ELECTRONIC SERVICE QUALITY AND CUSTOMER SATISFACTION IN SOUTH AFRICAN ONLINE STORES: THE ROLE OF PSYCHOGRAPHICS ON PERCEPTIONS

By

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DECLARATION

I, Tarisai Fritz Rukuni, hereby declare that this research report is my own work and effort and that it has not been submitted anywhere for any academic qualification. Where other sources of information have been referred to and used, they have been duly acknowledged. It is submitted in fulfilment of requirements for the degree of Philosophiae Doctor (PhD) in Management at the School of Business and Finance in the Faculty of Economic and Management Sciences at the University of the Western Cape, South Africa.

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DEDICATION

This study is dedicated to my parents Chipo and Alford Rukuni.

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ABSTRACT

In recent years, the South African online shopping industry has experienced remarkable growth which has attracted multi-national online stores to operate in the South African market thus creating competitive pressure for domestic online stores. Consequently, this presence of competition from well-resourced and recognisable online store brands it is critical that domestic online stores adopt measures to protect their competitive positions and to pursue competitive advantage. An adoption of a customer-centred approach focused on increasing customer satisfaction is one strategy for online stores to consider. This study had as its primary objective to develop a theoretical model of psychographic influences on customer satisfaction with electronic service quality. The associated objectives were to develop a theoretical model to (i) assess online shopping customers' perceptions of electronic service quality, (ii) illustrate the effect of electronic service quality on customer satisfaction, (iii) measure the effect of customer satisfaction on customer behavioural intentions, and (iv) determine how customers' perceptions of electronic service quality differ across different customer psychographic profiles. A quantitative descriptive cross sectional study was conducted to address the research objectives. Data was collected through a questionnaire from a sample of 344 South African online store customers. Statistical descriptive and inferential analyses were performed including mean values, structural equation modelling and analysis of variance. The findings included that, i) customers have negative perceptions of electronic service quality in South African online stores, ii) the constructs of electronic service quality, efficiency and contact, have a significant positive effect on customer satisfaction, iii) customer satisfaction has a significant positive effect on customer behavioural intentions, and iv) a significant difference in the perceptions of electronic service quality was found to exist among customers with different psychological profiles. Based on the study findings it is recommended that South African online stores should improve electronic service quality and apply market segmentation on the basis of customer psychological profiles in order to gain competitive advantage.

Key words: *Electronic service quality, online shopping, customer satisfaction, customer behavioural intentions, psychographics, customer perceptions.*

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1.1 CHAPTER OVERVIEW

This Chapter introduces the study background and its justification. The justification of the existing problem and background of the study is discussed in this Chapter. This will be based on the concepts of online shopping, customer satisfaction, behavioural intentions, psychographics, electronic service quality and perceptions within the context of South African online stores. Furthermore, the Chapter will introduce the research questions and the objectives of the study. The research methodology utilised will also be presented briefly.

1.2 INTRODUCTION AND BACKGROUND

The growth of online shopping in South Africa has resulted in a significant rise in competition. Consequently, the increase in South Africa online shopping competition is influenced by a remarkable revenue growth within the digital retail space in South Africa (Statista 2018:1). Multinational and domestic online stores compete for the South African online shopping market that has shown a 2.5 per cent increase in the second quarter of 2017 as reported by Statista (2018:1) and Goko (2017:120). Statista (2018:1) further reports that online shopping revenue in South Africa amounted to US$3 131 million during the first quarter of 2018. In addition, it is speculated that online shopping revenue growth will be at 13.7 per cent between year 2018 and 2022 leading to a US$5 239 million in 2022 (Statista 2018:1).

The user penetration within online shopping in South Africa has also been seen growing. Thus more people are getting to utilise digital platforms to purchase products and services. According to Statista (2018:1), the user penetration is at 34.8 per cent in 2018 and it is expected to rise to 43.8 per cent in 2022. Digital platform reporters such as eShopworld (2017:1) also acknowledges that in South Africa there are 18.43 million online shopping users in 2018 and the number is expected to increase to 24.79 million in 2021. Adding on, eShopworld (2017:1) establishes that at 24.79 million users expected in 2021, each user will be spending an average of

US$189.47 online. Furthermore, eShopworld (2017:1) affirms that Internet penetration is at 51.9 per cent in 2018 and should reach 59.5 per cent in 2021. These trends indicated positive prospects and growth within South African online shopping, hence has invited domestic and multinational competition.

South African customers are shopping from multinational online stores. Multinational online stores such as Amazon.com, Walmart, Torrid, Nike, Superdry, Athleta and eBay recognised the presence of online shopping developments in South Africa (My-Broadband 2017:1; Rachamim 2017:1). Consequently, such developments were treated as an opportunity by these multinational online stores to conduct business in South Africa. At the same time, the coming of multinational online stores in South African created competition for the domestic online stores (i.e. Zando, Takealot, Bidorbuy, Gumtree, OLX, Loot, Spree) (Investopedia 2017:1; Ebbers, Pieterson & Noordman 2008:181).

The rising competition within the online shopping space has created problems for South African based online stores. It has become difficult for South African based online stores to compete effectively in the presence of multinational online stores. Rachamim (2017:1) confirms that there are about 12 to 24 million online stores in the world and South African consumers are just a website away from these stores. The presence of global competition is already felt since only 650 000 online stores in the world are able to accumulate a revenue of more than US$ 100 000 per year (Rachamim 2017:1). South African online stores do not make it on this list as majority of the 650 000 online stores originate from the developed nations including the United States of America. It is therefore evident that millions of online stores especially those in South Africa require a new strategic angle to survive competition from multinational players.

The rising competition is a threat to domestic online stores and it calls the need for an adoption of a customer aligned strategic perspective. Mango and Nine West have already closed as competition intensifies (Investopedia 2017:1). Consumer behaviour authorities including Robbins, Judge, Odendaal and Roodt (2016:123), Kotler and Keller (2016:394) and Panda and Swar (2016:5) maintain that an understanding and utilisation of customer psychographics is a profound strategy to

gain competitive advantage. Customer psychographics are utilised to understand customers and apply insightful marketing strategies including segmentation. The failure to comprehend customer psychographic factors and their influence on customer choice is described by Robbins et al. (2016:61) and Gosh (2014:25) as a recipe for market failure, reduction in sales and ultimate loss of business. It is therefore upon this background that this current study sought to develop and test a model that illustrates the importance of customer psychographics in shaping consumer perceptions towards electronic service quality, satisfaction and their behavioural intentions.

Apart from the excessive competition, changing needs and expectations of customers with regard to online services calls the need for domestic online stores to rethink strategy and adopt a customer centred approach. Hence, a thorough apprehension of consumer psychographics and its application is one of the ways for domestic online stores players to guarantee a top spot in the market place (Akhlaq & Ahmed 2016:74). According to Akkuk and Teuman (2016:183) and Verdegem and Verleye (2009:487), most South African based online stores ignore the importance of incorporating psychographics when devising their electronic service quality strategies; consequently resulting in customer dissatisfaction, loss of market share, declining sales and shrinking profits.

The literature as it stands also ignore this subject in the context of South Africa, which should be considered a gap in the body of knowledge. It was therefore opportune to conduct this study. The study sought to develop a model that illustrate the customers' perceptions on electronic service quality, test the significant effect of electronic service quality on customer satisfaction and behavioural intentions as well as the role played by customer psychographics towards consumer perceptions on electronic service quality.

1.3 PRELIMINARY LITERATURE REVIEW

1.3.1 CUSTOMER SATISFACTION, BEHAVIOURAL INTENTIONS AND PSYCHOGRAPHICS

Customer satisfaction creates a competitive advantage for a business. It is therefore important for online stores to put strategies in place so as to ensure that customers are satisfied. Customer satisfaction is defined as the overall assessment of customers towards the products and services' ability to meet prior expectations (Kotler & Keller 2016:199; Zeithaml, Bitner & Gremler 2009:113). The attainment of customer satisfaction is important for the purpose of achieving competitive advantage. Customer experience results to either customer satisfaction or customer dissatisfaction.

One of the ways utilised by online stores to achieve customer satisfaction include tailor making the delivery of electronic service quality. According to Robbins et al. (2016:137), customer satisfaction shapes customers' behavioural intentions. A positive relationship is usually experienced between customer satisfaction and their behavioural intentions. The customer behavioural intentions can include the intention to repeat the purchase and recommend a relative or friend to purchase from the online store (Kotler & Keller 2016:278). It is therefore important for the online store to devise strategies that lead to customer satisfaction.

A number of strategies can be put in place to achieve customer satisfaction and competitive advantage. Consumer behaviour authors such as Prasha, Vijay and Parsad (2016:27) and Richa (2012:43) allude that an understanding of the role of psychographics on perceptions of electronic service quality is a recommended strategy for online stores to build competitive advantage. Kotler and Keller (2016:199) and Gosh (2014:24) conclude that psychographics can be utilised to further the understanding of customer behaviour. Hence, online store authorities need to consider psychographics when formulating the delivery of online store services.

Psychographics play a critical role in the board rooms and objectives of marketing specialists when utilised effectively. Psychographics is defined by Kotler and Keller (2012:247) as the science of using demographics and psychology to better understand consumers. Demographics include factors such as customer's age, race, religion, income, education and family size (Akman & Mishra, 2010:482; Naik, Gantasala & Prabhakar 2010:37). Psychology refers to a person's values, attitudes and lifestyles (Nurmmiko 2011:84). In this study psychology leads to a classification of customers into distinct groups that include innovators, survivors, thinkers, achievers, experiencers, believers, strivers and makers. Marketing authorities including Gosh (2014:24) and Rugimbana (2007:6) argue that psychographics is one of the most comprehensive method utilised to understand markets.

1.3.2 ELECTRONIC SERVICE QUALITY

The relevance of electronic service quality in the creation of customer satisfaction within online shopping cannot be overemphasised. Competition from multinational online stores has become a major problem for domestic online stores. Sources such as Goko (2017:120) and Rugimbana and Iversen (1994:30) illustrates the loss of competitiveness by most South Africa online stores on the face of multinational online stores. In addressing the problem, this study has already highlighted the importance of involving customer psychographics in developing appropriate electronic service quality programmes. Thus the significance of seven electronic service quality sub-constructs on customer satisfaction was investigated in this study (Sharma & Lijuan 2015:468). The electronic service quality sub-constructs include efficiency, fulfilment, system availability, privacy, responsiveness, compensation and contact.

Efficiency of the system is regarded as an important consideration for electronic service quality. According to Akkucuk and Teuman (2016:183), efficiency of online transaction is measured through the easiness of the store website to allow customers to find what they need. Chellapalli and Kumar (2016:41) added that efficiency is measured through ability of customer to complete online transaction quickly as well as the proper organisation of the information. Furthermore,

Parasuraman, Zeithaml and Malhotra (2005:16) acknowledge that efficiency involves the ability of site pages to load fast, simplicity in website use and easiness in quickly getting on to the site.

Fulfilment is also a critical sub-construct of electronic service quality. Fulfilment is the extent to which the site provided by the online shopping store is able to complete its promised deliveries (Parasuraman et al. 2005:16). According to Nabareseh, Osakwe, Klimek and Chovancova (2014:64), fulfilment is expressed as the ability of an online shopping store to deliver orders as initially prescribed. In addition, Nabareseh et al. (2014:64) argues that fulfilment involves taking into consideration the delivery of products and services at the right place and at the right time after an online order. Al-Nasser, Yusoff and Islam (2016:228) further establish that fulfilment is measured through the ability of the online store to deliver the ordered items quickly, in the right form and as promised.

System availability is considered an essential sub-construct of electronic service quality. Parasuraman et al. (2005:16) propose the use of four items in measuring system availability. These items are also indicated by Shala and Balaj (2016:7) and Byambaa and Chang (2012:46) as the constant availability of the site, the ability of the site to launch and run right away, the assurance of the site not to crash and freeze after the order information is entered.

Privacy makes one of the significant elements of electronic service quality. Akkucuk and Teuman (2016:183) explain that privacy is described as the protection of customers' personal information. Privacy is further expressed as the security that is given to protect customers from risk of fraud and financial loss (Shala & Balaj, 2016:5). Akkucuk and Teuman (2016:183) and Shala and Balaj (2016:5) maintain that privacy is the ability of a service provider to protect customers' information related to their web-shopping behaviour.

Responsiveness is defined as the willingness to help customers in getting a prompt service. Kotler and Keller (2016:394) and Parasuraman et al. (2005:16) explain responsiveness as the provision of convenient options for returning items by the service provider. Furthermore, Parasuraman et al. (2005:16) specify that

responsiveness is the proper handling of product returns and offering of meaningful guarantees.

Compensation refers to the ability of the online shopping service provider to supply customers with a reparation for problems encountered. Parasuraman et al. (2005:16) further state that compensation is measured through the ability of the online store to compensate customers for problems it creates. According to Akkucuk and Teuman (2016:183), compensation should be provided to the customers when the order does not arrive on time.

Contact is also considered an imperative component of electronic service quality. Dolatabadi and Pool (2013:2321) point out that contact refers to the easy accessibility of the online store. Parasuraman et al. (2005:16) regard contact as the ability to provide contact details to reach the online store. Furthermore, contact is regarded as availability of the customer service representatives online and availability of an online store representative that customers can speak to when there is a concern. Depth in the discussion of these electronic service quality sub-constructs will be provided in Chapter 3. The next section introduces the concept of perceptions.

1.3.3 CUSTOMER PERCEPTIONS

Perceptions play an integral role in shaping behaviour of customers. The concept of perceptions is defined by Kotler and Keller (2012:81) as a process through which customers select, organise and interpret information inputs to create a meaningful picture of the world. In specific terms, the world that Kotler and Keller (2012:81) refer to in this study is the electronic service quality provided by domestic online stores. Robbins and Judge (2011:202) highlight the complexity that occurs resulting in online shopping customers selecting, organising and interpreting electronic service quality experiences differently. Due to different perceptions, customers interpret electronic service quality differently. Some regard it to be satisfactory while others reflect dissatisfaction.

Domestic online stores are facing threatening competition from well-resourced multinational players and it is critical that new ways of attaining competitive advantage are put in place. Kotler and Keller (2016:199) agree with Robbins et al. (2016:202) that an understanding of consumer behaviour can be employed to formulate customer tailored electronic service quality and achieve customer satisfaction. Gosh (2014:24) purports that psychographics can be utilised to understand consumer behaviour and influence customer satisfaction. This study sought to understand the link between psychographics, perceptions, electronic service quality, customer satisfaction and customer behavioural intentions. Thus an understanding of such and its utilisation in electronic service delivery leads to competitive advantage.

1.4 PROBLEM STATEMENT

As previously noted in the abstract and introduction section, the growth of online shopping in South Africa has brought a manifestation of intense competition (Goko 2017:12; Nabareseh et al. 2014:64). The serving by multinational online stores such as Amazon.com, Walmart, eBay and Borderfree.com of the South African market has seen a rapid increase in competition for South African online stores (Goko 2017:12; Nabareseh et al. 2014:64; Papadomichelaki & Mentzas 2011:98). Considering this presence of competition from well-resourced and recognisable players it is critical that domestic online stores adopt measures to achieve competitive advantage. The utilisation of customer psychographics and perceptions to enhance service quality is regarded as one of the profound strategies that can be adopted to achieve customer satisfaction and competitive advantage. However, it has been observed that domestic online stores do not take psychographics and perceptions into consideration when devising their online services (Kotler & Keller 2016:85; Panda & Swar 2016:4). Goko (2017:12) and Eurostat (2009:2) establish that unattended customer needs and expectations for online businesses threatens relationships with customers, leading to dissatisfaction, negative behavioural intentions and an attendant drop in revenues. Literature also shows a paucity of studies that test the influence of psychographics on consumer's perceptions of electronic service quality and satisfaction. The literature on behavioural intentions

and psychographics within the context of South African online stores is also lacking, which should be considered a gap in the body of knowledge.

1.5 RESEARCH OBJECTIVES

The primary research objective was:

> *To develop a theoretical model that illustrate the role of psychographics on customers' perceptions of electronic service quality and its effect on customer satisfaction and customer behavioural intentions.*

The associated research objectives were to develop a theoretical model to:

i. assess customers' perceptions of electronic service quality at South African online stores;
ii. illustrate the effect of electronic service quality on customer satisfaction;
iii. measure the effect of customer satisfaction on behavioural intentions, and;
iv. determine how customers' perceptions of electronic service quality differ across different customer psychographic profiles.

1.6 RESEARCH QUESTIONS

The research questions were developed from the research objectives, as follows:

RQ_1 What are the perceptions of customers of electronic service quality at South African online stores?

RQ_2 To what extent does electronic service quality influence customer satisfaction at South African online stores?

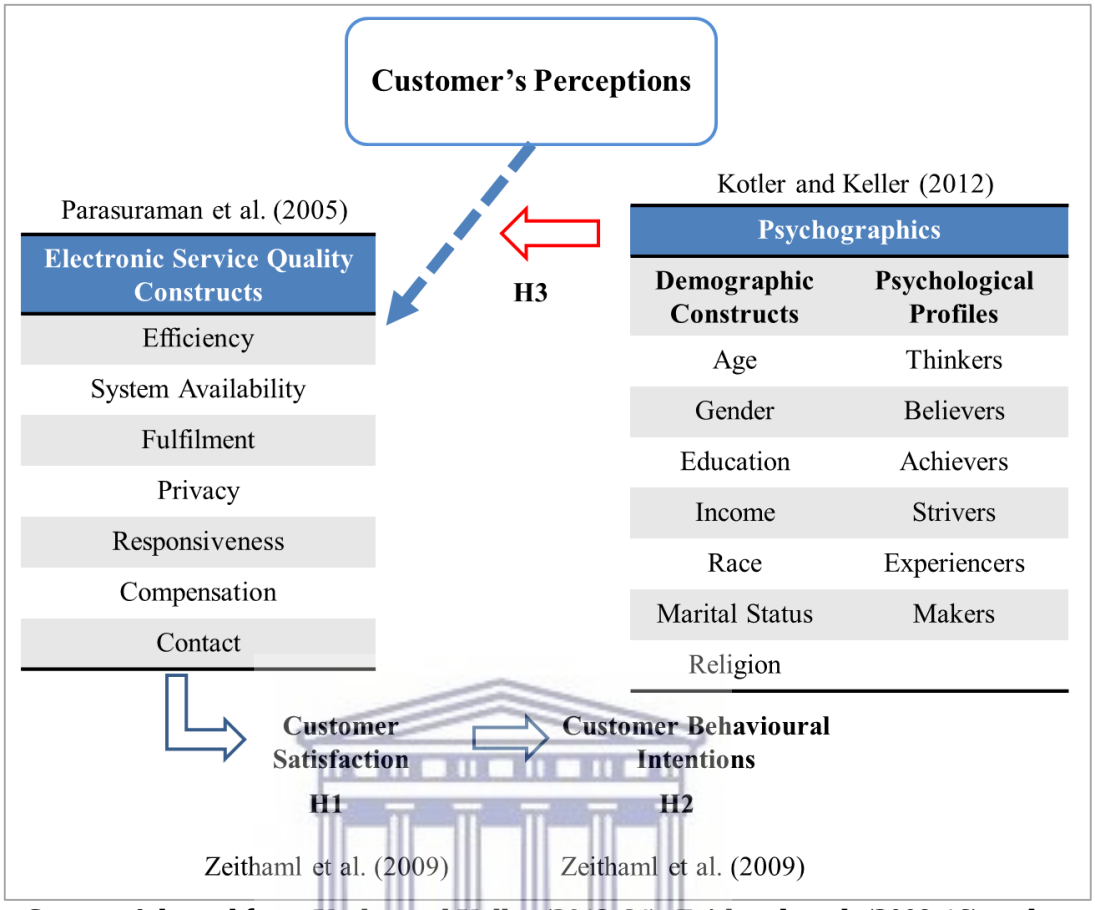
RQ_3 To what extent does customer satisfaction influence behavioural intentions of customers at South African online stores?

RQ_4 To what extent do customers' perceptions of electronic service quality at South African online stores differ across different psychographic customer groupings?

1.7 THEORETICAL MODEL

The theoretical model was based on the electronic service quality, customer satisfaction and psychographics theories (Zeithaml et al. 2009:16; Parasuraman et al. 2005:15). The model illustrated in Figure 1.1 theorises that customer psychographics affect consumers' perceptions of seven sub-constructs of electronic service quality (efficiency, system availability, fulfilment, privacy, responsiveness, compensation, contact) which determine customer satisfaction and ultimate behavioural intentions (Kotler & Keller 2012:64; Zeithaml et al. 2009:16). Based on Parasuraman et al's (2005:18) model, this study theorises relationships between customer psychographics, perceptions, electronic service quality, customer satisfaction and behavioural intentions. Firstly, it theorises that customer psychographics result in differences in customer perceptions of electronic service quality. Secondly, it theorises that electronic service quality sub-constructs (efficiency, system availability, fulfilment, privacy, responsiveness, compensation, contact) have a significant effect on customer satisfaction. Lastly, it theorises that customer satisfaction has a significant effect on customer behavioural intentions.

Figure 1.1: Theoretical Model



Source: Adapted from Kotler and Keller (2012:64), Zeithaml et al. (2009:16) and Parasuraman et al. (2005:19)

The proposed theoretical model was used to test the effect of electronic service quality on customer satisfaction, hypothesised as H1. The model also tests the effect of customer satisfaction on customer behavioural intentions, hypothesised as H2. Furthermore, the model tests the role played by psychographics in influencing differences in the perceptions of customers on electronic service quality and it is hypothesised as H3.

1.8 RESEARCH HYPOTHESES

The study hypotheses were developed to operationalise the theoretical model as follows:

H1: Electronic service quality has a significant effect on customer satisfaction of online shopping.

$H1_a$: Efficiency has a significant effect on customer satisfaction.

$H1_b$: System availability has a significant effect on customer satisfaction.

$H1_c$: Fulfilment has a significant effect on customer satisfaction.

$H1_d$: Privacy has a significant effect on customer satisfaction.

$H1_e$: Responsiveness has a significant effect on customer satisfaction.

$H1_f$: Compensation has a significant effect on customer satisfaction.

$H1_g$: Contact has a significant effect on customer satisfaction.

H2: Customer satisfaction has a significant effect on customer behavioural intentions.

H3: There is a significant difference in perceptions of electronic service quality among customers in different psychographic profiles.

1.9 RESEARCH METHODOLOGY

1.9.1 Research design

The research utilised a descriptive cross-section research design (Malholtra 2010:76) to test a theoretical model of psychographic influences on customer satisfaction with electronic service quality adapted from Parasuraman et al. (2005:21) in the context of South African online stores. A descriptive cross-section design was deemed appropriate for this study as it has been used in similar studies previously (Kwarteng & Pilik 2016:90; Prashar, Vijay & Parsad 2016:27). The study employed a quantitative approach using constructs that are already known and tested through the use of validated and reliable scales obtained from literature (Blumberg, Cooper & Schindler 2011:61).

1.9.2 Sampling

A sample of three hundred and forty four (n=344) customers with online buying experience took part in the survey. Raosoft sample size calculator was utilised to determine the minimum sample size so as to maintain at least 5 per cent margin of

error and 95 per cent confidence interval (Raosoft 2014:1). The sample was comprised of conveniently available online customers identified by participating South African online stores. Quota sampling (Saunders, Lewis & Thornhill 2012:61) was also employed in order to fairly represent the different psychographic profiles (i.e. age, gender, education, race, income and psychological profiles) among the online store customers in accordance with hypothesis 3.

1.9.3 Data collection

The data collection instrument was adapted from Parasuraman et al. (2005:11) and further developed from literature (Kwarteng & Pilik 2016:90; Lal, Vij & Jain 2015:75) to suit the purpose of the present study. The study employed the SurveyMonkey online questionnaire service to administer the questionnaire to the sampled participants. The selected South African online stores assisted in the distribution of the questionnaire. The completed questionnaires were returned through the researcher's email. Before carrying out the research, a pilot study was carried out with ten experienced online store customers to assess if questions were clear and understandable.

1.9.4 Data analysis

Data analyses were performed using the software STATA 13. Descriptive statistics was employed to describe the sample's psychographic profile and measure customers' perception of electronic service quality at South Africa online stores (Objective i and Research Question 1) through mean values and standard deviation (Field 2009:14). Factor analysis was conducted to reduce constructs into smaller groups of latent constructs and test validity of the instrument employed (Field 2009:14; McKinnon 1988:34). Through Cronbach's alpha, reliability analysis was carried out to measure the internal consistency (reliability) of the measurement scales (Field 2009:16). Structural equation modelling (SEM) was used to test the effect of electronic service quality on customer satisfaction (Objective ii, Research Question 2 and Hypothesis 1) and test the effect of customer satisfaction on customer behavioural intentions (Objective iii, Research Question 3 and Hypothesis 2). Analysis of variance (ANOVA) was utilised to test the role of psychographics

in influencing differences in customers' perceptions of electronic service quality (Objective iv, Research Question 4 and Hypothesis 3) (Field 2009:16).

1.10 OUTLINE OF CHAPTERS

This thesis follows the structured seven-Chapter approach that is recommended for a PhD and doctoral thesis in the management field (Perry 1998a:123). Accordingly, the literature review is divided into two Chapters. The seven Chapters in this study are as follows:

Chapter 1 introduces the background and overview of the research. The Chapter presents a summary of the literature review which outlines the main constructs of the research. The Chapter also introduces the problem statement, research objectives and questions, the theoretical model, and hypotheses of the study. A concise description of the research methodology that was employed is also provided in this Chapter.

Chapter 2 presents the literature related to online shopping, and it is described in the global context and in South Africa. The nature of the competition in the South African online market is also explained in the Chapter.

Chapter 3 presents the literature related to customer satisfaction, behavioural intentions, electronic service quality, psychographics and perceptions. The literature reviewed in this Chapter informs the construction of the theoretical model used to answer the research questions.

Chapter 4 presents the research methodology employed to operationalise the research objectives, questions and hypotheses. The methodology explains and justifies the adopted sampling strategy, the research design employed, the data collection instrument, the measurement scales and the procedures employed to collect data. The Chapter also explains the procedures employed to ensure reliability, validity and ethics of the research.

Chapter 5 presents the data analyses through techniques that included mean, standard deviations, Cronbach's alpha, factor analysis, structural equation modelling, analysis of variance and testing the theoretical model as well as discussion of findings.

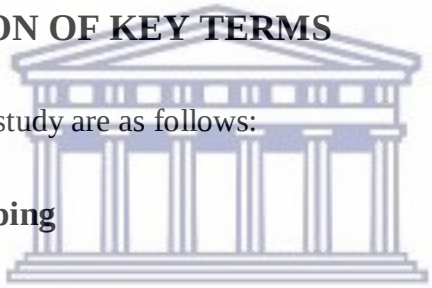
Chapter 6 presents the developed model and its explanation in relation to the South African online stores.

Chapter 7 provides conclusions to research objectives, study questions and hypotheses. The Chapter also provides the summary of findings, implications for theory and practice, limitations of the research and outlining directions for future research.

1.11 DEFINITION OF KEY TERMS

The key terms in this study are as follows:

(1) Online shopping



Online shopping is a digital transactional process that occurs between the customers and the online store. Kwarteng and Pilik (2016:90) and Lee and Lin (2005:161) define online shopping as a digital process that involves sub-processes such as navigation, searching for information, online transaction and customer interaction.

(2) Psychographics

Psychographics is defined as the science of understanding customers through demographic and psychological factors. In this study, psychographic factors are expressed as age, gender, education, income and psychological profile (Kotler & Keller 2012:247).

(3) Customer satisfaction

Customer satisfaction is the creation of a positive attitude within a customer as a result of an electronic service encounter with the online store. According to Zeithaml et al. (2009:113), customer satisfaction is defined as an overall assessment conducted by customers between their expectations and what they receive from the online store after online shopping transactions.

(4) Transaction-specific satisfaction

Transaction-specific satisfaction separates customer satisfaction from one encounter to the other. It occurs when customers assess the condition of each specific electronic service based on their prior expectations (Kotler & Keller 2016; Zeithaml et al. 2009:113).

(5) Cumulative satisfaction

Cumulative satisfaction refers to the overall assessment of the electronic service after two or more purchase encounters between customers and the online stores. Kamalaveni and Shalini (2013:35) and Zeithaml et al. (2009:113) define cumulative satisfaction as the summation of all the specific online shopping transactions.

(6) Electronic service quality

Electronic service quality is the composition of the electronic service delivery that determines customer satisfaction. Marketing authors including Parasuraman et al. (2005:13) define electronic service quality through components such as efficiency, system availability, responsiveness, contact, privacy, fulfilment and compensation. Zarei (2010:6) defines electronic service quality as a relative assessment that is carried out by customers between expected and actual digital services.

(7) Efficiency

Efficiency refers to the speed at which the online store responds to the needs and wants of customers during online shopping transactions. Efficiency is also explained by Pritwani and Sharma (2011:193) as expressing the ability of the online store website to make digital processes easy for customers.

(8) Fulfilment

Fulfilment expresses the ability of the online store to deliver online shopping services as promised. According to Ramez (2011:113) and Parasuraman et al. (2005:11), fulfilment is the extent to which the site is able to deliver on its promises.

(9) System availability

System availability is the extent at which the online store website stays online. The availability of the website online makes it possible for customers to carry out online shopping transactions at any time. Kotler and Keller (2016:231) and Parasuraman et al. (2005:11) posit that system availability is the constant availability of the online store site.

(10) Privacy

Privacy is the protection of customer information by the online store. According to Parasuraman et al. (2005:17) and Dittmar, Long and Meek (2004:423), customers share sensitive information including credit card details with the online store and they expect the stores to treat the information with utmost confidentiality.

(11) Responsiveness

Responsiveness is the extent to which the online store reacts to customers' requirements. This usually occurs when customers request for a service provision.

Kotler and Keller (2016:394) define responsiveness as the willingness of the online store to assist customers in the provision of prompt services.

(12) Compensation

Compensation comprises the reward that an online store is able to provide to customers for failing to meet an obligation. It is also defined as the ability of the online store to supply customers with a reparation for problems that are encountered during online shopping transactions (Rudansky-Kloppers 2014:1187).

(13) Contact

Contact is the accessibility of the online store that is facilitated through the provision of details such as the email address and telephone numbers. It also involves the availability of an online store agent that customers are able to talk to in case problems occur (Parasuraman et al. 2005:14).

1.12 LIMITATIONS OF SCOPE

This thesis, as with any research, was not free from limitations associated with the methodology employed (Shiu, Hair, Bush & Ortinau 2009:676). The limitations as they relate to this study were as follows:

(1) Sample

Customers that were obtained through selected online stores were employed as research respondents in this study. Hence, other consumer groups who were shopping at other online stores were not considered in this study. Results are therefore not generalised to every online consumer segment in South Africa.

(2) Time constraints

In keeping with the requirements of the doctoral degree, this study was completed within a specified time frame. This therefore meant that certain research designs such as longitudinal methodologies could not be employed.

(3) Measurement scales

A model obtained from literature was employed as an angle through which this study was conducted. The Parasuraman et al. (2005:16) model was employed to measure the constructs of interest. Since this is not the only model that explain electronic service quality, this can also be viewed as a limitation of the study.

(4) Geographic scope

The geographic coverage of this study was limited. The study was restricted to South Africa, hence results should not be generalised other geographical settings (i.e. other countries and continents).

The above-mentioned limitations apply to this research, and were taken into consideration in discussing the findings.

1.13 CONCLUSION

This Chapter introduced the study. It provided the background of the problem that instigated the research. Furthermore, it provided the problem statement, research objectives and questions, the theoretical model, and hypotheses of the study. In addition, a brief overview of the research methodology that was used to operationalise the study is presented. The next Chapter reviews literature related to online shopping and competition.

CHAPTER 2: LITERATURE REVIEW: ONLINE SHOPPING AND ONLINE COMPETITION

2.1 CHAPTER OVERVIEW

The previous Chapter provided the background of the research. The background included the problem statement, research objectives, study questions, the conceptual framework and a brief explanation of the research methodology. Chapter two discusses the literature on online shopping and competition. The discussion will include major developments and evolution within online shopping. In addition, online shopping at global level as well as in South Africa will also be elaborated. Finally, the existence of competition within South African online shopping will be expounded.

2.2 INTRODUCTION

Digitalisation of industries is occurring rapidly across the globe, and retail is subject to these dynamics. The concept of online shopping has matured greatly as three decades have passed since it commenced (Pandey, Barik & Soni 2015:53; Khatibi, Haque & Karim 2006:696). For most retailers, both abroad and in South Africa, offering products through digital market places has yielded significant benefits (Kwarteng & Pilik 2016:90; Cetinsoz 2013:1265) including increased convenience and cutting down on brick and mortar-related costs of operations. According to Chellapalli and Kumar (2016:45) and Anyana and Naidu (2016:26), South African online stores face stiff competition from the world's biggest online stores including Amazon.com, Macys, Zara.com, Bestbuy and eBay, which threatens the survival of South African-based online stores.

2.3 ONLINE SHOPPING

The concept of online shopping has become a common sensation for strategic retailers in the twenty-first century. In South Africa, online shopping has seized to

be regarded an uncommon phenomena. In fact, online shopping has revitalised the way in which modern retailing is conducted in the 21st century.

2.3.1 DEFINITIONS OF ONLINE SHOPPING

Online shopping is identified with the use of *digital platforms* to reach to the customers. Online shopping is defined as the use of digital platforms to peruse and purchase goods and services (Jiradilok, Malisuwan, Madan & Sivaraks 2014:5; Schneider 2014:3; Chaffey 2011:8). Koble (2014:13) and Turban, King, McKay, Marshall, Lee, Viehland, Volonino, Cheung and Lai (2008:4) define online shopping as the process of buying, transferring of products, services and information through a computer network, typically the Internet.

Online shopping is facilitated by a combination of human beings and technology. According to Chenet, Dagger and O'Sullivan (2010:336) and Kim, Lee and Chung (2012:109), for online shopping to be possible, human beings need to operate Internet enabled devices, for example tablets, laptops or desktop computers. It is therefore important that consumers utilising online shopping are in possession of the required equipment (Internet enabled devices) for shopping to take place.

