer to Section 5.3.1). Mean and standard deviations of the scales or dimensions were calculated (Refer to Section 5.3.2.1).

Inferential statistics were calculated so as to mirror the characteristics of a sample to the entire population (Zikmund *et al.* 2010:413). A well designed research study produces credible results and this can be done by evaluating the research instrument for validity and reliability (Collis & Hussey, 2009:204). An assessment of the reliability of the research instrument was conducted by means of an internal consistency measure, referred to as Cronbach's alpha co-efficient (Sekaran, 1992:287) and will be further explained in Section 5.2.1 in this chapter.

Pearson correlation analysis was performed to test hypotheses 1, 2 and 3 as outlined in Chapter 4, Section 4.8.2, and as reported on in Section 5.4 in this chapter. Pearson correlation analysis was used to determine the strength, direction and significance of the linear relationships between the dimensions of service quality, customer satisfaction and customer loyalty in the retail supermarket industry. The correlation analysis results present the Pearson correlation coefficient, rho, which indicates the strength and direction of the linear relationship between two variables (Sekaran & Bougie, 2009:322; Sekaran, 1992:265); as well as the statistical significance level, alpha of 0.05 ($p\text{-value} < 0.05$) which indicates if the correlation of two variables occurred by chance alone or if there is a high probability of its true existence (Copper & Schindler, 2006:492), as discussed in Chapter 4, Section 4.8.2. A significance of 5% is the generally accepted conventional level in social science research and indicates that there is 95% probability that there is a significant correlation between two variables and a 5% probability that the relationship does not exist (Sekaran, 1992:265).

The Pearson's Correlation is based on the two main assumptions that indicate the relationship between the two variables as linear and that there are normally distributed in the population (Cooper & Schindler, 2006:539).

T-tests were performed to test for hypotheses 4, 5 and 6 as outlined in Chapter 4, Section 4.8.2, and as reported in Section 5.5 in this Chapter. In the process of testing these hypotheses, the Shapiro-Wilks test was utilised to test for normality. The equality of variances was tested using the F-test so as to compare the variances of two samples from normal populations. If the

variances were not equal, Welch's t-test was performed, while, if the variances were equal, a two sample t-test was used (Sekaran & Bougie, 2010:347; Zikmund *et al.* 2010:345-346).

Where two or more groups were considered, Bartlett's test (Berk & Carey, 2007:258) was used to test for the equality of the population variances. If the variances were equal, a parametric one way ANOVA test was performed to test for the equality of the population means. If the variances were not equal, a non-parametric test, namely the Kruskal Wallis test, was performed to test if the populations had similar shape and distribution (Cooper & Schindler, 2006:523).

5.2 RELIABILITY AND VALIDITY OF THE RESEARCH INSTRUMENT

5.2.1 Reliability

As mentioned in Chapter 4, Sekaran (1992:28) interprets the Cronbach's alpha coefficient scores in the following way: Reliabilities less than 0.6 are considered poor; those within the 0.6 to 0.7 range are considered acceptable, and those over 0.8 are considered to be good. The closer the reliability co-efficient is to 1, the better the reliability of the scale. Tables 5.1 to 5.3 show the Cronbach's alpha scores of the scales or dimensions of service quality, customer satisfaction and customer loyalty respectively.

The Cronbach's alpha scores in Table 5.1 show that the instrument to measure service quality was reliable. The Cronbach's alpha coefficient scores for the following service quality dimensions: physical aspects, reliability and personal interaction were above 0.8000 which, according to Sekaran (1992:28), are good. On the other hand, the Cronbach's alpha coefficient scores for the service quality dimensions of problem solving and policy were between 0.6091 and 0.7910 which, according to Sekaran (1992:28), are acceptable.

Table 5. 1 Cronbach's alpha coefficient scores for service quality dimensions

	Sample size	Cronbach's alpha Co-efficient	Interpretation (Sekaran, 1992)
Physical aspects	260	0.8422	Good
Reliability	260	0.8173	Good
Personal interaction	260	0.9077	Good
Problem solving	260	0.7910	Acceptable
Policy	260	0.6091	Acceptable

The item to measure customer satisfaction (Taylor & Baker) had Cronbach's alpha coefficient scores of above 0.9000, which are interpreted as good (Sekaran, 1992:28) as depicted in Table 5.2.

Table 5. 2 Cronbach's alpha coefficient scores for customer satisfaction

	Mean	Standard deviation	Sample size	Cronbach's alpha Co-efficient	Interpretation (Sekaran, 1992)
Taylor & Baker	3.9827	0.7706	260	0.9069	Good

The items to measure customer loyalty are shown in Table 5.3. The Cronbach's alpha coefficient score for the dimension, Word of mouth communication, was 0.9248 which is regarded as being good. Purchase intentions and complaining behaviour dimensions had Cronbach's alpha coefficient scores of 0.6406 and 0.6166 respectively which is regarded as being acceptable. Although the price sensitivity dimension had a poor Cronbach's alpha coefficient score of 0.4557, the overall instrument is acceptable as other dimensions scored above the acceptable Cronbach's alpha score as interpreted by Sekaran (1992:128). Caution will need to be practiced in interpreting the findings pertaining to the customer loyalty dimension of price sensitivity.

Table 5. 3 Cronbach’s alpha coefficient scores for customer loyalty dimensions

	Sample size	Cronbach’s alpha Co-efficient	Interpretation (Sekaran,1992)
Word of mouth communication	260	0.9248	Good
Purchase intentions	260	0.6406	Acceptable
Price sensitivity	260	0.4557	Poor
Complaining behaviour	260	0.6166	Acceptable

5.2.2 Validity

The validity of this research’s instrument was based on the assumption of validity attained from the previous studies’ scales adapted for this research study (refer to Section 4.8.1.2 in Chapter 4).

5.3 DESCRIPTIVE STATISTICS FINDINGS

5.3.1 Biographic information

The basic descriptive findings for the biographic variables are indicated in Tables 5.4 to 5.10

Table 5.4 outlines the gender of respondents. From Table 5.4 it is evident that the majority of the respondents were female shoppers who consisted of 177 respondents (68.1%) while male shoppers comprised 83 respondents (31.9%).

Table 5. 4 Gender of respondents

Gender	Frequency	Percentage
Male	83.0	31.9
Female	177.0	68.1
Total	260	100.0

Table 5.5 shows that the majority of the respondents were from the African population group, which comprised of 161 respondents (61.9%). The balance of the respondents comprised 66

respondents (25.4%) from the White population group, with 27 respondents (10.4%) from the Coloured population group and 6 respondents (2.3%) from the Asian population group.

Table 5.5 Population group of respondents

Population group	Frequency	Percentage
White	66.0	25.4
Coloured	27.0	10.4
African	161.0	61.9
Asian	6.0	2.3
Total	260.0	100.0

From Table 5.6 it can be seen that the majority of the respondents were in the age category of 18-24 years which consisted of 94 respondents (36.2%). This is followed by age category 25-34 years which consisted of 80 respondents (30.8%). The age category 35-44 years constituted 48 respondents (18.5%). Age category 45-54 had 23 respondents (8.8%), whereas age category 55-64 had 12 respondents (4.6%). The minority age group was the 65+ which had 3 respondents (1.2%).

Table 5. 6 Age groups of respondents

Age	Frequency	Percentage
Between 18-24 years	94.0	36.2
Between 25-34 years	80.0	30.8
Between 35-44 years	48.0	18.5
Between 45-54 years	23.0	8.8
Between 55-64 years	12.0	4.6
65+ more years	3.0	1.2
Total	260	100.0

Table 5.7 shows that 98 respondents (37.7%) have a post graduate degree, whilst 64 respondents (24.6%) possess a bachelor's degree. Respondents with a grade 12 or equivalent were 42 respondents (16.2%), while those with grade 11 or equivalent were 6 respondents (2.3%) of the total sample. One respondent had no educational qualification.

Table 5. 7 Level of education for respondents

Level of education	Frequency	Percentage
Grade 11 or equivalent	6.0	2.3
Grade 12 or equivalent	42.0	16.2
Diploma	49.0	18.8
Degree	64.0	24.6
Post Graduate degree	98.0	37.7
None	1.0	0.4
Total	260	100.0

The occupations of the respondents are outlined in Table 5.8. Eighty seven (87) respondents (33.5%) were full-time employees, 31 (11.9%) were part-time employees and 19 respondents (7.3%) were pensioners, while 13 respondents (5%) were self-employed. Students constituted the largest, with 102 respondents (39.2%) and unemployed respondents were 8 respondents (3.1%).

Table 5. 8 Occupation of respondents

Occupation	Frequency	Percentage
Full-time employed	87.0	33.5
Part-time employed	31.0	11.9
Pensioner	19.0	7.3
Self-employed	13.0	5.0
Student	102.0	39.2
Unemployed	8.0	3.1
Total	260.0	100.0

Table 5.9 shows the monthly household income of respondents. Fifty eight (58) respondents (22.3%) earn between R2 000 to R4 999 per month. Fifty-seven (57) respondents (21.9%) earn between R 800 to R1 999 per month, whilst forty-nine of the respondents (18.8%) earn between R5 000 and R9 999 per month. Only 46 of the respondents (17.7%) earn between R10 000 to R19 999 per month, while 24 respondents (9.2%) earn R20 000 or more per month. The least income earners were 26 respondents representing 10% of the total sample whose earning are less than R 800 per month.

Table 5. 9 Monthly income of respondents

Monthly income	Frequency	Percentage
Less than 800	26	10
800-1999	57.0	21.9
2000-4999	58.0	22.3
5000-9999	49.0	18.8
10000- 19999	46.0	17.7
20000 and more	24.0	9.2
Total	260.0	100.0

The sample of customers per supermarket is outlined in Table 5.10. Supermarket A had 136 respondents (52.3%), while supermarket B had 124 respondents (47.7%).

Table 5. 10 Sample as per supermarket

Supermarket	Frequency	Percentage
Supermarket A	136.0	52.3
Supermarket B	124.0	47.7
Total	260.0	100.0

5.3.2 Descriptive statistics findings for the service quality, customer satisfaction and customer loyalty variables

In this section the descriptive statistics for service quality, customer satisfaction and customer loyalty variables will be given.

5.3.2.1 *The mean scores of service quality dimensions*

The second objective of this study was to determine customers' perceptions of service quality. This was estimated using the mean scores of service quality dimensions outlined in Table 5.11. The highest mean score was obtained by the policy dimension with a mean score of 3.9585 (0.6005), while physical aspects had the second highest mean score of 3.7269 (0.7402), followed by problem solving with a mean score of 3.6526 (0.7740), personal interaction with mean score of 3.6346 (0.7498) and reliability with mean score of 3.5981 (0.6747). Since all the mean scores were greater than 3.5500, it implies that respondents were reasonably satisfied with the way their respective supermarkets offer these service quality dimensions.

Table 5. 11 Mean scores of service quality dimensions

	Mean	Standard deviation	Sample size
Physical aspects	3.7269	0.7402	260
Reliability	3.5788	0.6747	260
Personal interaction	3.6346	0.7498	260
Problem solving	3.6526	0.7740	260
Policy	3.9585	0.6005	260

5.3.2.2 *The mean scores of customer satisfaction*

The third objective of this research study was to assess the perceptions of customer satisfaction levels of the selected retail supermarkets' customers. As shown in Table 5.2, the mean scores of customer satisfaction for the Taylor and Baker measures were 3.9827 (0.7706). This indicates that respondents are reasonably satisfied with the supermarkets' service quality offering.

Table 5. 12 Mean scores of customer satisfaction

	Mean	Standard deviation	Sample size
Taylor & Barker	3.9827	0.7706	260

5.3.2.3 The mean scores of customer loyalty dimensions

The fourth objective of this research study was to ascertain the levels of customer loyalty of customers of the two respective supermarkets and this was ascertained by using the mean scores of the dimensions of customer loyalty as outlined in Table 5.13. The mean scores of customer loyalty dimensions namely, word of mouth communication were 3.8154 (0.8625), purchase intentions 3.6756 (0.8072), price sensitivity 3.5359 (0.7163) and complaining behaviour 3.5500 (0.7019).

Table 5. 13 Mean scores of customer loyalty dimensions

	Mean	Standard deviation	Sample size
Word of mouth communication	3.8154	0.8625	260
Purchase intentions	3.6756	0.8072	260
Price sensitivity	3.5359	0.7163	260
Complaining behaviour	3.5500	0.7019	260

5.4 FINDINGS ON THE RELATIONSHIP BETWEEN SERVICE QUALITY, CUSTOMER SATISFACTION AND CUSTOMER LOYALTY

The purpose of this section is to give effect to the fifth objective of this research study, namely to determine the significance of the linear relationships between the various dimensions of service quality, customer satisfaction and customer loyalty in the retail supermarket industry as outlined in Chapter one, Section 1.3.2. In order to give effect to this objective, three sets of hypotheses were formulated. The first set of hypotheses was to determine whether there is significant linear relationship between the various dimensions of service quality and customer satisfaction. The second set of hypotheses determines whether there is significant linear relationship between the various dimensions of service quality and those of customer loyalty. The third set of hypotheses determines whether there is a significant linear relationship between customer satisfaction and the various dimensions of customer loyalty.

5.4.1 The relationship between service quality, customer satisfaction and customer loyalty

The findings pertaining to the relationships among the various dimensions of service quality, customer satisfaction and customer loyalty will be discussed in this section.

Tables 5.14 to 5.16 provide the Pearson's correlation coefficients (ρ) and the associated significance levels (p-values) between the various dimensions of service quality, customer satisfaction and customer loyalty respectively. Correlation coefficients (ρ) that are between 0.70 and 0.99 represent a strong positive linear relationship; correlation coefficients between 0.40 and 0.69 represent moderate positive linear relationship; and correlation coefficients less than 0.40 represent weak positive linear relationships. Similarly, for negative values, correlation coefficients that are between -0.70 and -0.99 represent a strong negative linear relationship; correlations between -0.40 and -0.69 represent a moderate negative relationship; and correlation coefficients between 0 and -0.39 represents a weak negative linear relationship (Collis & Hussey, 2009:268). P-values < 0.05 are considered significant. Thus if the p-value is less than the level of significance, alpha, of 0.05 (p-value < 0.05) the alternate hypothesis will be supported and the null hypothesis rejected.

5.4.2 Findings on the relationship between various dimensions of service quality and customer satisfaction

In this section the findings on the relationship between various dimensions of service quality and customer satisfaction will be presented, as highlighted in Table 5.14.

