



CONSUMER PERCEPTIONS OF GREEN PRODUCTS, PURCHASING BEHAVIOUR AND LOYALTY

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DECLARATION

I declare that:

“Consumer perceptions of green products, purchasing behaviour and loyalty” is my own work, that all the sources used or quoted have been identified and acknowledged by means of complete references, and that this thesis has not previously been submitted by me for a degree at any other university.

Signed: _____



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I certify that the above statement is correct.

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ABSTRACT

Green products have gained prominence on the market largely due to their perceived benefits of environmental sustainability. In view of the growth in influence of green products, the objectives of the study were to determine the impact of product quality on purchase intention for green products; ascertain the influence of environmental concerns on purchase intention for green products; establish the influence of situations affecting green product purchase on purchase intentions for green products; establish the impact of preference for green products on purchase intention and to assess the impact of purchase intention on re-purchase intention of green products. To establish these facts the study adopted a quantitative methodology, which made use of a self-reporting questionnaire which was administered to consumer households as the target population. For the suburban areas and locations, simple random sampling was done by arbitrarily picking out a number from the housing list secured from the Municipality. In the city center, convenience sampling was done by arbitrarily approaching consumers buying in shopping malls. The 497 responses received were accepted as the sample size of this study. Data collected was captured and analysed on Statistical Package of Social Sciences (SPSS) v22.0 and Analysis of Moment Structures (AMOS) v 24.0 to yield descriptive and inferential statistics. Structural Equation Modelling was then used to provide estimates of the strength of all the hypothesised relationships.

The key findings of the study were that green purchase intention was significantly and positively influenced by product quality, environmental concern, preference for green products, environmental responsibility and selection attributes, but not by situations affecting purchase behaviour. Purchase intention has a strong correlation with re-purchase intention. The implications of the findings to marketers are that they need to formulate and implement green marketing strategies to improve consumer perceptions of green products. It is also suggested that marketers drop deceptive marketing practices that cause consumers to be skeptical about green products. Future research may need to be directed at green marketing practices to see what business is doing to enhance the adoption of green products by consumers.

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LIST OF ACRONYMS

PQ	Product quality
PI	Purchase intention
EC	Environmental concern
RI	Re-purchase intention
PGP	Preference of green products
SA	Situations affecting green product purchase

CHAPTER ONE

ORIENTATION AND OVERVIEW OF THE STUDY

1.1 Introduction

This chapter provides an overview of purchasing behaviour and consumption related behaviour. It also deals with consumer awareness and responsible consumption. The concepts are discussed in relation to environmentally-friendly products, technically known as green products. There is a general trend where consumers are abandoning non-green products for environmentally-friendly green products. This behavioural change is the result of growing environmental problems such as climate change, global warming, carbon dioxide emissions and natural resource depletion. The chapter also provides a detailed outline of the rationale and relevance of the study, aim of the study, hypotheses, research objectives and the structure of the thesis.

1.2 Purchasing and Consumption Related Behaviour

Worldwide, it appears there is an increased awareness of the dangers of environmental degradation by consumers and organisations at large. Individuals and entities are putting environmental issues at the forefront when deciding on which products to purchase (McDonald and Oates, 2006:157). This is largely due to an increase in environmental degradation as a result of pollution, resource wastage and ozone layer depletion, amongst other causes. There is now global consensus that unsustainable consumption patterns result in ecological imbalance and ultimately translate into environmental degradation (Hume, 2010:386). Gradually, consumers are realising the need to take a lead in environmental preservation, which may be achieved by abandoning non-green conventional products for green products.

Paul and Rana (2012:413) describe 'green products' as those that are environmentally safe and whose production processes are considered to be environmentally sound. Examples of environmentally-friendly products include products with chemical

compositions that are environmentally-friendly and suitable to recycle (Alsmadi, 2007:342); food items whose manufacturing process does not involve pesticides or harmful chemicals (Thogersen, 2006:149); and energy-saving home appliances (Young *et al.*, 2010:23).