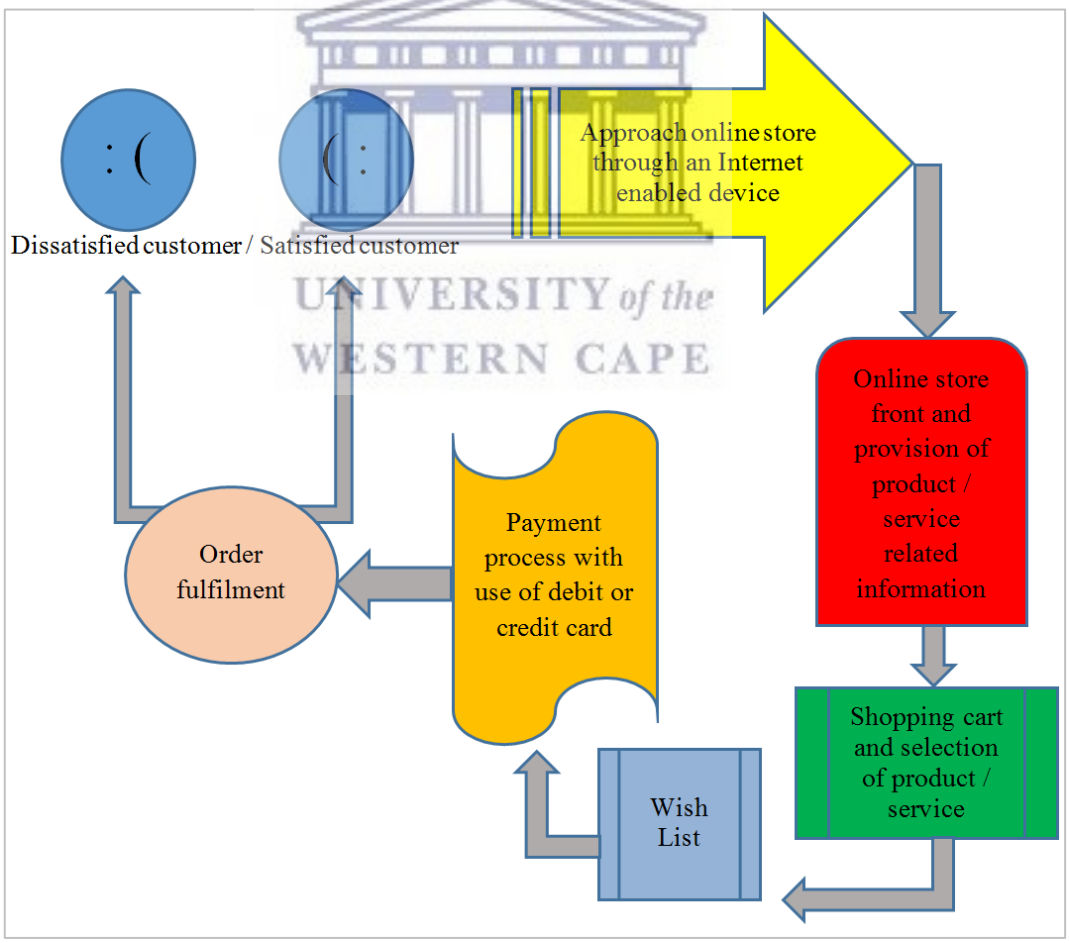
The concept of electronic commerce (e-commerce) is also utilised to describe online shopping. According to Schneider (2014:3) and Chaffey (2011:8), online shopping is commonly referred to as e-commerce. Online shopping is also referred to as a virtual market place by Schneider (2013:5) and Dolatabadi and Pool (2013:2321).

Online shopping follows similar processes to traditional stores when purchasing products and services, however with the use of virtual and digital platforms. As indicated in Figure 2.1, online shopping is a digital innovated replication of the traditional brick and mortar retailing (Dolatabadi & Pool 2013:2321). Lee and Lin (2005:161) recognise online shopping as a complex process that is comprised of sub-processes such as navigation, searching for information, online transaction and customer interaction. Jiradilok, et al. (2014:5) and Cheung, Chan and Limayem (2005:17) identify online shopping as the means by which retailers carry out

business transactions using the Internet and is related to activities such as information searching, information sharing, exchange of products and services.

Online shopping follows a well dignified process. The E-Marketing dictionary (2014:14) and Lee and Lin (2005:161) affirm that online shopping is comprised of four components that are the store front, shopping cart, payment process and the order fulfilment. Rudansky-Kloppers (2014:1187) and Deloitte (2011:13) describe the store front as a place where consumers get the information related to online shopping. The information obtained on the store front is related to product type, description, instructions, demonstrations and reviews from past consumers. The contact information and the store policies are also shown through the store front. Figure 2.1 elaborates a typical online shopping operational process.

Figure 2.1: Online Shopping Operational Process



Source: Author's own construct

Figure 2.1 shows that online shopping transactions can either result in customer satisfaction, neutral or dissatisfaction. Hence, the online store is responsible for ensuring that a customer obtains good experience (Kotler & Keller 2016:278; Nurmmiko, 2011:147). The ability of an online store to ensure effective operational attributes including customer satisfaction results in competitive advantage.

2.3.2 THE EVOLUTION OF ONLINE SHOPPING

The concept of online shopping has developed over the years. It can no longer be regarded as a new philosophy as it has matured greatly. Three decades have passed since online shopping was started (Pandey et al. 2015:53; Aldrich 2017:57). This section provides the background related to the beginning and development of online shopping over the years.

2.3.2.1 The beginning and development of online shopping in the 1970s

To date, the online shopping concept is more than three and half decades old. Online shopping is traced back in the 1970s when it was first introduced by Michael Aldrich (Pandey et al. 2015:53). According to Aldrich (2017:57), online shopping began in 1979 through the Videotex.

The Videotex was used to supply consumers with textual information. The textual information supplied to consumers was related to product and service information, for example product features and the prices. Aldrich (2017:57) and Instant-shift (2010:11) postulate that the Videotex was a two way kind of communication meant for information exchange.

Further developments came into existence in 1979 with the introduction of better online system than the existing Videotex. Source and CompuServe were online shopping system were introduced in 1979 (Aldrich 2017:57). According to Aldrich (2017:57) and Instant-shift (2010:11), in the 1970s,

three online shopping systems namely the Videotex, Source and CompuServe were introduced.

2.3.2.2Online shopping developments in the 1980s

The significance of Source and CompuServe was felt in the 1980s. Aldrich (2017:57) and Ching-Wen and His-Peng (2007) state that Source and CompuServe took over Videotex in 1982. The Source and CompuServe had an online ability to perform online purchases, view market share, search telephone directory and chat. They became the most successful form of online shopping and were first launched in France and the United Kingdom (Aldrich 2017:57).

A substantial evolution of online shopping occurred in tandem with the introduction of personal computers, television and telecommunications systems in the 1980s (Aldrich 2017:57; Instant-shift 2010:11). This important development led to the introduction of teleshopping by Redifon computers (Aldrich 2017:57). According to Aldrich (2017:57), teleshopping was introduced to cater for business to business (B2B) operation in 1981 and in 1984 it was introduced to cater for business to consumer (B2C) markets.

The Swreg system came into existence in 1987. The Swreg provided a platform for software developers and authors to market software services through online mechanisms (Instant-shift 2010:11). Hence, Swreg was a form of online shopping that focussed on software products and services. Basically, the 1980s was instrumental in the introduction of six major online shopping developments. These were i) the personal computer, ii) communications systems, iii) telecommunications systems, iv) B2B teleshopping, v) B2C teleshopping and vi) the Swreg (Aldrich 2017:57; Instant-shift 2010:11).

2.3.2.3Online shopping developments in the 1990s

The 1990s came with further developments in online shopping. The world-wide-web (www) was written in 1990 by Tim Berners-Lee (Pandey et al. 2015:53; Instant-shift 2010:11). The world-wide-web completely improved the face of online shopping. A solid platform for sellers and customers to meet was created.

In 1992, a revolutionary book by J. H. Snider and Terra Ziporyn was published to further develop online shopping. Instant-shift (2010:11) reports that the book was influential in the provision of online shopping insight. Thus, it progressed the interest and investments in online shopping. In 1994, Netscape contributed to further developments and released the Navigator browser and the encryption for transactions known as secure sockets layer (SSL). In the same year of 1994, Pizza Hut resorted to online ordering through its website (Instant-shift 2010:11).

Multinational online shopping stores also imaged in the 1990s. Instant-shift (2010:11) reports that Amazon.com began selling its products online in 1995. In addition, Jeff Bezos also launched an online radio station in 1995 as reported by Instant-shift (2011:11). Following the launching of a an online radio station by Jeff Bezos, Internet radio stations such as radio HK and NetRadio imaged.

Online shopping was introduced to auction activities. In 1995, Dell, Cisco and Auction floors started employing Internet in their transactions (Pandey et al. 2015:53). This was the beginning of online auction floors. According to Pandey et al. (2015:53), the United States of America started selling electronic postal stamps online in 1998. In 1999, a major acquisition involving online stores took place. Consequently, the Business.com was acquired by e-Companies for US$7.5 million (Aldrich 2017:57; Pandey et al. 2015:53). A summary in the development of online shopping is provided in Table 2.1.

Table 2.1: Development of Online Shopping since 1979

Period	Major online shopping development
1979	Videotex was developed and utilised to supply consumers with textual information.
1980	Introduction of a personal computer, television and telecommunication system.
1982	The Source and CompuServe came into existence in France and the United Kingdom.
1984	Teleshopping was introduced.
1987	Swreg began the marketing of software services.
1990	The World Wide Web was written by Tim Berners-Lee.
1992	A book supporting online shopping was written and published by J. H. Snider and Terra Ziporyn to revolutionise online shopping.
1994	Netscape released the navigation browser and the encryption known as secure socket layer (SSL).
	Pizza Hut resorted to online ordering.
1995	Amazon.com started selling products online.
	Online radio was launched by Jeff Bezos.
	Development of Internet radio stations such as radio HK and Net radio.
	Dell, Cisco and Auction floor started utilising Internet in their transactions.
1998	Selling of electronic postal stamps online began in the United States of America (US).
1999	Business.com acquired by eCompanies for US$7.5 million.
2000	The Dot com was developed.
	Pay Pal was acquired by eBay for US$1.5 billion.
2003	Amazon.com posted its first yearly profit and made first appearance on the stock market.
2008	Tremendous growth in the US ecommerce with sales first reaching US$204 billion.
2015	Online shopping industry accounted for US$ 2 trillion globally.
2017	Google fined a record $2.7 billion for unfair online trade practice and dominance by the European Union (EU).

Source: Aldrich (2017), Kottasova (2017), Pandey et al. (2015) and Instant-shift (2010)

2.3.2.4Online shopping developments in the year 2000 and beyond

Improvements in the functionality of online shopping were introduced in 2000. Functionality refers to how online shopping works and operated. The introduction of the dot com played a pivotal role on how online shopping is operated. According to Aldrich (2017:57), the dot com was developed in 2000. The dot com provided further enhancement on the face of online shopping such that the addresses of online stores began ending with a dot com, for example www.eBay.com.

The acquisition of online shopping business continued beyond year 2000. The business acquisitions were influenced by the profitability within the online shopping sector. Pay Pal Company was acquired by eBay for US$1.5 billion (Aldrich 2017:57). According to Instant-shift (2010:11), in 2003, online shopping began showing financial confidence and maturity to the world as Amazon.com publicly posted its first yearly profit and made its maiden appearance on the stock market.

Financial growth in online shopping activities became evident. According to Business Tech (2015:1), in 2008, there was tremendous growth in the US ecommerce with sales figures reaching US$204 billion. On the other hand, in 2009 Amazon.com recorded an estimated daily turnover of over US$25 billion with an annual growth rate of 14 per cent. Business Tech (2015:45) states that in 2015, the online shopping industry globally accounted for US$2 trillion. However, penalties emerged in the recent history of online shopping due to unfair trade practice by players within the sectors. In June 2017, Google was fined a record $2.7 billion for unfair online trade practice and dominance by the European Union (EU) (Kottasova, 2017:87).

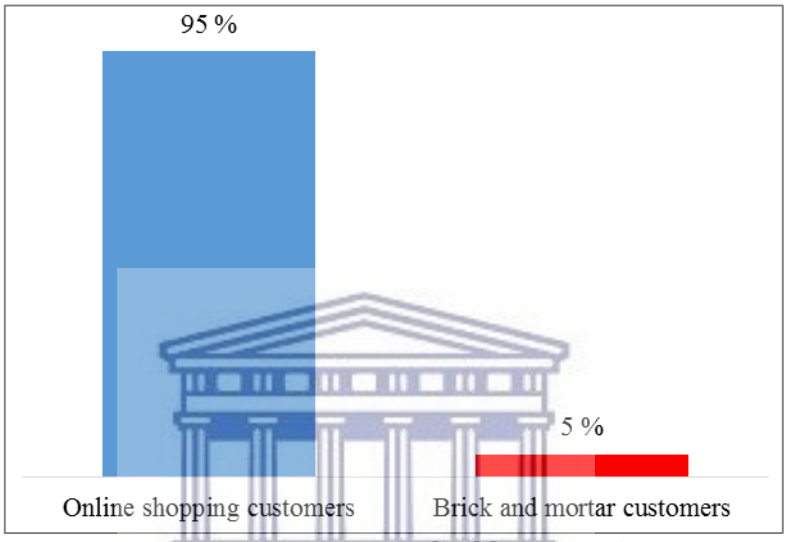
In this sub-section, the development and time line of online shopping has shown how online shopping has grown over the years. It is undoubtedly an opportunity for businesses to venture into online shopping. Hence, the existence of intense competition in the sector. The next sub-section navigates into the state of online shopping in the world.

2.3.3 GLOBAL ONLINE SHOPPING

Online shopping has penetrated most parts of the world. Its presence in Africa, Europe, South America, North America, Asia and Australia has become remarkable. Pandey et al. (2015:53), Rudansky-Kloppers (2014:1187), Richa (2012:43), Kwarteng and Pilik (2016:90) and Jiradilok et al. (2014:5) agree that online shopping has increased so significantly in recent years that it is taking over the role of traditional brick and mortar shopping across the world.

Statistics indicate that the share of customers who regularly purchase goods online has increased from 45 per cent to 85 per cent of the global population between 2011 and 2018 (Statista 2018:1). In the Asia Pacific region, New Zealand has the highest percentage of customers who shop online, at 95 per cent, with only 5 per cent of the population exclusively using brick and mortar stores for purchases (Statista, 2018:1).

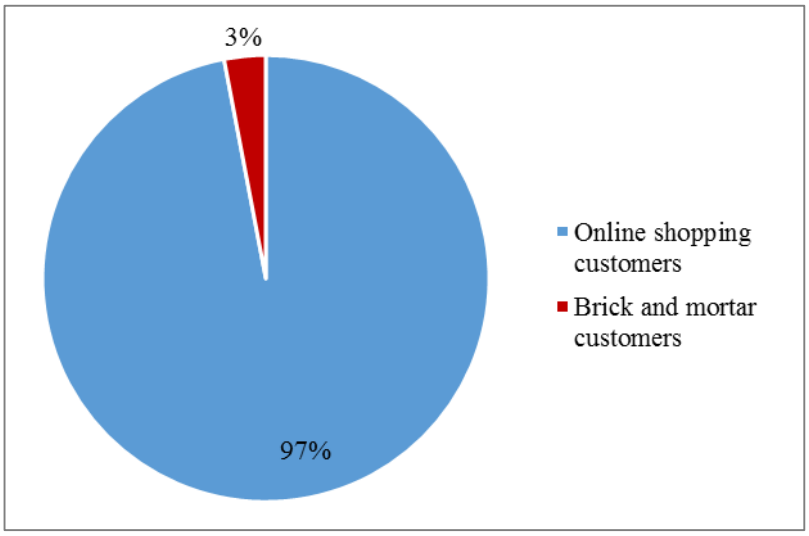
Figure 2.2: New Zealand's Online Shopping Usage



Source: Kwarteng and Pilik (2016:90)

Finland dominates Europe with 97 per cent of customers utilising online shopping.

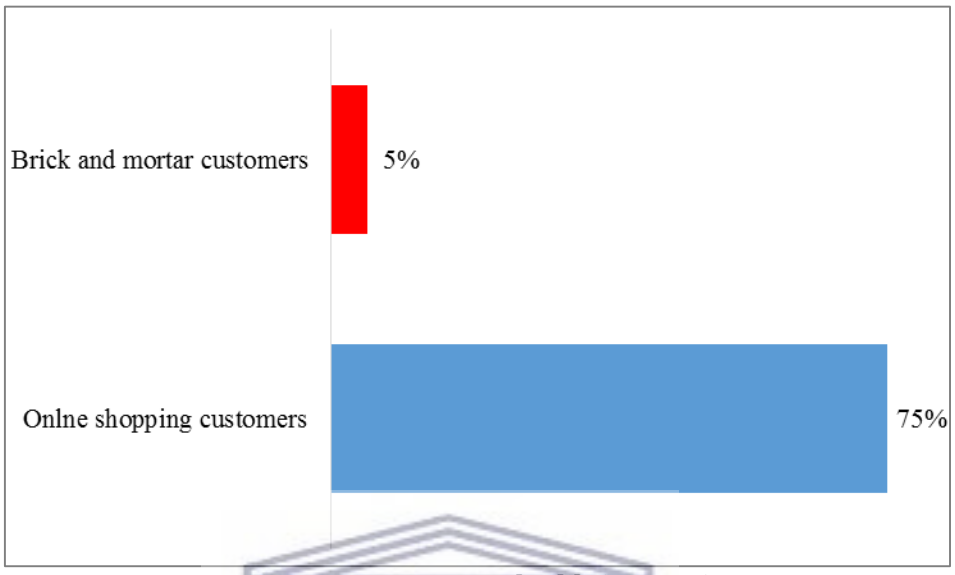
Figure 2.3: Finland's Online Shopping Usage



Source: Kwarteng and Pilik (2016:90)

In Latin America, Argentina demonstrates the highest percentage of customers purchasing online, at 75 per cent.

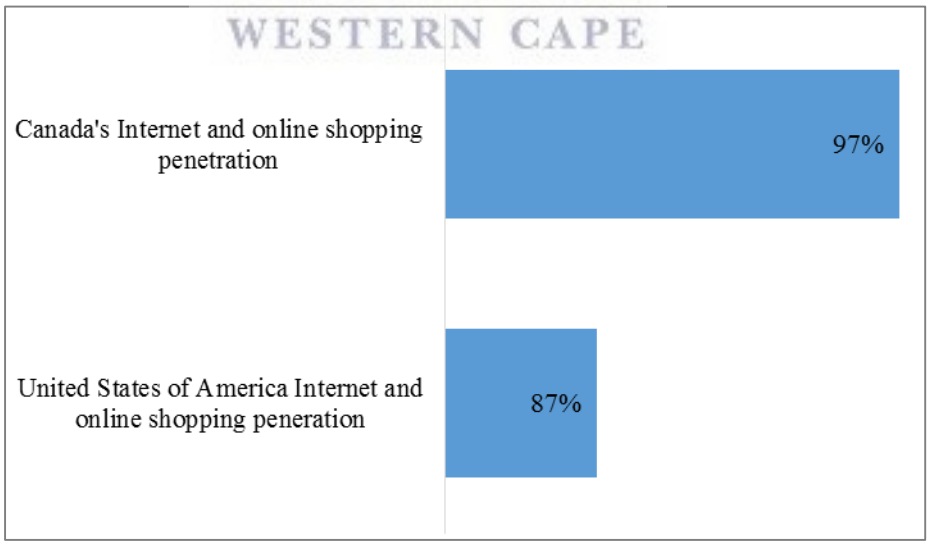
Figure 2.4: Argentina's Online Shopping Usage



Source: Kwarteng and Pilik (2016:90)

In North America, 87 per cent of customers shop online in the United States of America and 97 per cent in Canada.

Figure 2.5: Canada and the US's Online Shopping Usage



Source: Kwarteng and Pilik (2016:90)

There is tremendous sales growth in online shopping activities. According to Wilson (2018:16), in 2012, American online retailers generated online sales of US$

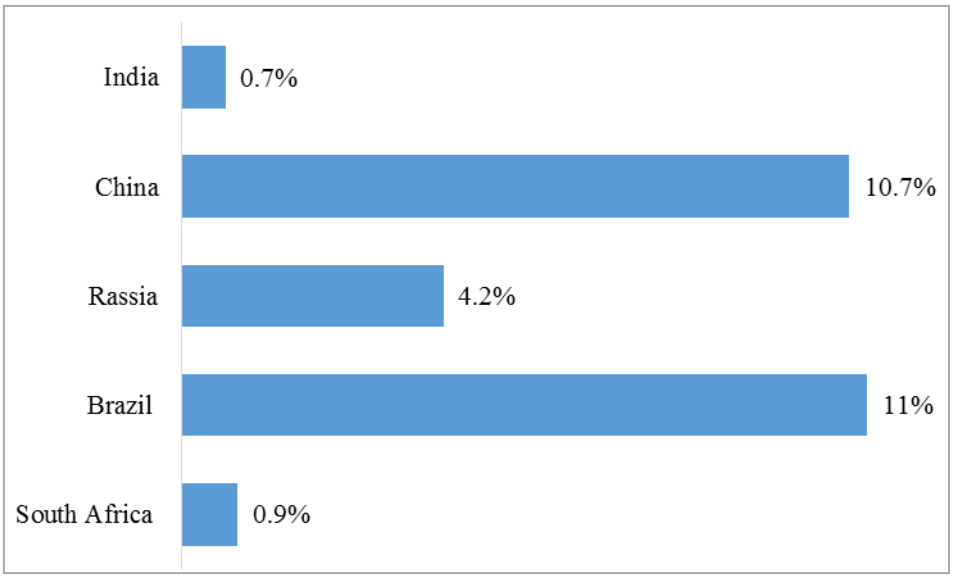
231 billion and online sales are expected to reach US$ 370 billion by end of 2018. South Africa, Nigeria and Kenya dominate the online shopping activity on the African continent. According to the Fichardt (2015:7), in terms of Internet use dominance, South Africa is at number two in Africa while Nigeria and Kenya are at number one and three respectively. The next subsection places its focus on online shopping in South Africa.

2.3.4 ONLINE SHOPPING IN SOUTH AFRICA

As already mentioned in sub-section 2.3.3, South Africa is at number two in Africa in terms of online shopping. It is leading Kenya and lagging behind Nigeria. However, despite such a lucrative online shopping position held by South Africa in Africa, Rudansky- Kloppers (2014:1187) is of the opinion that South Africa is still behind most economies in the world. According to Maake and Shevel (2013:1), online shopping in South Africa is five to seven years behind that of major economies such as the United Kingdom, United States of America and Australia.

South Africa's online shopping lags behind some of its trading partners. Maake and Shevel (2013:1) and Jacobs and De Klerk (2010:1) state that SA is lagging behind three of its peers in the BRICs (Brazil, Russia & China) nations. When comparing South Africa with the BRICS, its online retail transactions account for 0.9 per cent while that of Brazil, Russia and China is at 11 per cent, 4.2 per cent and 10.7 per cent respectively (Wilson, 2018:1). South African online shopping is however slightly better than that of India at 0.7 per cent (Wilson, 2018:1). Online retail transactions in the BRICs nations is represented next in Figure 2.6.

Figure 2.6: Online Transactions as Percentage of Total Retail Transactions in the BRICs Nations



Source: Kwarteng and Pilik (2016)

The products and services purchased online in SA are quite diverse as many stores (i.e. Woolworths, Intercape, Bidorbuy, Cars.co.za) are realising the importance of utilising online shopping platforms. According to Goldstuck (2013:1), online shopping in South Africa has been hugely dominated by the purchase of products such as air tickets, accommodation and concert tickets. However, this has changed as retailers are shifting to digital services. Major retailers in SA (i.e. Checkers, Pick n Pay, Spar) are also placing emphasis on online shopping. Pick n Pay and Woolworths were among the first few big retailers to enter into online retail (Maake & Shevel 2013:94).

In recent times, SA has been experiencing remarkable developments on its online shopping market. According to Akhlaq and Ahmed (2016:74) and Rudansky-Kloppers (2014:1187), major development in South African online shopping has been through an increase in Internet connectivity. Bredenhann (2007:64) argues that development of online shopping has also been positively influenced by the increase in broadband.

Increase in Internet connectivity in South Africa has also resulted in a significant increase in the number of people using Internet. Cinman (2013:64) and Wealthwisemag.com (2013:1) state that there has been a rapid increase in the

number of people using Internet in South Africa. Consequently, such development has resulted in the increased number of people shopping online and the attraction of competition within the online shopping industry. Rudansky-Kloppers (2014:1188) further alludes that a sharp increase in the number of people using Internet and Internet powered gadgets has been experienced in SA leading to an attraction of online shopping stores in the sector. Hence, threatening competition begun imaging in the South African online industry.

2.3.5 COMPETITION IN THE SOUTH AFRICAN ONLINE SHOPPING MARKET

As already specified in Chapter 1, there has been a rapid increase in competition amongst online stores in the South African market. This competition is driven by the change in consumers' lifestyles towards the use of Internet and digital platforms to conduct activities online creating a rapidly growing market for online shopping (Fichardt 2015:6). As mentioned also in section 2.3.3 and 2.3.4, online shopping usage in South Africa ranks second in the continent and its contribution to the economy is rapidly increasing (Goko 2017:12; Goldstuck 2013:14). This scenario has naturally attracted overseas competition due largely to the fact that international e-commerce platforms can operate cross-border without many restrictions in the South African market (Goldstuck 2013:6).

The nature of online shopping is that there is no trade boundary from one market to the other, hence it is possible for any service provider across the world to enter any market and serve customers from anywhere in the world, including South Africa. Through the use of the Internet and digital platforms online shopping consumers can purchase from any of the estimated 12 to 24 million online stores in the world (Rachamim 2017:1). As a result South African online stores are in direct competition with the world's best and most resourced online store brands. Table 2.2 details some of the South African and overseas online stores who are among the 12 to 24 million online stores competing in the world.

Table 2.2: Examples of Competing South African and Multinational Online Stores

South African online stores	Multinational online stores
Takealot.	Amazon.
Zando.	Walmart.
Bidorbuy.	e.Bay.
Oneshop.	Alibaba.
Zasttra.	PrettyLittleThing.
Raru.	Bcohoo.
Superbalist.	Gymshark.
Wootware.	Showpo.
Loot.	Missguided.
Makro.	Athleta.
Yuppiechef.	6PM.
Woolworths.	ASOS.
Evetech.	Nike.
OneDayOnly.	Superdry.
Pick n Pay.	Forever 21.
Rebel Tech.	Urban outfitters.
Spree.	Zappos.
HiFi Corp.	Nasty Gal.
Mr Price.	J. Crew.
Incredible connection.	Old Navy.
	Torrid.

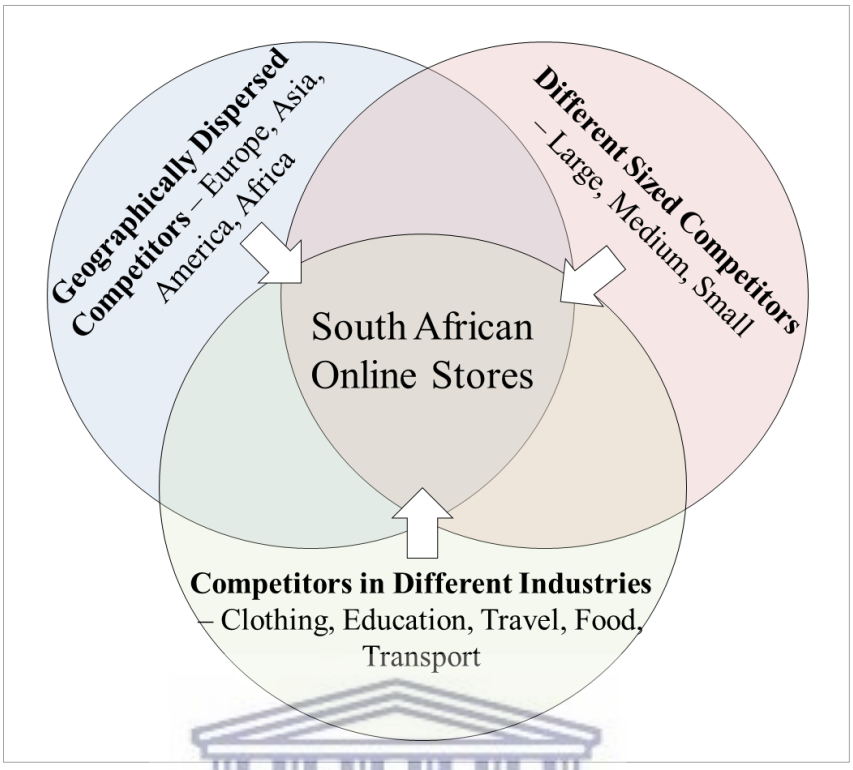
Source: My-broadband (2017:1) and Rachamim (2017:1)

Competition from multinational online stores threatens the survival of South African online retailers. According to Barrett (2017:78), multinational online brands tend to dominate industries across the world, including in the entertainment, education, automobile, grocery, footwear, clothing and travel industries. Therefore, it has become difficult for South African online stores to compete within any domestic industry without experiencing pressure from overseas brands (Goko 2017:2). In terms of the different industries, digi-electronics.net sells electronic products, trivago.co.za represent accommodation services, mytravel.co.za deals with travel services and exclusivebooks.co.za specialises in education services (Goko 2017:2).

To illustrate the difficulties facing online stores with a South African origin, Rachamin (2017:1) explains that only 650 000 online stores in the world out of between 12 and 24 million generate sales of more than US$ 100 000 per year and the majority of these are based in the United States of America. Goko (2017:3) shows that competitors are emanating from different geographical areas, especially North America, Asia and Europe. Examples of online stores from different geographic origins include global.rakuten.com (Japan / Asia) next.com.br (Brazil / South America) eBay.com (USA / North America) konga.com (Nigeria / Africa) and italist.com (Italy / Europe). Different sized online stores are also competing in different sizes, for example Amazon.com (large) gumtree.com (medium) and bidorbuy.com (small). Online stores competing within South Africa can be divided into "very big", "big", "medium" and "small" players (Fichardt 2015:6). The size of online stores competing in the South African market are also relevant as large, well-resourced and recognisable brands, such as Amazon.com, entering the domestic market has serious implications for South African-born online stores.

Figure 2.7 illustrates the categories of competition facing South African online stores, being competition from different geographical areas, competition from different sized brands and competition from brands in different industries.

Figure 2.7: Typology of Competitive Pressures on South African Online Stores



Source: Author's own construct

Based on section 2.3.5 and an illustration made on Figure 2.7, one would realise that online shopping competition in South Africa has surely reached climax. The presence of better resources multinational online store brands threatens the existence of domestic players. It is therefore for this reason that this study sort to assess customers' perceptions of electronic service quality, the effect of perceptions of electronic service quality on customer satisfaction and the influence of customer satisfaction on customer behavioural intentions.

2.4 CONCLUSION

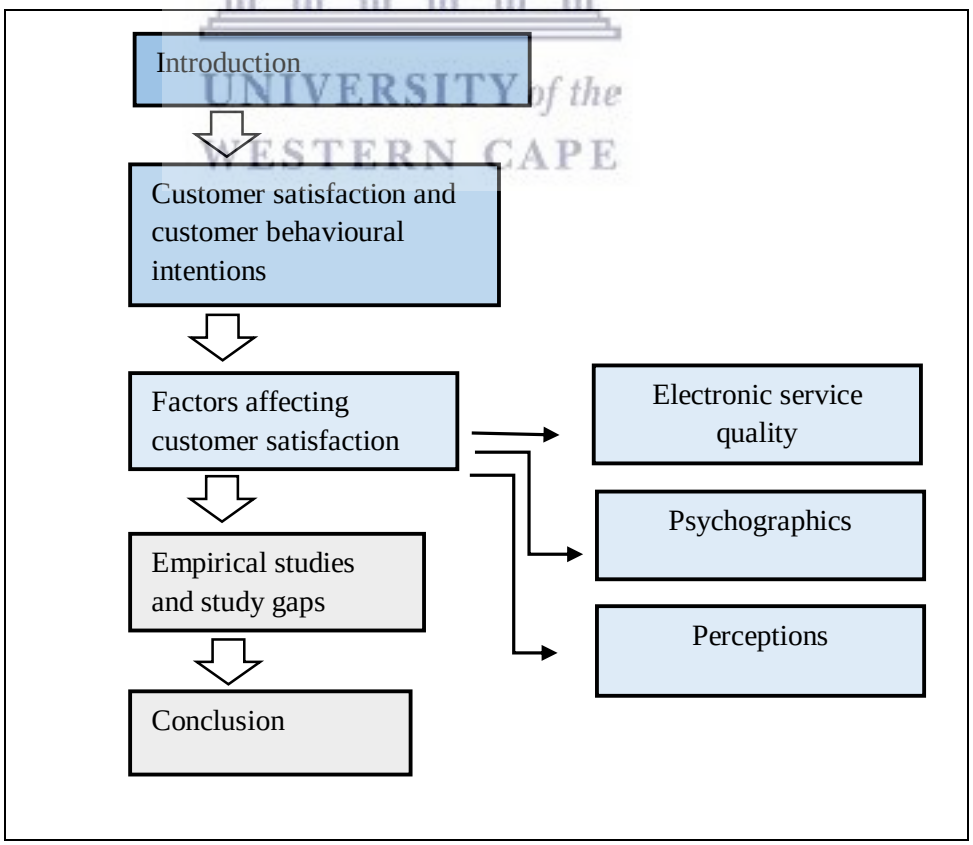
This Chapter has described the burgeoning online shopping industry globally and in South Africa, and outlined the competition in the South Africa online market. The competition in the South African online shopping market is observed to be constantly increasing and illustrates the need for South African online stores to devise effective strategies to be able to compete with larger, better-resourced and often more recognisable multinational competitors. Following on from this, the next Chapter describes literature on factors affecting customer satisfaction.

CHAPTER 3: LITERATURE REVIEW: CUSTOMER SATISFACTION, ELECTRONIC SERVICE QUALITY, PSYCHOGRAPHICS AND PERCEPTIONS

3.1 CHAPTER OVERVIEW

The previous Chapter provides the literature on online shopping and competition within the South African context. It has shown that the competition from multinational online stores put domestic players under pressure. This study sought to provide intervention through looking at ways that lead to customer satisfaction and competitive advantage. Thus competitive advantage is linked to electronic service quality, customer satisfaction and positive behavioural intentions which is influenced by customer perceptions and psychographics. Hence, this Chapter presents literature on customer satisfaction, behavioural intentions, electronic service quality, psychographics and perceptions. The flow of literature is as follows.