Table 5. 14 Pearson’s correlation matrix: Dimensions of service quality and customer satisfaction

	T&B scale	H ₀ (null hypothesis)	H _a (alternative hypothesis)
Service quality dimensions			
Physical aspects	0.7091		
	p = 0.00*	Rejected	Supported
Reliability	0.6421		
	p = 0.00*	Rejected	Supported
Personal interaction	0.6536		
	p = 0.00*	Rejected	Supported
Problem solving	0.5358		
	p = 0.00*	Rejected	Supported
Policy	0.5913		
	p = 0.00*	Rejected	Supported
*Marked Correlations are significant at p < 0.050 N=260 (Case wise deletion of missing data)			

5.4.2.1 Relationship between the service quality dimension of physical aspects and customer satisfaction

The results in Table 5.14 indicate strong positive correlations between the physical aspects of service quality and customer satisfaction (T&B, r = 0.7091) and the correlations are significant at the 5% level of significance, $p \approx 0$.

Hypothesis H₀^{1.1} can, therefore, be rejected and the alternative hypothesis supported. Therefore, it was found that there is a strong positive linear relationship between the physical aspects of service quality and customer satisfaction.

5.4.2.2 Relationship between the service quality dimension of reliability and customer satisfaction

The results in Table 5.14 show moderate positive correlation between the reliability dimension of service quality and Taylor and Baker’s measure of customer satisfaction (T&B, r = 0.6421) and the correlations are significant at 5% level of significance, $p \approx 0$.

Hypothesis $H_0^{1.2}$ can, therefore, be rejected and the alternative hypothesis supported. Therefore, these results have shown that there is a moderate positive linear relationship between reliability of service quality and customer satisfaction.

5.4.2.3 Relationship between the service quality dimension of personal interaction and customer satisfaction

The results in Table 5.14 further indicate moderate positive correlations between the personal interaction dimension of service quality and Taylor and Baker's measure of customer satisfaction ($r = 0.6536$) and the correlations are significant at 5% level of significance, $p \approx 0$.

Hypothesis $H_0^{1.3}$ can, therefore, be rejected and the alternative hypothesis supported. Therefore, this research has shown that there is a moderate positive linear relationship between personal interaction of service quality and customer satisfaction.

5.4.2.4 Relationship between the service quality dimension of problem solving and customer satisfaction

Table 5.14 also indicate moderate positive correlations between the problem solving dimension of service quality and Taylor and Baker's measure of customer satisfaction ($r = 0.5358$) and the correlations significant at 5% level of significance, $p \approx 0$.

Hypothesis $H_0^{1.4}$ is, therefore, rejected and the alternative hypothesis supported. Therefore, these results have shown that a moderate positive linear relationship between problem solving of service quality and customer satisfaction exists in the retail supermarket industry.

5.4.2.5. Relationship between the service quality dimension of policy and customer satisfaction

Lastly, Table 5.14 indicate moderate positive correlations of between the policy dimension of service quality and Taylor and Baker's measure of customer satisfaction ($r = 0.5913$) and the correlations are significant at 5% level of significance, $p \approx 0$.

Hypothesis $H_0^{1.5}$ can, therefore, be rejected and the alternative hypothesis supported. Therefore, this research has shown that there is a moderate positive linear relationship between policy of service quality and customer satisfaction.

5.4.3 Findings on the relationship between various dimensions of service quality and customer loyalty

In this section the findings on the relationship between various dimensions of service quality and customer loyalty will be given, as highlighted in Table 5.15.

Table 5. 15 Pearson's correlation matrix: Dimensions of service quality (SQ) and customer loyalty (CL)

	Complaining behaviour	Price sensitivity	Purchase intentions	Word of mouth
Service quality dimensions				
Physical aspects	0.0338	-0.1254	0.3620	0.6212
	p = 0.587	p = 0.043*	p = 1.80e-09*	p = 0.000*
Reliability	-0.00258	-0.1525	0.4591	0.6671
	p = 0.967	p = 0.014*	p = 5.77e-15*	p = 0.000*
Personal interaction	0.0079	-0.1734	0.4917	0.6654
	p = 0.899	p = 0.005*	p = 0.000*	p = 0.000*
Problem solving	0.0931	-0.1372	0.4121	0.5442
	p = 0.134	p = 0.026*	p = 4.38e-12*	p = 0.000*
Policy	0.0228	-0.1174	0.5026	0.5502
	p = 0.714	p = 0.058	p = 0.000*	p = 0.000*
H₀ (null hypothesis)	Not rejected	Rejected except for policy	Rejected	Rejected
H_a (alternative hypothesis)	Not supported	Supported except for policy	Supported	Supported
* Marked correlations are significant at p < 0.050 N=260 (Case wise deletion of missing data)				

5.5.3.1 Relationship between the service quality dimensions and the customer loyalty dimension of complaining behaviour

- ***Service quality dimension of physical aspects and the customer loyalty dimension of complaining behaviour***

The results in Table 5.15 show weak positive correlations between the physical aspects of service quality and customer loyalty (complaining behaviour, $r = 0.0338$) and the relationship is not significant at the 5% level of significance, $p = 0.587$.

Hypothesis $H_0^{2.1a}$ is, therefore, not rejected and the alternative hypothesis is not supported. This result shows that there is no significant linear relationship between physical aspects of service quality and complaining behaviour of customer loyalty, in this study.

- ***Service quality dimension of reliability and the customer loyalty dimension of complaining behaviour***

The results in Table 5.15 show weak negative correlations between reliability of service quality and customer loyalty (complaining behaviour $r = -0.0025$) and the relationship is not significant at 5% level of significance, $p = 0.967$.

Hypothesis $H_0^{2.1b}$ is, therefore, not rejected and the alternative hypothesis is not supported. This finding shows that there is no significant linear relationship between reliability of service quality and complaining behaviour of customer loyalty in this study.

- ***Service quality dimension of personal interaction and the customer loyalty dimension of complaining behaviour***

The results in Table 5.15 show weak positive correlations between the personal interaction of service quality and customer loyalty (complaining behaviour, $r = 0.0079$) and the relationship is not significant at the 5% level of significance, $p = 0.899$.

Hypothesis $H_0^{2.1c}$ can, therefore, not be rejected and the alternative hypothesis is not supported. These results indicate that there is no significant linear relationship between personal interaction of service quality and complaining behaviour of customer loyalty, in this study.

- *Service quality dimension of problem solving and the customer loyalty dimension of complaining behaviour*

The results in Table 5.15 further show weak positive correlations between problem solving of service quality and customer loyalty (complaining behaviour, $r = 0.0931$) and the relationship is not significant at the 5% level of significance, $p = 0.134$.

Hypothesis $H_0^{2.1d}$ cannot be rejected and the alternative hypothesis is not supported. This result has shown that there is no significant linear relationship between problem solving of service quality and complaining behaviour of customer loyalty, in this study.

- *Service quality dimension of policy and the customer loyalty dimension of complaining behaviour*

The results in Table 5.15 show weak positive correlations between policy of service quality and customer loyalty (complaining behaviour, $r = 0.0228$) and the relationship is not significant at the 5% level of significance, $p = 0.714$.

Hypothesis $H_0^{2.1e}$ cannot be rejected and the alternative hypothesis is not supported. These results have shown that there is no significant linear relationship between policy of service quality and complaining behaviour of customer loyalty in this study.

5.4.3.2 Relationship between service quality dimensions and the customer loyalty dimension of price sensitivity

- *Service quality dimension of physical aspects and the customer loyalty dimension of price sensitivity*

The results in Table 5.15 show weak negative correlations between the physical aspects of service quality and customer loyalty (price sensitivity, $r = -0.1254$) and the relationship is significant at the 5% level of significance, $p = 0.043$.

Hypothesis $H_0^{2.2a}$ can, therefore, be rejected and the alternative hypothesis is supported. Therefore, the research has shown that there is a weak negative linear relationship between physical aspects of service quality and price sensitivity of customer loyalty.

- ***Service quality dimension of reliability and customer loyalty dimension of price sensitivity***

The results in Table 5.15 indicate weak negative correlations between reliability of service quality and customer loyalty (price sensitivity, $r = -0.1525$) and the relationship is significant at the 5% level of significance, $p = 0.014$.

Hypothesis $H_0^{2.2b}$ can, therefore, be rejected and the alternative hypothesis is supported. Therefore, the research has shown that there is a weak negative linear relationship between reliability of service quality and price sensitivity of customer loyalty.

- ***Service quality dimension of personal interaction and the customer loyalty dimension of price sensitivity***

The results in Table 5.15 show weak negative correlations between personal interaction of service quality and customer loyalty (price sensitivity, $r = -0.1734$) and the relationship is significant at the 5% level of significance, $p = 0.005$.

Hypothesis $H_0^{2.2c}$ can, therefore, be rejected and the alternative hypothesis is supported. This finding has shown that there is a weak negative linear relationship between personal interaction of service quality and price sensitivity of customer loyalty.

- ***Service quality dimension of problem solving and the customer loyalty dimension of price sensitivity***

The results in Table 5.15 show weak negative correlations between problem solving of service quality and customer loyalty (price sensitivity, $r = -0.1372$) and the relationship is significant at the 5% level of significance, $p = 0.026$.

Hypothesis $H_0^{2.2d}$ can, therefore, be rejected and the alternative hypothesis is supported. This finding has shown that there is a weak negative linear relationship between problem solving of service quality and price sensitivity of customer loyalty.

- *Service quality dimension of policy and the customer loyalty dimension of price sensitivity*

The results in Table 5.15 show weak negative correlations between policy of service quality and customer loyalty (price sensitivity, $r = -0.1174$) and the relationship is not significant at the 5% level of significance, $p = 0.058$.

Hypothesis $H_0^{2.2e}$ can be, therefore, not rejected and the alternative hypothesis is not supported. This finding has shown that there is no significant linear relationship between policy of service quality and price sensitivity of customer loyalty.

5.4.3.3 Relationship between the service quality dimensions and the customer loyalty dimension of purchase intentions

- *Service quality dimension of physical aspects and the customer loyalty dimension of purchase intentions*

The results in Table 5.15 show weak positive correlations between physical aspects of service quality and customer loyalty (purchase intentions, $r = 0.3620$) and the relationship is significant at the 5% level of significance, $p \approx 0$.

Hypothesis $H_0^{2.3a}$ can therefore be rejected and the alternative hypothesis supported. This finding has shown that there is a significant weak linear relationship between physical aspects of service quality and purchase intentions of customer loyalty.

- *Service quality dimension of reliability and the customer loyalty dimension of purchase intentions*

The results in Table 5.15 show moderate positive correlations between reliability of service quality and customer loyalty (purchase intentions, $r = 0.4591$) and the relationship is significant at the 5% level of significance, $p \approx 0$.

Hypothesis $H_0^{2.3b}$ can therefore be rejected and the alternative hypothesis is supported. Therefore, the research has shown that there is a significant moderate positive linear relationship between reliability of service quality and purchase intentions of customer loyalty.

- ***Service quality dimension of personal interaction and the customer loyalty dimension of purchase intentions***

The results in Table 5.15 show moderate positive correlations between personal interaction of service quality and customer loyalty (purchase intentions, $r = 0.4917$) and the relationship is significant at the 5% level of significance, $p \approx 0$.

Hypothesis $H_0^{2.3c}$ can, therefore, be rejected and the alternative hypothesis is supported. Therefore, the research has shown that there is a significant moderate positive linear relationship between reliability of service quality and purchase intentions of customer loyalty.

- ***Service quality dimension of problem solving and the customer loyalty dimension of Purchase intentions***

The results in Table 5.15 show moderate positive correlations between problem solving of service quality and customer loyalty (purchase intentions, $r = 0.4121$) and the relationship is significant at the 5% level of significance, $p \approx 0$.

Hypothesis $H_0^{2.3d}$ can therefore be rejected and the alternative hypothesis supported. Therefore, this finding has shown that there is a significant moderate positive linear relationship between problem solving of service quality and purchase intentions of customer loyalty.

- ***Service quality dimension of policy and the customer loyalty dimension of Purchase intentions***

The results in Table 5.15 show moderate positive correlations between policy of service quality and customer loyalty (purchase intentions, $r = 0.5026$) and the relationship is significant at the 5% level of significance, $p \approx 0$.

Hypothesis $H_0^{2.3e}$ can, therefore, be rejected and the alternative hypothesis is supported. Therefore, this finding has shown that there is a moderate positive linear relationship between policy of service quality and purchase intentions of customer loyalty.

5.4.4.4 Relationship between the service quality dimensions and the customer loyalty dimension of word of mouth communication

- ***Service quality dimension of physical aspects and the customer loyalty dimension of word of mouth communication***

Table 5.15 shows moderate positive correlations between physical aspects of service quality and customer loyalty (word of mouth, $r = 0.6212$) and the relationship is significant at the 5% level of significance, $p \approx 0$.

Hypothesis $H_0^{2.4a}$ can, therefore, be rejected and the alternative hypothesis is supported. This finding has shown that there is a moderate positive linear relationship between physical aspects of service quality and word of mouth communication of customer loyalty.

- ***Service quality dimension of reliability and the customer loyalty dimension of word of mouth communication***

Table 5.15 shows moderate positive correlations between reliability of service quality and customer loyalty (word of mouth, $r = 0.6671$) and the relationship is significant at the 5% level of significance, $p \approx 0$.

Hypothesis $H_0^{2.4b}$ can, therefore, be rejected and the alternative hypothesis is supported. This finding has shown that there is a moderate positive linear relationship between reliability of service quality and word of mouth communication of customer loyalty.

- ***Service quality dimension of personal interaction and the customer loyalty dimension of word of mouth communication***

Table 5.15 shows moderate positive correlations between personal interaction of service quality and customer loyalty (word of mouth, $r = 0.6654$) and the relationship is significant at the 5% level of significance, $p \approx 0$.

Hypothesis $H_0^{2.4c}$ can, therefore, be rejected and the alternative hypothesis is supported. This finding has shown that there is a moderate positive linear relationship between personal interaction of service quality and word of mouth communication of customer loyalty.

- *Service quality dimension of problem solving and the customer loyalty dimension of word of mouth communication*

Table 5.15 shows moderate positive correlations between problem solving of service quality and customer loyalty (word of mouth, $r = 0.5442$) and the relationship is significant at the 5% level of significance, $p \approx 0$.

Hypothesis $H_0^{2.4d}$ can, therefore, be rejected and the alternative hypothesis is supported. This finding has shown that there is a moderate positive linear relationship between problem solving of service quality and word of mouth communication of customer loyalty.

- *Service quality dimension of policy and the customer loyalty dimension of word of mouth communication*

Table 5.15 show moderate positive correlations between policy of service quality and customer loyalty (word of mouth, $r = 0.5502$) and policy of service quality and the relationship is significant at 5% level of significance, $p \approx 0$.