Rakhsha and Majidazar (2011:755) claim that green marketing gained prominence in the late 1980s as an outcome of increased environmental concern and the advent of green consumerism. Historically, green products originated from the United States of America during the 1980s, with consumers demonstrating interest in aspects such as products that are healthy for consumers, carbon free, recyclable and energy efficient (Elliott, 2013:296).

Ko, Hwang and Kim (2013) propound that the increased usage of green products is at the epicenter of the trend towards sustainable consumption by consumers. Consumers are now more worried about the environmental impact of their purchase decisions. On a sombre note, Zhu, Li Geng and Qi (2013:2008) observe that not much is known about green products, despite the greater need to increase their consumption. Furthermore, Chang (2011:20) posits that consumers typically perceive green products as being more expensive and/or of lower grade relative to conventional products. Consumers are unwilling to compromise on aspects such as price, quality, value and performance just for the sake of buying green products.

The growing interest of consumers in environmental protection has compelled many companies to actively involve themselves in making their products greener. The proliferation of environmentally-friendly products has been aided by a thrust on the part of marketers to promote environmentally-friendly products better known as 'green marketing'. The consumer's desire for environmentally-friendly products gave a cue to marketers to start emphasising greenness in their market offerings. At the epicenter of green products promotion are typical terms like energy saving products, healthy foods, recyclable/re-usable packages and carbon-free products.

Green products are a largely new phenomenon to developing countries. In Zimbabwe, noticeable green products are energy saving bulbs, computers, refillable/ reusable

consumer product packages, solar energy systems, ethanol blended fuel and washing machines, amongst others. To hasten the growth of a green economy, the government has weighed in by crafting an environmental policy aimed at integrating environmental aspects into national development plans. The broad objectives of Zimbabwe's environmental policy have been described by Chari, Zivanai and Kandenga (2016:217) as:

- a) Optimal use of natural land and water resources to improve the quality of the environment;
- b) Sustainable utilisation of natural resources and;
- c) Attaining ecological balance through bio-diversity, tackling disaster effects and ozone layer protection. .

There are examples of specific government actions that encourage the consumption of green products such as the introduction of energy saving bulbs in 2011. Genetically modified foodstuffs have also been banned and this has been augmented with an increased promotion of organic foods. In 2011, all fuel stations were ordered not to sell leaded fuel in favour of E10, a green fuel with large components of ethanol.

The motivation of this thesis was to determine the relationship between consumer perceptions of green products, purchasing behaviour and loyalty. Studying consumer perceptions of green products will inform marketers about what consumers like or dislike with regard to green products, thereby helping them to make product improvements. Understanding green purchase behaviour will greatly aid in the crafting of marketing strategy. Lastly, studying green consumer loyalty aids in improving customer retention efforts.

1.3 Consumer Awareness and Responsible Consumption.

Globally, consumers have an increasing awareness of the impact of their purchase decisions. Biloslavo and Trnavcevic (2009:1159) have observed that more than 50% of interviewed global consumers would choose to buy products from companies with a good environmental reputation base. Similarly, Zaman, Miliutenko and Nagapetan (2010:109) point out that, worldwide, there is a noted drift towards green consumerism, revealing that consumers now prefer products with environmental attributes over conventional products. This resonates with Chen and Chai's (2010:27) observation that global warming effects have created shockwaves and have resulted in heightened interest in sustainable consumption and environmental preservation. Consumers are beginning to recognise their role in the greater effort to maintain a sustainable environment.

This increased awareness of environmental challenges means that consumers' perceptions of green products have improved. More than ever, consumers can effectively select, organise and interpret sensations into a meaningful whole. Sensation refers to the response of consumer sensory receptors (eyes, ears, mouth, nose, touch) to environmental stimuli (Schiffman and Kanuk, 2004:159). This process is also supported by Kotler and Armstrong (2014:172) who describes perception as the process by which people select, organise and interpret information to generate a meaningful picture of the world. Consumers will thus have standing beliefs of the nature of green products and how they are different from non-green products.