Figure 3.1: Flow of literature review



Source: Researcher's own construct

3.2 INTRODUCTION

Faced with 12 to 24 million known online stores across the world, South African online stores need to come up with a strategy to safeguard its home market and beyond. Online shopping has no trade boundary from one market to the other. Hence, it is therefore convenient for multinational online stores across the world to penetrate markets anywhere in the world including South Africa. Survival in such a condition requires the need to tailor make customers' needs and achieve customer satisfaction. Consequently, South African online stores need to understand the role of psychographics on customer perceptions of electronic service quality and its effect on customer satisfaction. The next section provides literature on customer satisfaction.

3.3 CUSTOMER SATISFACTION

The relevance of the concept of customer satisfaction is regarded as of great significance in this study. Customer satisfaction is a strategy that can be adopted by the domestic online stores in order to gain competitive advantage. Within the context of this study customer satisfaction is defined as the overall assessment of customers towards the ability of products and services to meet prior expectations (Robbins et at. 2016:234; Zeithaml et al. 2009:113). Kotler and Keller (2016:150) and Robbins et al. (2016:248) define customer satisfaction as a feeling of displeasure or pleasure resulting from experience of the actual performance experienced from a product or service as compared to its expected performance.

3.3.1 THEORIES OF CUSTOMER SATISFACTION

Numerous theories exist describing customer satisfaction. According to Shala and Balaj (2016:11) and Carter (2010:20), known theories of customer satisfaction include the Expectancy Disconfirmation Paradigm (EDP), the Value-Precept Theory, the Attribution Theory, the Equity Theory, the Comparison Level Theory, the Evaluation Congruity Theory, the Person-Situation Fit Model, the Performance-Importance model, the Dissonance and the Contrast Theory. Further explanation is given of three theories of customer satisfaction that are closely related to this study,

being the Dissonance theory, the Contrast theory and the Expectancy Disconfirmation Theory.

3.3.1.1 The dissonance theory

The dissonance theory suggests that a customer who expects a high value service and receives a low value service would experience cognitive dissonance. According to Robbins et al. (2016:267) and Harmon-Jones (2012:543), cognitive dissonance is a state of having inconsistent thoughts, beliefs or attitudes. Acharya, Blackwell and Sen (2015:3) and Carter (2010:20) also argue that inconsistencies between the expected and the perceived service result in cognitive dissonance. The concept of cognitive dissonance closely relates to online shopping. Pandey et al. (2015:53) maintain that customers who experience cognitive dissonance when carrying out online shopping will result in the customer seeking out other immediate satisfactory factors that will help to reduce the dissonance. Acharya et al. (2015:32); and Cho and Jialin (2008:95) establish that the cognitive dissonance theory has not received much attention in the customer satisfaction literature due to its inability to clearly specify how customers would behave after receiving a dissatisfying service. Gupta and Bansal (2011:83) add that as far as cognitive dissonance is concerned it is not clear whether customers would engage in discrepancy adjustment or not. According to Harmon-Jones (2012:544), customers are under no particular pressure to resolve the difference between their expectations and service performance. The weakness of this model led to the development of other theories.

3.3.1.2 The contrast theory

The contrast theory states that a customer who receives a service of lower quality than expected will magnify the difference between the service received and the service expected (Koszegi 2014:1075; Bhatnagar, Misra & Rao 2000:98). The theory predicts that service performance below expectations will be rated poorer than it is in reality (Frederick 2013:178;

Brusdal & Lavik 2005:117). However, this theory was only tested in tightly controlled environments, which makes it difficult to tell if the hypotheses tested could be accepted if applied in a survey situation. It is due to this reason that the contrast theory is not applied in this study.

3.3.1.3 The expectancy disconfirmation paradigm

The expectancy disconfirmation paradigm argues that customers purchase a product or service with a pre-conception of anticipated performance (Rahman, Khan & Haque 2012:201; Kumari & Rani 2011:299). It is the expectation level which is regarded as the standard against which the service is judged and as soon as a customer uses the service its outcome is compared against its expectations. Khare and Rakesh (2011:227) specify that customers became either satisfied or dissatisfied as a result of positive or negative difference between expectations and perceptions. The expectancy disconfirmation paradigm is regarded the most promising theoretical framework for the assessment of customer satisfaction (Jiradilok et al. 2014:5) hence it is appropriate for this study.

3.3.2 TYPOLOGY OF CUSTOMER SATISFACTION

This section describes customer satisfaction of electronic service quality. In order to understand the significance of customer satisfaction, it is imperative to appreciate that customers observe satisfaction in two different types. According to Robbins et al. (2016:264) and Rahman et al. (2012:201), customer satisfaction can be divided into, i) transaction specific satisfaction and ii) cumulative satisfaction. Transaction specific and cumulative satisfaction are described respectively as follows:

(1) Transaction specific satisfaction

Transaction specific satisfaction is an assessment given to customers' experience on a specific electronic service encounter. Mozaheb, Alamolhodaei and Ardakani (2015:42) and Yoo and Donthu (2001) allude that transaction specific satisfaction put emphasis on individual electronic transactions. According to Williams and Naumann (2011:20) and Yeo

(2009:62), transaction specific satisfaction can be transcribed in the context of e-service quality since customers engaging in online shopping are constantly wary about each e-service encounter on their disposal.

The transaction specific satisfaction is instrumental in explaining satisfaction with the online store. Chenet et al. (2011:336) and Beneke, Acton, Richardson and White (2011:136) propose that aspects of an e-service encounter during online shopping transaction leads to either dissatisfaction or satisfaction. Hence, it makes it important to pay particular attention to the concept of transaction specific encounter. Kuo, Wu and Deng (2009:887) further state that the consideration of transaction specific satisfaction puts an online shopping store in a rather strategic position.

In the online shopping environment, transaction specific satisfaction occurs each time a customer faces and receive a service through the electronic platform. According to Carter (2010:20) and Haque, Tarofder, Mahmud and Ismail (2007:10), the service encounter within an online store refers to the purchase of a product or service. It can also be the delivery of the purchased product or service. Shala and Balaj (2016:5) allude that transaction specific satisfaction can be the after sales service rendered by the online shopping store. In each of these aspects it can be noted that there is an appreciation of the transaction specific satisfaction.

(2) Cumulative satisfaction

The summation of all the transaction specific satisfaction result in a cumulative satisfaction. Byambaa and Chang (2012:10) support that cumulative satisfaction is a summation of all the service encounters a customer receives during his or her entire life with the online shopping store. Pandey et al. (2015:53) and Ipson (2015:3) further described cumulative satisfaction as the customers' overall evaluation of patronage experience obtained from the first point of inception to date. It is therefore an evaluation of all the experience obtained by the customer.

Cumulative satisfaction is an important component of customer satisfaction. According to Dewan and Mahajan (2014:29) and Buultjens and Robinson (2011:337), cumulative satisfaction reveals the importance of consistency in service encounters. In other words, cumulative satisfaction can be regarded as a marathon race where the sustenance of e-service delivery longevity occurs. It is therefore a collective observations done by customers in various service encounters.

Customer satisfaction is an attitude that is subject to a variety of factors. Factors affecting customer satisfaction in an online shopping context include electronic service quality, customer perceptions and psychographics (Kotler & Keller, 2012:134). The next section discusses factors affecting customer satisfaction.

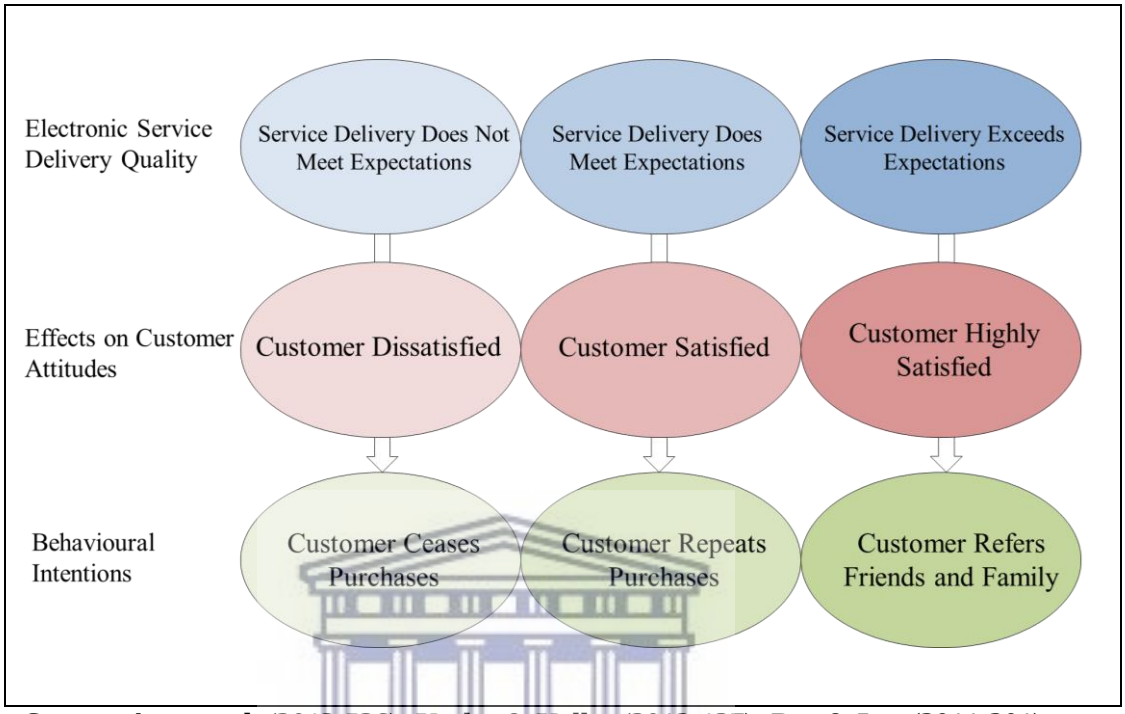
3.3.3 CUSTOMER SATISFACTION AND BEHAVIOURAL INTENTIONS

Customer satisfaction and service quality influences customers' purchase intentions. Byambaa and Chang (2012:12) and Klein (2012:10) found that electronic service quality and satisfaction are important in customers' decision-making process. Jiradilok et al. (2014:5) state that electronic service quality and customer satisfaction are utilised by customers in making their decision in picking an online shopping store. Customer satisfaction and its effects on behavioural intentions can be elicited in three specific forms. The first form occurs when electronic service delivery does not meet customer expectations and dissatisfaction occurs (Min & Khoon 2013:994; Kotler & Keller 2012:44). In this circumstance, customer dissatisfaction can lead to negative behavioural intentions. Thus customers can decide not to purchase from the organisation that perpetuated the dissatisfaction.

The second form is elicited when customer expectations match service delivery leading to satisfaction. In such a circumstance, corresponding positive behaviour intention is formed. According to Aren, Guzel, Kabadayi and Alkan (2013:536) and Yeo (2009:62), customer satisfaction can lead a customer to respond with a positive

behaviour intention. Such behavioural intention can include performing repeat purchases and referring friends and family to the online store.

Figure 3.2: Forms of Customer Satisfaction



Source: Aren et al. (2013:536); Kotler & Keller (2012:137); Bae & Lee (2011:201)

The third form of customer satisfaction is produced when service delivery exceeds expectations. In such a circumstance, a customer gets highly satisfied (Kotler & Keller 2012:44). Highly satisfying customers also results in positive behavioural intentions. Thus, organisations that over-deliver on their promises achieve competitive advantage in the market place.

3.3.4 CUSTOMER SATISFACTION AND COMPETITIVE ADVANTAGE

Customer satisfaction result in the gaining of competitive advantage by the online store. Competitive advantage is experienced through a positive word-of-mouth, customer retention and financial performance (Prashar et al. 2016:27; Sharma & Lijuan 2015:468; Moharrer, Tahayori & Sadeghian 2013:1172). Various empirical studies have researched the relationship that exists between customer satisfaction and competitive advantage (Seng 2013:126; Cardona & Bravo 2012:28; Butt &

Rehman 2010:5448). Several benefits of customer satisfaction are explained in the next sub-section as follows:

3.3.4.1 Influences word-of-mouth communication

Customers' satisfaction leads to positive word-of-mouth. Studies also confirmed that customer satisfaction has a positive impact on word-of-mouth intensions (Shala & Balaj 2016:5; Carter 2010:20; Yeo 2009:65). Naik et al. (2010:39) further confirm that satisfaction of customers leads to positive behavioural intentions that include positive word-of-mouth. It follows that satisfied customers are a useful tool in marketing online shopping stores. Investing efforts in understanding the views of customers towards electronic service quality is crucial. It contributes to increased word-of-mouth.

Customer satisfaction is important for loyalty to develop. It enables customers to tell good stories about the online store. Ultimately, it goes a long way in building the reputation of the online store. Shala and Balaj (2016:5) and Carter (2010:21) found that customers' dissatisfaction leads to a negative word-of-mouth. In addition, Carter (2010:21) found that dissatisfied customers spread bad news faster than satisfied customers. It is therefore important to ensure that factors that leads to customer satisfaction within the online stores are given preferential treatment.

3.3.4.2 Influences customers' purchasing decision

Customer satisfaction influences customers' purchase intentions (Kotler & Keller, 2012:156). Byambaa and Chang (2012:12) found that customer satisfaction is an important aspect in customers' decision-making process. Jiradilok et al. (2014:5) acknowledges that customer satisfaction determines the decision by customers in picking an online shopping store. It is therefore important for management of online stores to invest efforts in understanding factors that lead customer satisfaction.

3.3.4.3 It leads to service differentiation

An understanding of factors that leads to customer satisfaction result in the creation of differentiated services. The online store is therefore able to make use of factors that lead to customer satisfaction to create service delivery different from the competitors. An understanding of the needs and wants of customers result in customer satisfaction (Pandey et al. 2015:53; Min & Khoon 2013:994). Akhlaq and Ahmed (2016:74) argue that customer satisfaction is critical in creating a competitive edge.

3.3.4.4 It promotes continuous improvement

Assessment of customer satisfaction leads to continuous improvement. According to Anyana and Naidu (2016:26), understanding how customers feel about service delivery is critical in coming up with strategies for continuous improvement. Aren et al. (2013:536) specify that customer satisfaction is a critical aspect for measuring continuous improvement. Hence, it gives the online store an idea of its performance and the need for improvement. It is therefore important to assess factors that are important in determining customer satisfaction. Striving towards customer satisfaction put the online store in a position where by it constantly looks out for ways to enhance creativity and innovativeness (Aren et al. 2013:536).

3.3.4.5 It leads to a higher financial performance

Customer satisfaction is linked to financial performance. According to Yeo (2009:62) and Lee et al. (2005:457), an attainment of customer satisfaction is critical in influencing repeated purchase and increase in the sales level of the online store. Satisfied customers conduct business with the online store and financial performance is enhanced. Chellapalli and Kumar (2016:41) and Vishwagena (2016:411) support the importance of customer satisfaction in influencing the financial performance of the online store.

Based on this section, it is important to ensure that customer satisfaction is achieved. The section has shown the several benefits of customer satisfaction to the online store. These benefits include positive customer behavioural intentions such as positive word-of-mouth, repeated purchase, service differentiation as well as higher financial performance (Prashar et al. 2016:27; Sharma & Lijuan 2015:468; Moharrer et al. 2013:1172). In order to achieve competitive advantage, online stores need to understand the different factors that lead to customer satisfaction. The next section explores factors that leads to customer satisfaction.

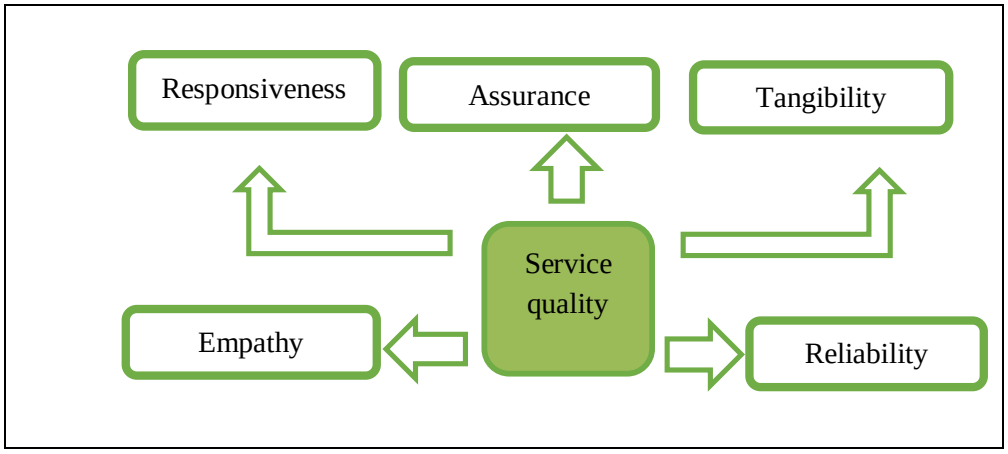
3.4 FACTORS AFFECTING CUSTOMER SATISFACTION

The concept of customer satisfaction is important in the prosperity of online shopping stores (Kotler & Keller, 2012:56). It is therefore important to understand the factors that affect customer satisfaction of online shopping. Factors that affect customer satisfaction include electronic service quality, customer psychographics and perceptions (Kotler & Keller 2016:276; Robbins et al. 2016:312).

3.4.1 ELECTRONIC SERVICE QUALITY

The concept of electronic service quality is an advancement from the relatively known traditional ZERVQUAL service quality model. According to Parasuraman, Zeithaml and Berry (1988:12) and Gronroos (1990:117), the SERVQUAL model comprised of five sub-constructs that are tangibility, reliability, assurance, empathy and responsiveness. These are illustrated in Figure 3.3.

Figure 3.3: The SERVQUAL Model



Source: Parasuraman et al. (1988:12)

The servqual model is mainly meant for brick and mortar service shops, for example hotels, hospitals, schools and banks. Akkucuk and Teuman (2016:183) allude that a fast change in the technological environment brought new ways of conducting services businesses. Shala and Balaj (2016), Gronroos (1990:134) and Gronroos (1984:36) further state that the utilisation of technology in conducting service transaction led to the birth of virtual shops known as online stores as already discussed in the online shopping section. Thus the traditional servqual was further advanced to electronic service quality (e-servqual) (Parasuraman et al. 2005:16).

Electronic service quality is regarded an important component for customer satisfaction in online stores. Electronic service quality is defined as a relative assessment carried out by customers between expected and actual digital services (Zarei, 2010:6). Electronic service quality authors (Rudansky-Kloppers 2014:1187; Jiradilok et al. 2014:5) support Zarei's (2010:6) explanation electronic service encounters. Zarei (2010:6) states that customers do carry specific expectations when faced with digital services and these expectations are compared to the actual digital services that are provided by online stores. To further enrich the understanding of e-servqual, various models were formulated (Parasuraman et al. 2005:16; Wolfinbarger & Gilly 2003:183; Barnes & Vidgen 2002; Yoo & Donthu 2001).

3.4.1.1MODELS OF ELECTRONIC SERVICE QUALITY

Electronic service quality is measured through several sub-constructs. Past research in the field of electronic service quality brought about numerous sub-constructs for measuring electronic service quality. These sub-constructs were contributed in models developed by authors such as Francis and White (2005:1), Parasuraman et al. (2005:16), Wolfinbarger and Gilly (2003:183), Barnes and Vidgen (2002), Yoo and Donthu (2001:16), Loiacono, Watson and Goodhue (2000:167); and Syzmanski and Hise (2000:194).

(1) The PIRQUAL Model

The PIRQUAL model explains electronic service quality. This model of electronic service quality was developed by Francis and White (2005:1). The scale was developed to add measurement of electronic service quality (Vishwagena 2016:411; Syzmigin & Bourne 1999). According to Francis and White (2005:1), the PIRQUAL electronic service quality model consists of six constructs that are; web store functionality, product attribute description, ownership conditions, delivery, customer service and security.

(2) The E-S-QUAL and E-RECS-S-QUAL Model

The E-S-QUAL and E-RecS-S-QUAL model was also developed in 2005 to measure electronic service quality. The E-S-QUAL and E-RecS-S-QUAL model was developed by Parasuraman et al. (2005:1) to measure electronic service quality. For better usability, the model was split into two, thus the E-S-QUAL and the E-RecS-S-QUAL (Akkucuk & Teuman 2016:183; Marimon, Vidgen, Barnes & Cristobal 2010:111). In terms of usability, E-S-QUAL and the E-RecS-S-QUAL are regarded the most influential in measuring service quality to date as evident by their use in a number of studies (Akkucuk & Teuman 2016:183; Marimon et al. 2010:111).

The E-S-QUAL has four constructs that are efficiency, fulfilment, system availability and privacy. These four constructs are measured through 22 related items. The E-RecS-S-QUAL is made up of three constructs that are responsiveness, compensation and contact. It is measured through 11 items (Parasuraman et al. 2005:1).

(3) The LEE and LIN Model

An additional model to measure electronic service quality was also introduced in 2005. The electronic service quality model was introduced by Lee and Lin (2005:162). In this model, Lee and Lin (2005:162) contributed constructs that can be used to measure e-service quality. According to Lee and Lin (2005:161), the constructs of e-service quality are website design, reliability, trust effect, and personalisation. Earlier on, Wolfinbarger and Gilly (2003:183) allude that e-service quality is measured through four constructs and 14 items. Following Wolfinbarger and Gilly's (2003:183) recommendations, the constructs for measuring e-service quality are website design, reliability or fulfilment, privacy or security and customer satisfaction.

(4) The WEBQUAL Model

The WebQual model was introduced to assess the quality of websites. Barnes and Vidgen (2002:114) developed the WebQual scale to measure organisational electronic commerce. In the WebQual scale there are five constructs for measuring e-service quality. The five constructs include usability, design, information, trust and empathy. However, in order to assess this scale, consumers did not need to complete a purchase process (Barnes & Vidgen 2002:114).

(5) The SITEQUAL Model

In adding value to the measurement of e-service quality, the SITEQUAL model was established. Yoo and Donthu (2001:31) developed an e-service

quality measuring instrument that is made of nine items and referred to it as the SITEQUAL. According to Yoo and Donthu (2001:31), the e-service quality instrument is made up of four constructs that are; ease of use, aesthetic design, processing speed and security. Similar to the WEBQUAL, the SITEQUAL model does not measure customers' transaction experience.

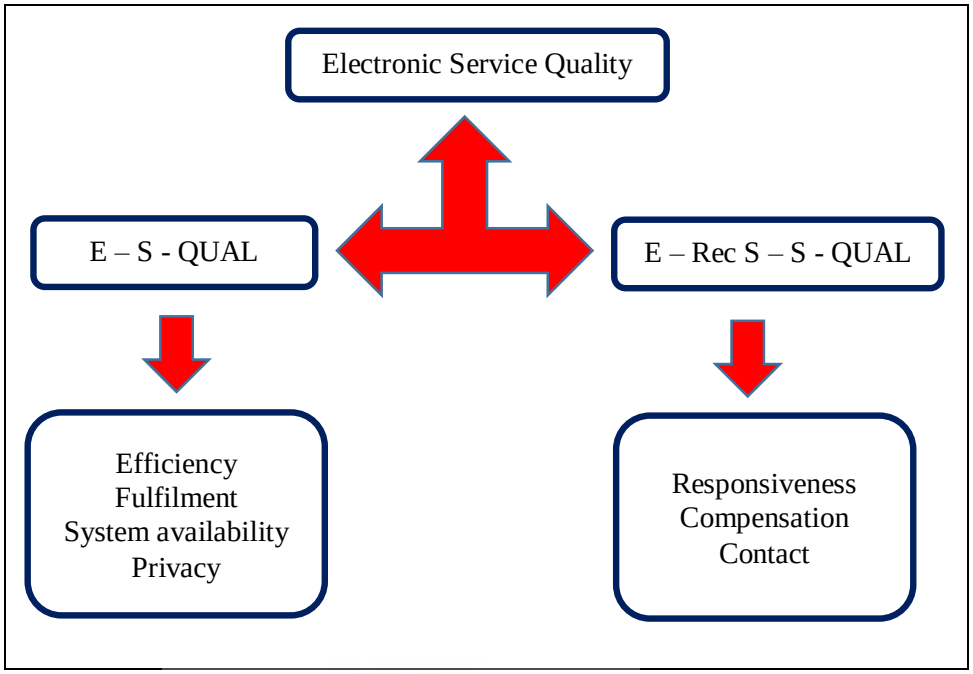
(6) The SYZMANSKI and HISE Model

The Syzmanski and Hise model was formed in 2000 to measure electronic service quality. Syzmanski and Hise (2000:309) contribute to the measurement of electronic service quality through constructs such as online convenience, merchandising, site design and financial security. However, the model opted by Syzmanski and Hise (2000:309) did not cater for customer service aspects, instead it concentrated much on the aspects of the website. The next section justifies the selection of the suitable study model.

3.4.1.2SELECTION OF THE APPROPRIATE ELECTRONIC SERVICE QUALITY MODEL

As mentioned in section 3.4.1.1, several models for measuring service quality were developed. The combination of the E-S-Qual and E-RecS-S-QUAL constructs developed by Parasuraman et al. (2005:1) was adopted as the study model in this research. An illustration of the model is shown on Figure 3.4.

Figure 3.4: The E-S-Qual and E–Rec S–S–QUAL Model



Source: Parasuraman et al. (2005)

The E-S-Qual and E-RecS-S-QUAL model was chosen in this study for its relevance. According to Akkucuk and Teuman (2016:183), the E-S-Qual and E – RecS – S - QUAL is the most recent model for measuring electronic service quality. Despite the existence of other various models of electronic service quality, the E-S-Qual stand to be the latest developed measuring instrument. Akkucuk and Teuman (2016:183) further state that the E-S-Qual and the E – RecS –S - QUAL is also regarded the most popular e-service quality measuring technique since it was used in most previous studies including Panda and Swar (2016:1) and Pandey et al. (2015:53).

The E-S-Qual and RecS – S - QUAL was also adopted in this study because it was found to be the most valid and reliable instrument for measuring electronic service quality. According to Boshoff (2007:101), the E-S-Qual and RecS-S-Qual are critical to ensure validity and reliability when measuring electronic service quality. In support of this argument, Marimon et al. (2010:111) tested the model at a supermarket utilising online systems in Spain and found the model to be the most valid and reliable instrument to make use.

The weakness discovered in other models, for example the WEBQUAL and the SITEQUAL makes the E-S-Qual the most preferred model for use in the study of electronic service quality. According to Barnes and Vidgen (2002:114) and; Yoo and Donthu (2001:31), the WEBQUAL and the SITEQUAL do not take into consideration transaction process involved as well as the customer service rendered to the customer. The E-S-Qual and RecS–S-QUAL developed by Parasuraman et al. (2005:1) take into consideration customer service aspects, hence it is regarded the most valid instrument to utilise in this study.

3.4.1.3CRITICISM ON THE E-S-QUAL AND E–RECS–S–QUAL MODEL

Despite the usefulness of the E-S-Qual and E–RecS–S-QUAL model in measuring electronic service quality in this study, it was also found to be facing a number of criticisms. Its denunciations include its lack of exhaustiveness, low prediction power, lower theoretical justification, not industry specific and lack of hedonic influence (Akkucuk & Teuman 2016:183).

(1) Lack of exhaustiveness

The E-S-Qual and the E-RecS-S-Qual model is limited to the use of only seven constructs (i.e. efficiency, fulfilment, system availability, privacy, responsiveness, compensation and contact) in its instrument. It leaves out other important constructs that are important in measuring electronic service quality. According to Hasan and Abuelrub (2008:11) and Lee and Lin (2005:161), aspects such as website design, reliability, trust effect and personalisation are not covered in the E-S-Qual and E – RecS – S – QUAL model.

(2) Lacking a high prediction power

The E-S-Qual and E-RecS-S-Qual lack a high prediction power. Bauer, Falk and Hammerschmidt (2006:876) also criticises the E-S-Qual model for

lacking a high prediction power. High prediction power is important for anticipating the needs and wants of customers. It is important for the online stores to be able to predict the needs of customers. This helps them to anticipate and prepare for the service and arrange aspects that are essential in giving a quality service.

(3) It lacks enough theoretical justification

Similarly to the Servqual model for brick and mortar service, the E-S-Qual model also makes use of expectations in determining electronic service quality. According to Lee and Lin (2005:161), expectations lack enough theoretical justification. This is an indication that the E-S-Qual lacks enough ground to cover a solid theoretical foundation.

(4) Not industry specific

The E-S-Qual model does not relate to one specific industry. Millissa, Cheung and To (2010:259) state that E-S-Qual model is considered too general. Since it is considered too general it becomes difficult for it to be applied in all electronic service industries. There are models which are industry specific, for example the service quality model for internet banking.

(5) Lack of hedonic elements

Despite the positive aspects sited in support of the E-S-Qual model, few aspects were found to be weaknesses of the model. According to Bauer et al. (2006:876), the E-S-Qual suffers from a weakness of not having hedonic service quality elements. Hedonism is a school of thought that argues that intrinsic benefits such as pleasure and happiness drive consumers into a shopping behaviour (Nurmmiko 2011:11). The E-S-Qual model lacks intangibility and emotional elements that are hedonic service quality

elements. Bauer et al. (2016:876) state that the E-S-Qual's online shopping experience is sorely based on utilitarian benefits.

Even though the E-S-Qual model faces criticism, its advantages still outweighs the disadvantages. It was therefore adopted as a main theoretical framework which enabled the research problem to be investigated in this study. The following section provides further insight on the E-S-Qual and E-RecS-S-Qual constructs.

3.4.1.4THE E-S-QUAL CONSTRUCTS

The E-S-Qual scale remains the most recent and relevant scale for measuring electronic service quality for online shopping transactions. According to Parasuraman et al. (2005:1), the E-S-Qual is measured with four constructs that are efficiency, fulfilment, system availability and privacy. The constructs for the E-S-Qual instrument are described in the following sub-sections.

(1) Efficiency

The efficiency of the online transaction is regarded an important component to consider when measuring electronic service quality (Kotler & Keller, 2012:234). Parasuraman et al. (2005:1) and Akkucuk and Teuman (2016:183) alluded that efficiency of online transaction is measured through items that measure if the site makes it easy for customers to find their needs, whether it makes it easy for the customer to get anywhere on the site, ability in ensuring that the customer completes the transaction quickly, proper organisation of the information, ability of the site pages to load fast, simplicity in use, easiness in getting on to the site quickly and a well organised site.

(2) Fulfilment

Fulfilment is the extent to which the site's promise about the delivery of the order is completed (Kotler & Keller, 2012:124). Parasuraman et al. (2005:1)

further proposed seven items for measuring fulfilment. Al-Nasser et al. (2016:228) and Nabareseh et al. (2014:64) supported the items proposed by Parasuraman et al. (2005:1) as the ability of the site to deliver orders when promised, the ability of the site to make items available for delivery within a suitable time frame, the ability to deliver the ordered items quickly, ability to send out the items as ordered, availability of the stock that the organisation claim to have, truthfulness about the organisation's offering and ability to make accurate promises about delivery of products.

(3) System availability

System availability is measured through four items of electronic service quality (Kotler & Keller, 2012:214). The four items proposed by Parasuraman et al. (2005:1) were also later on supported by Shala and Balaj (2016:5) and Byambaa and Chang (2012:46) as the constant availability of the site for business, the ability of the site to launch and run right away, the assurance that the site does not crash and freeze after the order information is entered.

(4) Privacy

Privacy is described as the protection of the customers' personal information (Kotler & Keller, 2012:134). Shala and Balaj (2016:5) expressed privacy as the security that is given to protect users from risk of fraud and financial loss. Parasuraman et al. (2005:1) proposed that there are four items for measuring privacy and these were further supported by Akkucuk and Teuman (2016:183) and Shala and Balaj (2016:5) as the ability of the service provider to protect customers' information about a customer's web-shopping behaviour, ensuring that customers' information is not shared with other sites and protection of customers' credit card information.

3.4.1.5THE E-RECS-S-QUAL CONSTRUCTS

The E-RecS-S-QUAL constructs are an extension of the E-S-Qual. According to Parasuraman et al. (2005:11), the E-RecS-S-QUAL is comprises of three constructs. The three constructs are responsiveness, compensation and contact. These constructs are described as follows:

(1) Responsiveness

Responsiveness is defined as the willingness to help customers in providing prompt services. Kotler and Keller (2016:394) and Parasuraman et al. (2005:9) state that responsiveness is used to measure electronic service quality in the E-RecS-S-QUAL model. According to Parasuraman et al. (2005:8), responsiveness is measured through five items that are the provision of convenient options for returning items by the service provider, the proper handling of product returns, offering of meaningful guarantee, the provision of information of what to do if the customers' transaction is not processed and the ability to take care of problems promptly (Ariely 2000:233).

(2) Compensation

Compensation refers to the ability of the online shopping service provider to supply customers with a reparation for problems encountered. According to Parasuraman et al. (2005:9), the E-RecS-S-QUAL model measure compensation through three items that are the ability of the online store to compensate customers for problems it creates, compensation of customers when the order does not arrive on time and pick up items that are to be returned from the customer's home or business (Arena, Arnaboldi & Azzone 2010:941).

(3) Contact

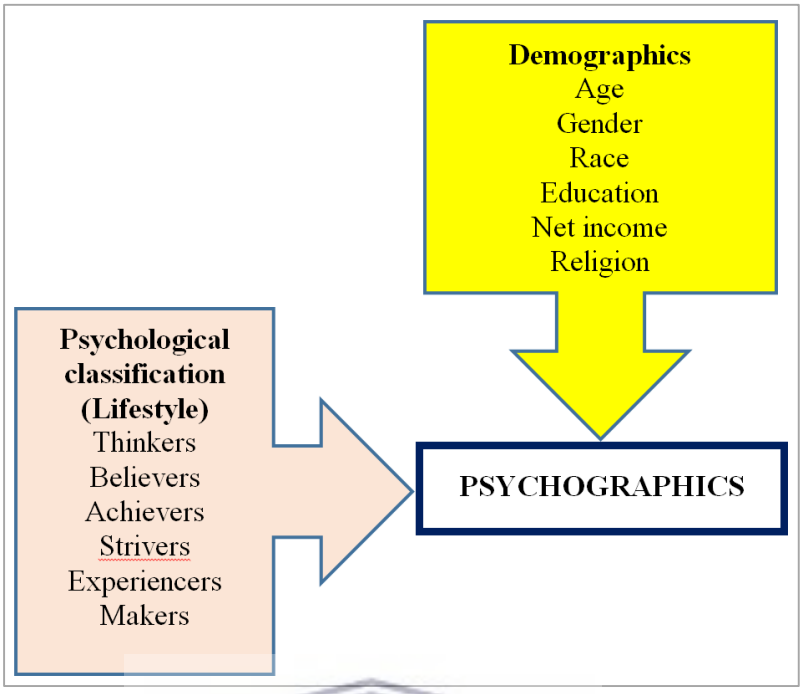
Contact refers to easy accessibility of the online shopping service provider to render assistance. Parasuraman et al. (2005:10) proposed three items for measuring the service provider the ability to provide convenient communication. The items include the site's ability to provide a telephone number to reach the organisation, availability of the customer service representatives available online for the site and availability of a person that customers can speak to when there is a problem (Al-Khali & Mahmoud 2012:113).