Hypothesis $H_0^{2.4e}$ can, therefore, be rejected and the alternative hypothesis is supported. This finding has shown that there is a moderate positive linear relationship between policy of service quality and word of mouth communication of customer loyalty.

5.4.4 Findings on the relationship between customer satisfaction and the dimensions of customer loyalty

In this section the findings on the relationship between customer satisfaction and customer loyalty will be given, as highlighted in Table 5.16.

Table 5. 16 Pearson’s correlation matrix: Customer satisfaction and dimensions of customer loyalty

	T&B	H₀ (null hypothesis)	H_a (alternative hypothesis)
Customer loyalty dimensions			
Word of mouth	0.7455		
	p = 0.000*	Rejected	Supported
Purchase intentions	0.5433		
	p = 0.000*	Rejected	Supported
Price sensitivity	-0.1254		
	p = 0.043*	Rejected	Supported
Complaining behaviour	-0.0171		
	p = 0.783	Not Rejected	Not supported
*Marked correlations are significant at p < 0.050 N=260 (Case wise deletion of missing data)			

5.4.4.1 Relationship between customer satisfaction and the customer loyalty dimension of word of mouth communication

Table 5.16 indicates strong positive correlations between Taylor and Baker measure of customer satisfaction ($r = 0.7455$, $p \approx 0$) and the word of mouth communication dimension of customer loyalty, with significant relationships at 5% level of significance.

Hypothesis $H_0^{3.1}$ can, therefore, be rejected and the alternative hypothesis supported. Therefore, this finding has shown that there is a strong positive linear relationship between customer satisfaction and word of mouth communication of customer loyalty.

5.4.4.2 Relationship between customer satisfaction and the customer loyalty dimension of purchase intentions

Table 5.16 indicates moderate positive correlations between Taylor and Baker measure of customer satisfaction ($r = 0.5433$, $p \approx 0$) and the purchase intentions dimension of customer loyalty, with significant relationships at 5% level of significance.

Hypothesis $H_0^{3.2}$ can, therefore, be rejected and the alternative hypothesis supported. This finding has shown that there is a moderate positive linear relationship between customer satisfaction and purchase intentions of customer loyalty.

5.4.4.3 Relationship between customer satisfaction and the customer loyalty dimension of price sensitivity

Table 5.16 indicate weak correlations between Taylor and Baker measure of customer satisfaction ($r = -0.1254$, $p \approx 0.043$) and the price sensitivity dimension of customer loyalty, with significant relationships at the 5% level of significance. .

Hypothesis $H_0^{3.3}$ can, therefore, be rejected and the alternative hypothesis supported. This finding has shown that there is a weak significant linear relationship between customer satisfaction and price sensitivity of customer loyalty.

5.4.5.4 Relationship between customer satisfaction and the customer loyalty dimension of complaining behaviour

Table 5.16 indicates weak correlations between Taylor and Baker measure of customer satisfaction ($r = -0.0171$, $p \approx 0.783$) and the complaining behaviour of customer loyalty, with no significant relationships at the 5% level of significance.

Hypothesis $H_0^{3.4}$ cannot be rejected and the alternative hypothesis is not supported. This finding has shown that there are no significant linear relationships between customer satisfaction and complaining behaviour of customer loyalty.

5.5 FINDINGS ON THE INFLUENCE OF BIOGRAPHIC VARIABLES ON SERVICE QUALITY, CUSTOMER SATISFACTION AND CUSTOMER LOYALTY

To give effect to the fifth research objective, namely to determine if there are significant differences in the average scores of the service quality, customer satisfaction and customer loyalty dimensions and the selected biographical variables, either a one way ANOVA test, a Kruskal-Wallis rank sum test, a Welch's two sample t- test or a two sample t-test were performed. These results were used to assess hypotheses four, five and six, as stated in Section 4.3, in Chapter 4.

5.5.1 Findings on the differences in average scores of service quality dimensions for the selected biographic variables

As explained in Section 4.8.3, in Chapter 4, appropriate statistical tests were conducted to determine whether there are significant differences in the average scores of the service quality dimensions (namely physical aspects, reliability, personal interaction, problem solving and policy) for the selected biographical variables, namely age, population, gender, highest levels of education, occupation, monthly income and supermarkets.

5.5.1.1 Differences in average scores of the service quality dimensions between the age groups

In this research study, where two or more groups were considered, Bartlett's test was used to test the equality of the population variances. If the variances were equal, a parametric test one way ANOVA was performed. If the variances were not equal, a non-parametric test, the Kruskal-Wallis test, was performed.

The results of the Kruskal-Wallis test or ANOVA test in Table 5.17 indicate that all the dimensions of service quality have p-values greater than 5%, meaning that the null hypothesis is not rejected and the alternative hypothesis ($H_a^{4.1 a-e}$) is not supported. This data does not provide sufficient evidence that the average scores of the respective service quality dimensions are significantly different among the various age groups.

Table 5. 17 Individual parametric tests ANOVA or non-parametric tests (Kruskal-Wallis) for age groups

	Bartlett's K-squared	df	p-value	Evaluation of variance	Statistical technique	Kruskal-Wallis	df	p-value
Reliability	19.1238	3	0.0002	Not equal	Non-parametric	1.2114	3, 250	0.7503
Personal interaction	10.4131	3	0.0154	Not equal	Non-parametric	2.9429	3, 250	0.4005
Problem solving	7.9354	3	0.0474	Not equal	Non-parametric	4.8465	3, 250	0.1834
						ANOVA	df	p-value
Physical aspects	3.0628	3	0.3820	Equal	Parametric	0.3649	3, 250	0.7783
Policy	1.7359	3	0.6290	Equal	Parametric	0.2705	3, 250	0.8465

5.5.1.2 Differences in average scores of the service quality dimensions between the population groups

The equality of the population variances was assessed as previously stated. If the variances were equal, a parametric test, one way ANOVA, was performed. If the variances were not equal, a non-parametric test, the Kruskal-Wallis test, was performed.

The results of individual parametric tests (ANOVA) in Table 5.18 show that the dimension of physical aspects ($p = 0.0275$) has a p-value less than 5%. This means that the null hypothesis ($H_0^{4.2a}$) is rejected and the alternative hypothesis ($H_a^{4.2a}$) is supported. This data provides sufficient evidence that the average scores of physical aspects are significantly different among the various population groups. However, the dimensions of service quality, namely reliability, personal interaction, problem solving and policy, grouped by population groups, as shown in Table 5.18, have p-values greater than 5%. As a result the null hypotheses ($H_0^{4.2 b-e}$) cannot be rejected and the alternative hypotheses ($H_a^{4.2 b-e}$) are not supported. This data does not provide sufficient evidence that the average scores of the respective service quality dimensions are significantly different among the various population groups.

Table 5. 18 Individual parametric tests ANOVA for population groups

	Bartlett's K- squared	df	p-value	Evaluation of variance	Statistical technique	ANOV A	df	p-value
Physical aspects	1.5973	2	0.4499	Equal	Parametric	3.6418	2,251	0.0275*
Reliability	4.5763	2	0.1014	Equal	Parametric	1.9708	2,251	0.1414
Personal interaction	0.8455	2	0.6552	Equal	Parametric	1.0656	2,251	0.3460
Problem solving	3.5492	2	0.1695	Equal	Parametric	2.1716	2,251	0.1161
Policy	2.6833	2	0.2614	Equal	Parametric	2.9556	2,251	0.0538
*Marked p-values are significant at $p < 0.05$								

5.5.1.3 Differences in average score of the service quality dimensions between gender

Appropriate t-test statistics were used to assess if the service quality dimensions had significantly different means scores between males and females. If the population variances were equal, based on the F-test result, a pooled two sample t-test was used; if not, Welch's t-test was used.

The results of the Welch's t-test and the two sample t-test shown in Table 5.19 indicate that all the dimensions of service quality grouped by gender have p-values greater than 5%. Therefore, the all the null hypotheses ($H_0^{4.3a-e}$) are not rejected and the alternative hypotheses ($H_a^{4.3a-e}$) are not supported. This data does not provide sufficient evidence that the average scores of the respective service quality dimensions are significantly different between gender.

Table 5. 19 Welch's two sample t-test or two sample t-test for gender

	F-test	df- male	df- female	p-value	Evaluation of variance	Welch's t- test	df	p-value
Physical aspects	1.5989	82	176	0.0104	Not equal	0.1648	131.8679	0.8694
Reliability	1.8985	82	176	4e-04	Not equal	0.5492	123.9851	0.5839
Personal interaction	1.6041	82	176	0.0099	Not equal	0.4714	131.7052	0.6381
Problem solving	1.4829	82	176	0.0318	Not equal	-1.7969	135.7372	0.0746
						Two sample t-test		
Policy	1.2811	82	176	0.1775	Equal	-0.609	258	0.5431

5.5.1.4 Differences in average scores of the service quality dimensions for the levels of education

The equality of the population variances was assessed as previously stated. If the variances were equal, a parametric test, one way ANOVA, was performed. If the variances were not equal, a non-parametric test, the Kruskal-Wallis test, was performed.

In Table 5.20, the results of the individual ANOVA test or the Kruskal-Wallis test indicate that the dimensions of service quality, namely physical aspects, reliability, personal interaction and policy, grouped by levels of education have p-values greater than 5%. The null hypotheses ($H_0^{4.4a-d}$) are not rejected and the alternative hypotheses ($H_a^{4.4a-d}$) are not supported. This data does not provide sufficient evidence that the average scores of the respective service quality dimensions are significantly different among the levels of education.

One dimension of service quality, namely problem solving ($p = 0.0149$), has a p-value less than 5%. This means that the null hypothesis ($H_0^{4.4e}$) is rejected and alternative hypothesis ($H_a^{4.4e}$) is

supported. This data does provide sufficient evidence that the average scores of the problem solving are significantly different among the various levels of education.

Table 5. 20 Individual parametric tests ANOVA and non-parametric tests (Kruskal-Wallis) for levels of education

	Bartlett's K-squared	df	p-value	Evaluation of variance	Statistical technique	ANOVA	df	p-value
Physical aspects	2.0415	4	0.7281	Equal	Parametric	0.8008	4, 254	0.5255
Reliability	7.0001	4	0.1358	Equal	Parametric	0.1910	4, 254	0.9429
Personal interaction	5.3455	4	0.2536	Equal	Parametric	1.4570	4, 254	0.2157
Policy	1.4582	4	0.8340	Equal	Parametric	0.0735	4, 254	0.9901
						Kruskal-Wallis	df	p-value
Problem solving	15.6042	4	0.0036	Not equal	Non-Parametric	12.3449	4	0.0150*

*Marked p-values are significant at $p < 0.05$

5.5.1.5 Differences in average scores of the service quality dimensions for occupation

The equality of the population variances was assessed as previously stated. For each variable the variances were homogeneous and hence one way ANOVA's were used to assess the significance of the difference in the population means.

The results of the individual parametric tests (ANOVA) in Table 5.21 indicate that all the respective service quality dimensions have p-values greater than 5%. The null hypotheses ($H_0^{4.5a-e}$) are not rejected and the alternative hypotheses ($H_a^{4.5a-e}$) are not supported. This data does not provide sufficient evidence that the average scores of the respective service quality dimensions are significantly different among the various occupations.

Table 5. 21 Individual parametric tests ANOVA for occupation

	Bartlett's K-squared	df	p-value	Evaluation of variance	Statistical technique	ANOVA	df	p-value
Physical aspects	3.4780	2	0.1757	Equal	Parametric	0.6137	2, 217	0.5422
Reliability	2.8696	2	0.2381	Equal	Parametric	0.0863	2, 217	0.9172
Personal interaction	0.9566	2	0.6198	Equal	Parametric	1.1575	2, 217	0.3161
Problem solving	0.8891	2	0.6411	Equal	Parametric	1.7905	2, 217	0.1693
Policy	0.6787	2	0.7122	Equal	Parametric	1.6396	2, 217	0.1964

5.5.1.6 Differences in average scores of the service quality dimensions for the monthly incomes

The equality of the population variances was assessed as previously stated. For each variable the variances were homogeneous and hence one way ANOVA's were used to assess the significance of the difference in the population means.

The results shown in Table 5.22 indicate that all the respective service quality dimensions have p-values greater than 5%. This means that the null hypotheses ($H_0^{4.6a-e}$) are not rejected and the alternative hypotheses ($H_a^{4.6a-e}$) are not supported. This data does not provide sufficient evidence that the average mean scores of the respective service quality dimensions are significantly different among the various monthly income groups.

Table 5. 22 Individual parametric tests ANOVA for monthly income

	Bartlett's K-squared	df	p-value	Evaluation of variance	Statistical technique	ANOVA	df	p-value
Physical aspects	3.4684	5	0.6281	Equal	Parametric	0.2557	5, 253	0.9366
Reliability	1.0774	5	0.9560	Equal	Parametric	0.3839	5, 253	0.8595
Personal interaction	2.0257	5	0.8455	Equal	Parametric	0.3122	5, 253	0.9055
Problem solving	8.7080	5	0.1212	Equal	Parametric	0.4267	5, 253	0.8298
Policy	4.8587	5	0.4333	Equal	Parametric	0.7147	5, 253	0.6128

5.5.1.7 Differences in average scores of the service quality dimensions between the supermarkets

Appropriate t-test statistics were used to assess if the service quality dimensions had significantly different mean scores between the two supermarkets. If the population variances were equal, based on the F-test result, a pooled two sample t-test was used; if not, Welch's t-test was used.

The results of these t-tests for supermarkets A and B are shown in Table 5.23. The service quality dimensions, namely physical aspects, reliability, personal interaction, and policy have p-values greater than 5%. The null hypotheses ($H_0^{4.7a-d}$) are not rejected and the alternative hypotheses ($H_a^{4.7a-d}$) are not supported. This data does not provide sufficient evidence that the average mean scores of these service quality dimensions are significantly different between the two supermarkets.

The dimension of service quality problem solving ($p = 0.0021$) has p-values less than 5%. Therefore, the null hypothesis ($H_0^{4.7e}$) is rejected and alternative hypothesis ($H_a^{4.7e}$) is supported in terms of the service quality dimension of problem solving. This data provides sufficient evidence that the average mean scores of problem solving is significantly different between the two supermarkets.