The resulting perception about a product has implications on whether the product is purchased or not. Lee (2009:87) describes green purchasing behaviour as the act of consuming products that align with a consumer's environmental concerns and that are beneficial for the environment. Similarly, Steg and Vlek (2009:309) state that green purchase behaviour involves purchase decisions that result in customer satisfaction, with minimum damage to the environment.

Consumer satisfaction, or otherwise, with a product easily determines whether or not the product will be re-purchased. Conceptually, consumer loyalty is described as a

deeply held commitment to re-buy a preferred product consistently despite situational influences (Oliver, 2007:392). By explaining it as “deeply held commitment”, the author highlights the attitudinal dimension of loyalty. The description goes on to pinpoint repetitive behaviour, revealing some behavioural aspect of customer loyalty.

Consumer loyalty is also explained from an environmental standpoint. Green consumer loyalty has been described as a consumer’s longing for a relationship with an institute which has environmental concerns through re-purchasing the institute’s products regularly. Another contention is that green consumer loyalty is the desire to continuously buy a green product even at a higher price than other products (Chang and Fong, 2010:2837).

1.4 Rationale for the study

Extant literature on green products has concentrated on studying singular concepts like consumer perceptions, purchasing behaviour or consumer loyalty, with not much effort on finding the relationship between such phenomena. Noted studies that have attempted to link variables include: Consumer attitude and perception towards green products (Yusuf and Fatima, 2015:141); Green product quality, green customer satisfaction and green customer loyalty (Asgharian, Salehi, Saleki, Hojabri, Nikkheslat, 2012); and Customer environmental satisfaction and loyalty in the consumption of green products (Suki, 2015). There are no known studies that link green product consumer perceptions, purchasing behaviour and loyalty.

Whilst a lot is known about consumer perceptions, purchasing behaviour and consumer loyalty, not much is known about the relationship between the three constructs. This study sought to establish the relationship between consumer perceptions; purchasing behaviour and consumer loyalty with regard to green products. In addition, many studies on green products have been done on developed countries, with not much on developing nations. Save for South Africa, there are scant studies on green products conducted in most parts of Africa. This study has shed light on consumer perception of green products, purchasing behaviour and loyalty in the Zimbabwean context.

1.5 Relevance of the study

The global scale of environmental deterioration poses a risk to the livelihoods of current and future generations, thus necessitating a change in consumption practices (Belz and Peattie, 2009:10). It is important that environmental issues are given prominence so that consumers are wary of the impact of their consumption activities. This study weighs in to the environmental debate on the viability of green products as a solution to ecological problems. Studies thus far, have produced conflicting positions on green purchasing behaviour. For example, other researchers found that while consumers are environmentally concerned, this did not translate into environmentally-friendly behaviour (Ali, Khan and Ahmed, 2011:224; Chang, 2011:19; Rahbar and Wahid, 2011:74). In contrast, other studies (Gupta and Ogden, 2009:376; Rahbar and Wahid, 2011:73; Sodhi, 2011:177) found out that consumers were not only willing to buy green products, but were even ready to pay a fortune for them.

Today's market place is so competitive that attracting and retaining consumers is a mammoth task for marketers (Zakaria *et al.*, 2011:35). It is important that marketers understand consumer loyalty dimensions to enable them to maintain their customer base. Marketing managers, especially in developing countries, are still striving to understand the features of the emerging green market (Albayrak *et al.*, 2011:189).

Scientific research is necessary to guide businesses, consumers and governments to achieve sustainability goals. Kaufmann, Panni and Orphanidou (2012:50) point to the dangers of environmental degradation attributed to human consumption behaviours. The knowledge generated by this study is anticipated to assist stakeholders to appreciate green products' usefulness.

This study therefore sought to bridge this knowledge gap by providing insights into the importance of green products. This analysis becomes more relevant in the Zimbabwean context because there is lack of evidence on notable studies on green products in Zimbabwe. There are no known works that have examined green product perceptions, purchasing behavior and loyalty in the Zimbabwean context.