This section provided the constructs and items used by the E-S-Qual and the E-RecS-S-QUAL model to measure electronic service quality. In summary, these constructs include efficiency, fulfilment, system availability, privacy, responsiveness, compensation and contact. The next sections looks at psychographics (demographics and psychological) and perceptions since they form part of factors that affect customer satisfaction and major constructs in this current study that seeks to understand the role played by psychographics in influencing the perceptions of customers towards electronic service quality of online shopping stores.

3.4.2 PSYCHOGRAPHICS

Psychographics represent one of the factors that affect customer satisfaction. Psychographics is the science of using demographics and psychology to better understand customers. Marketing authorities such as Robbins et al. (2016:202), Kotler and Keller (2012:247) and Gosh (2014:26) argue that psychographics is one of the most comprehensive method utilised to understand the markets. The sub-constructs for measuring psychographics are illustrated in Figure 3.5.

Figure 3.5: Psychographic Constructs Adopted in Theoretical Model



Source: Kotler and Keller (2012) and Robbins et al. (2016)

The next subsection will explain demographics as one of the critical sub-construct of psychographics.

3.4.2.1DEMOGRAPHIC CONSTRUCTS

Demographics is a sub-component of psychographics and its holds a critical position in the study of consumer behaviour (Robbins et al. 2016:202). This current study seeks to understand the influence of psychographics on perceptions towards electronic service quality and customer satisfaction in online shopping, hence a complete elaboration of demographics is of significance. According to Robbins et al. (2016:202), demographics is a study of population (customers) based on factors such as income, age, gender, marital status, race and education. Demographics is also described by Kotler and Keller (2012:238) as a construct that enables marketers to segment markets based on age, family life cycle, occupation, education, religion, generation, nationality and social class. Demographic factors are further explored in the next subsections.

(1) Age

Age is an important determinant of consumers' behaviour hence an important variable in this study (Robbins et al. 2016:202). Smith (2015:56) and Kamalaveni and Shalini (2013:35) state that age can be classified into different categories of a life cycle, for example baby, toddler, kid, teenager, young adult, adult, middle aged and senior citizen. Kamalaveni and Shalini (2013:35) and Gordon and Bhowan (2005:145) found that age plays a large role in influencing decisions to shop online. For example, Sulaiman, Ng and Mohezar (2008:149) argue that the younger generations are more likely perform online shopping because of more exposure to computer technology than the older generations, however older generations are also motivated to perform online shopping for convenience reasons.

(2) Gender

According to Lal et al. (2015:75) and Mokhlis (2012:103), gender is an important concept used for the segmentation of markets. Gender segments are easily identifiable and profitable enough to consider in the segmentation of markets. Phang, Kankanhalli, Ramakrrishnan and Raman (2010:344) found that female customers are involved in carrying out purchases online since they occupy a traditional role of purchasing agent, however this is changing in recent times as socio-cultural contexts are changing.

(3) Education

Examples of education levels include primary school, high school, diploma, degree and postgraduate degree qualifications (Dewan & Mahajan 2014:29). Education is an important factor in determining consumer behaviour. According to Palli and Mamilla (2012:430) and Gupta and Bansal (2011:83), different education levels result in consumers behaving differently. Lal et al. (2015:75) found that consumers with a high level of education demand different types of products and services to be provided to them.

(4) Income

Phang et al. (2010:344) state that income serves as a simple indicator of a consumer's purchasing power. According to Sasikala (2013:102), income is therefore an important variable used in the determination of consumer behaviour. Phang et al. (2010:344) indicate that there is usually a correlation between education and income and it is usually expected that the more educated an individual is the more income and purchasing decision power individuals possess.

(5) Race

According to Juwaheer (2011:164), race is defined as a group of people of common ancestry, distinguished from others by physical characteristics such as hair type, colour of eyes and skin. Min and Khoon (2013:994) further classified principal races as Whites, Asians, Coloureds and African.

(6) Marital status

Marital status describes a person's relationship with a significant other. According to Lal et al. (2015:75) and Mirza, Walstrom and Beheshti (2009:114), classifications of marital status include single, married, divorced and widowed. Marital status has a huge significance towards the determination of how consumers behave. Ramez (2011:113) also states marital status is utilised as a major construct in most consumer behaviour studies.

(7) Religion

Religion refers to a belief and worship of a superhuman controlling power. Dolatabadi and Pool (2013:2321) and Min and Khoon (2013:994) state that different forms of religion can be identified as Christianity, Islamic, Hinduism and Buddhihism. Religious affliation is an important construct for consumer behaviour. Consumer behaviour authorities including Rezai,

Mohamed, Shamsudin and Zahran (2013:2380) alluded that religion is crucial in the determination of consumer behaviour.

3.4.2.2PSYCHOLOGICAL CONSTRUCTS

Apart from demographics, psychological factors are also an important consideration in the study of psychographics since they lead to further understanding of consumers and facilitate segmentation of markets. Psychological factors refer to a person's values, attitudes and psychological profiles (Gosh 2014:25; Kotler and Keller 2016:199). A consumers psychographic profile is shown to affect their purchasing behaviour in specific ways. This study adopts the classification by Kotler and Keller (2012:248) of consumers with different psychological profiles divided into Innovators, Survivors, Thinkers, Achievers, Experiencers, Believers, Strivers and Makers. These are described as follows:

(1) Thinkers

Thinkers are referred to as individuals who are motivated by standards and high values (Kotler & Keller, 2016:212). Thinkers are also believed to be mature, satisfied, comfortable and reflective (Kotler & Keller 2016:200; Gosh (2014:25). According to Kotler and Keller (2012:248), thinkers are well educated and actively involved in the decision making process. Thinkers are also known to favour durability, functionality and value in services and products.

(2) Believers

Believers are referred to as individuals who are strongly traditional with strong adherence to rules and authority (Kotler & Keller, 2012:108). Kotler and Keller (2016:200) and Gosh (2014:28) state that believers are fundamentally conservative while slow in embracing change and technology. Gosh (2014:28) further states that believers tend to choose familiar products and well established brands.

(3) Achievers

Achievers are individuals with a high goal orientation that centres on family and career (Kotler & Keller, 2012:109). Achievers are known to avoid situations that encourage a high degree of stimulation or change. Kotler and Keller (2012:249) state that achievers prefer premium products and services that demonstrate success to their peers.

(4) Strivers

Strivers are individuals that are driven by achievement and possess relatively few resources (Kotler & Keller, 2012:98). According to Gosh (2014:28), strivers are trendy and fun loving. Kotler and Keller (2016:200) adds that strivers have little discretional income and tend to have narrow interests. Gosh (2014:28) further states that strivers favour stylish products that emulate the purchases of people with greater material wealth.

(5) Experiencers

Experiencers are motivated by self-expression and possess high resources (Kotler & Keller, 2012:88). Gosh (2014:28) and Kotler and Keller (2012:249) define experiencers as individuals that appreciate the unconventional, are active, impulsive, and seek stimulation from new experiences and take risks. Gosh (2014:28) states that these individuals spend a comparatively high proportion of their income on fashion, socialising and entertainment.

(6) Makers

Makers are individuals who are motivated by self-expression and possess low resources (Kotler & Keller, 2012:190). According to Gosh (2014:29) and Kotler and Keller (2012:249), makers choose hands-on constructive activities and spend leisure time with family and close friends. Kotler and

Keller (2016:200) states that makers prefer value to luxury hence they buy basic products and services.

This section focused on sub-constructs that define psychographic construct. These have been defined as demographics (age, gender, income, education, race, and religion) and psychological (thinkers, believers, achievers, strivers, experiencers and makers) elements. Demographics and psychological sub-contructs are important in this study that seeks to develop a model that shows the influence of psychographics on customers' perception towards electronic service quality and satisfaction in online shopping stores. The next section discusses the concept of customer perceptions.

3.4.3 CUSTOMER PERCEPTIONS

Customer perceptions are critical in influencing customer satisfaction. This study also sought to understand customers' perceptions on electronic service quality and its effect on customer satisfaction and customer behavioural intentions, hence perceptions is an important construct for consideration. Perceptions refers to the interpretation of customers of an existing object and stimuli (Allen-Lle, Lle & Munyaka 2007:403). In this study the objects and stimuli that perceptions were based on were electronic service quality. Perceptions are also defined by Robbins et al. (2016:202) as "a process by which individuals organise and interpret their sensory impressions in order to give meaning to their environment", while Schiffman and Kanuk (2007:148) define it as the process in which an individual selects, organises and interprets stimuli into a meaningful and coherent picture of the world.

People perceive the world around them differently and there are various factors that influence perception. These factors include the perceiver, the target and the environment (Robbins et al. 2016:202). In this study the perceiver is the customer of the online store in SA. Robbins et al. (2016:202) states that the customer who is a perceiver is influenced by his or her attitude, personality, motives, interests and past experiences of electronic service received from the online store in SA. The target refers to the electronic services to be received while the environment is the

online shopping platform rendered by the online store. The next section explores the relationship between E-servqual, customer satisfaction and competitive advantage.

3.5 EMPIRICAL STUDIES AND DEVELOPMENT OF THE RESEARCH GAPS

Numerous studies related to online shopping, electronic service quality, customer satisfaction, psychographics and perceptions were carried out in the past. These studies (Akhlaq & Ahmed 2016:74; Pandey et al. 2015:53; Vazifehdust, Ameleh, Esmaeilpour & Khadang 2014:156; Rudansky-Kloppers 2014:1187; Chen, Tsai, Hsu & Lee 2013:473) produced various interesting findings. However, several gaps were identified from these studies necessitating the need for this current study. The next paragraphs provide empirical evidence related to online shopping, electronic service quality, customer satisfaction, demographics and perceptions. The discussion on empirical evidence will led to the identification of the research gaps that justified carrying out of this study.

Privacy was found to be an important aspect in electronic service quality. A study carried out by Panda and Swar (2016:2) tested the concept of privacy and established that it is very important. Privacy was found to be the main reason why customers engage in business with an online store. This finding is supported by Akkucuk and Teuman (2016:183) and Kwarteng and Pilik (2016:90) who also contended that privacy is the main reason for customers to enter into online shopping transactions. Echoing the same finding is Al-Nasser et al. (2016:228) and Nabareseh et al. (2014:64) who also confirmed privacy as a significant construct for customer satisfaction within online shopping.

Although privacy was identified to be an important construct in various studies (Panda & Swar 2016:2; Akkucuk & Teuman 2016:183; Kwarteng & Pilik 2016:90; Al-Nasser et al. 2016:228; Nabareseh et al. 2014:64), it is critical to realise that none of these studies were carried out in the South African online stores. These studies were concentrated in Asian countries especially in India, hence it was

important to carry out a study in the context of the South African environment. The influence of psychographics on shaping differences in customer perceptions on privacy were also not taken into consideration when these studies were conducted. It was therefore important to conduct this current study in the context of the South Africa and determine customers' perceptions on privacy and the influence of psychographics in shaping different perceptions towards electronic service quality.

Studies have different findings regarding electronic service quality constructs that are regarded as important in online shopping transactions. Chen et al. (2013:473) established that the most important constructs for electronic service quality are interaction quality (ease of use, responsiveness and information quality), environmental quality (visual significance) and product quality (realisation of the order, reliability and emotional benefits). On the other side, Vazifehdust et al. (2014:156) suggested that important electronic service quality constructs are ease of use, website design, reliability, privacy and responsiveness. It was therefore important to carry out this study so as to determine customers' perceptions on electronic service quality constructs and their effect on customer satisfaction.

In most studies, the role that is played by psychographics in creating differences in perceptions was not considered. Popular studies (Vazifehdust et al. 2014:156; Chen et al.'s 2013:473) did not consider the influence of psychographics in forming differences on customer perceptions of electronic service quality constructs. It was therefore important to carry out this current study that sought to test the role of psychographics on different customer perceptions on electronic service quality. This study also intended to test a model that was different from the model tested by other reserchers (Vazifehdust et al. 2014:156; Chen et al. 2013:473). The Vazifehdust et al. (2014:156) study made use of the Webqual model and this study employed the constructs obtained from the E-RecS-S-QUAL and the E-S-Qual models.

Further conflicting findings were realised in different electronic service quality studies. Rudansky-Kloppers (2014:1187) recognised that important constructs for electronic service quality are convenience, delivery and time. On the other hand, Ardakani, Ardakani and Ardakani (2015:120) indicated that security, time, access

and system performance are the most important determinants of electronic service quality. Ardakani et al. (2015:120) further found security to have the highest impact on customer satisfaction. Ardakani et al.'s (2015:120) finding on security was also supported by Byambaa and Chang (2012:10) and Ganguli and Roy (2011:168) who also illustrated security of the system to be crucial in the determination of electronic service quality and customer satisfaction. It was therefore important to carry out this current study to determine the most important constructs of electronic service quality.

Electronic service quality studies were also conducted in developed countries. Panda and Swar (2016:1) and Smith (2015:56) carried out a study in the United States of America and it was established that perceived ease of use and prior online shopping experience have a positive influence towards customer satisfaction. Considering that these results were based on a developed nation, it was important to carry out this study within the African context. Hence, this study was based on South Africa so as to understand customers' perceptions on electronic service quality as well as its effect on customer satisfaction.

Akkucuk and Teuman (2016:183) maintained that innovativeness, familiarity and awareness are the main determinant of electronic service quality and customer satisfaction. Akkucuk and Teuman (2016:183) did not find image and reputation as important factors for customers in determination of their satisfaction. The study also established that customers' key expectations are ease of use, good navigation, strong interactivity and early response to service actions. In this study, the researcher focused on the different set of electronic service quality sub-constructs adopted from the E-S-Qual and E-RecS-S-QUAL so as to test if they lead to customer satisfaction.

A study carried out in Pakistan by Akhlaq and Ahmed (2016:74) established that gender has a significant influence towards customer satisfaction of online shopping. These finding is similar to Mokhlis's (2012:103) study that identified gender to have effects towards perception of electronic service quality. It was therefore important to carry out this study so as to find out if gender had an impact towards online shopping in South Africa.

In addition, Akhlaq and Ahmed (2016:74) affirmed satisfaction towards online shopping to be different among customers with different gender groups. Mokhlis (2012:103) and Juwaheer (2011:164) also found female customers to be having a negative perception towards online shopping. It was therefore important to carry out this latest study that seek to understand if there were any differences in perception of electronic service quality between customers with different gender groups.

Min and Khoon (2013:994) acknowledge gender, nationality and level of education to be the only important psychographic factors influential in the evaluation of electronic service quality. Min and Khoon's (2013:994) is in contrary to Akhlaq and Ahmed's (2016:74) results that show age and income to be also important in the evaluation of electronic service quality. In addition, Min and Khoon (2013:994) found that age is not an important demographic factor towards the evaluation of electronic service quality, however Pandey et al. (2015:53) maintained that young people are more ready in embracing technology than older ones. It was therefore important to carry out this study so as to find out psychographic factors that are important in the evaluation of electronic service quality.

A study conducted by Ilias, Hasan, Rahman and Yasoa (2008:131) established that psychographic factors such as gender, semester of study and ethnicity do not have any significant difference with service quality. On the contrary, Richa (2012:43) found online shopping India to be significantly affected by various demographic factors such as age, gender, marital status, family size and income. Since these two separate studies produced conflicting results of demographics and online shopping, it was important to find out what could be the influence of demographics on perceptions of customers in the context of South African online shopping in this current study.

Palli and Mamilla (2012:430) conducted a study within the higher education sector that found that age, occupation of the parents and family income has no impact towards satisfaction of customers. However, gender was found to be influential towards the satisfaction of customers. It is therefore important to carry out this study

to find if only gender is the only influential demographic factors towards the satisfaction of customers.

A study carried out by Ramez (2011:113) within the banking sector found that gender, age, education level and nationality do not influence the perception of customers towards electronic service quality. However, Gupta and Bansal's (2011:83) study carried in the banking sector found that gender, age, occupation, education level and income had different influence towards the opinion of customers on electronic service quality. Since the results by Ramez (2011:113) and Gupta and Bansal (2011:83) were limited to the banking sector, it was imperative that this study focused on online shopping in South African stores is carried out so as to find out the influence of psychographic factors on the perception of customers on electronic service quality.

Gupta and Bansal (2011:83) and Ganesan-Lim, Russell-Bennett and Dagger (2008:550) establish that age has no effect towards the perception of customers on service quality while gender and income have a significant influence. Since this study showed that age has a different influence from that of gender and income, it was important to carry out this study to find out the influence of age, gender and income in a different setting related to the South African context.

Dewan and Mahajan (2014:29) and Gupta, Iyer and Weisskirch (2010:41) claim that marital status and education are the most significant psychographic sub-construct towards the perception of customers on electronic service quality. This finding was contrary to Lal et al.'s (2015:75) study that found different marital status for example married and unmarried not to have a significant influence towards perception of electronic service quality. Since there are conflicting findings in these two studies regarding marital status, it is therefore important to carry out this study so as to find out if marital status has an influence towards perception of electronic service quality.

A study carried out in Iran by Mirza et al. (2009:114) establish that demographic factors such as gender, educational level, age and income are influential towards customers' decision of whether of staying with a service provider. Since this finding

is for Iran, it is important to carry out this study in the context of the South African environment to find out if similar demographic factors have any influence towards perceptions on electronic service quality.

A study that was carried out in the Vellore district of India by Sasikala (2013:102) established that there is a strong association between income and customer satisfaction. This study was supported by Baldevbhai (2015:212) and Allard, Banin and Chebat (2009:40) who found income to be having a significant impact towards online shopping behaviour. This finding was opposed by Lal et al. (2015:75) who found that the perceptions of customers with different income levels do not differ much. It is therefore important to find out the position of customers with different income levels in the South African context as tested in this study.

Sasikala's (2013:102) also obtain that there is a strong association between gender and high quality, satisfaction and loyalty. This finding was supported by Phang et al. (2010:344) who found that female tend to have a higher social experiential needs in shopping than males. Although these two studies supported each other, it is important to find out the implication of gender towards the perceptions of customer satisfaction.

Sasikala (2013:102) realise that there is a strong association between age, high quality, satisfaction and loyalty. This finding was opposed by Phang et al. (2016:344) who found no association between age, high quality, satisfaction and loyalty. Due to conflicting findings on these aspects it is important in this study to find out if age has an influence towards the perception of customers on electronic service quality.

Sasikala (2013:102) found that there is a strong association between marital status and high quality, satisfaction and loyalty. This finding was however opposed by Phang et al. (2016:344) who found that there is no association between marital status, high quality, satisfaction and loyalty. Due to contradictory findings on these aspects, it is therefore important to find out the direction of association between similar sub-constructs in the context of the South African online shopping stores in this latest study.

Nagra and Gopal (2013:2250) establish that online shopping in India is significantly affected by numerous demographic factors such as age, gender, marital status, family size and income. A study carried out by Rezai et al. (2013:2380) in Malaysia also found that different demographic factors such as age, gender, education level, income and ethnicity are significant in determining consumer behaviour on online shopping. Even though consensus is reached between these two studies carried out in India and Malaysia, it is also important to carry out this study in the context of South Africa and assess whether all demographic factors carry the same weight or not.

This section presented empirical evidence related to online shopping, electronic service quality, customer satisfaction, customer behavioural intentions and psychographics. The section assisted in bringing out the gaps that existed and justified the necessity to carry out this current study. The problem statement, study objectives, research questions and objectives have already been provided in Chapter 1. The research methodology that was utilised to operationalise the study is presented in Chapter 4.

3.6 CONCLUSION

This Chapter presented literature related to customer satisfaction, customer behavioural intentions, electronic service quality and psychographics. The literature has shown that the research is grounded in consumer behaviour theory (Akhlaq & Ahmed 2016:74; Pandey et al. 2015:53; Vazifehdust et al. 2014:156). The literature reviewed culminated in the development of the theoretical model of psychographic influences on customer satisfaction with electronic service quality used to investigate the research questions and hypotheses. The next Chapter presents the research methodology used to answer the research questions and hypotheses.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 CHAPTER OVERVIEW

The preceding Chapter reviewed literature on customer satisfaction, electronic service quality, psychographics and perceptions. In this Chapter there is an explanation of the research methodology that was employed to collect data needed to achieve the research objectives, answer research questions and test the formulated hypotheses. The Chapter begins with the justification of the selected paradigm and methodology as they relate to the stated research problem. Thereafter, sampling techniques and units of analysis will be discussed. The limitations of the methodology scope and ethical issues concerning this research will also be discussed.

4.2 INTRODUCTION

Chapter 1 highlighted the background and overview of the research as well as the study objectives, research questions and hypotheses. Chapter 2 provided the review of literature related to online shopping and the existence of competition within South African online stores. Chapter 3 further reviewed literature pertaining to the concept of customer satisfaction, electronic service quality, psychographics and customer perceptions. This Chapter explains and justifies the research paradigm and methodology that was employed by the researcher. The critical realism paradigm was adopted and a quantitative descriptive single cross sectional research design was employed to collect data with the use of a self-completion survey monkey questionnaire (Malholtra 2010:108). Convenience and quota sampling strategies were employed and will be explained. An explanation of the use of statistical data analyses techniques such as mean, standard deviation, reliability and validity tests, structural equation modelling and analysis of variance will also be provided.

4.3 THE RESEARCH PARADIGM AND JUSTIFICATION

This research followed a critical realism paradigm. A research paradigm is referred to as a set of theories and assumptions shared to conduct research by a community of researchers (Kuhn 1996:34). Alternatively, Guba and Lincoln (2005:76) describe a paradigm as a framework and world-view that span across to include ontology, epistemology and methodology. According to Thompson and Perry (2004:401), in order to conduct a successful study, researchers need to follow a particular paradigm that guides the appropriate collection of data, analysis and interpretation. The critical realism paradigm that was utilised in this study is housed between two main paradigms that are the positivism and interpretivism (constructivism) (Blumberg et al. 2011:16). Between these two extremes several paradigms are known to exist including critical realism (Healy & Perry 2000:118; Perry 1998b:782).

This study did not utilise the constructivism research paradigm despite its recognition of the existence of a subjective world environment. Constructivism paradigm was not suitable for this study for two main reason, thus i) constructivism it is most appropriate for theory building studies (Malhotra 2010:174) and ii) the researcher is a participant. In this study the researcher was neither interested in building theory nor participating, hence constructivism was not suitable.

The positivism paradigm was not considered because it views the world as an objective external entity. Such objectivity associated with the positivism approach renders it of little value due to the reason that it considers elements of the world to be easy to explain and reduced to objective facts. Hence, it makes numerous researchers utilising positivism paradigm to always come to the same conclusion when describing an event. Consequently, little knowledge is gained from utilising the positivism paradigm. In this research, study respondents are consumers of online shopping and view the world with subjectivity. The decision for consumers to adopt online shopping is subjective due to different reasons that influence consumers' consumption patterns. Also, the contradictory results observed in the existing literature further violate the assumptions of positivism.

Considering that this research aimed at establishing a family of answers to an existing marketing problem through a set of questions, the realism paradigm was suitable. Thus the marketing problem involved testing the predictive efficacies of customers' perceptions on electronic service quality towards customer satisfaction and customer behavioural intentions as well as the role played by psychographics within online stores (Healy & Perry 2000:123). It was also interested with answering research questions related to real life people (consumers) socialising with online shopping processes, hence realism paradigm was suitable (Perry 1998b:781). The efficacy of realism in marketing is expressed by Healy and Perry (2000:124) who point out that it is capable of describing and explaining social complex phenomena. Hence, the most suitable scientific paradigm to research existing marketing phenomena (Healy & Perry 2000:118).

4.4 THE QUANTITATIVE METHODOLOGY AND JUSTIFICATION

This study utilised a descriptive quantitative research methodology. According to Blumberg et al. (2011:17), a quantitative research methodology employs statistics (numbers) to collect, analyse and interpret data. Quantitative research techniques ranges from simple descriptive to more complex inferential analysis.

The nature of the study objectives that included i) assessing customers' perceptions on electronic service quality, ii) investigating the significant effect of electronic service quality on customer satisfaction, iii) establishing the significant effect of customer satisfaction on customer behavioural intentions, and iv) testing the existence of differences in perceptions of electronic service quality among customers in different psychographics profiles, it was necessary to make use of quantitative research methodology.

These objectives required the use of a highly structured data collection tool such as a questionnaire to collect data. A questionnaire is utilised to collect data in a quantitative research methodology (Saunders et al. 2012:247; Malhotra 2010:124).

Quantitative research methodology was also suitable for the sake of operationalising the objectives of the study that required the use of simple descriptive to inferential statistical analysis (Blumberg et al. 2011:17) such as mean, standard deviation, structural equation modelling (SEM) and analysis of variance (ANOVA). Quantitative research methodology was also utilised due to its ability to explain the relationship that exist between the measured constructs.

In line with similar previous studies, quantitative was deemed appropriate. Several studies (Akhlaq & Ahmed 2016:74; Pandey et al. 2015:53; Vazifehdust et al. 2014:156; Rudansky-Kloppers 2014:1187; Haghtalab, Tarzeh & Nabizadeh 2012:7) conducted in the past measuring similar constructs were completed successfully using quantitative research design. Consequently, for many study except for Mallat (2007:413), Black, Lockett, Winklhofer and Ennew (2001:390) and Syzmigin and Bourne (1999:192), quantitative research methodology was utilised to conduct studies in online shopping and electronic service quality.

4.5 SURVEY METHODS

This study utilised a survey method that was aimed at describing the perceptions of customers on electronic service quality and the role played by psychographics in creating the differences in perceptions. Hence, according to Blumberg et al. (2011:149), a study that is aimed at describing an existing phenomena is classified as a descriptive research design. Perry (2002:10) also argues that a study that is concerned with the testing of existing theory while explaining the relationship between two or more constructs should be grouped as an explanatory research design. This study was therefore fitting the profile of a descriptive and explanatory (descripto-explanatory) (Saunders et al. 2012:171).

Since this study qualified in the profile of both a descriptive and explanatory research design it made sense to utilise a cross-sectional survey research method. A survey was utilised in this research due to various factors. Firstly, for the sake of achieving the highest level of reliability and validity methodology utilised by past researchers on a similar study are useful (Hubbard & Armstrong 1994; McKinnon

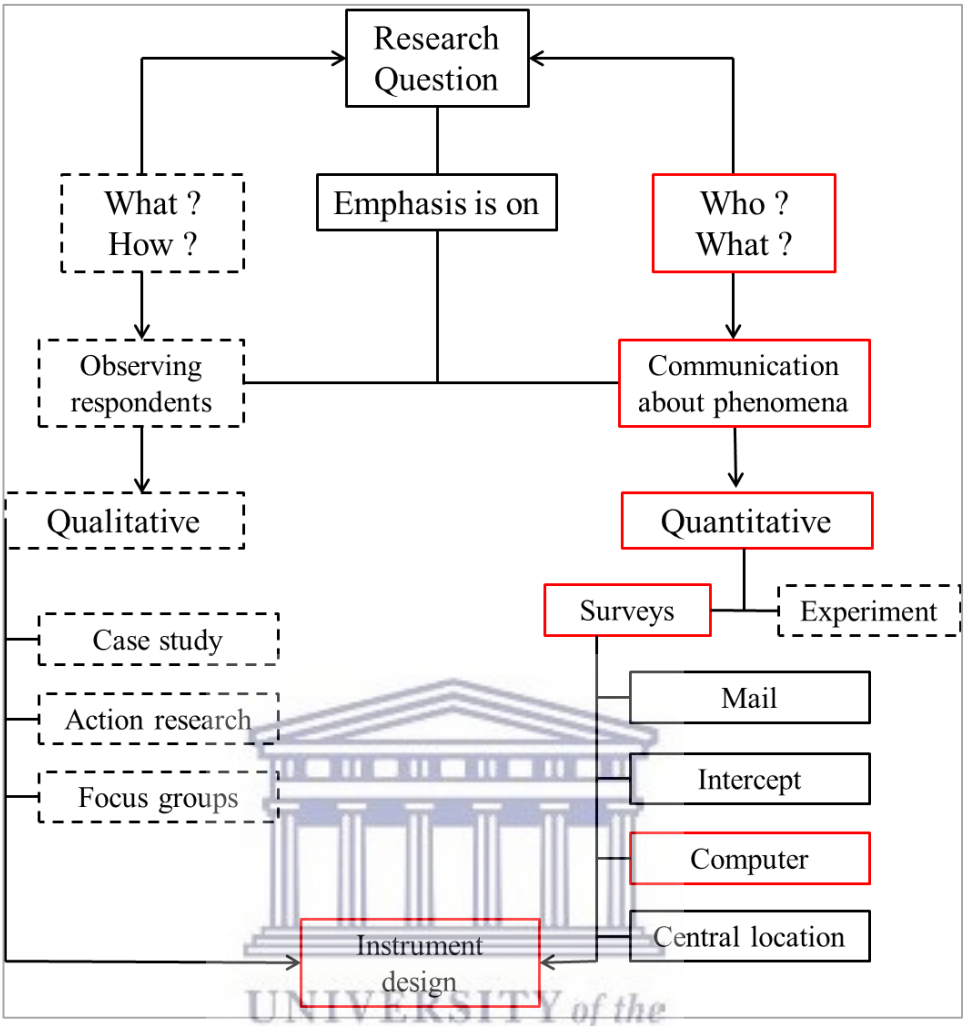
1994:34; Healy & Perry, 2000:119). Researchers such as Akhlaq and Ahmed (2016:74), Pandey et al. (2015:53) and Vazifehdust et al. (2014:156) utilised a survey to conduct research on aspects similarly to those in this study.

Secondly, this study was a survey because it collected data from a large sample size and ensured a great representation of the population of study. Blumberg et al. (2011:149) specifies that a survey is utilised when the researcher aims to collect a large sample with high representation. Thirdly, surveys allow the use of tried and tested research scales through a minimum research team (Perry 1998a:781). The use of a minimum team was applied in this research to research constructs (electronic service quality, customer satisfaction and customer behavioural intentions) that were tried and tested.

Fourthly, it has to be noted that when a research includes objectives and hypotheses it becomes necessary to collect and analyse quantitative data. Quantitative data is handled efficiently with the use of a survey method (Field 2009:312). Blumberg et al. (2011:149) add that a survey is utilised to collect primary data due to its versatility. Surveys are also suitable for learning opinions, attitudes, intentions and expectations of the respondents.

Marketing research, according to Blumberg et al. (2011:207), takes on one of two approaches – the observational or the communication approach. In the former, researchers 'observe' conditions and behaviour of participants as "passionate participants" (Healy & Perry 2000:119). In the latter, respondents communicate their feelings and thoughts about phenomena with very little involvement of the researcher (Figure 4.1) (Blumberg et al. 2011:207).

Figure 4.1: Justification of Research Approach and Data Collection



Source: Blumberg et al. (2011) and Perry (2002)

Given that the study focuses on understanding the role of psychographics towards perceptions of electronic service quality and customer satisfaction in online stores and clearly involved quantitative data, as Figure 3.1 illustrates, the survey monkey (computer) technique was most appropriate as it provided convenience in collecting data. All the same, surveys still fall within the ambit of the realism paradigm, and are quite effective in theory-falsification research (Healy & Perry 2000:118; Calder, Phillips & Tybout 1981:197).

4.6 SAMPLING DESIGN AND TECHNIQUES

Several aspects were considered to ensure a suitable sample for the study. A sample design criteria recommended by Blumberg et al. (2011:175) and Malhotra

(2010:175) was utilised. Seven steps were employed to reach a correct sample design. These steps were as follows: (1) population of interest, (2) parameters of interest, (3) sampling frame, (4) sampling technique, (5) minimum sample size required, (6) cost and budget of obtaining such a sample, and (7) execution of research design. Although these criteria are sequential in nature, Blumberg et al. (2011:175) caution that specific aspects of one criterion almost always result in revision of earlier criteria. Each of these seven criteria is discussed next.

4.6.1 POPULATION OF INTEREST

The population of interest constituted any person in South Africa who had purchased through online shopping channels three times or more. The population of interest was further refined into elements, sampling units, the extent and time (Malhotra 2010:372; Brown, Cajee, Davies & Stroebel 2003:381). The population of interest is summarised in Table 4.1.

Table 4.1 Population definition

Population criterion	**Explanation**
Element	These were individuals who had shopped from South African online stores three times or more.
Sampling unit	Online shopping customers found through South African online stores at the time of research.
Extent	Customers who had prior experience (three times or more) with online shopping at South African online stores qualifying them to provide opinion on their electronic service quality, customer satisfaction and behavioural intentions.
Time	The time of the sample survey was November 2017 – February 2018.

Source: Adapted from Malholtra (2010:372)

Consistent with the defined population, a convenient and quota sample (Section 4.6.4) of customers found through South African online stores participated in the study (Calder et al. 1981:197). The criteria for selecting customers at the South African online stores were based on a number of reasons, including:

(1) The problem (competition threat) that led to this research as expressed in the problem statement in Chapter 1 was based on South African online stores. Therefore it was essential to consider customers shopping at the South African online stores *(*Robertson 2011:213; Uzunboylu, Bicen & Cavus 2011:720).

(2) Accessibility and cost considerations required the researcher to collect data through the South African online stores. The online stores were appropriate for the collection of data because it was a convenient place to access the needed respondents while ensuring that are selected based on different psychographic profiles (Perry 1998a:781).

(3) Online store customers samples were utilised before in similar survey studies (Akhlaq & Ahmed 2016:74; Pandey et al. 2015:53; Vazifehdust et al. 2014:156). Based on this precedence, it was appropriate to make use of online shopping customers as study respondents.

(4) The study respondents were a group of customers with online shopping experience. Based on their common experience to online shopping the respondents are regarded homogenous and Calder et al. (1981:199) argue that the ideal falsification procedure is to employ maximally homogenous respondents as conducted in this study.

4.6.2 PARAMETERS OF INTEREST

Determining parameters of interest is an important consideration to take when designing an appropriate research methodology. Parameters of interest is important for three main reasons. Thus, i) it determines the type of data to be collected, ii) it

informs the researcher about the size and type of sample to be considered, and iii) it tells the data analysis to be conducted.