Table 5. 23 Individual parametric test (Welch's two-sample t-test) or non-parametric two t-sample test for supermarkets

	F-Test	df-Supermarket A	df-Supermarket B	p-value	Evaluation of variance	Two t-sample test	df	p-value
Physical aspects	0.7643	135	123	0.1271	Equal	3.9007	258	5.9162
Reliability	0.9085	135	123	0.5850	Equal	3.7438	258	2.8069
Personal interaction	0.8273	135	123	0.2816	Equal	3.8799	258	1.3347
Policy	0.7536	135	123	0.1084	Equal	4.2676	258	4.1877
						Welch's t-test		
Problem solving	0.6461	135	123	0.0133	Not equal	3.7941	235.9902	0.0021*
*Marked p-values are significant at $p < 0.05$								

5.5.2 Findings on the differences in average scores of customer satisfaction for the selected biographic variables.

As explained previously, appropriate statistical tests were conducted to determine whether there are significant differences in the average scores of customer satisfaction for the selected biographical variables, namely age, population, gender, highest levels of education, occupation, monthly income and supermarkets.

5.5.2.1 Differences in average scores of customer satisfaction between the age groups

The equality of the population variances was assessed as previously stated. The variances were equal, a parametric test, the one way ANOVA, was performed.

The results of the ANOVA test for various age groups in Table 5.24 indicate that Taylor and Baker customer satisfaction measure has p-values greater than 5%. The null hypothesis ($H_0^{5.1}$) is, therefore, not rejected and the alternative hypothesis ($H_a^{5.1}$) is not supported. This data does not provide sufficient evidence that the mean or sample populations are significantly different in centre and/or spread for customer satisfaction among the various age groups.

Table 5. 24 Individual parametric tests ANOVA for age groups

	Bartlett's K- squared	df	p-value	Evaluation of variance	Statistical technique	ANOVA	df	p-value
Taylor & Baker	3.6627	3	0.3003	Equal	Parametric	1.9677	3	0.1193

5.5.2.2 Differences in average scores of customer satisfaction between population groups

The equality of the population variances was assessed as previously stated. The variances were not equal, a non-parametric test, the Kruskal-Wallis test, was performed.

In Table 5.25, the results of the Kruskal-Wallis tests indicate that the Taylor & Baker customer satisfaction measure has p-values greater than 5%. The null Hypothesis ($H_0^{5.2}$) is, therefore, not rejected and the alternative hypothesis ($H_a^{5.2}$) is not supported. This data does not provide sufficient evidence that the sample populations are significantly different in centre and/or spread for customer satisfaction among the various population groups.

Table 5. 25 Individual non-parametric tests (Kruskal- Wallis) for population groups

	Bartlett's K- squared	df	p-value	Evaluation of variance	Statistical technique	Kruskal- Wallis	df	p-value
Taylor & Baker	6.603	2	0.0368	Not equal	Non- parametric	0.8486	2	0.6542

5.5.2.3 Differences in average scores of customer satisfaction between gender

Appropriate t-test statistics were used to assess if customer satisfaction had significantly different mean scores between males and females. For each variable the variances were not equal and hence Welch's t-test was used to assess the significance of the difference in the population means.

The results of these two sample t-tests are shown in Table 5.26. The customer satisfaction measure of Taylor & Baker ($p = 0.0222$) had a p-value of less than 5% meaning the null hypothesis is rejected and the alternative hypothesis ($H_a^{5.3}$) is supported. This data does provide sufficient evidence that the average Taylor & Baker scores of customer satisfaction are significantly different between males and females.

Table 5. 26 Welch's two-sample t-test for gender

	F-Test	df- male	df-female	p-value	Evaluation of variance	Welch's t- test	df	p-value
Taylor & Baker	2.0664	82	176	6.6611	Not equal	3.8012	120.5465	0.0222*
*Marked p-values are significant at $p < 0.05$								

5.5.2.4 Differences in average score of customer satisfaction between levels of education

The equality of the population variances was assessed as previously stated. For each variable the variances were homogeneous and hence one way ANOVAs' were used to assess the significance of the difference in the population means.

The results in Table 5.27 indicate that the Taylor and Baker customer satisfaction measure had a p-value greater than 5% meaning that the null hypothesis is not rejected and the alternative hypothesis ($H_a^{5.4}$) is not supported. This data does not provide sufficient evidence that the

average scores of customer satisfaction are significantly different between the levels of education.

Table 5. 27 Individual parametric tests ANOVA for levels of education

	Bartlett's K- squared	df	p-value	Evaluation of variance	Statistical technique	ANOVA	df	p-value
Taylor & Baker	2.87067	4	0.5796	Equal	Parametric	0.2757	4, 254	0.8934

5.5.2.5 Differences in average score of customer satisfaction between occupation

The equality of the population variances was assessed as previously stated. For each variable the variances were homogeneous and hence one way ANOVAs' were used to assess the significance of the difference in the population means.

In Table 5.28 the results of the individual ANOVA tests indicate that the customer satisfaction measure of Taylor & Baker ($p = 0.6545$) had a p-value that is greater than 5% meaning that the null hypothesis is not rejected and the alternative hypothesis ($H_a^{5.5}$) is not supported. This data does not provide sufficient evidence that the average scores of customer satisfaction are significantly different among various occupations.

Table 5. 28 Individual parametric tests ANOVA for occupation

	Bartlett's K- squared	df	p-value	Evaluation of variance	Statistical technique	ANOVA	df	p-value
Taylor & Baker	5.0622	2	0.0795	Equal	Parametric	0.4246	2, 217	0.6545

5.5.2.6 Differences in average score of customer satisfaction between monthly income

The equality of the population variances was assessed as previously stated. For each variable the variances were homogeneous and hence one way ANOVAs' were used to assess the significance of the difference in the population means.

The results of the individual ANOVA test for occupation in Table 5.29 indicate that customer satisfaction measure of Taylor and Baker had a p-value greater than 5% meaning that the null hypothesis is not rejected and the alternative hypothesis ($H_a^{4.6}$) is not supported. This data does

not provide sufficient evidence that the average scores of customer satisfaction are significantly different between the various monthly income groups.

Table 5. 29 Individual parametric tests ANOVA for monthly income

	Bartlett's K- squared	Df	p-value	Evaluation of variance	Statistical technique	ANOVA	df	p-value
Taylor & Baker	5.1790	5	0.3944	Equal	Parametric	0.3455	5, 253	0.8848

5.5.2.7 Differences in average score of customer satisfaction between supermarkets

Appropriate t-test statistics were used to assess if customer satisfaction had significantly different mean scores between the two supermarkets.

The results of the two t-sample tests are shown in Table 5.30. Customer satisfaction measure of Taylor & Baker ($p = 0.000$) had a p-value less than 5% meaning that the null hypothesis is rejected and the alternative hypothesis ($H_a^{4.7}$) is supported. This data does provide sufficient evidence that the average scores of customer satisfaction are significantly different between the two supermarkets.

Table 5. 30 Two t-sample test for supermarkets

	F- Test	df- Supermarket A	df- Supermarket B	p- value	Evaluation of variance	Two t- sample test	df	p- values
Taylor & Baker	0.7753	135	123	0.1486	Equal	5.1704	258	0.000*
*Marked p-values are significant at $p < 0.05$								

5.5.3 Findings on the differences in average scores of the customer loyalty dimensions for the selected biographic variables

As explained previously, appropriate statistical tests were conducted to determine whether there are significant differences in the average scores of customer loyalty dimensions for the selected biographical variables, namely age, population, gender, highest levels of education, occupation, monthly income and supermarkets.

5.5.3.1 Differences in average scores of the customer loyalty dimensions and age groups

The equality of the population variances was assessed as previously stated. If the variances were equal, a parametric test, the one way ANOVA, was performed. If the variances were not equal, a non-parametric test, the Kruskal-Wallis test, was performed.

The results of the individual parametric tests, the ANOVA and the non-parametric Kruskal-Wallis test, shown in Table 5.31, indicate that respective customer loyalty dimensions of word of mouth communication, purchase intentions, price sensitivity and complaining behaviour have p-values greater than 5% meaning that the null hypotheses ($H_0^{6.1a-d}$) are not rejected and the alternative hypotheses ($H_a^{6.1a-d}$) are not supported. This data does not provide sufficient evidence that the mean or sample populations are significantly different in centre and/or spread for customer loyalty dimensions among the various age groups.

Table 5. 31 Individual parametric tests ANOVA or non-parametric tests (Kruskal-Wallis) for age groups

	Bartlett's K-squared	df	p-value	Evaluation of variance	Statistical technique	ANOVA	df	p-value
Word of mouth communication	5.2308	3	0.1556	Equal	Parametric	1.3713	3, 250	0.2520
Purchase intentions	4.5157	3	0.2108	Equal	Parametric	1.0539	3, 250	0.3693
Price sensitivity	2.9792	3	0.3958	Equal	Parametric	1.3482	3, 250	0.2592
						Kruskal-Wallis	df	p-value
Complaining behaviour	8.9071	3	0.0305	Not equal	Non-parametric	1.1180	3	0.7727

5.5.3.2 Differences in average scores of the customer loyalty dimensions between population groups

The equality of the population variances was assessed as previously stated. For each variable the variances were homogeneous and hence one way ANOVA's were used to assess the significance of the difference in the population means.

The results of the individual parametric ANOVA test in Table 5.32 indicate that the respective customer loyalty dimensions, namely word of mouth communication, purchase intentions, price

sensitivity and complaining behaviour, have p-values greater than 5% meaning that the null hypotheses ($H_0^{6.2a-d}$) are not rejected and the alternative hypotheses ($H_a^{6.2a-d}$) are not supported. This data does not provide sufficient evidence that the average scores of the respective customer loyalty dimensions are significantly different among the various population groups.

Table 5. 32 Individual parametric tests ANOVA for population groups

	Bartlett's K-squared	df	p-value	Evaluation of variance	Statistical technique	ANOVA	df	p-value
Word of mouth communication	1.5248	2	0.4665	Equal	Parametric	0.8401	2, 251	0.4328
Purchase intentions	0.6868	2	0.7093	Equal	Parametric	0.6699	2, 251	0.5126
Price sensitivity	0.8918	2	0.6402	Equal	Parametric	0.0017	2, 251	0.9982
Complaining behaviour	3.4493	2	0.1782	Equal	Parametric	0.1837	2, 251	0.8322

5.5.3.3 Differences in average scores of the customer loyalty dimensions between gender

Appropriate t-test statistics were used to assess if customer loyalty had significantly different mean scores between males and females.

The results of the two sample t-test in Table 5.33 indicate that the respective customer loyalty dimensions, namely word of mouth communication, purchase intentions, price sensitivity and complaining behaviour, have p-values greater than 5% meaning that the null hypotheses ($H_0^{6.3a-d}$) are not rejected and the alternative hypotheses ($H_a^{6.3a-d}$) are not supported. This data does not provide sufficient evidence that the average scores of the respective customer loyalty dimensions are significantly different between males and females.

Table 5. 33 Two sample t- test for gender

	F-Test	df-male	df-female	p-value	Evaluation of variance	Two sample T-test	df	p-value
Word of mouth communication	1.3942	82	176	0.0704	Equal	3.6144	258	0.3549
Purchase intentions	1.1787	82	176	0.3683	Equal	3.6144	258	0.4036
Price sensitivity	1.0181	82	176	0.9059	Equal	3.5783	258	0.5142
Complaining behaviour	1.2147	82	176	0.2886	Equal	3.5873	258	0.5578

5.5.3.4 Differences in average scores of the customer loyalty dimensions between levels of education

The equality of the population variances was assessed as previously stated. If the variances were equal, a parametric test, the one way ANOVA, was performed. If the variances were not equal, a non-parametric test, the Kruskal-Wallis test, was performed.

The results of the ANOVA or Kruskal-Wallis tests for levels of education of respondents are shown in Table 5.34. The customer loyalty dimensions of word of mouth communication, purchase intentions and complaining behaviour have p-values that are greater than 5% meaning that the null hypotheses ($H_0^{6.4a,b,d}$) are not rejected and the alternative hypotheses ($H_a^{6.4a,b,d}$) are not supported. This data does not provide sufficient evidence that the average scores or sample populations of the respective customer loyalty dimensions are significantly different in centre and/or spread among the various levels of education.

The price sensitivity customer loyalty dimension has a p-value of 0.0019 which is less than 5% meaning that the null hypothesis ($H_0^{6.4c}$) is rejected and the alternative hypothesis ($H_a^{6.4c}$) is supported. This data provides sufficient evidence that the average price sensitivity scores of customer loyalty are significantly different among the various levels of education.

Table 5. 34 Individual parametric tests ANOVA or non-parametric tests (Kruskal-Wallis) for levels of education

	Bartlett's K-squared	df	p-value	Evaluation of variance	Statistical technique	ANOVA	df	p-value
Word of mouth communication	0.6725	4	0.9546	Equal	Parametric	1.106	4	0.3540
Purchase intentions	1.2441	4	0.8707	Equal	Parametric	0.8951	4	0.4673
Price sensitivity	7.3314	4	0.1193	Equal	Parametric	4.3641	4	0.0019*
						Kruskal-Wallis	df	p-value
Complaining behaviour	12.7317	4	0.0126	Not equal	Non-parametric	2.2616	4	0.6878
*Marked p-values are significant at $p < 0.05$								

5.5.3.5 Differences in average scores of the customer loyalty dimensions between occupations

The equality of the population variances were assessed as previously stated. If the variances were equal, a parametric test, the one way ANOVA, was performed. If the variances were not equal, a non-parametric test, the Kruskal-Wallis test, was performed.

The results of the ANOVA tests or Kruskal Wallis tests for occupation are shown in Table 5.35. The customer loyalty dimensions, namely word of mouth communications, purchase intentions and complaining behaviour, have p-values greater than 5% meaning that the null hypotheses ($H_0^{6.5a,b,d}$) are not rejected and the alternative hypothesis ($H_a^{6.5a,b,d}$) are not supported. This data does not provide sufficient evidence that the average or sample populations of the respective customer loyalty dimensions are significantly different in centre and/or spread among the various occupations.

The price sensitivity customer loyalty measure has a p-value of 0.0007 which is less than 5% meaning that the null hypothesis ($H_0^{6.5c}$) is rejected and the alternative hypothesis ($H_a^{6.5c}$) is supported. This data provides sufficient evidence that the average price sensitivity scores of customer loyalty measures are significantly different among various occupation levels.

Table 5. 35 Individual parametric tests ANOVA or non-parametric tests (Kruskal-Wallis) for occupation

	Bartlett's K-squared	df	p-value	Evaluation of variance	Statistical technique	ANOVA	df	p-value
Word of mouth communication	1.7902	2	0.4085	Equal	Parametric	0.1814	2, 217	0.8342
Purchase intentions	2.8385	2	0.2418	Equal	Parametric	2.3583	2, 217	0.0969
Price sensitivity	1.2290	2	0.5408	Equal	Parametric	7.4048	2, 217	0.0007*
						Kruskal-Wallis	df	p-value
Complaining behaviour	9.2981	2	0.0095	Not equal	Non-parametric	1.4025	2, 217	0.4960
*Marked p-values are significant at $p < 0.05$								

5.5.3.6 Differences in average scores of the customer loyalty dimensions between monthly income

The equality of the population variances were assessed as previously stated. If the variances were equal, a parametric test, the one way ANOVA, was performed. If the variances were not equal, a non-parametric test, the Kruskal-Wallis test, was performed.