1.6 Research Problem

Although consumer perceptions, purchasing behavior and consumer loyalty are well established variables in terms of literature, there are still unclear positions when these variables are studied in relation to green products. The situation is further exacerbated when analysed in a developing country context where such products are fairly new.

Despite the remarkable growth of green products, many researchers insightfully observed that the increased environmental awareness is not corresponding to increased purchase of green products (Peattie, 2001:137; Gupta and Ogden, 2009:376; Tan and Lau, 2011:559; Chang, 2011:19). An observable gap has been noted between environmental concerns and the actual purchase of green products despite the reported consumer increased awareness of environmental problems. This has been called the 'green paradox' where reported environmental concern has not translated into increased green product purchase (Park and Lee, 2014:572).

Furthermore, previous findings on environmentally-friendly products are conflicting. While some studies established that consumers rate conventional products higher on quality than environmentally-friendly products, other studies such as Vernekar and Wadhwa's (2011:67), have reported the opposite. Contradictions have also been reported where studies found that consumers are prepared to pay a premium price for green products (Pirani and Secondi, 2011:67) and in other studies that is not true (Vernekar *et al.*, 2011:67). These contradictions suggest that further studies are needed to investigate these issues.

Despite the remarkable growth of green products, marketers have not had full grasp of the issues surrounding green products adoption. Research has been inconclusive on the antecedents of green purchase behaviour (Atkinson and Kim, 2014:3). It is thus pertinent to establish the factors that enhance green product consumption.

No prior work in Zimbabwe has been found linking consumer perceptions, purchasing behaviour and consumer loyalty. Most of the studies on green products in Africa have been conducted in South Africa and have largely concentrated on antecedents to pro-environmental behaviour, for instance; environmental attitude (Synodinos, Bevan-Dye

and De Klerk, 2013:22, Gupta and Ogden, 2009:385); environmental concern (Rahbar and Wahid, 2011:73; Haytko and Matulich,2008:2); perceived environmental knowledge (Mostafa, 2007); perceived behavioural control (Al-Debei *et al.*, 2013); green purchase intentions (Ali *et al.*,2011:218, D'Souza, Taghian, and Khosla, 2007:72; Mostafa, 2007:448); values (Dietz *et al.*, 2005:336); demographic factors (Lee, 2009:91; Rezai, Teng, Mohamed and Shamsudin, 2013:4); and subjective norms (Han *et al.*, 2010:237).

This study therefore found it convenient to study the relationship between consumer perception of green products, purchasing behaviour and loyalty. Specifically, it seeks to establish if favorable consumer perceptions of green products lead to actual purchasing behaviour and more so, increased loyalty to the same products.

1.7 Aim of the study

The overarching aim of the study was to establish the extent to which product quality, environmental concern, preference and prevailing situations impact on purchase intention and repurchase intention or loyalty.

1.8 Research Objectives

The following objectives were set for the study:

- To determine the impact of product quality on purchase intention for green products;
- To ascertain the influence of environmental concerns on purchase intention for green products;
- To establish the influence of situations affecting green product purchase on purchase intentions for green products;
- To establish the impact of preference for green products on purchase intention; and
- To assess the impact of purchase intention on re-purchase intention of green products.

1.9 Hypotheses

The study sought to test the following hypotheses;

- H1: Product quality positively impacts on the purchase intention of green products
- H2: Environmental concern positively influences the purchase intention of the green products
- H3: Situations affecting green product purchase positively influences the purchase intention of green products
- H4: Preference for green products positively influences the purchase intention of green products
- H5: Purchase intention of green products positively impacts on re-purchase intention of green products

1.10 Delimitations of the Study

The primary objective of the study was to determine factors that influence consumer perceptions of green products, purchasing behaviour and loyalty. The present study focused on consumers in Zimbabwe, using a sample drawn from residential areas and the city centers. Town areas were considered for the study because it was deemed green products are largely purchased by the working population. The following provincial towns of Zimbabwe were included in the study; Bindura, Chinhoyi, Gweru and Marondera.