As highlighted in Chapter 1, the objectives of the study were to, (i) assess customers' perceptions on electronic service quality of SA online store, (ii) develop a model that illustrates the significant effect of electronic service quality on customer satisfaction, (iii) measure the significant effect of customer satisfaction on behavioural intentions among customers with different psychographic profiles and (iv) determine how customers' perceptions on electronic service quality differ across different customer psychographic profiles. Based on these objectives, the tested conceptual model reflected four main parameter that were psychographics, electronic service quality, customer satisfaction and customer behavioural intentions. Psychographics were measured through continuous and categorical responses. Electronic service quality, customer satisfaction and behavioural intentions were measured through continuous responses in the form of a five point Likert scale (1 = Strongly Agree; 2 = Agree; 3 = Neutral; 4 = Disagree; and 5 = Strongly Disagree). Parameters of interest are further illustrated in Table 4.2.

Table 4.2: Parameters of interest

Variable	Type of variable	Measurement	No. of items
Age	Moderating	Continuous	1
Gender	Moderating	Categorical	1
Education	Moderating	Continuous	1
Net income	Moderating	Continuous	1
Lifestyle (Psychological)	Moderating	Categorical	6
Efficiency	Independent	Continuous	5
System availability	Independent	Continuous	4
Fulfilment	Independent	Continuous	4
Privacy	Independent	Continuous	3
Responsiveness	Independent	Continuous	5
Compensation	Independent	Continuous	3
Contact	Independent	Continuous	3
Customer satisfaction	Dependent	Continuous	4
Customer behavioural intentions	Dependent	Continuous	4
Total constructs			45

Source: Kotler and Keller (2016) and Parasuraman et al. (2005)

Electronic service quality sub-constructs (efficiency, system availability, fulfilment, privacy, responsiveness, compensation and contact) were independent constructs. Customer satisfaction and customer behavioural intentions were dependent constructs. Psychographics (age, gender, education, net income and psychological) were moderating constructs since their role in determining the differences in the perceptions of customers on electronic service quality were tested. The moderating constructs (psychographics) in this study sought to establish whether customers have any differences in the perception of electronic service quality (Baron & Kenny 1986:1173). In keeping with the research objectives as well as replication logic, hypotheses and the model were tested using structural equation modelling (SEM) and analysis of variance (ANOVA) (see Figure 3.2) (Field 2009:822; Diamantopoulos & Schlegelmich 2000:212). SEM and ANOVA were preferred because:

(1) To keep up with replication logic, this study followed statistical analysis methods utilised in similar previous studies (Shambare & Shambare 2016:23) that utilised structural equation modelling.

(2) For the purpose of robustness and reliability, the researcher utilised SEM and ANOVA (Field 2009:822; Fox & Hong 2009:12; Fox 2008:83).

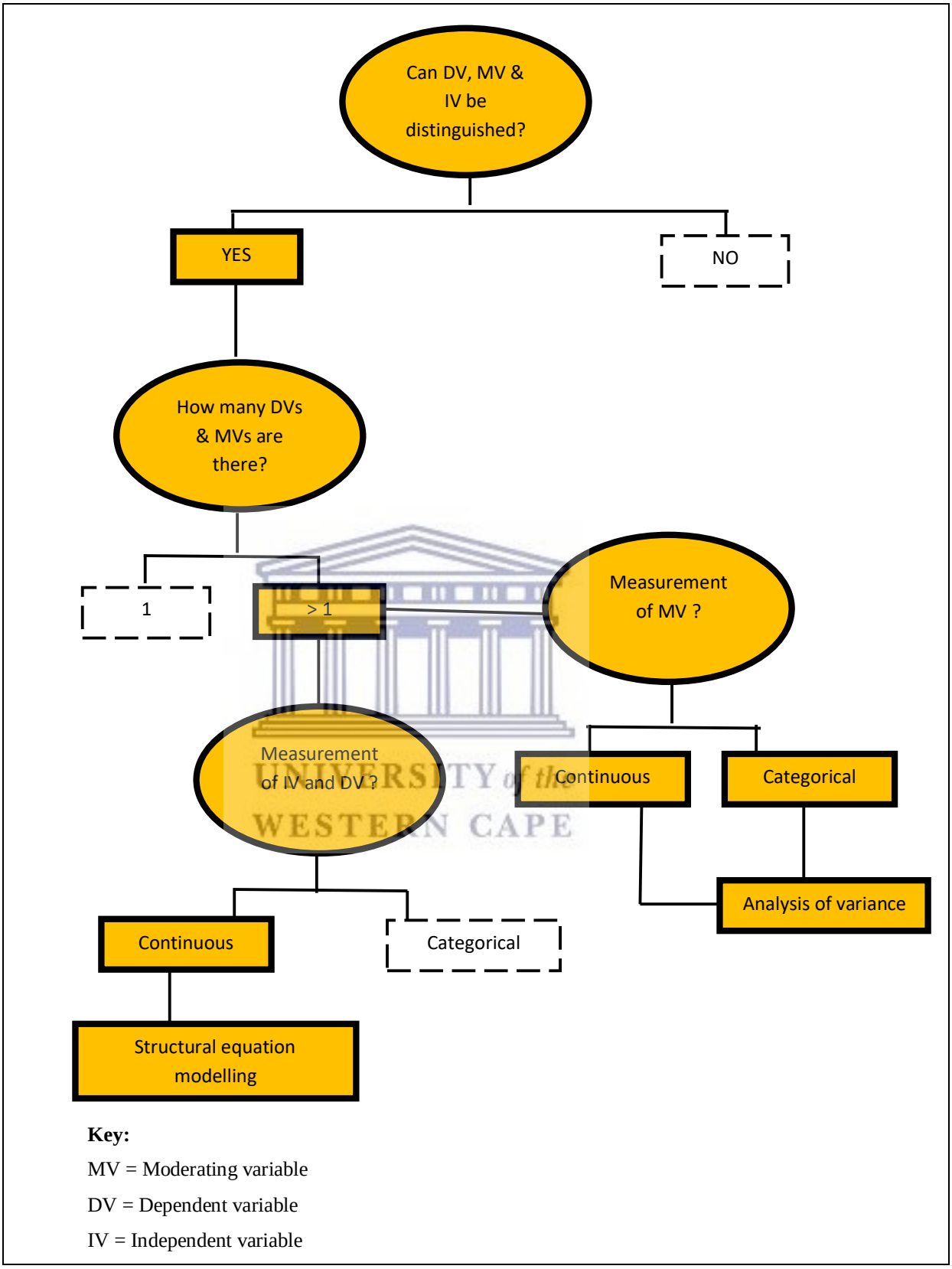
(3) SEM and ANOVA analyses results are also known to be fairly simple and straightforward to interpret (Pallant 2010:181).

(4) ANOVA analysis is the prescribed test for testing differences in perception among customers with different psychographic profiles (Meuter, Bitner, Ostrom & Brown 2005:61; McKinnon 1994:127; Baron & Kenny 1986:1173).

(5) SEM is appropriate in testing the significant effect of one variable towards another (Pallant 2010:181).

The justification of the research approach is presented in Figure 4.2. It shows the interaction between types of constructs and the appropriateness of data analysis that was utilised (Saunders et al. 2012:665).

Figure 4.2: Justification of research approach and data collection



Source: Field (2009:822) and Diamantopoulos and Schlegelmilch (2000:212)

To allow multivariate tests to be carried out, data needed to be summarised or reduced into smaller sets of manageable constructs or latent constructs. The reduction of data into smaller latent constructs was carried out using factor analysis (Pallant 2010:181). Before performing factor analysis, the researcher carried out i) the adequate sample size and ii) Kaiser-Meyer-Olkin (KMO) criterion as prerequisite tests (Field 2009:822).

4.6.3 SELECTION OF SURVEY POPULATION, SAMPLING FRAME AND SAMPLING TECHNIQUE

The survey population for this study was South Africa due to a number of reasons. Firstly, there is a remarkable development on practices and regulations of online shopping in the country. In Africa, South Africa is rated number two after Nigeria in terms of online shopping developments (Rudansky- Kloppers 2014:1187). Secondly, online shopping stores in this country offer electronic services through online shopping innovations such as those selected for this survey. Thirdly, while the online shopping sector in SA has been exposed to some of these services for many years, it still faces challenges such as global competition. Considering that the country, taps a significant amount of revenue from this sector (revenue amounting to US$3, 131m in 2018), it makes sense to carry out this study on the nation so as to help South African online stores to develop a competitive advantage.

In keeping with the target population and the sampling design specified above, convenience and quota sampling was utilised (Malholtra 2010:377). The choice for convenience was influenced by the fact that it is the least expensive and least time-consuming. Quota sampling was coordinated for the purpose of ensuring that the different psychographic profiles are balanced within the sample size. Although representativeness becomes a problem especially in non-random samples, these were compensated for by using a relatively large sample size, which is discussed in the following section.

4.6.4 SAMPLE SIZE

In quantitative studies, methodology specialist recommend the use of large sample sizes since they are known to yield meaningful analysis and better results. However, defining a large population always a problem. In defining the large population, it was critical to consider the cost and the time that it would take to collect the data.

Nevertheless, statisticians recommend an absolute minimum sample size of at least 100 cases (respondents) (Pallant 2010:183; Field 2009:822). According to Pallant (2010:181), a minimum of 100 respondents are needed in quantitative studies in order for meaningful reliability test and factor analysis to be carried out. Other researchers (Field 2009:822) recommend that the ratio of number of items (questions) to respondents in the questionnaire range from 1:5 to 1:10. That is to say, at the upper extreme, for every question (or item) there should be at least 10 or 5 respondents (Pallant 2010:183). Despite a great deal of contestation as to what constituted a minimum acceptable sample, as a rule of thumb, the 5:1 criterion was applied in this study. The questionnaire (see Appendix A) contained 34 items to be factor analysed; this translated to a minimum sample size of (34 x 5) = 170 respondents from the entire study. However, the actual sample size was 344, which surpassed the recommended 170 participants (Pallant 2010:181).

4.6.5 TIME

As usual with postgraduate studies, this present study was influenced by time constraints. The minimum and maximum acceptable time for completion of doctoral study impacts on the type of research problems and topics investigated, methodology selected and the sampling techniques applied (Perry 1998:781). To balance the sampling adequacy of inferential statistical tests together with time limitations, the author resorted to utilising SA online stores customer sample, as indicated in Section 3.6.1. However, the latter was not the only formative factor for using the South African online store customers; the nature of the research – that of testing theory – was also considered. Customers at the online stores, as alluded to by Calder et al. (1981:197), represent a convenient and accessible population that

does not compromise theory falsification. Section 4.6.1 provided a detailed discussion of the utility of online store customers in theory testing research.

4.6.6 EXECUTION OF SAMPLING DESIGN

Table 4.1 indicates that the population of interest for the study were online customers shopping at the South African online stores. The online shopping customers with at least three times or more purchase history were found through South African online stores to participate in this study. The selected online stores were asked to qualify customers for the survey based on their purchase history (three times or more). In total, five South African online stores were recruited and assisted in collecting data. They coordinated distribution of the survey monkey questionnaires to their customers. The data collection was conducted from November 2017 to February 2018.

4.7 DATA COLLECTION INSTRUMENT

In keeping with the research objectives, the data collection instrument was constructed from the constituent theories. Scales developed in previous studies were adapted to suit the respective conditions in South Africa. As indicated previously, the collected primary data could be classified into four major categories. These are respondents' psychographic information, electronic service quality attributes, customer satisfaction and customer behavioural intentions parameters. A detailed discussion of the measurement of these attributes is continued in the following sections.

4.7.1 MEASURING CUSTOMERS' PSYCHOGRAPHIC INFORMATION

Since the study relates to the role of customer psychographic profile towards their perceptions of electronic service quality, it was important to establish respondents' psychographic profiles. Psychographic profiles provide vital information about consumer behaviour towards use of online shopping habits which is useful for

online shopping store authorities when establishing segmentation strategies. This information is potentially useful to online shopping marketers, who could use it to map trends within the market and achieve competitive advantage.

The psychographic profile section comprised 11 questions, which sought to ascertain the psychographic information of research participants. Since the emphasis of this section of the questionnaire was to establish and classify respondents in terms of proportions, categorical and continuous questions were used. An example of such a question is: "What is your gender?" and "What is your age in years?"

In practice, online shopping customers are usually segmented along psychographic characteristics. Some of the psychological profiles bases are income (Akinci, Aksoy & Atilgan 2004:212), age (Calisir & Gumussoy 2008:215) and values (Dick 2007:49). Thus, several psychographic questions were included in the questionnaire.

4.7.2 MEASURING PARAMETERS OF INTEREST

Four parameters were identified in Section 4.6.2: (1) customers psychographic profile, (2) electronic service quality, (3) customers satisfaction and (4) customer behavioural intentions. Customer psychographics were moderator constructs. Electronic service quality represented independent constructs while customer satisfaction and customer behavioural intentions represented dependent constructs. Table 4.2 illustrates that the moderator constructs (psychographics) had both continuous and categorical measuring scales; independent constructs (electronic service quality) and dependent constructs (customer satisfaction and customer behavioural intentions) had continuous measuring scales measured using a 5-point Likert scale.

All measurement scales for the parameters have already been tested and validated in past studies. To render the methodology more robust, it was therefore prudent to adapt existing instruments (Parasuraman et al. 2005:1). More specifically, replications and extensions were most useful in research for at least two major

reasons: (a) they promote generalisability of results, thus expanding the utility of the tested theory in explaining phenomenon, even in different contexts, and (b) they guard against "the perpetuation of erroneous and questionable results" (Hubbard & Armstrong 1994:234). This is similar to the principle of theory falsification as suggested by Calder et al. (1981:198), which states that theories are universal in that they can explain real-world phenomena within their domain. However, this universality should be tested through replications and extensions (Tsikriktsis 2004:42). Those that repeatedly survive rigorous falsification attempts can be accepted as scientific explanation.

4.7.3 QUESTIONNAIRE ADAPTATION AND MODIFICATION

The data collection instrument consisted of questions measuring different aspects pertaining to respondents' psychographics, electronic service quality, customer satisfaction and customer behavioural intentions. Table 4.3 describes the structure and rationale of the questionnaire.

Table 4.3: Data collection instrument format

Section	Section summary	Scale development	Rationale
A	**Moderator constructs:** Covers information pertaining to the psychographic profile (age, gender, education, net income and psychological).	Kotler and Keller (2016:199-210), Baldevbhai (2015:212), Lal et al. (2015:75), Gosh (2014:25-30) and Sasikala (2013:102).	To determine respondents' psychographic patterns and test how they influence differences in perceptions.
B	**Independent constructs:** Covers electronic service quality. This included efficiency, system availability, fulfilment, privacy, responsiveness, compensation and contact.	Parasuraman et al. (2005:5).	To determine respondents' perception of electronic service quality and test their effect on customer satisfaction.
D	**Dependent variable:** Customers' satisfaction.	Zeithaml et al. (2009:113).	To determine customers' level of satisfaction and test effect on customer behavioural intentions.
E	**Dependent variable:** Customers' behavioural intentions.	Zeithaml et al. (2009:113).	To determine customers' behavioural intentions.

In total, the questionnaire was 5 pages long, comprising four parts: the respondents' psychographic profile, electronic service quality, customer satisfaction and customer behavioural intentions sections (Table 4.3). A Likert scale (1 = Strongly

Agree; 5 = Strongly Disagree) and structured questions were used. A copy of the instrument is included in the appendix.

4.7.4 PILOT STUDY AND PRE-TESTING THE QUESTIONNAIRE

Following the compilation of the questionnaire, the next step was to test its effectiveness and efficiency in measuring the intended constructs. This was achieved by pre-testing the instrument (Blumberg et al., 2011:344). The instrument was pilot-tested in two phases. The first stage entailed discussing the contents of the questionnaire with a panel of experts that included marketing professionals, online shopping experts, ICT specialists and statisticians. The overall objective was to determine whether the questionnaire adequately assessed the constructs associated with the customers' perception of electronic service quality, customer satisfaction, customer behavioural intentions as well as the role of psychographics. Some changes were effected as a result of these consultations.

The second phase of the pre-test was to ensure that the questions would be understood by the target audience. To achieve this, pilot testing of the instrument was undertaken using customers who had purchased through online channels provided by the South African online store before. In total 10 customers with the knowledge of online shopping at the South African online store participated in the pilot study. After this, some alterations to the language were made. The results from the pilot study confirmed that for the most part, the research instrument was satisfactory.

4.8 VALIDITY AND RELIABILITY

In order to improve the quality of the study, researchers make use of validity and reliability. The importance of validity and reliability in measuring the robustness of the study is highlighted in literature (Malhotra 2010:72; Blumberg et al. 2011:81; Kline 2000:93). Validity is referred to as the ability of the study to measures what it is meant to measure. On the other hand, reliability include the accuracy and precision of measurement (Malhotra 2010:72).

A research paradigm such as critical realism requires the use of validity and reliability so as to maintain the quality of the study. Healy and Perry (2000:67) also emphasises the importance of validity and reliability in conducting a study that falls under critical realism research. In the case of this research, Healy and Perry (2000:69) recommend that researchers test their research for the issues relating to construct validity, content validity, face validity, internal validity, external validity and reliability.

(1) Construct validity

Construct validity requires that correct operational measures and conceptual model should be developed for the phenomena under study. It is therefore required that the developed measurement instrument should be closely linked to known theory and related concepts in the area of study (Bless, Higson-Smith & Kagee 2007:75). In this study the questionnaire was grounded to the theoretical aspects based on the model developed by Parasuraman et al. (2005). Consequently, this was intended to ensure that the questionnaire measures appropriate constructs.

(2) Content validity

The extent to which a measure covers the meanings of the concepts included in the study is content validity. Babbie and Mouton (2009:103) and Bless et al. (2007:76) argue that content validity occurs when the questionnaire is created from a thorough literature review of the previous related studies. In addition, both the proposal and questionnaire were peer reviewed by the University of the Western Cape's Ethics Committee and online shopping industry Experts.

(3) Face validity

Face validity is established when a measure is accepted among different researchers as addressing particular concepts. Babbie and Mouton (2009:74) point out that face validity refers to the ability of a measure to conform to common agreements on a particular concept. Face validity determines the success of a measuring instrument since respondents' willingness to participate is based on their perception on what the instrument seeks to measure. The absence of face validity leads to the resistance of the participants in participating in a study which adversely affect the results. The researcher explained the purpose of the research to the respondents and participation was made voluntary.

(4) Internal validity

Internal validity is primarily concerned with the relationships of constructs within the study. In other words, to what extent do hypothesised relationships represent real-life phenomena. Arising from this is the idea of statistical inference. To address internal validity, a conceptual model was developed and used as the basis for literature review, data collection and data analysis.

(5) External validity

External validity is associated with the generalisability of findings. For the purposes of this study, the use of replication logic was employed. Replication was achieved by using adapted questionnaires. The findings from this study can therefore be generalisable in similar situations.

(6) Reliability

Reliability means that if a researcher were to conduct the same study using the same procedures as described within the study, that researcher would

arrive at the same results and findings. The objective of reliability is to (i) minimise errors and biases in studies, (ii) facilitate in-theory falsification, and (iii) provide rigorous test for theory. This was achieved by testing the internal consistency of items in the questionnaire, which is normally calculated by means of Cronbach's alpha coefficient for reliability.

Cronbach's alpha coefficient has become one of the most popular indicators of internal consistency. Internal consistency is a measure of the homogeneity of the items in a measuring instrument (Bless et al. 2007:155). Dondolo (2014:67) and Malhotra (2010:102) argue that internal consistency enables the researcher to examine the reliability of several items in a scale administered during the same period of time.

A minimum threshold of 0.7 should be achieved for the measuring constructs to be regarded of high consistency. Cronbach's alpha coefficient values of 0.7 and higher are indicative of high consistency (Malhotra 2010:167). Kline (2000:1130) argues that even though values of $0.5 \leq \alpha < 0.6$ are poor, they are acceptable. However, the standard practice of setting the minimum Cronbach's alpha threshold of 0.7 was considered for this study (Field, 2009:97) with the absolute minimums of $0.5 \leq \alpha < 0.6$ (Malhotra 2010:67; Field 2009:69; Wu & Wu 2008:97; Kline 2000:63).

4.9 LIMITATIONS OF METHODOLOGY

This thesis, as with any research, was not free from limitations associated with the methodology (Shiu et al. 2009:676). The limitations as they relate to this study were as follows:

(1) Sample considered

The sample was comprised of online shopping customers in South Africa (Malhotra 2010:34). Only customers purchasing from South African online stores were considered. Hence, online shopping customers who did not

purchase from South African online stores were not considered. It is therefore noted that results of this study do not reveal the perceptions of every online customer segment in South Africa.

(2) Time constraints

A specified time was also provided as it was meant to control the duration of this study (Field 2009:121). This is also common for academic studies, for example this present doctoral thesis that had a two years full time duration. In order to keep up with the time constraints, the researcher could not make use of the longitudinal research methodology.

(3) Measurement scale

This study adopted the measurement scale from Parasuraman et al.'s (2005) study. It has to be noted that this is not the only model for electronic service quality.

(4) Geographic scope

This study was restricted to South Africa and the results may not be generalisable to other countries and continents outside Africa.

The above-mentioned limitations apply to this research, and have been taken into consideration in discussing the findings. The next section explains the ethical considerations that were made for this study.

4.10 ETHICAL CONSIDERATIONS

To protect research participants from any negative impact, this dissertation adhered to the ethics regulations and guidelines stipulated by the University of the Western Cape Research Ethics Committee. In order to uphold high ethical standards, this study adhered to the following ethical guidelines:

(1) The data collection instrument was submitted to the University of the Western Cape Research Ethics Committee to ensure that it conformed to all the university's regulations.

(2) Informed consent was obtained from the participants of the study through the use of a sign-off electronic sheet that accompanied the survey monkey questionnaire (Thompson & Perry 2004:401; Patton 2002:105).

(3) The participants were informed that they could withdraw at any stage from the study, if they wanted to.

(4) Names and any other information that could identify participants were not requested; hence anonymity and confidentiality were preserved throughout the entire research process (Patton 2002:107; Patton 1990:102).

(5) The data that was obtained during the research process will be stored and retained for a minimum of five years (Patton 2002:107). The data will be stored at the University of the Western Cape and with the researcher.

(6) The contact details of the researcher were given to the participants on the electronic sign-off sheet of the study to enable them to initiate contact if they had any questions regarding the research.

(7) At no stage during the research process were participants placed at any psychological or other form of risk.

(8) A statement regarding the purpose of the inquiry was provided to all participants of the study, which outlined the participant's role in the study and how the information they provided will to be used.

4.11 CONCLUSION

This Chapter describes the methodology that was utilised to operationalise the study. Chapter 4 explains the use of a quantitative research methodology that was aimed at answering the research question and objectives related to electronic service quality, customer satisfaction, behavioural intentions and the role played by the customer psychographics. Justification of the research methodology is also provided. Further explanation on the use of descriptive and inferential data analysis mechanisms is provided fully. The next Chapter will provide results of data analysis conducted through frequency tables, mean values, standard deviation, reliability and validity analysis, structural equation modelling (SEM) and analysis of variance (ANOVA) to test the proposed model as well as developing a model for the study.

CHAPTER 5: DATA ANALYSIS AND DISCUSSION OF FINDINGS

5.1 CHAPTER OVERVIEW

In the previous Chapter there is an explanation of the research methodology that was employed to provide answers to the research problem and study questions. Consequently, Chapter four explains the quantitative research methodology that was employed in the collection of large primary data from South African stores online shopping customers. In this Chapter, an explanation of data analysis employed in the study is provided. Chapter five provides both descriptive and inferential analysis on the large sample of data utilised for this research. Firstly the Chapter will provide the analysis on the psychographics profiling of the respondents. Secondly, perceptions of online shopping customers on electronic service quality will be presented. Thirdly, inferential analysis was employed to test the reliability and validity of the employed data followed by a series of analysis including the structured equation modelling and analysis of variance (ANOVA) to test the proposed hypotheses and study model.

5.2 INTRODUCTION

Following an extensive review of the literature in previous Chapters, a research gap was identified and a research problem defined, which culminated in the conceptual framework (Chapter 1). The existence of competition which threatens the survival of South African online stores necessitated the need for this study (Goko 2017:120; Nabareseh et al. 2014:64). Therefore, it become imperative for this study to be carried out so that authorities within the South African online stores could understand the significant effect of customer perceptions on customer satisfaction and customer behavioural intentions. Carrying out the study was also an opportunity for South African online stores to understand the role played by psychographics in creating differences in the perceptions of customers on electronic service quality. Consequently, leading to segmentation opportunities and creation of competitive advantage.

A gap within the body of knowledge was also identified. In the South African online shopping context, scientific studies explaining the moderating impact of psychographics on the perceptions of customers on electronic service quality, its significant effect on customer satisfaction and customer behavioural intentions are still in the infancy stages. Consequently, this research attempted to address the paucity in the body of knowledge by investigating *the role played psychographics on consumer perceptions towards electronic service quality, its significant effect on customer satisfaction and customer behavioural intentions within the South African online stores in order to gain competitive advantage.*

In line with the quantitative data collected, as described in Chapter 4, various statistical analyses were conducted. STATA 13 was employed to perform the following analyses (Field 2009:43):

(1) Frequency tables was employed to clearly describe the psychographic profiling of the respondents.

(2) Skewness and Kurtosis measured the sample data's adequate for descriptive analysis.

(3) Mean values and standard deviation measured the perception of online shopping customers on electronic service quality and customer satisfaction.

(4) KMO and Bartlett's test of sphericity tested if data was suitable for reliability and factors analysis.

(5) Reliability analysis was conducted through Cronbach's alpha to ensure internal consistency (reliability) of the data for inferential tests.

(6) Validity test was conducted through factor analysis to reduce constructs into smaller groups of latent constructs.

(7) Structural equation modelling (SEM) was used to test the significant effect of electronic service quality on customer satisfaction and the significant effect of customer satisfaction on customer behavioural intentions. It was also utilised to test the proposed hypotheses and conceptual model.

(8) Analysis of variance (ANOVA) was used to test if there is a difference in perceptions of electronic service quality among SA online store customers in different psychographic profiles.

5.3 PSYCHOGRAPHIC DISTRIBUTION OF THE SAMPLE

The sample size in this study was (n = 344). The research collected data on the sample's psychographic information that included age, gender, race, education, monthly net income, religion; and life styles. For the purpose of this study, a discussion on the sample psychographics was of utmost importance. This follows the purpose of the study that seeks to develop a model that shows the role played by psychographics on customer perceptions of electronic service quality. The psychographic distribution of the sample is shown in Table 5.1.

Table 5.1: Psychographic Profile Distribution of the Sample (n = 344).

Psychographic characteristics		Frequency	%
Age	18 – 25 years	48	14
	26 – 35 years	91	27
	36 – 45 years	109	32
	46 years +	96	27
Gender	Male	175	51
	Female	169	49
Race	African	131	40
	White	71	20
	Coloured	71	20
	Asians	71	20
Education	Attending college / university	24	7
	Hold a diploma	82	24
	Hold a degree	97	28
	Hold a postgraduate degree (honours/masters/doctorate)	141	41
Income	Less than R10 000	65	19
	R10 001 – R20 000	58	17
	R20 001 – R30 000	117	34
	R30 001 and above	104	30
Psychological Profiles	Thinkers	48	14
	Believers	48	14
	Achievers	48	14
	Strivers	61	18
	Experiencers	26	26
	Makers	14	14

Age is regarded one of the most important aspects to consider for marketing specialist who seek an understanding of consumer behaviour. In this study age classification was based on four categories (18 – 25 years, 26 – 35 years, 36 – 45 years and 46 years and above). The findings indicated that 14 per cent were in the age group 18 – 25 years, 27 per cent were 26 – 35 years, 32 per cent were in 36 – 45 years and 27 per cent were in the age group 46 years and above. Clearly the majority of respondents were in the age group 36 to 45 years old, followed by 26 to 35 years; and 46 years and more. The findings shows that all generational groups were fairly represented, that's from generation Z (born 1996 and onwards), Y (born 1977 to 1995), X (born 1965 to 1976) and baby boomers (born 1946 to 1964) (Baldevbhai 2015:212). It is also an indication that customers for online shopping services are fairly distributed across different generational groups.

Crossing over to gender, findings indicated that 51 per cent of respondents were male while 49 per cent were female. An almost equal gender representation was found in this study which signifies that both male and female are active in South African online shopping. As such and noted by Lal et al. (2015:75) both gender groups play a significant role players in online shopping.

With regard to race, it was found that 40 per cent of respondents were African, 20 per cent were White, 20 per cent were Coloured and 20 per cent were Indian. Majority of respondents in this study were African and the rest were shared among Indian, White and Coloured. It is not surprising to find that all races were represented in this study. This follows the notion that SA is a "rain ball nation" (Min & Khoon 2013:994), that is it represents a nation where all people of different racial groups.

On education, seven per cent of respondents were attending either college or university, 24 per cent were holding a diploma, 28 per cent were with a degree and 41 per cent were having a postgraduate degree (honours, masters or doctorate). Majority of respondents were having educational qualifications classified as diploma, degree and postgraduate degree. According to Dewan and Mahajan (2014:29), consumers involved in online shopping are mostly literate.

In terms of net income, it was found that 19 per cent of respondents were earning an income less than R10 000, 17 per cent were earning from R10 001 to R20 000, 34 per cent were earning between R20 001 and R30 000 and 30 per cent were earning R30 001 and above. In terms of psychological factors, respondents indicated that 14 per cent were thinkers, 14 per cent were believers, 14 per cent were achievers, 17 per cent were strivers, 26 per cent were experiencers and 14 per cent were makers. Therefore, the findings indicated that respondents from different lifestyles were represented as recommended by Kotler and Keller (2012:248).

In this section, findings on psychographic elements such as age, gender, race, education, monthly net income, religion and psychological are shown. These shall also be reported in the section that shows the differences of perception on electronic service quality among customers with different psychographic background. The next section will report results on perceptions of customers on electronic service quality.

5.4 PERCEPTIONS OF ELECTRONIC SERVICE QUALITY

The first objective of this study sought to measure the perceptions of customers on electronic service quality. This section presents the perceptions of customers on electronic service quality, customer satisfaction and customer behavioural intentions that was measured through descriptive analysis that include mean values and standard deviation. Table 5.2 presents findings on customers' perception on electronic service quality on each of the 34 items and each of the seven sub-constructs. A five-point Likert scale with 1 = 'strongly agree' and 5 = 'strongly disagree' was employed to measure each item relating to customers' perceptions on electronic service quality. Perceptions on each of the seven sub-constructs were calculated as a summated average of the items employed under each sub-construct. Customers' perceptions on customer satisfaction and behavioural intentions were also calculated as a summated average of all the items employed under the constructs. It is important to note that in this study a scale of (1.0 to 2.0) indicated a positive perception on electronic service quality, while (2.1 to 5.0) indicated a negative perception.

In order to ensure that the data utilised for descriptive analysis (mean values and standard deviation) was normally distributed, kurtosis and skewness were conducted. The results for kurtosis and skewness ranged within 2 and -2 signifying that the data was normally distributed and suitable for descriptive analysis.

Table 5.2: Perceived Electronic Service Quality, Satisfaction and Behavioural Intentions (n = 344)

	Sub-constructs and items	Mean	Standard deviation	Kurtosis	Skewness
Efficiency		2.42	1.03	.05	.66
E1	The online store site makes it easy to find what I need.	2.48	1.01	.07	.59
E2	It is easy to get anywhere on the online store site.	2.52	1.09	-.18	.63
E3	The online store site enables me to complete a transaction quickly.	2.40	1.02	.26	.73
E4	Information at the online store site is well organised.	2.39	1.05	-.07	.66
E5	The online store site loads its pages fast.	2.33	1.01	.21	.69
System Availability		2.36	.94	.31	.59
SA1	The online store site is always available for business.	2.33	.88	.3	.53
SA2	The online store site launches and run right away.	2.31	.91	1.13	.97
SA3	The online store site does not crash.	2.34	.98	.03	.52
SA4	Pages at the online store site do not freeze after I enter my order information.	2.49	1.02	-.22	.35
Fulfilment		2.17	.96	1.29	.76
F1	The online store site delivers orders when promised.	2.2	.95	.16	.63
F2	The online store site makes items available for delivery within a suitable time frame.	2.13	.92	.99	.89
F3	The online store quickly deliver what I order.	2.19	1.02	.00	.7
F4	The online store send out the items ordered.	2.17	.97	.58	.83

Privacy		2.2	.87	1.08	.8
P1	The online store protect information about my Web-shopping behaviour.	2.21	.83	1.99	1.03
P2	The online store do not share my personal information with other online store sites.	2.2	.85	.9	.72
P3	The online store site protects information about my credit card.	2.19	.94	.36	.65
Responsiveness		2.38	.99	-.07	.44
R1	The online store provide me with convenient options for returning items.	2.35	.94	-.16	.26
R2	The online store handles product returns well.	2.29	.95	.22	.64
R3	The online store offers a meaningful guarantee.	2.46	1.04	-.27	.32
R4	The online store tells me what to do if my transaction is not processed.	2.45	1.04	-.08	.55
Compensation		2.57	.9	1.36	.77
CO1	This online store compensates me for problems it creates.	2.24	.85	1.93	1.3
CO2	The online store compensates me when what I ordered doesn't arrive on time.	2.22	.8	1.8	1.51
CO3	The online store picks up items I want to return from my home or business.	3.27	1.05	-.63	-.48
Contact		2.27	.82	1.02	.67
C1	The online store site provides a telephone number to reach the organisation.	2.11	.73	1.78	1.38
C2	The online store site have customer service representatives available online.	2.21	.79	1.28	1.13
C3	The online store offers the ability to speak to a live person if there is a problem.	2.51	.95	0	.5
Customer satisfaction		2.51	.92	.25	.6
CS1	Am happy with this online shopping site.	2.35	.85	.55	.8
CS2	I like shopping through this online shopping.	2.35	.84	1.02	.91
CS3	I like the service provided by this online shopping site.	2.51	.91	.2	.67

CS4	I find what I need from this online shopping site.	2.86	1.08	-.77	.04
Customer behavioural intentions		2.88	1.14	-.88	0.01
BI1	I say positive things about the online store to other people.	2.85	1.12	-.87	.16
BI2	I recommend the online store to someone who seeks my advice.	2.97	1.16	-.92	-.12
BI3	I encourage friends and others to do business with the online store.	2.85	1.12	-.76	-.01
BI4	I consider the site to be my first choice for future transactions.	2.88	1.18	-.97	.04

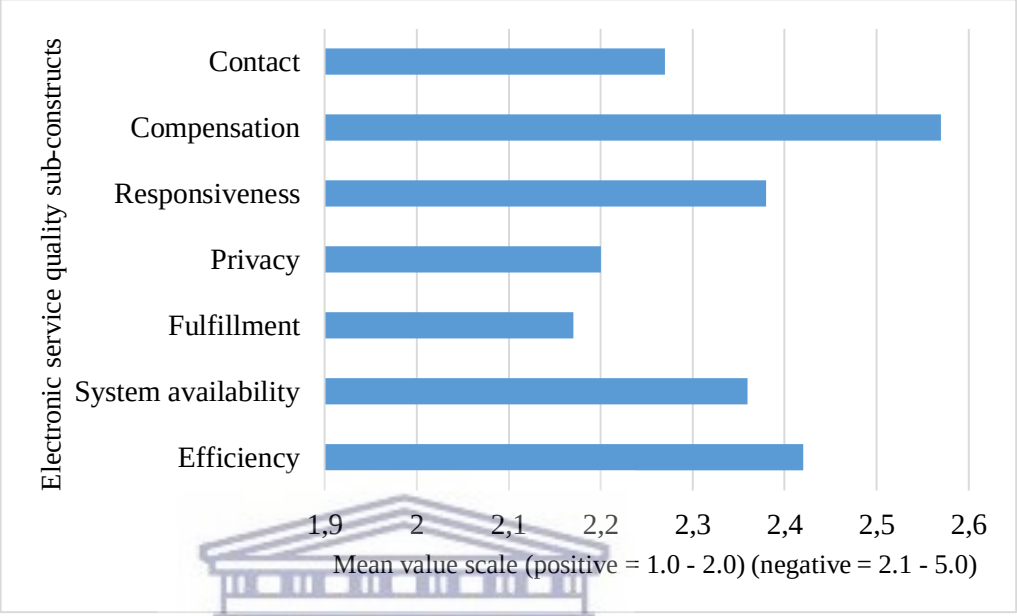
As already specified in section 5.4, the test for data normality was achieved through kurtosis and skewness tests. In this study it was found that kurtosis and skewness was within the acceptable range for normal data as it ranged from 1.99 to -.97 and 1.38 to -.48, respectively. After having established that the data involved was normal, further descriptive tests to understand the perception of customers on electronic service quality were conducted through mean and standard deviation as indicated in Table 5.2. The perception of customers on electronic service quality, customer satisfaction and customer behavioural intentions were tested on both items and sub-construct level.