The results of the ANOVA or Kruskal Wallis tests for monthly incomes in Table 5.36 indicate that the respective customer loyalty dimensions, namely word of mouth communication, purchase intentions, price sensitivity and complaining behaviour have p-values greater than 5% meaning that the null hypotheses ($H_0^{6.6a-d}$) are not rejected and the alternative hypotheses ($H_a^{6.6a-d}$) are not supported. This data does not provide sufficient evidence that the average or sample populations of the respective customer loyalty dimensions are significantly different in centre and/or spread among the various monthly incomes.

Table 5. 36 Individual parametric tests ANOVA or non-parametric tests (Kruskal-Wallis) for monthly incomes

	Bartlett's K-squared	df	p-value	Evaluation of variance	Statistical technique	ANOVA	df	p-value
Word of mouth communication	5.6549	5	0.3412	Equal	Parametric	0.2848	5, 253	0.9211
Purchase intentions	6.3015	5	0.2779	Equal	Parametric	0.2688	5, 253	0.9298
Price sensitivity	0.9858	5	0.9637	Equal	Parametric	1.3902	5, 253	0.2283
						Kruskal-Wallis	df	p-value
Complaining behaviour	11.3838	5	0.0442	Not equal	Non-parametric	2.7676	5	0.7358

5.5.3.7 Differences in average scores of the customer loyalty dimensions and supermarkets

Appropriate t-test statistics were used to assess if customer loyalty dimensions had significantly different mean scores between supermarkets.

The results of the two t-sample test for supermarkets in Table 5.37 indicate that the respective customer loyalty dimensions, namely word of mouth communication, purchase intentions and

price sensitivity have p-values less than 5% meaning that the null hypotheses ($H_0^{6.7a-c}$) are rejected and the alternative hypotheses ($H_a^{6.7a-c}$) are supported. This data does provide sufficient evidence that the average scores of the respective customer loyalty dimensions are significantly different between the supermarkets.

The complaining behaviour customer loyalty measure has a p-value of 0.1240 which is greater than 5% meaning that the null hypothesis ($H_0^{6.7d}$) is not rejected and the alternative hypothesis ($H_a^{6.7d}$) is not supported. This data does not provide sufficient evidence that the average complaining behaviour scores of customer loyalty are significantly different between supermarkets.

Table 5. 37 Two t-sample test for supermarkets

	F-Test	df-Supermarket A	df-Supermarket B	p-value	Evaluation of variance	Two t-sample test	df	p-value
Word of mouth communication	0.8711	135	123	0.4328	Equal	4.8160	258	.000*
Purchase intentions	0.7789	135	123	0.1561	Equal	5.4193	258	.000*
Price sensitivity	1.0783	135	123	0.6718	Equal	-2.2505	258	0.0253*
Complaining behaviour	0.9712	135	123	0.8662	Equal	1.5431	258	0.1240
*Marked p-values are significant at $p < 0.05$								

5.6 SUMMARY

This chapter presented the empirical findings of this research. A description of the statistical software used in this research study and how the data was cleaned and analysed was given. The reliability of the research instrument was discussed and the descriptive statistics were presented. Thereafter, the findings on the relationships among service quality, customer satisfaction and customer loyalty were presented and described. Lastly, the findings on the influence of biographic variables on service quality, customer satisfaction and customer loyalty were explained.

The following chapter will discuss these findings and the conclusion and recommendations will be made.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The previous chapter presented the empirical findings of this research study. The main purpose of this chapter is to discuss the empirical findings of this study in the light of the literature reviewed in chapters two and three. The discussions of the findings of this research will lead to conclusions and, thereafter, appropriate recommendations will be made. The recommendations will not be based only on the empirical findings of this research study but the views expressed in the secondary sources (literature) dealing with service quality, customer satisfaction and customer loyalty will also be incorporated. A discussion of the limitations of this study will be presented, and thereafter the guidelines for future research will be provided.

6.2 OVERVIEW OF THE RESEARCH

This study set out to determine the relationships among service quality, customer satisfaction and customer loyalty in the retail supermarket industry. The study sought to contribute to the deeper understanding of how relationship marketing can be implemented through service quality, customer satisfaction and customer loyalty in the retail supermarket industry. Chapter one of this thesis provided the background to this study with regards to the concepts of relationship marketing, service quality, customer satisfaction and customer loyalty. The chapter also described the purpose of the study, outlined the research objectives and hypotheses and thereafter suggested the research methodology that was implemented.

In chapter two the concepts of relationship marketing, service quality and customer satisfaction were explained. Relationship marketing was defined and discussed in terms of its transition from the traditional transactional marketing to relationship marketing. Service quality was comprehensively defined and the various frameworks developed to understand the concept were discussed. Measuring scales of service quality (SERVQUAL, SERVPERF and Retail Service Quality Scale) were explored. Customer satisfaction and how it is measured were examined. Lastly, the relationship between customer satisfaction and service quality was highlighted and discussed.

In chapter three the concepts of customer retention and customer loyalty, two concepts that are of high importance to contemporary organisations, were presented. The link between customer retention and customer loyalty was explained. The benefits of customer retention and customer loyalty to contemporary organisations were outlined. The customer loyalty measurement for this study was discussed according to behavioural and attitudinal dimensions that customers reflect towards an organisation. The framework used to measure customer loyalty (Bloemer *et al.* 1998) in this study was explained. The relationships between customer loyalty and service quality; customer loyalty and customer satisfaction and customer loyalty and biographic variables were discussed respectively.

In chapter four the research design and methodology of this study were discussed. The research purpose and objectives were outlined and described. Thereafter, the research paradigms used in research were identified and the positivist paradigm appropriate for this study was discussed. The research methods used were then examined and subsequently the survey method which was used in this study was discussed in detail, including the reliability and validity of the instruments of previous studies adapted for this research study. Furthermore, the sample selection for this research study was explained. Following from this, data analysis techniques were examined in detail, in which descriptive and inferential statistics were discussed. Lastly, ethical considerations which the researcher ensured were in place in this study were explained.

In chapter five the empirical findings of this research were presented. The reliability analysis of the research instrument used in this study was provided. The descriptive statistics of the biographic information and service quality, customer satisfaction and customer loyalty were presented. Inferential Statistics were used to test six sets of hypotheses. These hypotheses tested the relationships between service quality, customer satisfaction and customer loyalty, as well as the influence of biographic variables on service quality, customer satisfaction and customer loyalty.

This chapter will provide a discussion of the empirical findings of the study and present conclusions of the findings with regards to the relationship between service quality, customer satisfaction and customer loyalty and the influence of biographic variables on service quality, customer satisfaction and customer loyalty as per this research study.

6.3 CONCLUSIONS

The conclusions of the empirical findings will be discussed under the following headings:

- The perceptions of service quality, customer satisfaction and customer loyalty
- The relationship between the dimensions of service quality and customer satisfaction
- The relationship between the dimensions of service quality and customer loyalty
- The relationship between customer satisfaction and customer loyalty
- Influence of biographic variables on service quality
- Influence of biographic variables on customer satisfaction
- Influence of biographic variables on customer loyalty

6.3.1 The perceptions of service quality, customer satisfaction and customer loyalty

Objectives two, three and four of the research study were to determine customers' perceptions of service quality; assess the perceptions of customer satisfaction levels and ascertain the perceptions of customer loyalty levels of the selected retail supermarkets' respectively. In order to give effect to these objectives, the mean scores of service quality dimensions, customer satisfaction measures and customer loyalty dimensions were calculated.

The mean scores of service quality dimensions namely physical aspects (mean score 3.7269), reliability (mean score 3.5788), personal interaction (mean score 3.6346), problem solving (mean score 3.6526) and policy (mean score 3.985) show that respondents agree with the standard of service quality that their respective supermarkets offer. The mean scores of customer satisfaction measure of Taylor and Baker (mean score 3.9827) also imply that respondents are satisfied with the service quality offering of their respective supermarkets. Lastly, the mean scores of customer loyalty dimensions, namely word of mouth communication (mean score 3.8154), purchase intentions (mean score 3.6756), price sensitivity (mean score 3.5359) and complaining behaviour (mean score 3.5500) imply that respondents agree to show their loyalty to their respective supermarkets through word of mouth communication, future purchase intentions, price sensitivity and complaining behaviour.

6.3.2 The relationship between the dimensions of service quality and customer satisfaction

The relationship between the dimensions of service quality and customer satisfaction was discussed, so as to give effect to the fifth research objective and the first hypotheses (H_a^1). The purpose of the first hypotheses (H_a^1) was to determine whether there is a significant linear relationship between the dimensions of service quality (namely physical aspects, reliability, personal interaction, problem solving and policy) and customer satisfaction.

- H_0^1 : There is no statistically significant linear relationship between various dimensions of service quality and customer satisfaction.
- H_a^1 : There is a statistically significant linear relationship between various dimensions of service quality and customer satisfaction.

The findings in this study indicate positive linear relationships between all the dimensions of service quality (physical aspects, reliability, personal interaction, problem solving and policy) and customer satisfaction.

The findings in this regard can be summarised as follows:

- There is a strong positive linear relationship between the physical aspects of service quality and customer satisfaction. This implies that customers want to shop in an environment that has modern-looking equipment and fixtures, which is clean, visually appealing and has a layout that makes it easy for customers to move around in the supermarket. In a nutshell customers are satisfied to shop in a hassle-free environment. The findings of this study support the study by Beneke *et al.* (2012:37) who found that physical aspects were the most important predictors of customer satisfaction.
- There is a moderate positive linear relationship between reliability of service quality and customer satisfaction. This implies that customers are satisfied when the supermarket keeps its promises, performs its services right the first time, has no shortage of merchandise that customers might want and insists on error free sales transactions. A supermarket that keeps its promises, does things right and always keeps its merchandise up to date is highly likely to have satisfied customers. However, this result does not support previous research by Beneke

et al. (2012:37), who found that there was no significant relationship between service quality (reliability) and customer satisfaction.

- There is a moderate positive linear relationship between personal interaction of service quality and customer satisfaction. From these findings it is evident that customers in supermarkets are satisfied when the supermarket's employees are knowledgeable about the supermarket, friendly, provide prompt services and are courteous and helpful. This implies that the behaviour and attitude of employees has an effect on the satisfaction of customers. It is, therefore, important for supermarket management to keep their employees happy by paying at least minimum wages and providing good working conditions so that they can have good personal interactions with customers. This finding supports the research by Beneke *et al.* (2012:37) who found that the relationship between service quality (personal interaction) and customer satisfaction was significant.
- A moderate positive linear relationship between the problem solving component of service quality and customer satisfaction exists in the retail supermarket industry. The findings of this study imply that customers are satisfied when the supermarket willingly handles their returns and exchanges, show sincere interest to solve their problems and handles their complaints directly and immediately. Therefore, customers are more likely to be satisfied when the supermarket handles their problems and complaints sincerely and immediately. However this finding contradicts the research by Beneke *et al.* (2012:37) who found that problem solving had no significant effect on customer satisfaction.
- A moderate positive linear relationship exists between the policy component of service quality and customer satisfaction. The findings of this study revealed that customers are satisfied when the supermarket provides them with high quality merchandise, plenty of convenient parking, convenient operating hours and accepts major credit cards. This contradicts the findings by Beneke *et al.* (2012:37) who found that policy had no significant relationship with customer satisfaction.

Overall the aforementioned findings of the relationship between dimensions of service quality and customer satisfaction do support previous research studies (Cronin & Taylor, 1992:65; Taylor & Barker, 1994:172; Sureshchandar *et al.* 2002:36; Ojo, 2010:88) who all found that there was a strong relationship between service quality and customer satisfaction.

As a result it was concluded that moderate to strong linear significant relationships exist between the dimensions of service quality and customer satisfaction, whereby physical aspects, reliability, personal interaction, problem solving and policy are more likely to influence customer satisfaction in the retail supermarket industry.

6.3.3 The relationship between the dimensions of service quality and the dimensions of customer loyalty

The relationship between the dimensions of service quality and dimensions of customer loyalty was discussed, so as to give effect to the fifth research objective and the second hypotheses (H_a^2). The purpose of the second hypotheses was to determine whether there is a significant relationship between the dimensions of service quality (namely physical aspects, reliability, personal interaction, problem solving and policy) and customer loyalty (complaining behaviour, purchase intentions, price sensitivity and word of mouth communication).

- H_0^2 : There is no statistically significant linear relationship between the various dimensions of service quality and the dimensions of customer loyalty.

H_a^2 : There is a statistically significant linear relationship between the various dimensions of service quality and the dimensions of customer loyalty.

The findings of this research also indicate significant relationships between various dimensions of service quality (namely physical aspects, reliability, personal interaction, problem solving and policy) and dimensions of customer loyalty (purchase intentions, word of mouth communication and price sensitivity). There was no evidence of relationships between all dimensions of service quality and complaining behaviour of customer loyalty.

The findings in this regard can be summarised as follows:

- There are no significant linear relationships between the dimensions of service quality (namely physical aspects, reliability, personal interaction, problem solving and policy) and complaining behaviour of customer loyalty. This implies that there is no evidence based on this research study that indicates the dimensions of service quality have an effect on complaining behaviour of customer loyalty. The findings of this study support previous research by Bloemer *et al.* (1998:1099) who found there was no significant relationship between complaining behaviour and service quality dimensions.