1.11 Structure of the thesis and Chapter outline.

Chapter One highlights the problem of environmental degradation and the call for sustainable consumption, which saw the emergence of green products as a panacea. It provides a background to the study, then goes on to present the rationale of the study and finally the relevance of the study. This chapter also presents the aim and objectives of the research.

Chapter Two, Three and Four presents literature review on the three main constructs of the study; consumer perception, purchasing behaviour and consumer loyalty. Chapter Two, deals with green product and sustainable consumption. Chapter Three follows with deliberations perception and purchasing behaviour. Chapter Four then present consumer loyalty. The focus of Chapter Five is on the theoretical background of the research methodology employed in collecting and analysing the data captured in the study. The chapter begins with a discussion of the rationale for research, research design, research philosophy and research strategies. The target population, sampling method and research instrument are clearly laid out in this chapter. Lastly, an outline of the pilot study, validity and reliability, data collection process, data analysis and discussion are provided.

Chapter Six then present the empirical findings of the study. Within the chapter, there is a description of the sample, together with a descriptive and inferential statistical analysis of research data. The study hypotheses are also tested and reported on in this chapter. Chapter Seven provides a review of the entire study and the conclusions observed from the study. In addition, it stipulates the recommendations emanating from the findings of the study. Suggestions for future research are also made within this chapter.

The next chapter provides a review of related literature on green products and sustainable consumption

CHAPTER TWO

GREEN PRODUCT AND SUSTAINABLE CONSUMPTION

2.1 Introduction

In this chapter scholarly work on green products and sustainable consumption are reviewed. The purpose is to link the adoption of green products to the current drive to attain sustainable consumption. The approach to this review conducting a conceptual development of the constructs under study, green product and sustainable consumption. In this chapter the origin of the sustainable consumption theory is also explored.

2.2 Green product

Green products are characterized by a green manufacturing process and a low environment impact. Thøgersen (2006:149) posits that the chemical composition of green products is such that they are environment-friendly and suitable for recycling. This is confirmed by Alsmadi (2007:342) who states that green products are not harmful for the environment or have a low impact on the environment. Similarly, Durif, Bolyin and Julien (2010:31) describe a green product as a product whose design uses recyclable resources and improves environmental impact or reduces environmental toxic damage throughout its entire life cycle. This is confirmed by Mishra and Sharma (2012:36) who states that green products are originally grown, are recyclable, reusable and bio-degradable, have natural ingredients, contain recycled contents, non-toxic chemical, do not harm or pollute the environment, are not tested on animals and have eco-friendly packaging.

The explanation above indicates that there is some inferred naturalness in the composition of green products and that they are largely explained from an environmental viewpoint. Consumers often find themselves in a difficult position with regard to the choice of products as there are too many brands to choose from. For consumers of green products the situation is compounded by the fact that the products are pretty novel and there are still some unsubstantiated claims about the products.

However, depending on the situation consumers often resort to some inherent attributes associated with particular green products. It is therefore important to identify selection attributes for green products that assist consumers in coming up with a choice of a green product brand in the midst of a vast array of available brands.

One of the earlier scholarly works on the selection attributes of green products comes from Sheth *et al* (1991). These scholars identified a number of attributes that form the basis of the discussion below.

2.2.1 Green functional value

Functional value, according to Sheth *et al* (1991:160) is achieved when product is able to satisfy a consumer's utilitarian needs. Consumers are utility seekers who seek to maximise satisfaction through making the correct product choice. Thus, consumers of green products should be environmentally conscious individuals who seek to preserve the environment. Consistent with this view, Elliot (2013:299) states that a green consumer, who is principally driven by functional value, considers the costs and benefits of green products when purchasing. Essentially, the consumer looks at the accrued environmental benefits to purchasing the product against the costs of acquiring the product. A consumer with a high level of environmental concern will first consider the utility that comes from using a green product before all else.