5.4.1 PERCEPTIONS OF ELECTRONIC SERVICE QUALITY SUB-CONSTRUCTS

Customers' perception of electronic service quality was assessed on seven electronic service quality sub-constructs that include efficiency, system availability, fulfillment, privacy, responsiveness, compensation and contact. It was found that customers perceived all the seven sub-constructs for electronic service quality to be negative. The negative perception on efficiency, system availability, fulfillment, privacy, responsiveness, compensation and contact was drawn from the mean values (2.42), (2.36), (2.17), (2.2), (2.38), (2.57) and (2.27) respectively. The values for electronic service quality sub-constructs were above mean value (2.0), hence

represented a lower perception value. Figure 5.1 illustrates the mean values for the electronic service quality sub-constructs.

Figure 5.1: Perceptions of electronic service quality sub-constructs



Source: Researcher's own construct

Customers perceived the seven sub-constructs for electronic service quality to be negative. The highest negative perception was on compensation, followed by efficiency, responsiveness, system availability, contact, privacy and fulfillment. The findings in this study are similar to that of Chen et al. (2013:473) and Byambaa and Chang (2012:86) who found that customers had negative perceptions on electronic service quality. However, Al-Nasser et al. (2016:228) and Ardakani et al. (2015:120) found that customers had a negative perception on electronic service quality. The next section provides customers' perception on electronic service quality at the items level.

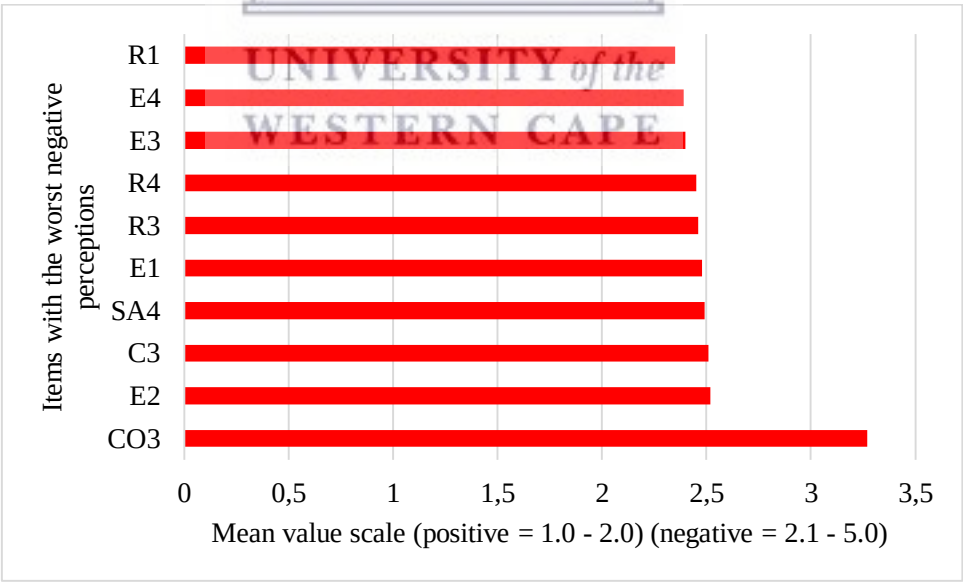
5.4.2 PERCEPTIONS OF ELECTRONIC SERVICE QUALITY ITEMS

After testing the perception of customers on electronic service quality and established that it was negative, the study went on to ascertain the customers' perceptions on electronic service quality items. In this study, 26 items represented

sub-constructs for electronic service quality. Customers had a negative perception on all the items utilised to measure electronic service quality. It was found that all the items had a mean value above (2.0).

Out of the 26 items, ten items found to be having the lower perception value were: CO3 (Online store picks up items I want to return from my home or business) with mean value (3.27), E2 (It is easy to get anywhere on the site) with (2.52), C3 (The online store offers the ability to speak to a live person if there is a problem) with (2.51), SA4 (Pages at the site do not freeze after I enter my order information) with (2.49), E1 (The site makes it easy to find what I need) with (2.48), R3 (The site offer a meaningful guarantee) with (2.46), R4 (The online store tells me what to do if my transaction is not processed) with (2.45), E3 (The site enable me to complete a transaction quickly) with (2.4), E4 (Information at the site is well organised) with (2.39) and R1 (The online store provides me with convenient options for returning items) with (2.35). These 10 items with the worst negative customer perceptions are illustrated in Figure 5.2.

Figure 5.2: Perceptions of electronic service quality items



Source: Researcher's own construct

Customers had a negative perception on the 26 electronic service quality items and the worst ten negatively perceived items are shown in Figure 5.2. These items were CO3, E2, C3, SA4, E1, R3, R4, E3, E4 and R1. It is also established that customers

had a negative perception towards electronic service quality sub-constructs: efficiency, compensation, system availability, privacy, responsiveness and contact.

5.4.3 PERCEPTIONS OF CUSTOMER SATISFACTION

Customers' perceptions of customer satisfaction was found to be negative. The mean value for the sub-construct customer satisfaction was at (2.51) which is above (2.0). All the items representing customer satisfaction were also perceived by customers to be bad. These items included CS1 (Am happy with this online shopping site) with a mean value (2.35), CS2 (I like shopping through this online shopping) with (2.35), CS3 (I like the service provided by this online shopping site) with (2.51), and CS4 (I find what I need from this online shopping site) with a mean value (2.86). Customers' perceptions on customer satisfaction are depicted on Figure 5.3 as follows:

Figure 5.3: Perceptions of customer satisfaction

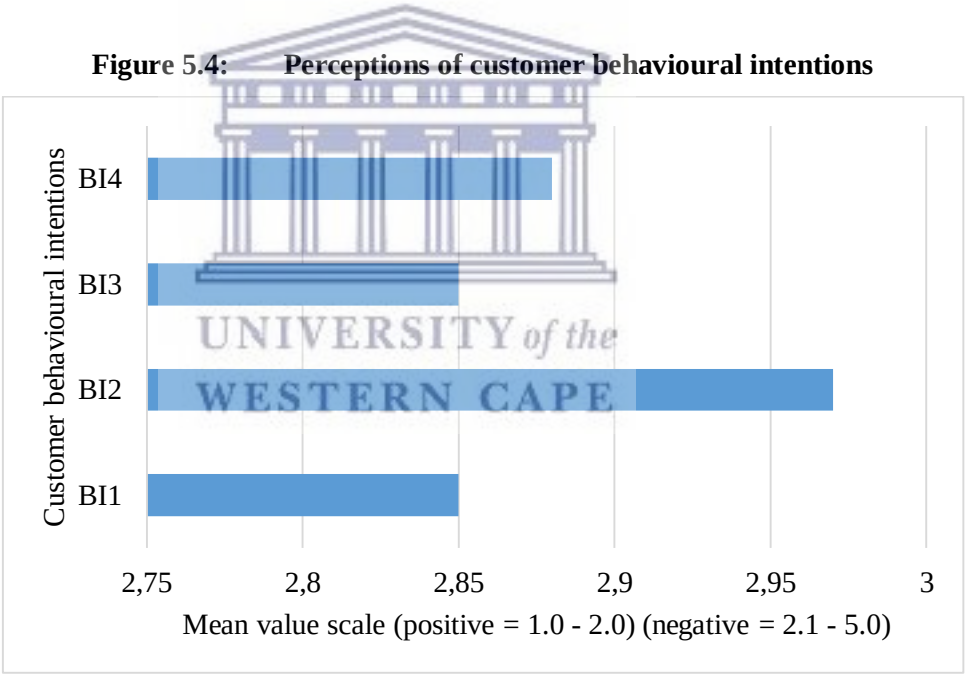
Source: Researcher's own construct

Based on the findings as reflected on Figure 5.3, customers had negative perceptions on customer satisfaction. This is indicated by the mean values of customer satisfaction sub-construct and the four items that had a mean value above (2.0).

5.4.4 PERCEPTIONS OF CUSTOMER BEHAVIOURAL INTENTIONS

Customers had negative perceptions on customer behavioural intentions. The negative perceptions of customer on customer behavioural intentions are shown through its sub-construct and items that were having mean values above (2.0). Customer behavioural intentions sub-construct had a mean value (2.88). The items for customer behavioural intentions included BI1 (I say positive things about the site to other people) with mean value (2.85) BI2 (I recommend the sites to someone who seeks my advice) with (2.97), BI3 (I encourage friends and others to do business with the site) with (2.85) and BI4 (I consider the site to be my first choice for future transactions) with (2.88). Customers' negative perceptions on customer behavioural intentions is indicated on Figure 5.4 as follows:

Figure 5.4: Perceptions of customer behavioural intentions



Source: Researcher's own construct

At this stage it can be realised that customers had negative perceptions on electronic service quality, customer satisfaction and customer behavioural intentions. Customers perceptions were rated on both sub-construct and items level. The next section explores the reliability and validity of the measurement instrument before inferential analyses are conducted.

5.5 VALIDITY AND RELIABILITY TESTING

It was important to determine the reliability and validity of the measurement items used to collect data, since the quality of any study relies on the accuracy of measuring constructs under study. Blumberg et al. (2011:357), Malholtra (2010:64) and Shiu et al. (2009:137) demonstrate that measurement accuracy is a function of two things: (i) the extent to which the study measures what it sets out to measure, being validity, and (ii) the precision with which the phenomena are measured, being reliability.

5.5.1 CONSTRUCT VALIDITY

Construct validity is rooted in the interplay of two forms of validity – convergent and discriminant validity. Blumberg et al. (2011:344) define construct validity as an instrument's "ability to accurately measure the phenomena it purports to measure". To establish high levels of construct validity of the scale, factor analysis was employed in order to determine the validity of the independent constructs. In particular, exploratory factor analysis was performed to determine not only the loading of items to their factors, but also the inter-correlation of factors themselves (Mazzocchi 2011:86). Requirements to proceed with exploratory factor analysis were determined via the sample size; ratio of cases to items, Kaiser-Meyer Olkin (KMO) measure of sampling adequacy and the Bartlett's test of sphericity (Shiu et al. 2009:71). Firstly, the ratio of the number of cases to items in the questionnaire exceeded the prescribed minimum of 5 cases (or participants) to each item (or question) (Pallant 2010:172). Secondly, the range of the KMO index falls between 0 and 1; ideally an index (> 0.6) is required for factor analysis. In this study KMO was at 0.92. Lastly, the Bartlett's test, in all cases, yielded highly significant p-values ($p < 0.05$). Having satisfied the requirements, the principal components analysis (PCA) was proceeded with for all nine sub-scales to test convergent validity against the hypothesised correlations among items within latent constructs (or factors). Table 5.3 summarises the PCA results.

Table 5.3: PCA Loadings of Variable Constructs

Constructs	Factors retained	% variance
Independent		
Efficiency	5	51
System availability	4	56
Fulfilment	4	46
Privacy	3	28
Responsiveness	4	32
Contact	3	30
Dependent		
Customer satisfaction	3	42
Customer behavioural intentions	4	40

The resultant factors were retained subject to satisfying the pre-conditions of attaining eigen values greater than 1, parallel analysis tests and screen plots tests (Mazzocchi 2011:88; Pallant 2010:171). The minimum cut-off loading for items within factors was set at 0.4 (Field 2009:68). Thus, requirements of convergent validity were assessed and fully satisfied by the former. In the latter, the tests for discriminant validity were also satisfied. The factor structures for the eight scales (efficiency, system availability, fulfilment, privacy, responsiveness, contact, customer satisfaction and customer behavioural intentions) loaded as expected and are explained in theory. Sub-scales loaded highly and distinctly within factors, thereby supporting the assumptions of construct validity (Blumberg et al. 2011:126). However, items for compensation (CO1, CO2 and CO3) and one item for customer satisfaction (CS4) could not meet the 0.4 expected threshold hence sub-scale compensation and item CS4 were excluded from further analysis.

5.5.2 CONSTRUCT RELIABILITY

Cronbach's alpha was used to measure the reliability of the multi-item scales of the questionnaire (Mazzocchi 2011:84). Ensuring high levels of reliability was critical in order to minimise bias and to provide a rigorous test for theory (in-theory falsification) (Calder et al. 1981:71). Eight sub-scales were observed to have very high measures of reliability, exceeding 0.7 (Table 5.3) with the exception of compensation that was dropped from further analysis due to its failure to meet and satisfy the requirements for construct validity. In all cases, the scales exceeded 0.5 for reliability testing, which according to Malholtra (2010:173), Field (2009:68) and Kline (2000:134) should be considered as an absolute minimum. Also, inter-

item correlations of the items surpassed .4; thereby suggesting a satisfactory measure of internal consistency (Pallant 2010:161). The positive nature of these inter-item correlation matrices indicates that the items are measuring the same underlying characteristics and confirming the internal consistency of the scales. Table 5.4 illustrates the Cronbach's alpha values associated with each of the ten scales comprising the questionnaire.

Table 5.4: Cronbach's Alpha for the Sub-scales

Variable	Cronbach's Alpha	Number of items
Efficiency	.87	5
System availability	.85	4
Fulfilment	.87	4
Privacy	.80	3
Responsiveness	.86	4
Contact	.81	3
Compensation	.42	3
Customer satisfaction	.94	5
Customer behavioural intentions	.85	4

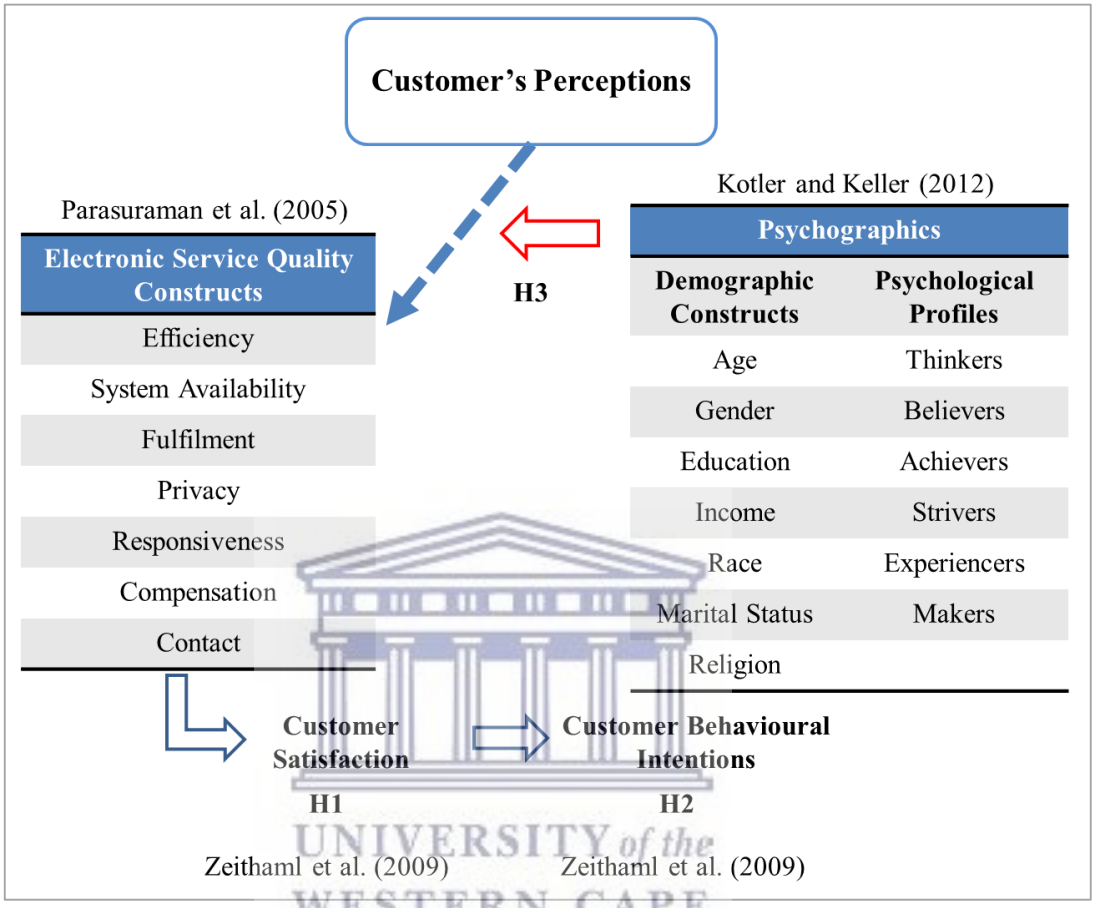
After having established both the construct validity and reliability of the questionnaire it was concluded that the items used to measure electronic service quality, customer satisfaction and customer behavioural intentions were indeed reliable. The next section proceeds with results on structural equation modelling (SEM) to operationalise objective 2 that aimed to determine the significant effect of electronic service quality on customer satisfaction and objective 3 that aimed to determine the significant effect of customer satisfaction on behavioural intentions among customers with different psychographic profiles.

5.6 THE EFFECT OF ELECTRONIC SERVICE QUALITY ON CUSTOMER SATISFACTION AND THE EFFECT CUSTOMER SATISFACTION ON CUSTOMER BEHAVIOURAL INTENTIONS

In accordance with the primary research objective, *To develop a theoretical model that illustrate the role psychographics on customers' perceptions of electronic service quality and its effect on customer satisfaction and customer behavioural intentions,* this section highlight the proposed conceptual model that is already

presented in Chapter 1 on section 1.9 and test its efficacy to predict the proposed hypotheses.

Figure 5.5: Theoretical Model



Source: Adapted from Parasuraman et al. (2005)

The proposed theoretical model test the effects of electronic service quality on customer satisfaction, hypothesised as H1. The model also tests the effects of customer satisfaction on customer behavioural intentions, hypothesised as H2. Furthermore, the model tests the role played by psychographics in influencing differences in the perceptions of customers on electronic service quality and it is hypothesised as H3.

H1: Electronic service quality has a significant effect on customer satisfaction.

H2: Customer satisfaction has a significant effect on customer behavioural intentions.

H3: There is a significant difference in perceptions of electronic service quality among customers in different psychographic profiles.

Hypotheses H1 and H2 were tested using structural equation modelling (SEM). Hypothesis H3 was tested in using analysis of variance (ANOVA). SEM and ANOVA were employed to test the model and the formulated hypotheses.

5.7 FIT OF THE THEORETICAL MODEL

The model fit was assessed by the use of Chi-square and Normal X^2/df value, coupled with other model fit indices such as Comparative Fit Index (CFI) Tucker-Lewis Index (TLI) and Root Mean Square Error of Approximation (RMSEA). The recommended cut off value for the goodness of fit indices was based on Hu and Bentler's (1999:433) and Shiu et al.'s (2009:678) recommendations. Following common practice acceptable model fit is indicated by value greater than .90 for CFI and TLI, and a value of less than 0.08 for RMSEA. However, a cut-off value close to .95 for TLI, CFI; and a cut-off value close to .06 for RMSEA are needed to support that there is a relatively good fit between the hypothesised model and the observed data (Hu & Bentler 1999:134).

The sub-constructs of electronic service quality included fulfilment, efficiency, contact, system availability, privacy, responsiveness, compensation and contact. However, it has to be noted that compensation was not taken further for inferential analysis due to its failure to meet the minimum required threshold of .7 for reliability and .4 for the validity test. The dependent constructs were customer satisfaction and customer behavioural intentions while electronic service quality sub-constructs were independent.

The study's theoretical model was tested as shown in Table 5.5. Results show that the original model did not achieve a good fit.

Table 5.5: Structural Equation Model: Conceptual Theoretical Model

	Coef.	OIM Std. Err.	z	P > I z I
Structural Customer satisfaction				
Efficiency	.1538513	.0704585	2.18	0.029
System availability	.1564602	.0697601	2.24	0.025
Fulfilment	-.0867075	.0573631	-1.51	0.131
Privacy	.1446487	.0715753	2.02	0.043
Responsiveness	.1108052	.0698625	1.59	0.113
Contact	.8351328	.1414115	5.91	0.000
Behavioural intentions < - Customer satisfaction	.8333391	.0930994	8.95	0.000
LR test of model vs. saturated: chi2 (344) = 1566.26, Prob > chi2 = 0.000				
Fit statistic	**Value**	**Description**		
Likelihood ratio				
chi2_ms (398)	1566.263	Model vs. saturated		
P > chi 2	0.000			
chi2_bs (435)	6159.168	Baseline vs. saturated		
p > chi2	0.000			
Population error				
RMSEA	0.093	Root mean squared error of		
90% CI, lower bound	0.000	approximation		
upper bound				
pclose		Probability RMSEA < = 0.05		
Information criteria				
AIC	23812.804	Akaike's information criterion		
BIC	24184.496	Bayesian information criterion		
Baseline comparison				
CFI	0.796	Comparative fit index		
TLI	0.777	Tucker-Lewis index		
Size of residuals				
SRMR	0.285	Standardised root mean squared residual		
CD	1.000	Coefficient of determination		

The initial theoretical model (CFI=0.796, TLI = 0.777, RMSEA = 0.093, Chi Square: 1566.263, CD (R2): 1.000, SRMR = 0.285) yielded an unacceptable model fit, thus some modifications were to be made to determine a model that better fit the data. The next section explains the modifications that were carried out to achieve a good model fitness.

5.8 REVISION OF THE THEORETICAL MODEL

In order to achieve model fitness, several modifications to the model were carried out. Seven modification steps were carried out as follows:

Step 1: Latent constructs fulfilment and responsiveness were dropped out of the model due to their failure to show a statistically significant effect (coef. = -.0867075; p = 0.131) and (coef. = .1108052; p = 0.113) respectively towards customer satisfaction.

Step 2: Removal of a path from system availability to customer satisfaction as it did not show a statistically significant effect (coef. = .1564602; p = .0197) in the model.

Step 3: Removal of a path from privacy to customer satisfaction that also did not show a statistically significant effect (coef. = .1446487; p = 0.043) in the model.

Step 4: Creation of a path direction from system availability to efficiency.

Step 5: Creation of a path direction from privacy to contact.

Step 6: Removal of the item E1 from the latent variable efficiency that had a factor lower than .7.

Step 7: Creation of a covariance relationship between efficiency and contact.

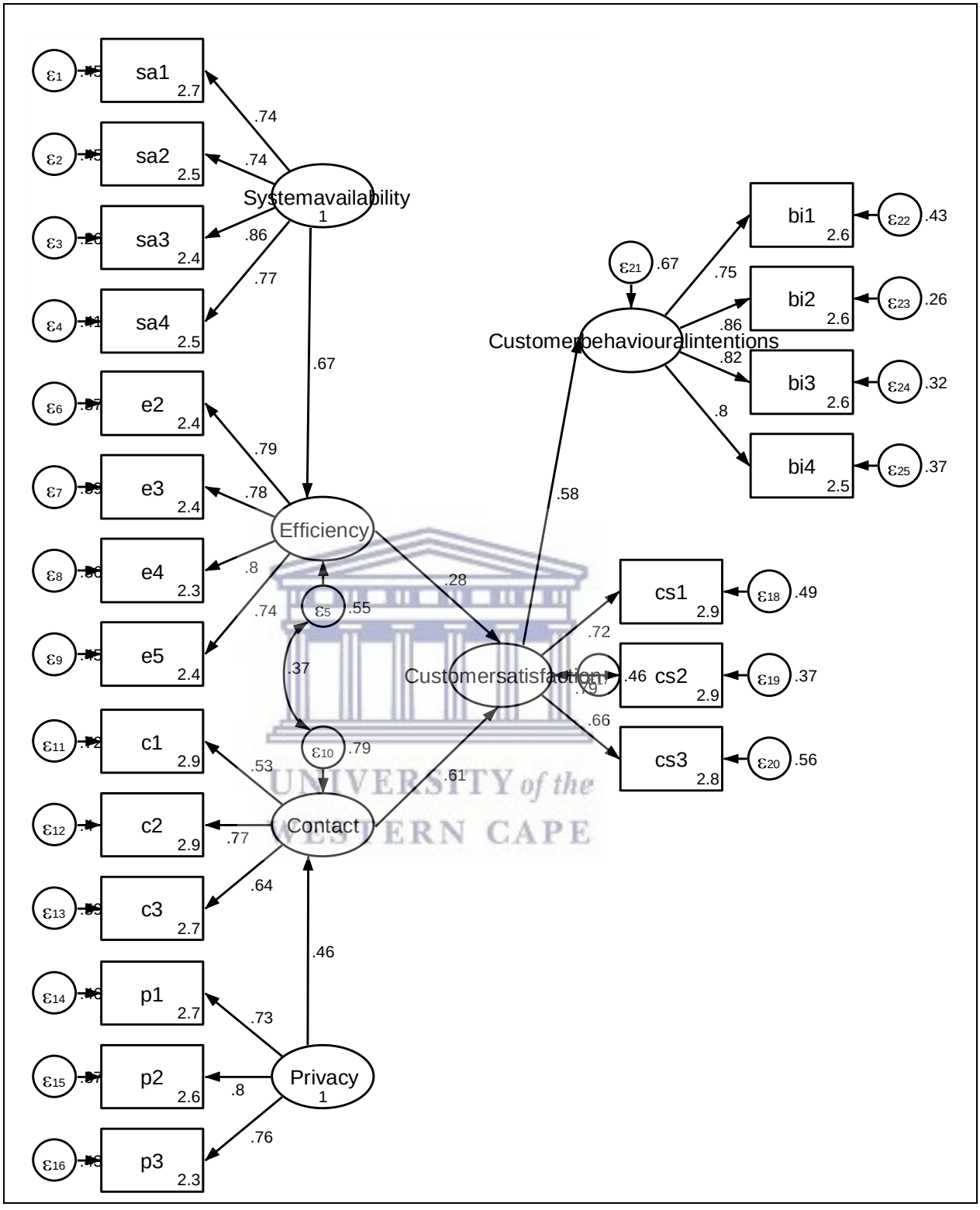
After the seventh step, the revised model achieved a good fit. The seven step modification led to an improved structural model depicted in Table 5.6 and Figure 5.6. The resultant goodness of fit indices showed a good fit (CFI = .912; TLI = 0.901; RMSEA = .072; SRMR = .176).

Table 5.6: Structural Equation Model: Revised Section of the Model

	Coef.	OIM Std. Err.	z	P > I z I
Structural Efficiency < -				
System availability	.870492	.0876326	9.93	0.000
Customer satisfaction < -				
Efficiency	.1985253	.0501069	3.96	0.000
Contact	.943362	.1547382	6.10	0.000
Contact < -				
Privacy	.2854427	.0531262	5.37	0.000
Customer behavioural intentions < - Customer satisfaction	.8195189	.0928801	8.82	0.000
LR test of model vs. saturated: chi2 (59) = 149.24, Prob > chi2 = 0.000				
Fit statistic	**Value**	**Description**		
Likelihood ratio				
Chi2_ms (183)	505.239	Model vs. saturated		
P > chi 2	0.000			
Chi2_bs (351)	3866.176	Baseline vs. saturated		
p > chi2	0.000			
Population error				
RMSEA	0.072	Root mean squared error of approximation		
90% CI, lower bound	0.064			
upper bound	0.079			
pclose	0.000	Probability RMSEA < = 0.05		
Information criteria				
AIC	16414.125	Akaike's information criterion		
BIC	16678.525	Bayesian information criterion		
Baseline comparison				
CFI	0.912	Comparative fit index		
TLI	0.901	Tucker-Lewis index		
Size of residuals				
SRMR	0.176	Standardised root mean squared residual		
CD	0.979	Coefficient of determination		

The revised theoretical model shown in Table 5.6 indicated a good fit. The revised model relationships are illustrated in Figure 5.6.

Figure 5.6: Revised section of the theoretical model



The revised section of the model identifies the existence of six relationships. These are: i) system availability is needed for efficiency to have a significant effect on customer satisfaction, ii) privacy is needed for contact to have a significant effect on customer satisfaction, iii) efficiency has a significant effect on customer

satisfaction, iv) contact has a significant effect on customer satisfaction, v) a covariance relationship exists between efficiency and contact for customer satisfaction to be achieved; and vi) customer satisfaction has a significant effect on customer behavioural intentions.

5.9 HYPOTHESES TESTING

The results from the initial model fit, and revised section of the model, were employed to test the hypotheses. Hypotheses testing proceeded as follows:

5.9.1 HYPOTHESIS H1

HYPOTHESIS $H1_A$

Hypothesis $H1_a$ which states that efficiency has an effect on customer satisfaction, is accepted (coef. = .28; p = 0.000) at $p < 0.001$ statistically significant level. For the sampled data efficiency showed a positive statistically significant effect. This finding is similar to the study carried out by Al-Nasser et al. (2016:228) that found efficiency to be an important determinant of customer satisfaction. Akkucuk and Teuman (2016:183) and Kiran, Sharma and Mittal (2008:55) also alluded that efficiency of online transactions is an important component for achieving customer satisfaction.

HYPOTHESIS $H1_B$

Hypothesis H_{1b} which states that system availability has a significant effect on customer satisfaction, is rejected (Coef. = .156; p = 0.0250). The results were found not to be significant ($p > 0.005$). These results oppose Parasuraman et al.'s (2005:1-21) proposition that system availability has a significant effect on customer satisfaction. The results are also in contrast to Jiradilok et al. (2014:5); and Dolatabadi and Pool (2013:2321) and Haghtalab et al. (2012:7) who found system availability to be an important influence on customer satisfaction. Shala and Balaj (2016:5) and Byambaa and Chang (2012:46) also found that there is a positive relationship between system availability and customer satisfaction.

HYPOTHESIS $H1_C$

Hypothesis H_{1c} which states that fulfilment has a significant effect on customer satisfaction, is rejected based on the model fit results (coef. = -.0867; p = 0.131). The result was also found not to be significant (p > 0.005). Fulfilment was therefore found not to have a significant effect on customer satisfaction in the tested sample data of different psychographic customer groups. Studies including those of Kumari and Rani (2011:299) and Juwaheer (2011:164) dispute the finding of this study. Both Kumari and Rani (2011:299) and Juwaheer (2011:164) found that fulfilment has a significant effect on customer satisfaction.

HYPOTHESIS $H1_D$

Hypothesis H_{1d} which states that privacy has a significant effect on customer satisfaction, is rejected following results of the model fit and revised model (coef. = .144; p = 0.043). The results were also found not to be significant (p > 0.005). Therefore privacy has no significant effect on customer satisfaction for the present sampled data. However, privacy was found to have a significant effect on contact as highlighted earlier. This result is contrary to Shala and Balaj (2016:5), Mozaheb et al. (2015:42) and Nabareseh et al. (2014:64) who found that privacy has a direct influence on customer satisfaction.

HYPOTHESIS $H1_E$

Hypothesis H_{1e} which states that responsiveness has a significant effect on customer satisfaction, is rejected based on the model fitness and revised model results (coef. = .11; p = 0.113). These results were found not to be significant (p > 0.005). Therefore responsiveness has no significant effect on customer satisfaction in a sample data of customer with different psychographic profiles. This finding opposes Panda and Swar (2016:5) and Pandey et al. (2015:53) who found that responsiveness has a significant statistical effect on customer satisfaction. The result however confirms earlier research (Shala & Balaj 2016:20; Sharma & Lijuan 2015:468) which also found responsiveness not to have a significant effect on customer satisfaction.

HYPOTHESIS $H1_F$

Hypothesis $H1_f$ which states that compensation has a significant effect on customer satisfaction, is rejected based on reliability and validity test results. Compensation could not achieve the minimum required threshold of .7 and .4 for reliability and validity respectively. Previous studies including those of Vazifehdust et al. (2014:156) and Quarshie and Amid-Narh (2012:1302) found compensation to be an important determinant of customer satisfaction. The importance of compensation for customer satisfaction is also indicated in Negash, Laily and Ali (2009:757) and Parasuraman et al.'s (2005:18) study.

HYPOTHESIS $H1_G$

Hypothesis H_{1g} which states that contact has a significant effect on customer satisfaction, is accepted (coef. = .61; p = 0.000) at p < 0.005 significant level. Therefore contact has a significant effect on customer satisfaction. This result confirms earlier results by Vishwagena (2016:411) and Zarei (2010:6) who found that contact is an important factor that leads to customer satisfaction.