- There are weak negative linear relationships among the dimensions of service quality (namely physical aspects, reliability, personal interaction and problem solving) and the customer loyalty dimension of price sensitivity. This research study provides evidence that the dimensions of service quality (namely physical aspects, reliability, personal interaction and problem solving) have an effect on price sensitivity in the retail supermarket industry, although the effect is weak. Since the relationship is negative this implies that an improvement in the dimensions of service quality (namely physical aspects, reliability, personal interaction and problem solving) will influence a decrease in price sensitivity amongst the customers. The findings of this study support the previous research by Bloemer *et al.* (1998:1098) who found significant relationships between the dimensions of service quality and price sensitivity.
- There are weak to moderate positive linear relationships between all the dimensions of service quality (namely physical aspects, reliability, personal interaction, problem solving and policy) and purchase intentions of customer loyalty. This research study showed evidence that when customers are satisfied with the supermarket's service quality dimensions (namely, physical aspects, reliability, personal interaction, problem solving and policy), they will indicate their intentions to purchase from the supermarket again. The evidence of the significant relationship between dimensions of service quality (namely, physical aspects, reliability, personal interaction, problem solving and policy) supports previous research studies (Zeithaml *et al.* 1996:44; Cronin & Taylor, 1992:55; Perez, *et al.* 2007:134; Choudhury, 2013:529) that found significant relationships between dimensions of service quality and purchase intentions of customer loyalty.
- There are moderate positive linear relationships between all the dimensions of service quality (namely physical aspects, reliability, personal interaction, problem solving and policy) and word of mouth communication of customer loyalty. This research study showed evidence that when customers are satisfied with the physical aspects (visually appealing physical facilities, clean environment, convenient layout), reliability (keeping promises and doing things right), personal interaction (courteousness and helpfulness of employees), problem solving ability and policy of the supermarket they will conduct word of mouth communication through saying positive things about the supermarket, recommending the supermarket to those who seek advice and encouraging friends and relatives to shop at the

supermarket. The findings of this study support the previous research by Bloemer *et al.* (1998:1098) who found that the various dimensions of service quality have a significant relationship with word of mouth communication.

From the above mentioned it can be concluded that all the dimensions of service quality (namely physical aspects, reliability, personal interaction, problem solving and policy):

- are not associated with the customer loyalty dimension of complaining behaviour.
- have a weak negative influence on price sensitivity amongst customers.
- have a weak to moderate influence on future purchase intentions.
- are moderately associated with the word of mouth communication dimension of customer loyalty.

6.3.4 The relationship between customer satisfaction and the dimensions of customer loyalty

The relationship between customer satisfaction and the dimensions customer loyalty was discussed so as to give effect to the fifth research objective and the third hypotheses. The third hypotheses were tested to determine whether there is statistically significant relationship between customer satisfaction and dimensions of customer loyalty (namely word of mouth, purchase intentions, price sensitivity, and complaining behaviour).

- H_0^3 : There is no statistically significant linear relationship between customer satisfaction and the dimensions of customer loyalty.
- H_a^3 : There is a statistically significant linear relationship between customer satisfaction and the dimensions of customer loyalty.

The findings of this research study indicate significant linear relationships between customer satisfaction and dimensions of customer loyalty (namely word of mouth communication, purchase intentions and price sensitivity).

The main findings in this regard can be summarised as follows:

- This research study has shown that there is a weak negative linear relationship between price sensitivity of customer loyalty and customer satisfaction. This implies that when customers

are satisfied they will likely be willing to pay more for the services that they get from the supermarket, that is, they become price insensitive. The findings from this study support the research by Anderson (1996:272) who found that an increase in customer satisfaction is associated with a decrease in price sensitivity. Homburg, Koschate and Hoyer (2005:93) also found that there was a strong positive relationship between customer satisfaction and willingness to pay.

- The research has also shown that there is a moderate positive relationship between purchase intentions of customer loyalty and customer satisfaction. This research study provided evidence that customer satisfaction influences purchase intentions of customer loyalty. This implies that when customers are satisfied, they will show their intentions to do more business with the supermarket in the near future and consider the supermarket as their first choice to buy their groceries. The findings of this study do support the previous well documented researches (Cronin & Taylor, 1992:55; Gerpott *et al.* 2000:249; Sivadas & Prewitt, 2002:79; Bowen & Chen, 2001:215) that found a significant relationship between customer satisfaction and purchase intentions of customer loyalty.
- This research study has shown that there is a strong positive relationship between word of mouth communication of customer loyalty and customer satisfaction. This study provided evidence in the retail supermarket industry that, when customers are satisfied, they will spread positive word of mouth communication through saying positive things about the supermarket, recommending the supermarket to those who seek advice, and encouraging friends and relatives to shop at the supermarket. This implies that management of supermarkets should keep their customers satisfied so as to benefit from their word of mouth communication. This finding of the study supports the previous research study by Ranaweera and Prabhu (2003:82) that found a positive association between customer satisfaction and word of mouth communication.

From the above mentioned it can be concluded that customer satisfaction influences the following dimensions of customer loyalty, namely word of mouth communication, purchase intentions and price sensitivity in the retail supermarket industry. A satisfied customer in the retail supermarket industry is more likely to perform word of mouth communication, indicate

their future purchase intentions and be price insensitive. Customer satisfaction was found to have no effect on complaining behaviour within the retail supermarket industry.

6.3.5 Influence of biographic variables on service quality

The influence of biographic variables on service quality was discussed so as to give effect to the sixth research objective and the fourth hypotheses. The purpose of the fourth hypotheses as stated below, were to determine the difference in average scores of service quality on selected biographic variables, namely age, population groups, gender, education, occupational levels, monthly income and supermarkets.

- **H₀⁴** There is no significant difference in the average scores of the respective service quality dimensions between the selected biographical variables.

H_a⁴ There is a significant difference in the average scores of the respective service quality dimensions between the selected biographical variables.

The results of this study do not provide sufficient evidence that the average scores of the respective service quality dimensions are significantly different amongst the various age groups, gender occupation and monthly income.

The findings of this research study with regards to population groups, levels of education and supermarket are highlighted below:

- There is no sufficient evidence that indicate there is a significant difference amongst the various population groups with regards to service quality dimensions of reliability, personal interaction, problem solving and policy, except in the case of physical aspects. This implies that customers of various population groups have different perceptions about physical aspects of service quality (physical aspects made up of appearance and convenience) of the supermarkets. The finding of this research study supports the research by Gagliano and Hathcote (1994:64) who found that there was a significant difference in perceptions on service quality (convenience) among different population groups.
- There is no sufficient evidence that indicate there is a significant difference between the different levels of education with regards to service quality dimensions of physical aspects, reliability, personal interaction and policy, except in the case of problem solving. Therefore,

this study showed evidence that customers with different educational levels will likely show different attitudes and perceptions to a supermarket's problem solving system. It is therefore, important for supermarket managers to solve customers' problems in a way that will satisfy all their respective customers.

- There is sufficient evidence of a significant difference in the average scores of the problem solving dimension between the two supermarkets. This study provided evidence that the customers of the two supermarkets have different perceptions of their supermarkets' problem solving dimension of service quality. This implies that problem solving in supermarket A is different from supermarket B and this can be attributed to the uniqueness of the problem that a particular supermarket encounters at a certain period of time.

It can, therefore, be concluded that there is sufficient evidence of a significant difference in the average scores of service quality dimensions namely physical aspects and problem solving amongst the various population groups, levels of education and the two respective supermarkets.

6.3.6 Influence of biographic variables on customer satisfaction

The influence of biographic variables on customer satisfaction was discussed so as to give effect to the sixth research objective and the fifth hypotheses. The purpose of the fifth hypotheses, as stated below, were to determine the difference in average scores of customer satisfaction on selected biographic variables, namely age, population groups, gender, education, occupational levels, monthly income and supermarkets.

- H_0^5 There is no significant difference in the average scores for customer satisfaction between the selected biographical variables.

H_a^5 There is a significant difference in the average scores for customer satisfaction between the selected biographical variables.

The findings of this study did not show sufficient evidence of the significant difference amongst the various biographical variables (namely, age groups, population groups, levels of education, occupation, monthly income and supermarkets) on customer satisfaction.

The findings of this research study with regards to gender are highlighted below:

- This study provides sufficient evidence of the significant difference between gender on customer satisfaction. This research study supported the previous research by Mittal and Kamakura (2001:137) which found a significant difference existed in the average scores of satisfaction between females and males.

6.3.7 Influence of biographic variables on customer loyalty

The influence of biographic variables on customer loyalty was discussed so as to give effect to the sixth research objective and the sixth hypotheses. The purpose of the sixth hypotheses, as stated below, were to determine the difference in average scores of customer loyalty on selected biographic variables, namely age, population groups, gender, education, occupational levels, monthly income and supermarkets.

- **H₀⁶** There is no significant difference in the average scores for various dimensions of customer loyalty between the selected biographic variables.

H_a⁶ There is a significant difference in the average scores for various dimensions of customer loyalty between the selected biographic variables.

The findings of this study did not provide sufficient evidence that the average scores of the respective customer loyalty dimensions (namely word of mouth communication, purchase intentions and complaining behaviour) are significantly different amongst the various age groups, population groups, gender and monthly incomes.

The findings of this research study with regards to level of education, occupation and supermarkets are highlighted below:

- The results of the ANOVA or Kruskal-Wallis tests for levels of education show no sufficient evidence that the average scores of the customer loyalty dimensions (namely word of mouth communication, purchase intentions and complaining behaviour, except in the case of price sensitivity), have significant differences between the levels of education. This study provided sufficient evidence that the average price sensitivity scores of customer loyalty are significantly different among the various levels of education. The results of this study imply that customers with different levels of education are different in terms of price sensitivity in the retail supermarket industry.

- This study provided sufficient evidence that the average price sensitivity scores of customer loyalty are significantly different among the various occupations.
- This study also provided sufficient evidence that the average word of mouth communication, purchase intentions and price sensitivity scores of customer loyalty are significantly different between the supermarkets. This study implies that customers of the two respective supermarkets investigated show their loyalty in different ways.

The conclusion that is derived from the abovementioned is that respondents of different educational and occupational levels have different price tolerance levels. This research study also found that respondents are sensitive about the prices that their respective supermarkets charge. Furthermore, this study showed that word of mouth communication and purchase intentions are different between the customers of the two respective supermarkets investigated. The findings of this research with regard to biographic variables and customer loyalty do support the previous studies (Homburg & Giering, 2001; Caruana, 2002) that found significant differences with regards to average scores of customer loyalty among various biographic variables.

In conclusion all the research objectives as stated in Section 1.3.2 in Chapter one were met and the results of the research showed the significance of the relationships among service quality, customer satisfaction and customer loyalty in the retail supermarket industry ; and also the influence of biographical variables on service quality, customer satisfaction and customer loyalty. .

6.4 RECOMMENDATIONS

Based on the findings of this study and the assertions of various authors regarding the relationships among service quality, customer satisfaction and customer loyalty, the following recommendations with regards to these relationships in the supermarket industry are made:

- The supermarkets should maintain the dimensions of service quality, namely physical aspects, reliability, personal interaction, problem solving and policy, as they influence customer satisfaction.

- The supermarkets' management should be aware that service quality dimensions, namely physical aspects, reliability, personal interaction and problem solving influence price sensitivity amongst customers.
- The supermarkets' management should be equally aware that service quality, namely personal interaction and policy influences customers' future purchase intentions.
- The supermarkets should also take advantage of customers' word of mouth communication as a cheap way of marketing their supermarkets.
- The supermarkets' management should make customer satisfaction one of their key objectives as it influences the dimensions of customer loyalty, namely word of mouth communication, purchase intentions and price sensitivity.
- Supermarkets should offer service quality that meets the expectations of its diverse customers, especially in terms of the various population groups and different levels of education.
- Supermarkets should be aware of the levels of satisfaction between gender.
- The management of supermarkets should take into consideration the sensitivity of customers when pricing their products.

6.5 RECOMMENDATIONS FOR FUTURE RESEARCH

Taking into consideration the findings of this research, the following recommendations for future research are highlighted.

- Supermarkets hold a significant position in the retail industry in South Africa. The retail supermarket industry is competitive and these supermarkets need competitive advantage to differentiate them from competition. Therefore, there is a need for more research in this environment and this research study will stimulate further studies in the retail supermarket environment.

- Future research may focus on the development of a customer satisfaction scale that uses service quality items in the retail industry, so as to gather data about what satisfies customers in the retail context.
- This research focused on the five dimensions of retail service quality and did not address in detail the retail mix. Future research could be conducted in investigating the influence of the retail mix on service quality, customer satisfaction and customer loyalty.
- As indicated in the literature of this research study, contemporary organisations have shifted from transactional marketing to relationship marketing with much emphasis on creating customer loyalty. Further research could focus on customer relationship management in the retail supermarket industry in South Africa.
- The effect of consumer behaviour on customer loyalty should be investigated in the retail supermarket industry.

6.6 LIMITATIONS OF THE RESEARCH

Although all necessary steps were taken for a good research project, the researcher encountered some limitations to this research like the following:

- As it well documented, the concepts of relationship marketing, service quality, customer satisfaction and customer loyalty were mostly researched during the 1990s; therefore most of the secondary sources used in this study are outdated.
- Finding a research instrument that measured the three variables of service quality, customer satisfaction and customer loyalty was difficult. Therefore, the questionnaire of this study was adapted from previous researches and the researcher had to develop further questions on customer satisfaction based on service quality items so as obtain rich information.
- The findings of this research study were obtained through convenience sampling and the majority of the respondents were students from Rhodes University.
- The research instrument was in a structured format and limited the respondents of the answers provided.

REFERENCE LIST

- AHMAD, R. and BUTTLE, F., 2001. Customer retention: a potentially potent marketing management strategy. *Journal of strategic marketing*. 9, 1: 29-45.
- AHMAD, R. and BUTTLE, F., 2002. Customer retention management: a reflection of theory and practice. *Marketing intelligence and planning*. 20, 3:149-161.
- ANDERSON, E.W., 1996. Customer satisfaction and price tolerance. *Marketing letters*. 7, 3: 265-274.
- ANG, L. and BUTTLE, F., 2006. Customer retention management processes. *European Journal of Marketing*. 40, 1/2:83-99.
- BENEKE, J., LYKIARDOPULOS, N., DE VILLERS, L. and RAWOOT, N., 2011. A pathway to commitment in the South African supermarket: An exploratory study. *KCA Journal of Business Management*. 3, 1:30-47.
- BENEKE, J., ADAMS, E., DEMETRIOU, O. and SOLOMONS, R., 2011b. An Exploratory study of the relationship between store image, trust, satisfaction and loyalty in a franchise setting. *South African Business Review*. 15, 2:59-74.
- BENEKE, J., HAYWORTH, C., HOBSON, R and MIA, Z., 2012. Examining the effect of retail service quality dimensions on customer satisfaction and Loyalty: The case of the supermarket shopper. *Acta Commercii*. 12, 1:27-43.
- BENNET, R. and BARKENSJO, A., 2005. Causes and consequences of donor perceptions of the quality of the relationship marketing activities of charitable organisations. *International Journal of Service Industry Management*. 16, 1:81-106.
- BERK, K.N. and CAREY, P., 2007. *Data analysis with microsoft excel: updated for office 2007*. Boston: Cengage Learning.
- BERRY, L.L., 1983. Relationship marketing. In: BERRY, L.L., 1995. Relationship marketing of services-growing interest, emerging perspectives. *Journal of the Academy of Marketing Science*. 23, 4:236-245.
- BERRY, L.L., 1995. Relationship marketing of services-growing interest, emerging perspectives. *Journal of the Academy of Marketing Science*. 23, 4:236-245.
- BERRY, L.L., 2002. Relationship marketing of services perspectives from 1983 and 2000. *Journal of relationship marketing*. 1, 1:59-77.
- BLOEMER, J., DE RUYTER, K. and WETZELS, M., 1998. Linking perceived service quality and Service Loyalty: A multi-dimensional perspective. *Journal of Marketing*. 33, 1082-1106.