2.2.2 Green social value

A consumer's quest to identify with a significant social group may influence the individual to comply with the expectations of others. (Webb, Mohr and Harris 2008:93). For instance, a consumer who may want to associate with an environmentally sensitive group may have to drop conventional products for green products. This resonates with Ashworth and Matar's (2009:129) view that consumption behaviour appears to be influenced by the quest to satisfy social value needs such as social identification, self-presentation, symbolism and belongingness. Consumers often seek approval of their product purchases from their esteemed reference group.

2.2.3 Green emotional value

The view of Sheth *et al.* (1991:161) is that motional value is attained when a consumer has positive feelings aroused by their product purchase. This implies that the purchase and use of green products has more to do with the feelings of the individual than anything else. Lin and Huang (2012:16) observe that consumers who buy green products are driven by the intrinsic feelings of doing something good, both for their own well-being and that of society. Consumers engage in pro-environment behaviours in order to satisfy emotional values. Similarly, Koenig-Lewis *et al.* (2014:97) contend that the introduction of green products in the market stimulates favourable emotions as consumers perceive green purchase behaviour as a potential solution to environmental problems. It is the pleasant feeling that the usage of green products elicits that satisfies the consumer.

2.2.4 Green conditional value

Conditional value results from satisfaction derived from the obtaining situational factors at the time of the purchase. The purchase of green products is a reaction to the prevailing situation (Sheth *et al.*, 1991:162). Gadenne *et al.* (2011:7686) contend that consumers who are confronted with environmental problems will understand the implications of their consumption behaviour for the environment and will react appropriately. The environmental problems will make the consumer realise the need to alter their consumption patterns and change for those that enhance the well-being of the environment.

2.2.5 Green epistemic values

Epistemic values have been described as the satisfaction with product novelty. Consumers are adventurous and often want to be the first to be associated with new things (Sheth *et al.*, 1991:162). Epistemic values are particularly important for green consumers who may want to express themselves through product choices. Often, such

consumers have an insatiable quest to fulfill meta-needs and need to be recognised as knowledgeable trendsetters (Kinley, Josiam and Lockett, 2010:563).

2.3 Conceptual development of sustainable consumption

A number of theories have been expounded to explain sustainable consumption, but none did so with the utmost satisfaction as the signalling theory. The theory is chosen because central to it is the effort to link environmental conservation and consumption habits. It suits the object of this study which is to explain why consumers prefer green products to conventional products. Its usefulness has also been proven in studies that include signalling theory, strategic interaction and symbolic capital (Bird and Smith, 2005:46). Basuroy, Desai, and Talukdar, (2006:287)) conducted an empirical investigation of signalling in the motion picture industry. Branzei, Ursacki-Bryant, Vertinsky and Zhang,(2004:1075) studied the formation of green strategies in Chinese firms, where they matched corporate environmental responses and individual principles

The questions to answer are what is sustainable consumption? What are the dimensions of sustainability? What are the approaches to sustainable consumption and who are the parties to sustainable consumption and what challenges do these parties face? To answer these questions, a look is taken on the theories of sustainable consumption.

2.3.1 The basic theory of sustainable consumption

As was indicated earlier, this study draws from the signalling theory which is based on gesticulating one's attributes in order to gain some kind of social advantage. The signalling theory is central to the study as it aims to find out what kinds of attributes an individual is signalling to others with his/her consumption of green products. It is assumed that green products consumption can be used to signal pro-social attributes. The basis of this discourse is that consumption of green products is assumed to be symbolic consumption loaded with symbolic value, with which the person is signalling to others ones values, identity or some other symbolic capital possessed by him or her

(Bird and Smith, 2005:46). This is supported by the work of Griskevicius *et al.* (2012:115) who propound that people are perceived as pro-social in relation of purchasing green products. The signalling theory provides insight into human behaviour by aiding to the understanding of why people consume the way they do. Griskevicius *et al.* (2010:392) reason that people are motivated to green consumption more on social account than for environmental reasons. This perspective accentuates the signalling value and people are inclined to associate responsibility. The signalling theory as it is used in pro-environmental behaviour research combining economic, social and evolutionary approaches examines communication between individuals or individual and society. Contributing to this discourse, Han, Nunes and Dreze (2010:15) state that the signalling theory aims to provide information how certain actions might signal hidden traits that provide benefits to both, the signaller as well as to the receiver.