5.9.2 HYPOTHESIS H2

Hypothesis H2 which states that customer satisfaction has a significant effect on customer behavioural intentions, can be accepted (coef. = .819; p = 0.000) at p < 0.005 significant level. It is therefore confirmed that customer satisfaction has a significant effect on customer behavioural intentions. This finding confirms similar previous studies (Al-Nasser et al. 2016:228; Ardakani et al. 2015:120; Michel, Bowen, & Johnston 2009:253) that also found customer satisfaction to have a significant effect on customer behavioural intentions.

5.9.3 HYPOTHESIS H3

The differences in perceptions of electronic service quality among customers in different psychographic profiles was tested through analysis of variance (ANOVA). In this test the F-ratio and p value statistics were used as bases for interpreting the results. When the F ratio is close to 1 and p- value more than 0.05 (P > 0.05) it

signified that there is no significant difference on perceptions of electronic service quality (dependent constructs) among the customers in different psychographic profiles (independent constructs) (Zarei 2010:6). The tested psychographic factors are age, gender, net income, education and psychological profiles. The dependent constructs were electronic service quality sub-constructs that are efficient, system availability, contact and privacy. These were considered on the bases that they were found to be significant in this study as shown in the revised model.

In order to have a good understanding of whether there are significant differences in perceptions of electronic service quality among customers in different psychographic profiles, hypothesis H_3 and its relevant secondary hypotheses were formulated as described in Table 5.7.

Table 5.7: Hypotheses 3 Description

Hypotheses description	
H_3	There is a significant difference in perceptions of electronic service quality among customers in different psychographic profiles.
$H3_i$	There is a significant difference in perceptions of efficiency among customers in different age groups.
$H3_{ii}$	There is a significant difference in perceptions of efficiency among customers in different gender groups.
$H3_{iii}$	There is a significant difference in perceptions of efficiency among customers in different education groups.
$H3_{iv}$	There is a significant difference in perceptions of efficiency among customers in different net income groups.
$H3_v$	There is a significant difference in perceptions of efficiency among customers in different psychological profiles.
$H3_{vi}$	There is a significant difference in perceptions of system availability among customers in different age groups.
$H3_{vii}$	There is a significant difference in perceptions of system availability among customers in different gender groups.
$H3_{viii}$	There is a significant difference in perceptions of system availability among customers in different education groups.
$H3_{ix}$	There is a significant difference in perceptions of system availability among customers in different net income groups.
$H3_x$	There is a significant difference in perceptions of system availability among customers in different psychological profiles.
$H3_{xi}$	There is a significant difference in perceptions of privacy among customers in different age groups.
H_{3xii}	There is a significant difference in perceptions of privacy among customers in different gender groups.
$H3_{xiii}$	There is a significant difference in perceptions of privacy among customers in different education groups.
$H3_{xiv}$	There is a significant difference in perceptions of privacy among customers in different net income groups.
$H3_{xv}$	There is a significant difference in perceptions of privacy among customers in different psychological profiles.
$H3_{xvi}$	There is a significant difference in perceptions of contact among customers in different age groups.
$H3_{xvii}$	There is a significant difference in perceptions of contact among customers in different gender groups.
$H3_{xviii}$	There is a significant difference in perceptions of contact among customers in different education groups.
$H3_{xix}$	There is a significant difference in perceptions of contact among customers in different net income groups.
$H3_{xx}$	There is a significant difference in perceptions of contact among customers in different psychological profiles.

Testing of these hypotheses was conducted through ANOVA. The results from ANOVA testing are provided in Table 5.8.

Table 5.8: Analysis of Variance Results – section of the theoretical model

	Independent Factors	Age		Gender		Education		Net income		Psychological Profiles	
Dependent Constructs		F	Sig.	F	Sig.	F	Sig	F	Sig	F	Sig
Efficiency	Between Groups	1.35	.259	.36	.549	1.25	.286	.40	.879	2.58	.027
	Within Groups	Reject H_{3i}		Reject H_{3ii}		Reject H_{3iii}		Reject H_{3iv}		Accept H_{3v}	
System availability	Between Groups	.67	.572	.03	.871	1.14	.339	.40	.876	2.05	.042
	Within Groups	Reject H_{3vi}		Reject H_{3vii}		Reject H_{3viii}		Reject H_{3ix}		Accept H_{3x}	
Privacy	Between Groups	.50	.683	.34	.560	1.41	.221	.63	.704	2.19	.050
	Within Groups	Reject H_{3xi}		Reject H_{3xii}		Reject H_{3xiii}		Reject H_{3xiv}		Accept H_{3xv}	
Contact	Between Groups	.75	.522	.21	.643	.47	.795	.35	.912	.61	.695
	Within Groups	Reject H_{3xvi}		Reject H_{3xvii}		Reject H_{3xviii}		Reject H_{3xix}		Reject H_{3xx}	

HYPOTHESIS 3i, 3ii, 3iii, 3iv and 3v

Hypothesis H_{3i} which states that there is a difference in perceptions of efficiency among customers in different age groups. This hypothesis can be rejected based on the analysis of variance results (F = 1.35; p = .259). The results provided sufficient evidence that p > 0.05, hence there is no difference in perceptions of efficiency among customers in different age profiles. Hypothesis H_{3ii} which states that there is a difference in perceptions of efficiency among customers in different gender groups is also rejected based on ANOVA results (F = .36; p = .549). Hypothesis H_{3iii} which states that there is a difference in perceptions of efficiency among customers in different education groups is rejected based on ANOVA results (F = 1.25; p = .286). Hypothesis H_{3iv} which states that there is a difference in perceptions of efficiency among customers in different net income groups is rejected based on ANOVA results (F = .40; p = .879). Hypothesis H_{3v} which states that there is a difference in perceptions of efficiency among customers in different psychological profiles is accepted based on ANOVA results (F = 2.58; p = .027).

Results indicated that the perceptions of customers of efficiency (electronic service quality) are not different among customers with different age, gender, education and income profiles. However, the perceptions of customers were found to be

different among customers with different psychological profiles. This finding is similar to previous studies (Baldevbhai 2015:212; Lal et al. 2015:75; Kamalaveni & Shalini 2013:35) that found that the perceptions of customers on electronic service quality do not differ across customers with different demographic profiles. The finding also confirms Kotler and Keller's (2016:199) opinion that demographics alone do not assist in proper understanding of consumer behaviour. Kotler and Keller (2016:199) argue that psychographic profiles lead to different customer perceptions of electronic service quality.

HYPOTHESIS 3vi, 3vii, 3viii, 3ix and 3x

Hypothesis H_{3vi} which states that there is a difference in perceptions of system availability among customers in different age groups is rejected based on ANOVA results (F = .67; p = .572). Hypothesis H_{3vii} which states that there is a difference in perceptions of system availability among customers in different gender groups is rejected based on ANOVA results (F = .03; p = .572). Hypothesis H_{3viii} which states that there is a difference in perceptions of system availability among customers in different education groups is also rejected based on ANOVA results (F = 1.14; p = .339). Hypothesis H_{3ix} which states that there is a difference in perceptions of system availability among customers in different income groups is rejected based on ANOVA results (F = .40; p = .876). Hypothesis H_{3x} which states that there is a difference in perceptions of system availability among customers in different psychological profiles is accepted based on ANOVA results (F = 2.05; p = .042).

The results showed that perceptions of system availability do not differ across customers in different age, gender, education and income profiles. The perceptions of system availability were found to be different across customers with different psychological profiles (thinkers, believers, achievers, strivers, experiencers and makers). This finding closely resembles the findings of past studies by Gosh (2014:29) and Fang and Yen (2006:363) who also found that the perceptions of customers of electronic service quality was different across customers in different psychographic profiles. Furthermore, the finding is closely aligned to Kotler and Keller (2016:199) who state that customers' psychological profiling is useful in segmentation of consumer markets.

HYPOTHESIS 3xi, 3xii, 3xiii, 3xiv and 3xv

Hypothesis H_{3xi} which states that there is a difference in perceptions of privacy among customers in different age groups is rejected based on ANOVA results (F = .50; p = .683). Hypothesis H_{3xii} which states that there is a difference in perceptions of privacy among customers in different gender groups is also rejected based on ANOVA results (F = .34; p = .560). Hypothesis H_{3xiii} which states that there is a difference in perceptions of privacy among customers in different education groups is also rejected based on ANOVA results (F = 1.41; p = .221). Hypothesis H_{3xiv} which states that there is a difference in perceptions of privacy among customers in different income groups is rejected based on ANOVA results (F = .63; p = .704). Hypothesis H_{3xv} which states that there is a difference in perceptions of privacy among customers in different psychological profiles is accepted based on ANOVA results (F = 2.19; p = .05).

The findings showed that perceptions of privacy among customers in different age, gender, education and income profiles were not different. However, perceptions of privacy among customers with different psychological profiles were different. The finding supports Kotler and Keller (2016:199) and Gosh (2014:29) who found that demographics do not lead to differences in customer perceptions of electronic service quality but that psychological profiles do.

HYPOTHESIS 3xvi, 3xvii, 3xviii, 3xix and 3xx

Hypothesis H_{3xvi} which states that there is a difference in perceptions of contact among customers in different age groups is rejected based on ANOVA results (F = .75; p = .522). Hypothesis H_{3xvii} which states that there is a difference in perceptions of contact among customers in different gender groups is rejected based on ANOVA results (F = .21; p = .643). Hypothesis H_{3xviii} which states that there is a difference in perceptions of contact among customers in different education groups is also rejected based on ANOVA results (F = .47; p = .795). Hypothesis H_{3xix} which states that there is a difference in perceptions of contact among customers in different net income groups is also rejected based on ANOVA results (F = .35; p =

.912). Hypothesis H_{3xx} which states that there is a difference in perceptions of contact among customers in different psychological profiles is rejected based on ANOVA results (F = .61; p = .695).

The findings showed that perceptions of contact (electronic service quality) were not different across customers with different age, gender, education, race, income and psychological profiles. This finding contrasts with previous studies (Chellapalli & Kumar 2016:41; Baldevbhai 2015:212) that agree with Kotler and Keller (2016:199-210) that psychographics result in different customer perceptions of electronic service quality.

5.10 CONCLUSION

This Chapter presented several descriptive and inferential statistical analyses that were carried out to answer the research questions. Descriptive analysis took the form of frequency tables, kurtosis, skewness, mean values, standard deviation, reliability and validity analysis through Cronbach's alpha and factor analysis respectively. The sub-constructs used in the theoretical model of electronic service quality were tested for reliability and validity. The theoretical model's hypothesised relationships between constructs were tested using structural equation modelling (SEM) and analysis of variance (ANOVA). The original theoretical model was found to be ineffective at describing all of the hypothesised relationships between sub-constructs of the constructs of electronic service quality, customer satisfaction, behavioural intention and psychographic profiles. The model was subsequently revised and achieved a good fit. The findings revealed that customers had negative perceptions of electronic service quality, that the electronic service quality sub-constructs of system availability and privacy have a positive significant effect on efficiency and contact respectively, that efficiency and contact have a positive significant effect on customer satisfaction, that customer satisfaction has a significant positive effect on customer behavioural intentions, and that, among different psychographic profiles (age, gender, education, race, income and psychological profile) only psychological profile was found to have a significant influence on the perceptions of customers of electronic service quality. The next Chapter present the model that came out of this study.

CHAPTER 6: PRESENTATION OF THE DEVELOPED MODEL

6.1 CHAPTER OVERVIEW

The previous Chapter presented and discussed the results from data analysis. Analysis of data were done through descriptive and inferential analysis that include frequency tables, mean values, standard deviation, reliability and validity test, structural equation modelling and analysis of variance. The conceptual model was also tested and modified in Chapter 5. The presentation of the final conceptual model is facilitated in this Chapter.

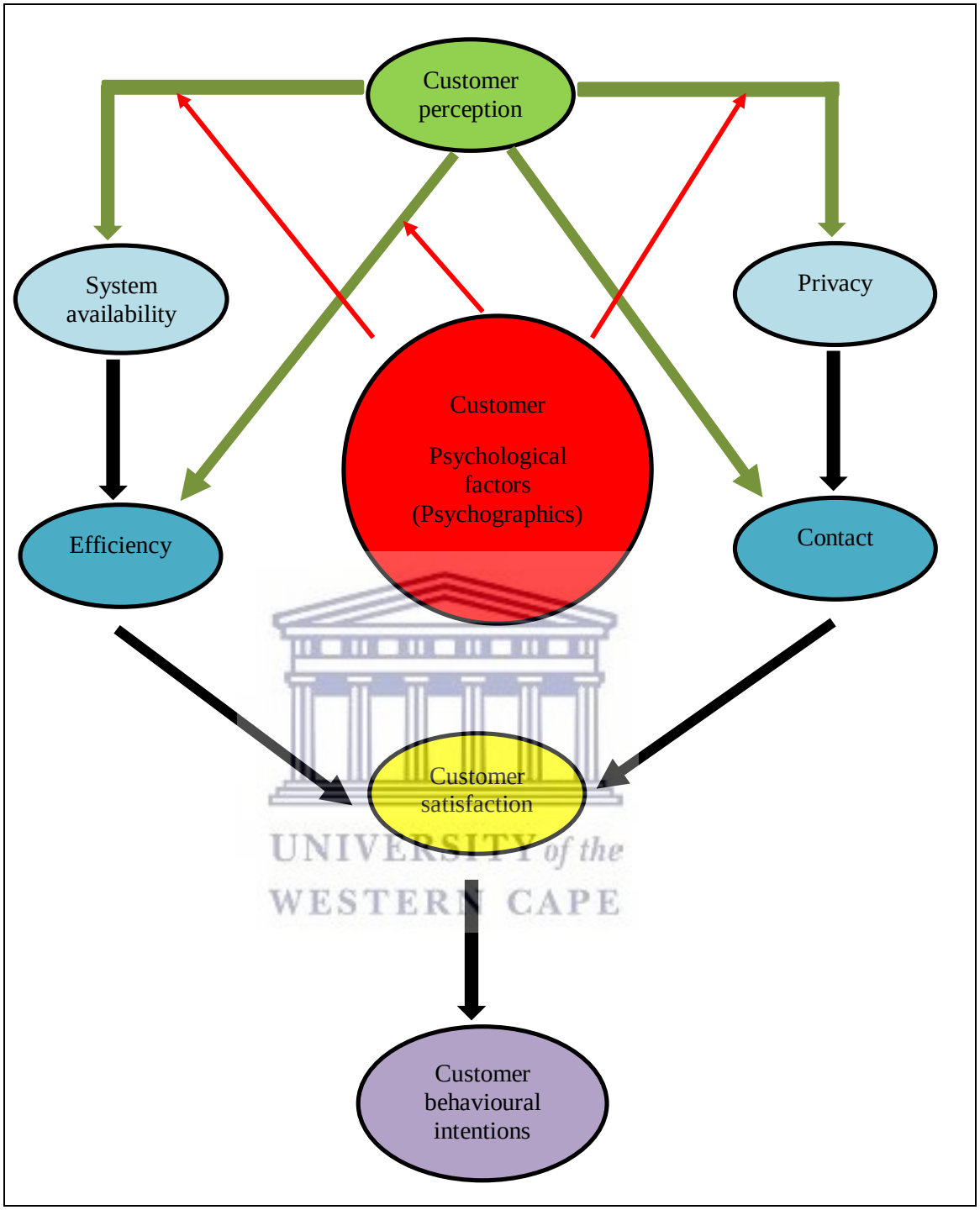
6.2 INTRODUCTION

This Chapter presents the final developed conceptual model based on the analyses of data and findings in Chapter 5. The final model pictures the interaction between perceptions of electronic service quality, customer satisfaction, customer behavioural intentions and psychographics. The role of these constructs in the model is also explained in detail.

6.3 THE DEVELOPED MODEL

The final theoretical model illustrates a relationship between electronic service quality sub-constructs, customer satisfaction, customer behavioural intentions and psychographics. This model is extracted from the modified model shown on Figure 5.6 and analysis of variance results in Table 5.8 in Chapter 5. Electronic service quality sub-constructs system availability and privacy have a statistically significant positive effect on efficiency and contact, respectively. Efficiency and contact have a statistically significant positive effect on customer satisfaction. Customer satisfaction has a positive statistically significant effect on customer behavioural intentions. Psychological profile is a psychographic factor that leads to different customer perceptions of electronic service quality. The final study model is presented in Figure 6.1.

Figure 6.1: The Final Model



Source: Researcher's own construct

There are eight significant relationships shown in the model; i) privacy has a significant positive effect on contact, ii) system availability has a significant positive effect on efficiency, iii) contact has a significant positive effect on customer satisfaction, iv) efficiency has a significant positive effect on customer satisfaction, v) customer satisfaction has a statistical positive effect on customer

behavioural intentions, vi) different customer psychological profiles lead to different customer perceptions of privacy, vii) different customer psychological profiles lead to different perceptions of efficiency, viii) different customer psychological profiles lead to different perceptions of system availability. These relationships are described in further detail:

6.3.1 THE SIGNIFICANCE OF PRIVACY IN ONLINE STORES

Privacy has a significant positive effect on contact in the model. Thus, the amount of privacy that is maintained by the online store results in the creation of more contact. Privacy refers to the ability of the online store to protect the information provided by the customers. The information that needs to be kept in private includes the credit card details and customer's personal details such as their name, phone numbers and emails.

For ethical reasons, online stores should be able to keep the information of customers private. In the 21st century customers have become inquisitive to an extent that they would want to know ethical standards of online stores since they will be buying from them. In recent years, customers have evolved to such an extent that they shy away from stores that do not consider the privacy of consumers.

Customers prefer working with online stores that are able to protect their information. The online store should therefore ensure that its customers have positive perceptions on their ability to keep information in strict privacy. Positive perceptions on privacy levels drive customers to contact the online store for purchase as shown in the model. Prashar et al. (2016:27) and Nabareseh et al. (2014:64) support this model as they also found that there is correlation between privacy and contact.

6.3.2 THE IMPORTANCE OF CONTACT IN ONLINE STORES

The previous section has highlighted that the perceptions of customers on the level of privacy upheld by the online store contributes towards customers' willingness to contact the store. Contact therefore depends on the privacy level of the online store.

Contact is the process through which the customers get hold of the online store for the purpose of making a purchase or inquiring about a product or service. According to the model, the ability of customers to contact the online store should be embraced.

It is therefore important for the online store to provide communication mechanisms such as a telephone number and an e-mail address. The presence of these facilities ensures that the store is willing to be contacted. Contact details also shows that the online store is ready to respond to customer's problems. The model further displays that contact has a positive significant effect on customer satisfaction. Vishwagena (2016:411) and Sharma and Lijuan (2015:468) support the connection in the model that contact leads to customer satisfaction.

6.3.3 THE SIGNIFICANCE OF SYSTEM AVAILABILITY IN ONLINE STORES

System availability refers to the ability of the online store to keep the website running. Keeping the website up and running is critical within online stores. A website is the platform that online stores employ for transactional purposes. Failure for a website to consistently run leads to loss of business. Customers usually prefer visiting websites that are always running.

The website links the online store with its customers, hence it is important to keep it running. A dedicated information technology (IT) department is essential in ensuring that the website is kept running. It is also important to keep an IT team that is dedicated and knowledgeable enough to keep the website informative. While keeping the system available, the IT team should work effectively with the rest of the store including the marketing department so that current information related to products, services, prices and promotions is always uploaded.

Keeping the system available is critical in order to ensure that the online store is visible to the intended market. A consistently running website keeps the online store present in the market. The model also shows that system availability result to the

efficiency of the online store. The next section explains the concept of efficiency as signified in the model.

6.3.4 THE IMPORTANCE OF EFFICIENCY IN THE ONLINE STORE

The previous sub-section 6.3.3 has shown that system availability result to the efficiency of the online store. The model constitute efficiency as an important construct within online stores. Efficiency refers to the level at which the online store processes are well organised and systematised. Efficiency involves the ability of the online store website page to load quickly. It also involves the rate at which current information of the online store is kept updated. An efficient online store would ensure that its information that include prices and products as already specified in section 6.5.4 are kept updated.

The efficiency of the online store is also embedded in its ability to offer a website that is easy to navigate. When the online store is efficient, its website should not be difficult to search. The information that is needed by the customers to make a purchase decision should also be readily available. It should also be easy to select the products and services of choice including putting them on the wish list for future purchase.

The process of making a payment should be kept simple. Only essential security related information should be requested to allow the customer to proceed with the purchase. Such information can include the credit or the debit card number including the CCV or the CVC number. In addition, the system should also send a number called the OTP through the customer's mobile number in order to confirm the payment.

The online store should also be efficient in its order fulfilment. The products and services purchased by the customer should delivered to the provided address as quick as possible. It is therefore important to have a policy that specifies the maximum average time in which a delivery can be made. The model shows that efficiency leads to customer satisfaction. Williams and Naumann (2011:20) and

Xia, Mengqiao, Fang and Peihong (2008:919) support the relationship between the online store efficiency and customer satisfaction as shown in the model.

6.3.5 CUSTOMER SATISFACTION

In section 6.2.2 and 6.2.4 have shown that contact and efficiency respectively have a positive significant effect on customer satisfaction. Section 6.5.4 has already shown that the provision of contact details such as a telephone number and an email address is critical in influencing customer satisfaction. The ability to maintain processes that are well organised and systematised result in the efficiency of the online store. Such processes eventually leads to customer satisfaction. Customer satisfaction is a positive attitude that customers display after experiencing an online store service that meets their expectations. Williams and Naumann (2011:20) and Xia et al. (2008:919) support that contact and efficiency lead to customer satisfaction as shown in the model. The model also shows that customer satisfaction has a positive significant effect on customer behavioural intentions.

6.3.6 CUSTOMER BEHAVIOURAL INTENTIONS

The model shows that customer satisfaction leads to positive customer behavioural intentions. Customer satisfaction as a positive attitude leads to reinforced positive behaviour that includes repeated purchase and referral of friends and relatives. These positive behavioural intentions leads to an increase in the level of sales and profitability of the online store. Authors such as Kotler and Keller (2016:214) and Schiffman and Kanauk (2007:102) support the relationship portrayed by the model that customer satisfaction has a positive significant effect on customer behavioural intentions.

6.3.7 THE IMPORTANT ROLE OF PSYCHOLOGICAL PROFILE ON CUSTOMER PERCEPTIONS

The model shows that psychological profiles play a role in formation of different customer perceptions of electronic service quality. Psychological profile refers to the way of living adopted by online shopping customers. Different psychological

profiles are identified as thinkers, believers, achievers, strivers, experiencers and makers (Gosh 2014:29). The model shows that customers' psychological profile leads to different perceptions of electronic service quality sub-constructs that include system support, efficiency and privacy. The model is also supported by Kotler and Keller (2016:236-239) who state that psychological profiles are useful in the segmentation of markets.

6.4 CONCLUSION

The model presented in this Chapter shows that system availability and privacy have a positive effect on efficiency and contact respectively. The model has also shown that efficiency and contact influence customer satisfaction. It has also been shown that customer satisfaction result in customer behavioural intentions. Lastly, the model shows the role that psychological profiles play on customer perceptions of system support, efficiency and privacy. The next Chapter provide conclusions to research questions as well as the implications this study has on theory and practice.

CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS

7.1 CHAPTER OVERVIEW

In the previous Chapter, the presentation of the final model is provided. The model was formulated based on the results of both descriptive and inferential analyses illustrated in Chapter 5. Conclusions and recommendations of this study are provided in this Chapter. Conclusions are provided to the questions and objectives of the study. Recommendations are provided so as to assist South African online stores in order to rework their online shopping strategy and achieve a competitive advantage.

7.2 INTRODUCTION

This study was motivated by the increased loss of competitive advantage facing South African online stores due to increased competition from major multinational online shopping brands (Goko 2017:12). An extensive review of the literature also indicated a gap in the body of knowledge related to the paucity of studies that links electronic service quality, customer satisfaction, customer behavioural intentions and psychographics within the context of South African online stores. This study addressed this gap in the literature.

The purpose of this study was to address the primary research objective, which was:

> *To develop a theoretical model that illustrate the role of psychographics on customers' perceptions of electronic service quality and its effect on customer satisfaction and customer behavioural intentions.*

The associated research objectives were to develop a theoretical model to:

i. assess customers' perceptions of electronic service quality at South African online stores;

ii. illustrate the effect of electronic service quality on customer satisfaction;

iii. measure the effect of customer satisfaction on behavioural intentions, and;

iv. determine how customers' perceptions of electronic service quality differs across different customer psychographic profiles.

The research questions were developed from the research objectives, as follows:

RQ_1 What are the perceptions of customers of electronic service quality at South African online stores?

RQ_2 To what extent does electronic service quality influence customer satisfaction at South African online stores?

RQ_3 To what extent does customer satisfaction influence behavioural intentions of customers at South African online stores?

RQ_4 To what extent do customers' perceptions of electronic service quality at South African online stores differ across different psychographic customer groupings?

From the theoretical model of psychographic influences on customer satisfaction with electronic service quality, three primary hypotheses (H_1, H_2 and H_3) were formulated to assist in the answering of the research questions. These are as follows:

H1: Electronic service quality has a significant effect on customer satisfaction.

H2: Customer satisfaction has a significant effect on customer behavioural intentions.

H3: There is a significant difference in perceptions of electronic service quality among customers in different psychographic profiles.

This Chapter outlines the conclusions based on the research objective of evaluation of a theoretical model of psychographic influences on customer satisfaction with electronic service quality. The conclusions to research objectives and associated hypotheses are presented below.

7.3 CONCLUSIONS ON RESEARCH OBJECTIVES

Following the data analysis and evaluation of the theoretical model of psychographic influences on customer satisfaction with electronic service quality by method of hypotheses testing, several conclusions were drawn that answered the research questions. The conclusions on the research objectives are as follows:

7.3.1 CONCLUSION ON RESEARCH OBJECTIVE 1

Research Objective 1 sought to assess customers' perceptions of electronic service quality of South African online stores. Based on the findings from descriptive analysis that included mean and standard deviation, it is concluded that online shopping customers had negative perceptions of electronic service quality of South African online stores. Customer perceptions of electronic service quality were measured on the sub-constructs and items levels. Online shopping customers had negative perceptions of electronic service quality sub-constructs, which are efficiency, system availability, fulfilment, privacy, responsiveness, compensation and contact.

The negative perceptions of online shopping customers on electronic service quality sub-constructs was evidenced by the means values of the sub-constructs that were within the negative range of 2.1 to 5.0. The mean values of the sub-constructs were (2.42) for efficiency, (2.36) system availability, (2.17) fulfilment, (2.2) privacy, (2.38) responsiveness, (2.57) compensation and (2.27) contact. In this study 26 items represented electronic service quality. All the 26 items had mean values above 2.0. Based on the mean values within the range 2.1 to 5.0 it was concluded that online shopping customers had negative perceptions of items that represented electronic service quality.

The assessment through descriptive analysis leads to the conclusion that online shopping customers had negative perceptions of the sub-constructs of electronic service quality; efficiency, system availability, fulfilment, privacy, responsiveness, compensation and contact.

7.3.2 CONCLUSION ON RESEARCH OBJECTIVE 2

Research Objective 2 sought to understand the effect of electronic service quality on customer satisfaction. This question was addressed through structural equation modelling. Based on the findings it can be concluded that the electronic service quality sub-construct of efficiency had a positive statistically significant effect on customer satisfaction. This conclusion is made based on the revised theoretical model results that showed that efficiency (coef. = .198; $p < 0.001$) has a significant positive effect on customer satisfaction. It is also concluded that the sub-construct of contact had a significant positive effect on customer satisfaction. The conclusion is made based on the results on the revised model that illustrated that contact (coef. = .943; $p < 0.001$) has a significant positive effect on customer satisfaction.

It is further concluded that electronic service quality sub-constructs of system availability, privacy, compensation, responsiveness and fulfilment did not have a significant effect on customer satisfaction. This conclusion is made based on the results of structural equation model results that could not achieve a good fit. As indicated in Table 6.1, the initial structural equation model and the revised structural equation model showed that system availability (coef. = .156; $p > 0.0196$) privacy (coef. = .144; $p > 0.042$) compensation (cronbach's alpha < 0.7) responsiveness (coef. = .11; $p > 0.112$) and fulfilment (coef. = -.086; $p > 0.13$) did not have significant effect on customer satisfaction.

However, system availability and privacy were found to have a significant positive effect on efficiency and contact respectively. This conclusion is based on the results of the revised structural equation model that showed that system availability (coef. = .87; $p < 0.001$) had a significant positive effect on efficiency. Privacy (coef. = .285; $p < 0.001$) was also found to have significant positive effect on contact. The developed model showed that efficiency and contact have a significant positive effect on customer satisfaction. The model also showed that system availability and privacy have a significant positive effect on efficiency and contact respectively. However, fulfilment, responsiveness and compensation had no effect on customer satisfaction in the model.

7.3.3 CONCLUSION ON RESEARCH OBJECTIVE 3

Research Objective 3 sought to measure the effect of customer satisfaction on customer behavioural intentions. It can be concluded that customer satisfaction had a significant positive effect on customer behavioural intentions. This conclusion is made based on the results of the revised structural equation model that showed that customer satisfaction (coef. = .819; $p < 0.001$) had a significant positive effect on customer behavioural intentions.

7.3.4 CONCLUSION ON RESEARCH OBJECTIVE 4

Research Objective 4 sought to determine how customers' perceptions of electronic service quality differ across different customer psychographic profiles. Analysis of variance (ANOVA) was employed to answer this question. It can be concluded that customers' perceptions of electronic service quality did not differ across customers with different age, gender, education and net income profiles. This conclusion is made based on the results of ANOVA that indicated that the perceptions of customer on electronic service quality (efficiency, system availability, contact and privacy) were different across customers with different age, gender, education and income profiles (F value close to 1 and p value > 0.05).

It is also concluded that customers' perceptions of electronic service quality sub-constructs are influenced by different psychological profiles. This conclusion is made based on the results from ANOVA that showed that F value was not close to 1 and p value was below 0.05. At the same time it can also be concluded that customers' perceptions of contact was not different across customers with different psychological profiles (F value close to 1; p value > 0.05).

7.4 SUMMARY OF THE FINDINGS

This study produced seven findings listed as follows: i) online shopping customers had negative perceptions of electronic service quality sub-constructs (efficiency, system availability, fulfilment, privacy, responsiveness, compensation and contact), ii) electronic service quality sub-constructs such as efficiency and contact have a

significant positive effect on customer satisfaction, iii) system support and privacy have a significant positive effect on efficiency and contact respectively, iv) fulfilment, responsiveness, compensation, system support and privacy have no significant effect on customer satisfaction, v) customer satisfaction has a significant positive effect on customer behavioural intentions, vi) customers' perceptions of electronic service quality do not differ across different age, gender, education and income demographic profiles, and vii) customers' perceptions of electronic service quality do differ across different customer psychological profiles. The summary of hypotheses and major findings is provided in Table 7.1.

Table 7.1: A Summary of the Hypotheses and Major Results

	Hypotheses	Results
H_1:	Electronic service quality has a significant effect on customer satisfaction.	
H_{1a}	Efficiency has a significant effect on customer satisfaction.	Accept
H_{1b}	System availability has a significant effect on customer satisfaction.	Reject
H_{1c}	Fulfilment has a significant effect on customer satisfaction.	Reject
H_{1d}	Privacy has a significant effect on customer satisfaction.	Reject
H_{1e}	Responsiveness has a significant effect on customer satisfaction.	Reject
H_{1f}	Compensation has a significant effect on customer satisfaction.	Reject
H_{1g}	Contact has a significant effect on customer satisfaction.	Accept
H_2	Customer satisfaction has a significant effect on customer behavioural intentions.	Accept
H_3	There is a significant difference in perceptions of electronic service quality among customers in different psychographic profiles.	
H_{3i}	There is a significant difference in perceptions of efficiency among customers in different age groups.	Reject
H_{3ii}	There is a significant difference in perceptions of efficiency among customers in different gender groups.	Reject
H_{3iii}	There is a significant difference in perceptions of efficiency among customers in different education groups.	Reject
H_{3iv}	There is a significant difference in perceptions of efficiency among customers in different net income groups.	Reject
H_{3v}	There is a significant difference in perceptions of efficiency among customers in different psychological profiles.	Accept
H_{3vi}	There is a significant difference in perceptions of system availability among customers in different age groups.	Reject
H_{3vii}	There is a significant difference in perceptions of system availability among customers in different gender groups.	Reject
H_{3viii}	There is a significant difference in perceptions of system availability among customers in different education groups.	Reject
H_{3ix}	There is a significant difference in perceptions of system availability among customers in different net income groups.	Reject

H_{3x}	There is a significant difference in perceptions of system availability among customers in different psychological profiles.	Accept
H_{3xi}	There is a significant difference in perceptions of privacy among customers in different age groups.	Reject
H_{3xii}	There is a significant difference in perceptions of privacy among customers in different gender groups.	Reject
H_{3xiii}	There is a significant difference in perceptions of privacy among customers in different education groups.	Reject
H_{3xiv}	There is a significant difference in perceptions of privacy among customers in different net income groups.	Reject
H_{3xv}	There is a significant difference in perceptions of privacy among customers in different psychological profiles.	Accept
H_{3xvi}	There is a significant difference in perceptions of contact among customers in different age groups.	Reject
H_{3xvii}	There is a significant difference in perceptions of contact among customers in different gender groups.	Reject
H_{3xviii}	There is a significant difference in perceptions of contact among customers in different education groups.	Reject
H_{3xix}	There is a significant difference in perceptions of contact among customers in different net income groups.	Reject
H_{3xx}	There is a significant difference in perceptions of contact among customers in different psychological profiles.	Accept

Source: Researcher's own construct

The summary of findings assisted in answering the four research questions. On the **First Research Question (RQ1)**: "What are the perceptions of customers of electronic service quality at South African online stores?" it can be noted that the perceptions of customers on electronic service quality of the South African online stores were negative. The **Second Research Question (RQ2)**: "To what extent does electronic service quality influence customer satisfaction at South African online stores?" the study found that contact (coef. = .943; $p < 0.001$) and efficiency (coef. = .198; $p < 0.001$) significantly influenced customer satisfaction. However, system availability, privacy, compensation, responsiveness and fulfilment were found not to have statistical significant influence on customer satisfaction.

Third Research Question (RQ3) that states: "To what extent does customer satisfaction influence behavioural intentions of customers at South African online stores?" it was noted that customer satisfaction (coef. = .819; $p < 0.001$) significantly influenced customer behavioural intentions to a greater extent. With regard to the **Fourth research question (RQ4):** "To what extent do customers'

perceptions of electronic service quality at South African online stores differ across different psychographic customer groupings?" it can be answered that customers' perceptions of customers on electronic service quality did not differ across customers with different age, gender, education and net income profiles. However, the perceptions of customers on electronic service quality differed greatly across customers with different psychological profiles.