- BOSHOFF, C. and TERBLANCHE, N.S., 1997. Measuring retail service quality: A replication study. *South African Journal of Business Management*. 28, 4:123-133.
- BOONE, L.E. and KURTZ, D.L., 1999. *Contemporary marketing*. Ohio: South-Western Cengage Learning.
- BOSLAUGH, S., 2012. *Statistics in a nutshell: a desktop quick reference*. (2e). California: O' Reilly.
- BOWEN, J.T. and CHEN, S.L., 2001. The relationship between customer loyalty and customer satisfaction. *International Journal of Contemporary Hospitality Management*. 13, 5:213 – 217.
- BRINK, A. and BERNDT, A., 2008. *Relationship marketing and customer relationship management*. Cape Town: Juta.
- BROWN, T.A., 2006. *Confirmatory factor analysis for applied research*. New York: Guilford.
- BRYMAN, A. and BELL, E., 2003. *Business research methods*. (2e). New York: Oxford University Press.
- BRYMAN, A. and BELL, E., 2007. *Business research methods*. (2e). Oxford: Oxford University Press.
- BUSINESS DICTIONARY. 2013. Transactional marketing. [Online]. Available: <http://www.businessdictionary.com/definition/transactional-marketing.html> (Accessed 14 April 2013).
- BUTTLE, F. 1995. Servqual: review, critique, research agenda. *European Journal of Marketing*. 30:8-32.
- BUTTLE, F., ed. 1996. *Relationship marketing: theory and practice*. London: Paul Chapman Publishing.
- CARUANA, A., 2002. Service loyalty: The effects of service quality and the mediating role of customer satisfaction. *European Journal of Marketing*. 36, 7/8:811-826.
- CHRISTOPHER, M., PAYNE, A. and BALLANTYNE, D., 2002. *Relationship marketing: creating stakeholder value*. Oxford: Butterworth-Heinemann.
- CHOUDHURY, K., 2013. Service quality and customers' purchase intentions: An empirical study of the Indian banking sector. *International Journal of Bank Marketing*. 13, 7:529-543.
- COLGATE, M., STEWART, K and KINSELLA, R., 1996. Customer defection: A study of the student market in Ireland. *International Journal of Bank Marketing*. 14, 3:23-29.

COLLIS, J. and HUSSEY, R., 2003. *Business research: A practical guide for undergraduate and post graduate students*. (2e). Houndmills, Basingtoke: Palgrave MacMillan.

COLLIS, J. and HUSSEY, R., 2009. *Business research: A practical guide for undergraduate and post graduate students*. (3e). Houndmills, Basingtoke: Palgrave MacMillan.

COOPER, D.R. and SCHINDLER, P.S., 2006. *Business research methods*. (9e). New York: McGraw Hill.

CRONIN, J.J. and TAYLOR, S.A. 1992. Measuring service quality: A re-examination and extension. *The Journal of Marketing*. 56, 3:55-68.

CULIBERG, B. and ROJSEK, I., 2010. Identifying service quality dimensions as antecedents to customer satisfaction in retail banking. *Economic and Business Review*. 12, 3:51-166.

DABHOLKAR, P.A., THORPE, D.I. and RENTZ, J.O., 1996. A measure of service quality for retail stores: Scale development and validation. *Journal of the Academy of Marketing Science*. 24, 1:3-16.

DENG, Z., LU, Y., WEI, K.K. and ZHANG, J., 2010. Understanding customer satisfaction and loyalty: An empirical study of mobile instant messages in China. *International Journal of Management*. 30:289-300.

DE MEYER, C.F., 2008. *Customer retention in the South African domestic passenger airline industry*. Unpublished doctoral thesis. Potchefstroom Campus: North-West University.

DICK, A.S. and BASU, K., 1994. Customer loyalty: toward an integrated conceptual framework. *Journal of the Academy of Marketing Science*. 22, 2:99-113.

DOLL, W.J., RAGHUNATHAN, T.S., LIM, J. and GUPTA, Y.P., 1995. *A confirmatory factor analysis of the user information satisfaction instrument*. Research report. Institute for Operations Research and Management Sciences.

EGAN, J., 2001. *Relationship marketing, exploring relational strategies in marketing*. Essex: Prentice Hall.

ENNEW, C.T. and BINKS, R.M., 1996. The impact of service quality and service characteristics on customer retention: Small businesses and their banks in the UK. *British Journal of Management*. 7, 1:219-230.

ERIKSSON, K. and VAGHULT, A.L., 2000. customer retention, Purchasing Behavior and Relationship Substance in Professional Services. *Industrial Marketing Management*. 29: 363-372.

FIELD, A., MILES, J. and FIELD, Z., 2012. *Discovering statistics using r*. Thousand Oaks: Sage Publications.

- FORNELL, C., 1992. A national customer satisfaction barometer: The Swedish experience. *Journal of Marketing*. 56, January:6-21.
- GAGLIANO, K.B. and HATHCOTE, J., 1994. Customer expectations and perceptions of service quality in retail apparel specialty stores. *Journal of Service Marketing*. 8, 1:60-69.
- GANESAM-LIM, C., RUSSELL-BENNETT, R. and DAGGER, T., 2008. The impact of service contact type and demographic characteristics on service quality perceptions. *Journal of Services Marketing*. 22, 7:550-561.
- GERPOTT, T.J., RAMS, W. and SCHINDLER, A., 2001. Customer retention, loyalty, and satisfaction in the German mobile cellular telecommunications market. *Telecommunication policy*. 25:249-269.
- GREMLER, D.D. and BROWN, S.W., 1996. Service loyalty: its nature, importance and implications. *Proceedings American Marketing Association*. 171-180.
- GRÖNROOS, C., 1994. From marketing mix to relationship marketing: towards a paradigm shift in marketing. *Management Decision*. 32, 2:4-20.
- GRÖNROOS, C., 1984. A service quality model and its marketing implications. *European Journal of Marketing*. 18, 4:36-44.
- GRÖNROOS, C., 2000. *Service management and marketing: A customer relationship management approach*. California: Wiley.
- GUMMESSON, E., 1994. Making relationship marketing operational. *International Journal of Service Industry Management*. 5, 5:5-20.
- GUSTAFSSON, A., JOHNSON, M.D. and ROOS, I., 2005. Managing customer satisfaction, image and strength of relationship across switching paths. *Journal of Marketing*. 69, 4:210-218.
- HALLOWELL, R., 1996. The relationships of customer satisfaction, customer loyalty and profitability: An empirical study. *International Journal of Service and Industry Management*. 7, 4:27-42.
- HAN, Y., 2006. *Impact of brand identity on perceived brand image of the Nelson Mandela Metropolitan University*. Unpublished masters thesis. Port Elizabeth: Nelson Mandela Metropolitan University.
- HENNING-THURAU, T. and KLEE, A., 1998. The impact of customer satisfaction and relationship quality on customer retention: A critical reassessment and model development. *Psychology and Marketing*. 14, 8:737-764.
- HUANG, M., 2009. Using service quality to enhance the perceived quality of store brands. *Total Quality Management and Business Excellence*. 20, 2:241-252.

- HOFFMAN, K.D., CZINKOTA, M.R., DICKSON, P.R., DUNNE, P., GRIFFIN, A., HUTT, M.D., KRISHNAN, B.C., LUSCH, R.F., RONKAINEN, I.A., ROSENBLOOM, B., SHETH, J.N., SHIMP, T.A., SIGUAW, J.A., SIMPSON, P.M., SPEH, T.W. and URBANY, J.E., 2005. *Marketing: Principles and best practices*. (3 e). Mason, Ohio: Thomson South-Western.
- HOMBURG, C. and GIERING, A., 2001. Personal characteristics as moderators of the relationship between customer satisfaction and loyalty - An empirical analysis. *Psychology and Marketing*. 18, 1:43-66.
- HOMBURG, C., KOSCHATE, N. and HOYER, W.D., 2005. Do satisfied customers really pay more? A study of the relationship between customer satisfaction and willingness to pay. *Journal of Marketing*. 69, 2:84-96.
- HILL, N. and ALEXANDER, J., 2000. *Handbook of customer satisfaction and loyalty measurement* (2e). Hampshire: Gower Publishing Company.
- IACOBUCCI, D; OSTROM, A and GRAYSON, K., 1995. Distinguishing service quality and customer satisfaction: The voice of the consumer. *Journal of Consumer Psychology*. 4, 3:277-303.
- JAIN, S.K. and GUPTA, G., 2004. Measuring service quality: Servqual vs servperf scales. *Vikalpa*. 29, 2:25-37.
- JONES, T.O. and SASSER, W.E., 1995. Why satisfied customers defect. *Harvard Business Review*. November-December: 1-14.
- KOTLER, P. and ARMSTRONG, G., 1999. *Principles of marketing*. New York: Prentice Hall.
- KUMAR, V. and REINARTZ, W.J., 2006. *Customer relationship management: A database approach*. New Jersey: Wiley.
- LAMB, C.W., HAIR, J.F., McDANIEL, C., BOSHOFF, C., TERBLANCHE, N.S., ELLIOT, R. and KLOPPER, H.B., 2010. *Marketing*. (4e) South African edition. Cape Town: Oxford.
- LAZER, W. 1994. Handbook of Demographics for Marketing and Advertising. In: STRAFFORD, M.R., 1996. Demographic discriminators of service quality in the banking industry. *The Journal of Services Marketing*. 10, 4:6-22.
- LEEDY, P.D. and ORMROD, J.E., 2005. *Practical research: Planning and design*. Upper Saddle River: Prentice Hall.
- MAHARAJ, A., 2008. *Awareness, perceptions and effects of customer loyalty programmes within the retail sector of the Durban Metropolitan area*. Unpublished masters thesis. Pretoria: University of South Africa.

- MALHOTRA, N.K., 1999. *Marketing research: An applied orientation*. (3e). New Jersey: Prentice Hall.
- MARX, N.J.M.M. and ERASMUS, A.C., 2006. An evaluation of the customer service in supermarkets in Pretoria East, Tshwane Metropolis, South Africa. *Journal of Family Ecology and Consumer Sciences*. 34:56-68.
- MCDANIEL, C. and GATES, R., 1996. *Contemporary marketing research*. (3e). New York: West Publishing.
- MENG, J.G., SUMMEY, J.H., HERNDON, N.C. and KWONG, K.K. 2009. Some retail service quality expectations of Chinese shoppers. *International Journal of Market Research*. 51, 6:773-796.
- MITTAL, V. and KAMAKURA, W.A., 2001. Satisfaction, repurchase intent, and repurchase behaviour: Investigating the moderating effect of customer characteristics. *Journal of Marketing Research*. 38:131-142.
- MONETTE, D.R., SULLIVAN, T.J. and DEJONG, C.R., 2010. *Applied social research: A tool for the human services*. (8e). California: Cengage Learning.
- MORGAN, R.M. and HUNT, S.D., 1994. The commitment-trust theory of relationship marketing. *Journal of Marketing*. 58, July 1994:20-38.
- MOSTERT, P. and DE MEYER, C., 2010. Building customer relationships as retention strategy in the South African domestic passenger airline industry. *Acta Commercii*. 10:27-42.
- MUNUSAMY, J., CHELLIAH, S. and MUN, H.W., 2010. service quality delivery and its impact on customer satisfaction in the banking sector in Malaysia. *International Journal of Innovation, Management and Technology*. 1, 4:398-404.
- OJO, O., 2010. The relationship between service quality and customer satisfaction in the telecommunication industry: Evidence from Nigeria. *Brand. Broad Research in Accounting, Negotiation and Distribution*. 1, 1:88-100.
- OTT, M., 2008. *An analysis of the impact of service quality on satisfaction, value and future intentions within campus recreation using performance-based measures*. Unpublished masters thesis. New York City: University of New Hampshire.
- OLIVER, R.L., 1980. A cognitive model of the antecedents and consequences of satisfaction decisions. In TAYLOR, S.A. and BAKER, T.L., 1994. An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. *Journal of Retailing and Consumer Services*. 70, 2:163-178.

- OLIVER, R.L., 1999. Whence customer loyalty? *Journal of Marketing*. 63, October: 33-44.
- OXFORD DICTIONARIES. 2013. *Definition of paradigm in English*. [Online]. Available: www.oxforddictionaries.com. [Accessed 20 July 2013].
- PARASURAMAN, A., ZEITHAML, V.A. and BERRY, L.L., 1985. A conceptual model of service quality and its implications for further research. *Journal of Marketing*. 49, 4:41-50.
- PARASURAMAN, A., ZEITHAML, V.A. and BERRY, L.L., 1988. SERVQUAL: a multiple-item scale for measuring customer perceptions of service quality. *Journal of Retailing*. 64, 1:12-40.
- PARASURAMAN, A., ZEITHAML, V.A. and BERRY, L.L., 1994a. Alternative scales for measuring service quality: A comparative assessment based on psychometric and diagnostic criteria. *Journal of Retailing*. 70, 3:201-230.
- PATTERSON, P.G. and JOHNSON, L.W., 1993. Disconfirmation of expectations and the gap model of service quality: An integrated paradigm. *Journal of Consumer Satisfaction, satisfaction, and complaining*. 6:90-99.
- PAYNE, A., 2000. Customer retention. In *Marketing management: A relationship marketing perspective* by Cranfield School of Management. London: Macmillan, pp. 110-122.
- PEREZ, M.S., ABAD, J.C.G., CARILLO, G.M.M. and FERNANDEZ, R.S., 2007. Effects of service quality dimensions on behavioural purchase intentions: A study in public sector transport. *Managing service quality*. 17, 2:134-151.
- R DEVELOPMENT CORE TEAM. 2013. *The R foundation for statistical computing. R: a language and environment for statistical computing*. [Online]. Available: <http://www.r-project.org/> [Accessed May-June 2013].
- RAHMAN, S.H., 2006. Relationship marketing: The retail customer's perspective. *Innovative Marketing*. 2, 1:61-66.
- RANAWEERA, C. and PRABHU, J., 2003. On the relative importance of customer satisfaction and trust as determinants of customer retention and word of mouth. *Journal of Targeting Measurement and Analysis for Marketing*. 12, 1:82-90.
- RAVALD, A. and GRÖNROOS, C., 1996. The value concept and relationship marketing. *European Journal of Marketing*. 30, 2:19-30.
- REICHHELD, F.F., 1993. Loyalty based management. *Harvard Business Review*. 71, 2:64-73.
- ROBERTS-LOMBARD, M.R., 2009. Customer retention strategies implemented by fast food outlets in Gauteng, Western Cape and KwaZulu-Natal provinces of South Africa - A focus on Something Fishy, Nando's and Steers. *African Journal of Marketing Management*. 1, 2:070-80.