7.5 CONTRIBUTIONS TO THE BODY OF KNOWLEDGE

As expected at doctorate level, this thesis has made new contributions to the body of knowledge in a number of ways. The five major contributions to theory are the following:

(1) The paucity within the literature pertaining to research on the link between electronic service, customer satisfaction and customer satisfaction especially at South African online stores, has been addressed. Therefore, this provides a platform upon which future research in the region could be based.

(2) This study also makes important contribution on revealing the role that is played by psychographics especially psychological factors on perceptions of customers on electronic service quality.

(3) More specifically, the applicability of the Parasuraman et al. (2005:15) electronic service quality model in a non-Western contexts has been irrefutably confirmed. Results found in this study conformed to those hypothesised in the respective theories, thus suggesting a "successful replication and generalisability of results within different populations, products, and geographical areas" (Hubbard & Armstrong, 1994:233).

(4) While past research focused exclusively on studying one variable in determining customer satisfaction – either perceptions (Akhlaq & Ahmed 2016:74; Akkucuk & Teuman 2016:183; Parasuraman et al. 2005:16) or

psychographics (Lal et al. 2015:75; Gupta & Bansal 2011:83; Hashim, Ghani & Said 2009:19) this thesis considers the two simultaneously. The methodology applied in this study therefore provides better explanation of phenomena.

(5) Another unique contribution of this study is related to (3) above. While few other studies compared two constructs, none studied two endogenous constructs. To illustrate, studies such as Rugimbana (1998:52) and Meuter et al. (2005:106) considered one endogenous and one exogenous variable. In the case of the former, culture and perceptions were studied and in the latter, perceptions and personal differences. Thus, the current study provides greater introspection into the efficacy of endogenous constructs – perceptions and psychographics.

7.6 IMPLICATIONS FOR THEORY

This study has implications for theory in relation to four theoretical issues. Firstly, the connection between electronic service quality sub-constructs and customer satisfaction. Secondly, the interaction that occurs among electronic service sub-constructs. Thirdly, on the effect of customer satisfaction on customer behavioural intentions. Fourthly, as to the role that is played by psychographics in forming different customer perceptions of electronic service quality.

The study implies that electronic service quality sub-constructs such as efficiency and contact have a significant positive effect on customer satisfaction. This outcome confirms various previous studies including Jiradilok et al. (2014:10) and Dolatabadi and Pool (2013:2321) that assert that efficiency and contact have a positive effect on customer satisfaction. At the same time, the study implies that electronic service quality sub-constructs that include responsiveness, fulfilment, privacy, compensation and system availability do not have an effect on customer satisfaction. This is in contrast to the findings of researchers such as Al-Nasser et al. (2016:228) and Aren et al. (2013:536) who found privacy and responsiveness to be influential on customer satisfaction.

The study implies that there is interaction among electronic service quality sub-constructs themselves. Thus, electronic service quality sub-constructs that include system availability and privacy have a significant positive effect on efficiency and contact respectively. Chen et al. (2013:473) and Chenet et al. (2010:336) also indicate that electronic service attributes such as privacy, contact and compensation interact with each other.

This study confirms the interaction between customer satisfaction and customer behavioural intentions. The study implies that customer satisfaction has a significant positive effect on customer behavioural intentions. This finding confirms the contributions from Akkucuk and Teuman (2016:183) that show that customer satisfaction is an important determinant of customer behavioural intentions. Kotler and Keller (2016:126) also state that customer satisfactions leads to reinforced behavioural intentions such as repeated purchase and customer referrals.

The study also provides insight into the role of psychographics in determining the differences in customer perceptions of electronic service quality, and furthermore that not all psychographic factors influence customer perceptions of electronic service quality (Kotler & Keller 2016:128; Akhlaq & Ahmed 2016:74). The study provides evidence that demographic factors such as age, gender, education and income do not lead to different customer perceptions of electronic service quality, but that customers' psychological profiles do influence perceptions of electronic service quality.

7.7 IMPLICATIONS FOR PRACTICE

This study provided not only new connections to theory but also numerous insights on how to improve practice in electronic service quality environments including online shopping stores. There has to be continuous improvement of electronic service quality practices in online shopping stores in order to retain

competitiveness. Following this reasoning the recommendations are made for online shopping stores, as follows:

7.7.1 PROVIDE CLEAR INFORMATION ON PRODUCTS AND SERVICES

It is of paramount importance that information regarding product and services is made clear to customers of online shopping stores. The information pertaining to the products in stock should have product specifications. This approach enables consumers to measure the ability of the products or services to satisfy their needs and wants. The online stores should also specify their respective delivery timeframes.

7.7.2 IMPROVE THE LOADING SPEED OF WEB PAGES

In has been found that customers are not happy with the speed in which the web page of online stores load. This study therefore recommends that Information Technology Engineers for the online stores should continuously seek software improvements to the loading speed of the web page.

7.7.3 DELIVER PRODUCTS AND SERVICES AT THE RIGHT TIME AND PLACE

It is important that sales and marketing departments understand agreed to delivery times. Understanding of delivery times is possible provided that there is effective and efficient communication within the organisation. Thus communication needs to be coordinated within relevant departments, for example financing, purchasing, marketing and distribution departments. The purchasing and supply department should stock in accordance to the advice provided by the marketing department. At the same time the marketing department should not promise what cannot be delivered by the distribution department.

7.7.4 DELIVER THE CORRECT PRODUCTS AND SERVICES AS ORDERED

This study found that customers are usually disappointed by the inability of the online stores to correctly deliver what has been ordered. The failure to deliver correct products can be due to incorrect operational processes. It is therefore important that a system is put in place to ensure effective and efficient operations that are able to deliver the right products and services.

7.7.5 PROTECT CUSTOMER INFORMATION

It is of great concern that customers are not happy with the level of information security offered by the online stores. It is therefore an indication that online stores are not doing enough to assure their customers that their personal information will be protected. Based on this customer security anxiety it is critical that online stores make use of software that provides encryption and other forms of protection for customer information.

7.7.6 COMPENSATE CUSTOMERS PROMPTLY AND FAIRLY

Research has shown that customer dissatisfaction is usually as a result of order mistakes on the side of the online store. Upon making such an order mistake, the online store should take the occasion as an opportunity to improve the service. Such an opportunity should be followed by a prompt correction of the mistakes.

7.7.7 APPLY MARKET SEGMENTATION ON THE BASIS OF CUSTOMER PSYCHOLOGICAL FACTORS

This study's findings demonstrated that there are significant differences in customer perceptions of electronic service quality among customers with different psychological profiles. It is therefore appropriate to sub-divide (segment) the market according to typical consumer psychological profiles. Online store practitioners should know that customers can be divided into innovators, survivors, thinkers, achievers, experiencers, believers, strivers and makers.

7.7.7.1 TAILOR MADE SERVICES FOR THINKERS

Provision of products and service should be informed by an understanding of these different customer lifestyle and personality, for example thinkers are motivated by standards and high resources. Thinkers are also known to favour durability, functionality and value in services and products.

7.7.7.2 PROVIDE SERVICES FOR BELIEVERS

Online store sales and marketing experts should know that there is a group of customers referred to as believers. This group of customers is made up of individuals who are strongly traditional with strong believe for rules and authority. It is important that online store top management put together policies and procedures that informs service operations. Believers are conservative who slowly embrace change and technology. Online store authorities should carry out a market test on the web page and ensure that it is user friendly.

7.7.7.3 CREATE SERVICES FOR ACHIEVERS

The service provision in online stores should serve the interest of a lifestyle customer group known as achievers. Achievers prefer premium products and services that demonstrate success to their peers. The needs and wants of achievers are catered for through the provision of premium products and services.

7.7.7.4 DEVELOP SERVICES FOR STRIVERS

There is also customer group referred to as strivers. Strivers emulate the lifestyle of wealth people, however they have limited resources. It is therefore important for online stores provide to provide stylish products that can be purchased at lower price.

7.7.7.5 CONSTRUCT SERVICES FOR EXPERIENCERS

Services and product offering should also cater for the needs and wants of a customer group called experiencers. Experiencers are motivated by self-expression and high resources. Online stores marketing specialists need to provide products and services related to fashion, socialisation and entertainment.

7.7.7.6 CREATE SERVICES FOR MAKERS

Online store service provision should consider the requirements of customer group referred to as makers. Makers are individuals who are motivated by self-expression and low resources. This customer group need to be provided with products and services that cater for family. These kind of products are usually basic instead of luxury.

The recommendations have been provided in this section add to the improvement of service delivery within online stores. These recommendations require an enabling environment. An enabling environment is created by every player in the organisation. Thus team work, effective delegation, communication, motivation and fair compensation of employees are necessary conditions that should be in place for effective and efficient electronic service quality to thrive.

7.8 LIMITATIONS OF THE STUDY

Like in many other academic studies, this study was accompanied by a number of limitations. Specifically, four limitations were found to be dominant in this study. These limitations were as follows, i) limited sample size, ii) the research duration, iii) research methodology employed and iv) the study model with only a selected constructs. These limitations are explained further in the next sub-sections.

The first limitation was associated with the sample utilised for this study. The sample population was comprised of customers at selected online stores in South

Africa. Not all South African online stores were included to obtain the respondents of this study. The findings of this study cannot be generalised to every South African online store. It is also important to remember that this study made use of a sample size that was 344. The sample size can be extended higher than the one employed in this study.

The duration of this research was two years. The research did not continuously capture the perceptions of customers on electronic service quality at South African online stores beyond the period of research. An extended time could have reflected the change in customer perceptions that occurs over time.

This research made use of quantitative research methodology. Hence, the benefits that comes with qualitative research methodology were forgone. Thus, the respondents could not get a chance to respond to the research questions in their own words. The researcher therefore missed an opportunity to fully gather the perceptions of customers without a boundary set by a structured questionnaire.

It has to be noted also that this study employed a single model of electronic service quality (Parasuraman et al. 2005:15). The model that was utilised is only limited to seven electronic service quality constructs that are efficiency, system availability, fulfilment, compensation, privacy, contact and responsiveness. This model therefore excluded other constructs for electronic service quality as specified by models such as the PIRQUAL, WebQual and the SiteQual (Francis & White 2005:89; Barnes & Vidgen 2002:67; Yoo & Donthu 2001:172).

7.9 DIRECTION FOR FUTURE RESEARCH

In this section, four directions for future research are specified. Future research can take one of the following forms, i) a larger sample than 344 employed in this study, ii) a duration longer than two years, iii) a study in a qualitative form and iv) use of other models not employed in this study. Direction for future research is explained further in the next sub-sections.

Since this study made use of 344 as a sample size, a future study could aim at enlarging the sample size. Thus a sample size much higher than 344 could be employed. Apart from the sample size, future researcher can also consider carrying out a comparison study. The comparison study could aim at comparing the perceptions of customers on electronic service quality of online stores in different countries. It will be interesting to carry out a study comparing online stores in different industries, for example the clothing versus the clothing online stores.

This study was carried out within two years, a future study could be carried out in a prolonged period thus for more than two years. This could assist in understanding possible changes in customer perceptions on electronic service quality. Thus longitudinal study could serve the purpose.

A qualitative study is also another route that can be pursued in a future research. Thus data collection can be done through use of interviews. Interviews will permit respondents to discuss free how they feel about electronic service quality of the online stores. Through a qualitative study a different data analysis technique can be employed.

The researchers in future can make use of electronic service quality models that were employed in this study. For example the PIRQUAL, WebQual and the SiteQual (Francis & White 2005:89; Barnes & Vidgen 2002:67; Yoo & Donthu 2001:172) offer different electronic service quality constructs and these could be employed for future studies.

7.10 CONCLUSION

The purpose of this study was to address the primary research objective, which was to develop a theoretical model of psychographic influences on customer satisfaction with electronic service quality. The associated research objectives were to utilise this theoretical model to: (i) assess customers' perceptions of electronic service quality at South African online stores, (ii) illustrate the effects of electronic service quality on customer satisfaction, (iii) measure the effects of customer satisfaction

on customer behavioural intentions, and (iv) determine how customers' perceptions of electronic service quality differ across different customer psychographic profiles. In line with these objectives, a theoretical model of electronic service quality was developed based on a review of the literature. The research questions and several hypotheses were formulated to operationalise the theoretical model and research findings provided a number of insights. Chapter 1 provided an outline of the research. In Chapter 2 and Chapter 3 the literature related to the research objectives was presented, leading to the presentation of the theoretical model of psychographic influences on customer satisfaction with electronic service quality. Chapter 4 discussed the methodology used to answer the research questions. Chapter 5 outlined the data analysis procedures and findings from the collected data. Chapter 6 presented the developed study model. Conclusions of the findings, recommendations and suggestions for further research were provided in Chapter 7.

Data analysis presented interesting findings. The perceptions of customers on electronic service quality were assessed. It was found that online shopping customers had negative perceptions of electronic service quality (efficiency, system availability, fulfilment, privacy, responsiveness, compensation and contact) in South African online stores. It was also found that electronic service quality sub-constructs that included efficiency and contact had a statistically significant positive effect on customer satisfaction. There was also no statistically significant effect found between electronic service quality sub-constructs such as system availability, privacy, responsiveness, compensation and fulfilment on customer satisfaction. Instead, the study found that system availability and privacy had a statistically significant positive effect on efficiency and contact respectively. Lastly, the study found that demographic psychographic attributes such as age, gender, education and income did not lead to significant differences in customer perceptions of electronic service quality, however, psychological profile was found to play a role in influencing different customer perceptions of electronic service quality.

The research findings have implications for both theory and practice. The research helps to refine a theoretical model of electronic service quality that provides evidence for the sub-constructs of service quality that influence customer satisfaction, and provides the theoretical justification for inclusion of customer

psychological profiles in a model of electronic service quality. The research findings are of importance for online store marketers and management who can use insights gained to tailor electronic services to customers' needs and wants to improve customer satisfaction and achieve competitive advantage.

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APPENDICES

APPENDIX A: INFORMED CONSENT AND QUESTIONNAIRE

Informed Consent Form University of the Western Cape

Title: Electronic service quality and customer satisfaction in South African online stores: role of psychographics on perceptions.

Researcher: Tarisai Fritz Rukuni 3689013

Please initial box

1. I confirm that I have read and understand the information sheet explaining the above research project and I have had the opportunity to ask questions about the project. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline. (If I wish to withdraw I may contact the lead researcher at any time) ☐

3. I understand my responses and personal data will be kept strictly confidential. I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the reports or publications that result for the research. ☐

4. I agree for the data collected from me to be used in future research. ☐

5. I agree for to take part in the above research project.

☐

_____	_____	_____
Name of Participant (*or legal representative*)	Date	Signature
_____	_____	_____
Name of person taking consent *(If different from lead researcher)*	Date	Signature

Tarisai Fritz Rukuni

_____	_____	_____
Lead Researcher	Date	Signature

(*To be signed and dated in presence of the participant*)

Copies: All participants will receive a copy of the signed and dated version of the consent form and information sheet for themselves. A copy of this will be filed and kept in a secure location for research purposes only.

Researcher:	**Supervisor:**
Tarisai Fritz Rukuni	Dr Garth van Gensen
Number 2 Goldenridge Flat 27 Abelia Road	Private Bag X17, Bellville 7535 Tel: 27 21 959 3187

INFORMATION SHEET FOR RESEARCH PARTICIPANTS

Dear Respondent

PARTICIPATION IN A STUDY OF THE ELECTRONIC SERVICE QUALITY AND CUSTOMER SATISFACTION IN SOUTH AFRICAN ONLINE STORES: ROLE OF PSYCHOGRAPHICS ON PERCEPTIONS MODEL DEVELOPMENT

The purpose of this letter is to invite you to participate in a research study being conducted through the School of Business and Finance, at the University of the Western Cape. The researcher is registered for a Doctoral degree in the School of Business and Finance at the University of the Western Cape.

The underlying theme of the research is to develop a model that shows how customers' perceptions of electronic service quality differ across different psychographic profile and (b) how electronic service quality sub-constructs influence satisfaction of customers with different psychographic profile. In order to undertake this study, 344 experienced online customers participated as participants. You have been selected to form part of the study. The research has a potentially broad impact of improving the service delivery of online stores in South Africa and at a global level, as well as to improve the management of online shopping in online stores.

Therefore, it would be appreciated if you could avail yourself and your time to complete the questionnaire, which should take approximately 15 minutes to complete and requires only a cross next to the relevant response. However, your participation in this research project is voluntary and you are allowed to withdraw from participating at any time.

The data collected will remain anonymous and confidential

Thanking you for your participation.

Supervisor	**Researcher**
Dr Garth van Gensen Position: Head of Department in EMS Faculty Tel: 021 959 3187 Email:	Fritz Tarisai Rukuni Student Number: 3689013 Tel: 073 418 1426 Email: tfrukuni@gmail.com

DECLARATION BY RESPONDENT

I hereby agree to participate in the completion of this questionnaire.

Signature of participant _____

SECTION A: DEMOGRAPHICS

1.What is your age in years?

18-25	1
26-35	2
36-45	3
46 +	4

2. What is your gender?

Male	1
Female	2

3.What is your race?

Black	1
White	2
Coloured	3
Indian	4

4. What is your level of education?

High school or less	1
Attending college or university	2
Hold a diploma	3
Hold a degree	4

Hold a postgraduate degree (honours/ masters/ doctorate)	5

5. What is your monthly net income level?

< R 10 000	1
R 10 001 – R 20 000	2
R 20 001 – R 30 000	3
R 30 001 +	7

SECTION B: PSYCHOLOGICAL PROFILE

In this section you choose only one response on the list of questions measuring your psychological profile classified as thinkers (T) believer (B) achievers (A) strivers (S) experiencers (E) and makers (M). You may indicate your answer by placing an (x) on one option.

Psychological Profile		
T	I consider the durability, functions and value of services and products when buying.	1
B	I prefer sticking to brands that I know when making a purchase.	2
A	My purchase is usually limited to products and services related to family and career.	3
S	Am attracted to trending and stylish products.	4
E	Am usually on the lookout for new products and services, fashion and entertainment.	5
M	I prefer sticking to brands that I know when making a purchase.	6

SECTION C: OPINIONS SOUGHT ON ELECTRONIC SERVICE QUALITY

In this section, please indicate the extent to which you agree or disagree with each of the following statements. You may indicate your answer by placing a cross (x) in your selected response, using the scale: (1) = Strongly Agree; (2) = Agree; (3) = Neutral; (4) = Disagree; (5) = Strongly Disagree.

Efficiency		Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
E1	The site makes it easy to find what I need.	1	2	3	4	5
E2	It is easy to get anywhere on the site.	1	2	3	4	5
E3	The site enable me to complete a transaction quickly.	1	2	3	4	5
E4	Information at the site is well organised.	1	2	3	4	5
E5	The site load its pages fast.	1	2	3	4	5

System Availability		Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
SA1	The site is always available for business.	1	2	3	4	5
SA2	The site launches and run right away.	1	2	3	4	5
SA3	The site does not crash.	1	2	3	4	5
SA4	Pages at the site do not freeze after I enter my order information.	1	2	3	4	5

Fulfilment		Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
F1	The site deliver orders when promised.	1	2	3	4	5
F2	The site make items available for delivery within a suitable time frame.	1	2	3	4	5
F3	They quickly deliver what I order.	1	2	3	4	5
F4	They send out the items ordered.	1	2	3	4	5

Privacy		Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
P1	They protect information about my Web-shopping behaviour.	1	2	3	4	5
P2	They do not share my personal information with other sites.	1	2	3	4	5
P3	The sites protects information about my credit card.	1	2	3	4	5

Responsiveness		Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
R1	They provide me with convenient options for returning items.	1	2	3	4	5
R2	The site handles product returns well.	1	2	3	4	5
R3	The site offer a meaningful guarantee.	1	2	3	4	5
R4	They tell me what to do if my transaction is not processed.	1	2	3	4	5

Compensation		Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
CO1	This site compensates me for problems it creates.	1	2	3	4	5
CO2	It compensates me when what I ordered doesn't arrive on time.	1	2	3	4	5
CO3	It picks up items I want to return from my home or business.	1	2	3	4	5

Contact		Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
C1	The site provides a telephone number to reach the organisation.	1	2	3	4	5
C2	The site have customer service representatives \available online.	1	2	3	4	5
C3	They offer the ability to speak to a live person if there is a problem.	1	2	3	4	5

Customer satisfaction		Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
CS1	Am happy with this online shopping site.	1	2	3	4	5
CS2	I like shopping through this online shopping.	1	2	3	4	5
CS3	I like the service provided by this online shopping site.	1	2	3	4	5
CS4	I find what I need from this online shopping site.	1	2	3	4	5

Customer behavioural intentions		Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
BI1	I say positive things about the site to other people.	1	2	3	4	5
BI2	I recommend the sites to someone who seeks my advice.	1	2	3	4	5
BI3	I encourage friends and others to do business with the site.	1	2	3	4	5
BI4	I consider the site to be my first choice for future transactions.	1	2	3	4	5

THANK YOU

APPENDIX B: STATISTICAL OUTPUTS

FREQUENCIES

FREQUENCIES

/VARIABLES= Age Gender Race Education Monthly_net_income Lifestyle

/FORMAT=AVALUE TABLE.

Age

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
18 – 25 years	1	48	13.95	13.95	13.95
26 – 35 years	2	91	26.45	26.45	40.41
36 – 45 years	3	109	31.69	31.69	72.09
46 years +	4	96	27.91	27.91	100.00
	Total	344	100.0	100.0	

Age

N	Valid	344
	Missing	0
Mean		2.74
Std Dev		1.02
Minimum		1.00
Maximum		4.00

Gender

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Male	1	175	50.87	50.87	50.87
Female	2	169	49.13	49.13	100.00
	Total	344	100.0	100.0	

Gender

N	Valid	344
	Missing	0
Mean		1.49
Std Dev		.50
Minimum		1.00
Maximum		2.00

Race

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Black	1	131	38.08	38.08	38.08
White	2	71	20.64	20.64	58.72
Coloured	3	71	20.64	20.64	79.36
Indian	4	71	20.64	20.64	100.00
	Total	344	100.0	100.0	

Race

N	Valid	344
	Missing	0
Mean		2.24
Std Dev		1.17
Minimum		1.00
Maximum		4.00

Education

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Attending college / less	2	24	6.98	6.98	6.98
Diploma	3	82	23.84	23.84	30.81
Degree	4	97	28.20	28.20	59.01
Postgraduate (honours/ masters/ doctorate)	5	141	40.99	40.99	100.00
	Total	344	100.0	100.0	

Education

N	Valid	344
	Missing	0
Mean		4.03
Std Dev		.96
Minimum		2.00
Maximum		5.00

Monthly-net-income

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Less than R10 000	1	65	18.90	18.90	18.90
R10 000 – R20 000	2	58	16.86	16.86	35.76
R20 001- R30 000	3	117	34.01	34.01	69.77
R30 001 +	4	104	30.23	30.23	100.00
	Total	344	100.0	100.0	

Monthly-net-income

N	Valid	344
	Missing	0
Mean		2.76
Std Dev		1.08
Minimum		1.00
Maximum		4.00

Lifestyle

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Thinkers	1	48	13.95	13.95	13.95
Believers	2	48	13.95	13.95	27.91
Achievers	3	48	13.95	13.95	41.86
Strivers	4	61	17.73	17.73	59.59
Experiencers	5	91	26.45	26.45	86.05
Makers	6	48	13.95	13.95	100.00
	Total	344	100.0	100.0	

Monthly-net-income

N	Valid	344
	Missing	0
Mean		3.71
Std Dev		1.64
Minimum		1.00
Maximum		6.00

DESCRIPTIVES

DESCRIPTIVES

/VARIABLES= E1 E2 E3 E4 E5 SA1 SA2 SSA3 SA4 F1 F2 F3 F4 P1 P2 P3 R1 R2 R3 R4 CO1 CO2 CO3 C1 C2 C3 CS1 CS2 CS3 CS4 B11 BI2 BI3 BI4

/STATISTICS= DEFAULT KURTOSIS SKEWNESS.

Valid cases = 344; cases with missing values(s) = 3

Variable	N	Mean	Std Dev	Kurtosis	S.E. Kurt	Skewness	S.E. Skew
E1	344	2.48	1.01	.07	.26	.59	.13
E2	344	2.52	1.09	-.18	.26	.63	.13
E3	344	2.40	1.02	.26	.26	.73	.13
E4	344	2.39	1.05	-.07	.26	.66	.13
E5	344	2.33	1.01	.21	.26	.69	.13
SA1	344	2.33	.88	.30	.26	.53	.13
SA2	344	2.31	.91	1.13	.26	.97	.13
SA3	344	2.34	.98	.03	.26	.52	.13
SA4	344	2.49	1.02	-.22	.26	.35	.13
F1	344	2.20	.95	.16	.26	.63	.13
F2	344	2.13	.92	.99	.26	.89	.13
F3	344	2.19	1.02	.00	.26	.70	.13
F4	344	2.17	.97	.58	.26	.83	.13
P1	344	2.21	.83	1.99	.26	1.03	.13
P2	344	2.20	.85	.90	.26	.72	.13
P3	344	2.19	.94	.36	.26	.65	.13
R1	344	2.35	.94	-.16	.26	.26	.13
R2	344	2.29	.95	.22	.26	.64	.13
R3	344	2.46	1.04	-.27	.26	.32	.13
R4	344	2.45	1.04	-.08	.26	.55	.13
CO1	344	2.24	.85	1.93	.26	1.30	.13
CO2	344	2.22	.80	1.80	.26	1.51	.13
CO3	344	3.27	1.05	-.63	.26	-.48	.13
C1	344	2.11	.73	1.78	.26	1.38	.13
C2	344	2.21	.79	1.28	.26	1.13	.13
C3	344	2.51	.95	0	.26	.50	.13
CS1	344	2.35	.85	.55	.26	.80	.13

CS2	344	2.35	.84	1.02	.26	.91	.13
CS3	344	2.51	.91	.2	.26	.67	.13
CS4	344	2.86	1.08	-.77	.26	.04	.13
BI1	344	2.85	1.12	-.87	.26	.16	.13
BI2	344	2.97	1.16	-.92	.26	-.12	.13
BI3	344	2.85	1.12	-.76	.26	-.01	.13
BI4	344	2.88	1.18	-.97	.26	.04	.13

Kaiser-Meyer-Olkin measure of sampling adequacy

Variable	KMO
E1	0.9375
E2	0.9378
E3	0.9467
E4	0.9644
E5	0.9429
SA1	0.9266
SA2	0.9372
SA3	0.9356
SA4	0.9315
F1	0.9362
F2	0.9334
F3	0.9296
F4	0.9133
P1	0.9179
P2	0.9076
P3	0.9533
R1	0.9348
R2	0.9510
R3	0.954
R4	0.9498
CO1	0.6611
CO2	0.6447
CO3	0.4015
C1	0.9007
C2	0.9398

C3	0.9529
CS1	0.9223
CS2	0.9020
CS3	0.9060
CS4	0.6023
BI1	0.9314
BI2	0.8994
BI3	0.9457
BI4	0.8938
Overall	0.9262

RELIABILITY

RELIABILITY

/VARIABLES= E1 E2 E3 E4 E5

/MODEL=ALPHA

Scale: ANY

Case Processing Summary

	N	%
Cases Valid	344	100.00
Excluded	0	.00
Total	344	100.00

Reliability Statistics

Cronbach's Alpha	N of Items
.88	5

RELIABILITY

RELIABILITY

/VARIABLES= SA1 SA2 SA3 SA4

/MODEL=ALPHA

Scale: ANY

Case Processing Summary

	N	%
Cases Valid	344	99.71
Excluded	1	.29
Total	344	100.00

Reliability Statistics

Cronbach's Alpha	N of Items
.86	4

RELIABILITY

RELIABILITY

/VARIABLES= F1 F2 F3 F4

/MODEL=ALPHA

Scale: ANY

Case Processing Summary

	N	%
Cases Valid	344	100.00
Excluded	0	.00
Total	344	100.00

Reliability Statistics

Cronbach's Alpha	N of Items
.87	4

RELIABILITY

RELIABILITY

/VARIABLES= P1 P2 P3

/MODEL=ALPHA

Scale: ANY

Case Processing Summary

	N	%
Cases Valid	344	99.71
Excluded	1	.29
Total	344	100.00

Reliability Statistics

Cronbach's Alpha	N of Items
.80	3

RELIABILITY

RELIABILITY

/VARIABLES= R1 R2 R3 R4

/MODEL=ALPHA

Scale: ANY

Case Processing Summary

	N	%
Cases Valid	344	100.00
Excluded	0	.00
Total	344	100.00

Reliability Statistics

Cronbach's Alpha	N of Items
.86	4

RELIABILITY

RELIABILITY

/VARIABLES= CO1 CO2 CO3

/MODEL=ALPHA

Scale: ANY

Case Processing Summary

	N	%

Cases Valid	344	100.00
Excluded	0	.00
Total	344	100.00

Reliability Statistics

Cronbach's Alpha	N of Items
.42	3

RELIABILITY

RELIABILITY

/VARIABLES= C1 C2 C3

/MODEL=ALPHA

Scale: ANY

Case Processing Summary

	N	%
Cases Valid	343	99.71
Excluded	1	.29
Total	344	100.00

Reliability Statistics

Cronbach's Alpha	N of Items
.67	3

RELIABILITY

RELIABILITY

/VARIABLES= CS1 CS2 CS3 CS4

/MODEL=ALPHA

Scale: ANY

Case Processing Summary

	N	%

Cases Valid	344	100.00
Excluded	0	.00
Total	344	100.00

Reliability Statistics

Cronbach's Alpha	N of Items
.62	4

RELIABILITY

RELIABILITY

/VARIABLES= BI1 BI2 BI3 BI4

/MODEL=ALPHA

Scale: ANY

Case Processing Summary

	N	%
Cases Valid	344	100.00
Excluded	0	.00
Total	344	100.00

Reliability Statistics

Cronbach's Alpha	N of Items
.89	4

FACTOR

FACTOR

/VARIABLES= E1 E2 E3 E4 E5 SA1 SA2 SA3 SA4 F1 F2 F3 F4 P1 P2 P3 R1 R2 R3 R4 CO1 CO2 CO3 C1 C2 C3 CS1 CS2 CS3 CS4 BI1 BI2 BI3 BI4

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative
1	11.70	34.41	34.41
2	2.94	8.66	43.07
3	2.02	5.93	49.00

4	1.60	4.72	53.71
5	1.34	3.93	57.64
6	1.22	3.57	61.21
7	.98	2.88	64.09
8	.95	2.79	66.88
9	.90	2.64	69.52
10	.86	2.53	72.05
11	.83	2.45	74.50
12	.69	2.01	76.51
13	.65	1.92	78.43
14	.57	1.68	80.11
15	.52	1.54	81.65
16	.49	1.45	83.10
17	.45	1.34	84.43
18	.45	1.31	85.74
19	.42	1.24	86.98
20	.40	1.18	88.16
21	.39	1.14	89.30
22	.37	1.08	90.38
23	.35	1.03	91.41
24	.33	.98	92.40
25	.33	.96	93.36
26	.31	.90	94.26
27	.30	.88	95.14
28	.28	.81	95.96
29	.27	.80	96.76
30	.25	.74	97.50
31	.24	.70	98.20
32	.22	.65	98.84
33	.21	.62	99.46
34	.18	.54	100.00

Variable	Factor score
E1	.63
E2	.72
E3	.70
E4	.75
E5	.67
SA1	.64
SA2	.68
SA3	.71
SA4	.66
F1	.59
F2	.60
F3	.56
F4	.55
P1	.54
P2	.57
P3	.67
R1	.68
R2	.70
R3	.71
R4	.74
CO1	.20
CO2	.15
CO3	.05
C1	.45
C2	.61
C3	.55
CS1	.56
CS2	.59
CS3	.50
CS4	-.07
BI1	.50
BI2	.56
BI3	.60
BI4	.53

Structural Equation Model

Conceptual theoretical model

	Coef.	OIM Std. Err.	z	P > I z I
Structural				
Customer satisfaction < -				
Efficiency	.1538513	.0704585	2.18	0.029
System availability	.1564602	.0697601	2.24	0.025
Fulfilment	-.0867075	.0573631	-1.51	0.131
Privacy	.1446487	.0715753	2.02	0.043
Responsiveness	.1108052	.0698625	1.59	0.113
Contact	.8351328	.1414115	5.91	0.000
Behavioural intentions < -				
Customer satisfaction	.8333391	.0930994	8.95	0.000
LR test of model vs. saturated: chi2 (344) = 1566.26, Prob > chi2 = 0.000				

Fit statistic	Value	Description
Likelihood ratio		
chi2_ms (398)	1566.263	Model vs. saturated
P > chi 2	0.000	
chi2_bs (435)	6159.168	Baseline vs. saturated
p > chi2	0.000	
Population error		
RMSEA	0.093	Root mean squared error of approximation
90% CI, lower bound	0.000	
upper bound		
pclose		Probability RMSEA < = 0.05
Information criteria		
AIC	23812.804	Akaike's information criterion
BIC	24184.496	Bayesian information criterion
Baseline comparison		
CFI	0.796	Comparative fit index
TLI	0.777	Tucker-Lewis index
Size of residuals		
SRMR	0.285	Standardised root mean squared residual
CD	1.000	Coefficient of determination

Structural Equation Model: Modified conceptual theoretical model

	Coef.	OIM Std. Err.	z	P > I z I
Structural				
Efficiency < -				
System availability	.870492	.0876326	9.93	0.000
Customer satisfaction < -				
Efficiency	.1985253	.0501069	3.96	0.000
Contact	.943362	.1547382	6.10	0.000
Contact < -				
Privacy	.2854427	.0531262	5.37	0.000
Customer behavioural intentions < -				
Customer satisfaction	.8195189	.0928801	8.82	0.000
LR test of model vs. saturated: chi2 (59) = 149.24, Prob > chi2 = 0.000				

Fit statistic	**Value**	**Description**
Likelihood ratio		
Chi2_ms (183)	505.239	Model vs. saturated
P > chi 2	0.000	
Chi2_bs (351)	3866.176	Baseline vs. saturated
P > chi2	0.000	
Population error		
RMSEA	0.072	Root mean squared error of approximation
90% CI, lower bound	0.064	
upper bound	0.079	
pclose	0.000	Probability RMSEA < = 0.05
Information criteria		
AIC	16414.125	Akaike's information criterion
BIC	16678.525	Bayesian information criterion
Baseline comparison		
CFI	0.912	Comparative fit index
TLI	0.901	Tucker-Lewis index
Size of residuals		
SRMR	0.176	Standardised root mean squared residual
CD	0.979	Coefficient of determination