- ROOTMAN, C., 2006. *The influence of customer relationship management on the service quality of banks*. Unpublished masters thesis. Port Elizabeth: Nelson Mandela Metropolitan University.
- ROOS, C., 2008. *Relative importance of subject fields, management skills and traits in the business and economics sciences*. Unpublished M.Com dissertation. Port Elizabeth: NMMU.
- ROWE, G.W. and BARNES, J.G., 1998. Relationship marketing and sustained competitive advantage. *Journal of Market Focused Management*. 2, 3:281-297.
- SANTOS, J. and BOOTE, J., 2006. A theoretical exploration and model of consumer expectations, post purchase affective states and affective behaviour. *Journal of Consumer Behaviour*. 3, 2:142-156.
- SAUNDERS, M., LEWIS, P. and THORNHILL, A., 2009. *Research methods for business students*. (5e). Essex: Prentice Hall.
- SEILER, V., RUDOLF, M. and KRUME, T. 2013. The influence of socio-demographic variables on customer satisfaction and loyalty in the private banking industry. *International Journal of Bank Marketing*. 31, 4:235-258.
- SEKARAN, U. and BOUGIE, R., 2009. *Research methods for business: A skill building approach*. West Sussex: Wiley.
- SEKARAN, U., 1992. *Research methods for business: A skill building approach*. (2e). New York: John Wiley.
- SETH, N., DESHMUKH, S.G. and VRAT, P., 2005. Service quality models: A review. *International Journal of Quality and Reliability Management*. 22, 9: 913-949.
- SHETH, J.N. and PARVATIYAR, A. 1995. The evolution of relationship marketing. *International Business Review*. 4, 4:397-418.
- SRINIVASAN, S.S., ANDERSON, R. and PONNAVOLU, K., 2002. Customer loyalty in e-commerce: An exploration of its antecedents and consequences. *Journal of Retailing*. 78, 1:41-50.
- SINGH, A., 2013. Relationship between service quality and customer satisfaction in organised retail outlets. *Developing Country Studies*. 3, 1:84-96.
- SINGH, H., 2006. *The importance of customer satisfaction in relation to customer loyalty and retention*. Working paper. Asia Pacific University College of Technology and Innovation. [Online]. Available: <http://www.ucti.edu.my/wps/issue1/wp-06-06-paper.pdf> (Accessed 24 June 2012).

- SIVADAS, E. and BARKER-PREWITT, J.L., 2000. An examination of the relationship between service quality, customer satisfaction and store loyalty. *International Journal of Retail and Distribution Management*. 28, 2:73-82.
- SPRENG, R.A. and MACKOY, R.D., 1996. An empirical examination of a model of perceived service quality and satisfaction. *Journal of Retailing*. 72, 2:201-214.
- STRAFFORD, M.R., 1996. Demographic discriminators of service quality in the banking industry. *The Journal of Services Marketing*. 10, 4:6-22.
- SURESHCHANDAR, G.S., RAJENDRAN, C. and ANANTHARAMAN, R.N., 2002. The relationship between service quality and customer satisfaction - A factor specific approach. *Journal of Service Marketing*. 16, 4:363-379.
- TAYLOR, S.A. and BAKER, T.L., 1994. An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. *Journal of Retailing and Consumer Services*. 70, 2:163-178.
- TEAS, R.K., 1993. Expectations, performance evaluation, and consumers' perceptions of quality. *Journal of Marketing*. 57 (October): 18-34.
- TERBLANCHE, N.S. and BOSHOFF, C., 2001. Measuring customer satisfaction with the controllable elements of the instore shopping experience. *South African Journal of Business Management*. 32, 4:11-19.
- THURAU, H.T. and HANSEN, U., 2000. *Relationship marketing: Gaining competitive advantage through customer satisfaction and customer retention*. Hannover: Springer.
- TOO, L.H.Y., SOUCHON, A.L. and THIRKELL, P.C., 2001. Relationship marketing and customer loyalty in a retail setting: A dyadic exploration. *Journal of Marketing Management*. 17, 4:287-319.
- UNCLES, M.D., DOWLING, G.R. and HAMMOND, K., 2003. Customer loyalty and customer loyalty programs. *Journal of Consumer Marketing*. 20, 4:294-316.
- VÀZQUEZ, R., RODRIGUEZ-DEL BOSQUE, I.A., MA DAZ, A. and RUIZ, A.V., 2001. Service quality in supermarket retailing: Identifying critical service experiences. *Journal of Retailing and Consumer Services*. 8:1-14.
- VENETIS, K.A. and GHAURI, P.N., 2004. Service quality and customer retention: building long term relationships. *European Journal of Marketing*. 38, 11/12:1577-1598.
- WACKERLY, D.D., MENDENHALL, W. and SCHEAFFER, R.L., 2002. *Mathematical Statistics with applications*. (6e). Pacific Grove: Duxbury.

- WELMAN, C., KRUGER, F. and MITCHELL, B., 2005. *Research methodology*. (3e).Cape Town: Oxford University Press.
- WEST, D., FORD, J. and IBRAHIM, E., 2006. *Strategic marketing: Creating competitive advantage*. New York: Oxford.
- WONG, A. and SOHAL, A., 2003. service quality and customer loyalty perspectives on two levels of retail relationships. *Journal of Services Marketing*. 17, 5:495-513.
- YUEN, E.F.T. and CHAN, S.S.L., 2010. The effect of retail service quality and product quality on customer loyalty. *Database Marketing and Customer Strategy Management*, 17, 3/4: 222-240.
- ZEITHAML, V.A., 1985. The new demographics and market fragmentation. *Journal of Marketing*. 49 (Summer):64-75.
- ZEITHAML, V.A., BERRY, L.L. and PARASURAMAN, A., 1996. The behavioural consequences of service quality. *Journal of Marketing*. 60, April: 31-46.
- ZIKMUND, W.G., 2003. *Exploring marketing research*. (8e). Mason, Ohio: Thomson South-Western.
- ZIKMUND, W.G., BABIN, B.J., CARR, J.C. and GRIFFIN, M., 2010. *Business research methods*.(8e). New York: South Western Cengage Learning.

APPENDIX A-QUESTIONNAIRE



RHODES UNIVERSITY

DEPARTMENT OF MANAGEMENT

Where leaders learn

Tel: (046) 603 8736 – email: h.bakker@ru.ac.za

Dear Participant

The purpose of this research is to obtain the perceptions of customers with regard to their supermarket's service quality offering, their level of satisfaction and degree of loyalty to the supermarket. This questionnaire serves as part of a Masters study to determine the relationship of service quality, customer satisfaction and customer loyalty in the retail supermarket industry.

We request you to share your actual perceptions of your supermarket's service quality offering, indicating your level of satisfaction and the degree of loyalty to the supermarket with us. In the final analysis, your opinions will contribute to the improvement of services in our supermarkets in Grahamstown and South Africa as a whole.

The questionnaire should not take longer than 20 - 30 minutes to complete. There is no right or wrong answer, only your opinions are important. Please complete the questionnaire below that has been compiled to gauge your opinions/perceptions in this regard. The structure of the questionnaire is as follows:

Section A: Indicate the supermarket you most frequently shop at.

Section B: Statements pertaining to service quality, customer satisfaction and customer loyalty.

Section C: Biographical information.

Thank you for your participation.

Yours faithfully

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PARTICIPANT CONSENT

- I hereby certify that my response to the information in this document is correct to the best of my knowledge.
- I hereby give consent to the researchers to use the information contained in this document for the purpose of completing their research project, and that I will not be identified and my personal results will be kept confidential.
- I understood the purpose of the research and my involvement in it.
- My participation in this survey is voluntary and I understood that I could withdraw from the research at any stage.

Signature of participant:

Date:

The relationship between service quality, customer satisfaction and customer loyalty in the retail supermarket industry

Section A

1. Please indicate the supermarket you most frequently shop at by placing a cross (X) in the appropriate block.

Supermarket A	Supermarket B	Other: Specify
1	2	3

Section B

2. Please read the statements below and indicate the extent to which you agree or disagree with each statement, relating to service quality (of the supermarket you frequently shop at), customer satisfaction and customer loyalty.

There is no right or wrong answer- Insert cross (X) in the category that mostly reflects your view.

Nr	Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	This supermarket has modern looking equipment and fixtures.	5	4	3	2	1
2	The physical facilities at this supermarket are visually appealing.	5	4	3	2	1
3	Materials associated with this supermarket's service (such as shopping bags or catalogs) are visually appealing.	5	4	3	2	1
4	This supermarket has access to clean, attractive and convenient restrooms.	5	4	3	2	1
5	The layout at this supermarket makes it easy for customers to find what they need.	5	4	3	2	1
6	The layout makes it easy for customers to move around in the supermarket.	5	4	3	2	1
7	When this supermarket promises to do something by a certain time, it will do so.	5	4	3	2	1
8	This supermarket provides its services at the time it promises to do so.	5	4	3	2	1

Nr	Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
9	This supermarket performs the service right the first time.	5	4	3	2	1
10	This supermarket has merchandise available when the customers want it.	5	4	3	2	1
11	This supermarket insists on error-free sales transaction and records.	5	4	3	2	1
12	This supermarket offers its services at a speed that is convenient to all customers.	5	4	3	2	1
13	Employees in this supermarket have the knowledge to answer customers' questions.	5	4	3	2	1
14	The behavior of employees in this supermarket instils confidence in customers.	5	4	3	2	1
15	Customers feel safe in their transactions with this supermarket.	5	4	3	2	1
16	Employees in this supermarket give prompt service to customers.	5	4	3	2	1
17	Employees in this supermarket help customers with packing and pushing the trolleys to the parking lot.	5	4	3	2	1
18	Employees in this supermarket are never too busy to respond to customer's requests.	5	4	3	2	1
19	This supermarket gives customers individual attention.	5	4	3	2	1
20	Employees in this supermarket are consistently courteous with customers.	5	4	3	2	1
21	Employees of this supermarket treat customers courteously at the till/ check out point.	5	4	3	2	1
22	This supermarket willingly handles returns and exchanges.	5	4	3	2	1
23	When a customer has a problem, this supermarket shows a sincere interest in solving it.	5	4	3	2	1
24	Employees of this supermarket are able to handle customer complaints directly and immediately.	5	4	3	2	1
25	This supermarket offers high quality merchandise.	5	4	3	2	1
26	This supermarket provides plenty of convenient parking for customers.	5	4	3	2	1

Nr	Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
27	This supermarket has operating hours convenient to all their customers.	5	4	3	2	1
28	This supermarket accepts most major credit cards.	5	4	3	2	1
29	This supermarket offers its own loyalty card.	5	4	3	2	1
30	I am satisfied with this supermarket in terms of its grocery services.	5	4	3	2	1
31	Overall in the purchasing of products and services, I am pleased with this supermarket.	5	4	3	2	1
32	Purchasing from this supermarket is usually a satisfying experience.	5	4	3	2	1
33	My feeling toward this supermarket can best be characterised as satisfied.	5	4	3	2	1
34	I am satisfied with the appearance of the physical aspects of this supermarket as compared to others.	5	4	3	2	1
35	I am satisfied with the layout of this supermarket as it makes it easy for customers to move around the supermarket.	5	4	3	2	1
36	I am satisfied that this supermarket does something they have promised to do.	5	4	3	2	1
37	I am satisfied that this supermarket performs its services right the first time.	5	4	3	2	1
38	I am satisfied that the employees of this supermarket have the knowledge to answer customers' questions.	5	4	3	2	1
39	I am satisfied that the employees of this supermarket are never too busy to respond to customers' requests.	5	4	3	2	1
40	I am satisfied that this supermarket shows sincere interest in solving problems that customers encounter.	5	4	3	2	1
41	I am satisfied that employees of this supermarket are able to handle customer complaints immediately.	5	4	3	2	1
42	I am satisfied that this supermarket offers convenient hours to all customers.	5	4	3	2	1

Nr	Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
43	I am satisfied with this supermarket's parking area.	5	4	3	2	1
44	Overall I am satisfied with the service quality provided by this supermarket.	5	4	3	2	1
45	I say positive things about this supermarket to other people.	5	4	3	2	1
46	I recommend this supermarket to someone who seeks my advice.	5	4	3	2	1
47	I encourage friends and relatives to shop at this supermarket.	5	4	3	2	1
48	I will consider this supermarket as the first choice to buy my groceries.	5	4	3	2	1
49	I will do more business with this supermarket in the next few years.	5	4	3	2	1
50	I will do less business with this supermarket in the next few years.	5	4	3	2	1
51	I will do some of my shopping from supermarkets that offer more attractive prices.	5	4	3	2	1
52	I will continue to shop at supermarkets that offer more attractive prices.	5	4	3	2	1
53	I will pay a higher price than what other supermarkets charge for the benefits I currently receive from this supermarket.	5	4	3	2	1
54	I will switch to a competitor if I experience a problem with this supermarket's service.	5	4	3	2	1
55	I will complain to other customers if I experience a problem with this supermarket's service.	5	4	3	2	1
56	I will complain to external agencies if I experience a problem with this supermarket's service.	5	4	3	2	1
57	I will complain to the employees of this supermarket if I experience a problem with this supermarket's service.	5	4	3	2	1

Section C: General and biographic information

Please answer the following questions by placing a cross (x) in the appropriate block.

Gender	
Male	1
Female	2
Population group	
White	1
Colored	2
Black	3
Asian	4
Age groups	
Between 18-24 years	1
Between 25-34 years	2
Between 35-44 years	3
Between 45-54 years	4
Between 55-64 years	5
65 and above	6
Highest level of education	
Grade 11 or equivalent qualification or lower	1
Grade 12 or equivalent qualification	2
Grade 12 and diploma/certificate(s)	3
Grade 12 and degree	4
Post-graduate degree	5
None	6
Occupation	
Full time employed	1
Part-time employed	2
Pensioner	3
Self- employed	4
Student	5
Unemployed	6
Monthly household income	
Below R800	1
R800-R1 999	2
R2 000-R4 999	3
R5 000-R9 999	4
R10 000-R19 999	5
R20 000+	6

Thank you for your co-operation.