Consistent with the above discussion, Elliot (2013:294) postulates that green goods are consumed as an expression of taste, which signals social status. To purchase green products, a person will have gathered a certain amount of knowledge about the products. The consumer is assumed to have certain attitudes and ethical values and gained knowledge on the vital link between consumption habits and environmental conservation. So even mundane sustainable products may convey certain attributes of the consumer, and provide a signal to other consumers to follow suit by purchasing the products. Thus if the perceiver possess similar taste to the sender of the signal, the signal is perceived correctly and the former buys the product.

2.3.2 Sustainable consumption

According to Berntley, Fien and Neil (2005:2) sustainable consumption is characterised by common features such as minimising resource use, waste and pollution, satisfying basic human needs, prioritising quality of life over materialism and factoring this into consumer decision making. Dolan (2002:172) agrees stating that sustainable consumption is the use of goods and services that respond to basic needs and bring better quality of life, while minimising the use of natural resources, toxic materials and

emission of waste and pollutants over the life cycle, so as not to jeopardise the needs of future generations. Consistent with the above discussion, Brakman (2014:23) states that sustainable consumption is consumption that supports the ability of current and future generations to meet their material and other needs, without causing irreversible damage to the environment or loss of function in natural systems.

2.3.3 The Rise of Sustainable Consumption

The emergence of green consumers is the driving force behind the growth sustainable consumption. Green consumerism oversaw a trend towards the adaption and entrenchment of sustainable consumption lifestyles among consumers (Hessami, Yousefi and Goudarzi 2013:10). Sustainable consumption patterns have grown exponentially in recent years, as demonstrated by the increased number of consumers engaging in pro-environmental behaviours (Zhu, Li, Geng and Qi, 2013:279). The shift towards sustainable consumption resulted in the evolution of consumers into independent economic participants accorded the responsibility of enhancing the wellbeing of the environment (Autio, Heiskanen and Heinenen 2009:40). Gadenne *et al.* (2011:7687) weighs in pointing out that human-induced climate change, disintegrating biodiversity and degraded ecosystems has led to the adoption of sustainable practices by consumers.

Ottman (2011:1) adds that the growth in environmental concern has seen sustainable consumption emerge as a major phenomenon unlocking a niche market of green consumers. Contributing to this discourse, Bantye *et al.* (2010:374) suggest that a thorough appreciation of the characteristics of green consumers is essential for marketers in formulating effective green marketing strategies. This is supported by Husted *et al.* (2013:3) who propose that marketers launch green products en masse to create sustainable competitive advantage by targeting environmentally conscious consumers. On another dimension sustainable consumption is being enhanced by governments who are crafting environment laws and regulations to enhance pro-environmental behaviour (Mostafa, 2009:11031).

2.3.4 Dimensions of sustainability

Fundamental to the understanding of sustainable consumption is an analysis of the dimensions of sustainable consumption. These include environmental (Moisander, 2007:406), economic (Hans and Bohm 2011:679,683) and social dimensions (Peattie and Collins (2009:108)).

The environmental dimension explains sustainability as preservation of natural resources, ranging from oil resources to fish stock. The environmental dimension is important as there are many concerns related to waste and air pollution. Moisander (2007:406) stresses that consumers need to take responsible purchase and consumption decisions and think about sustainability in everyday routines to be able to protect the natural environment. This dimension in particular is important with regard to the importance of green products as a panacea to environmental problems.

The social dimension sees sustainability as promoting equal opportunities for all and increasing the quality of life of the poor society and is linked to values and attitudes.

The economic dimension sees economic growth as an important factor in securing human wellbeing (Hans and Bohm, 2011:679). These dimensions of sustainability are illustrated in Figure 2.1 below.

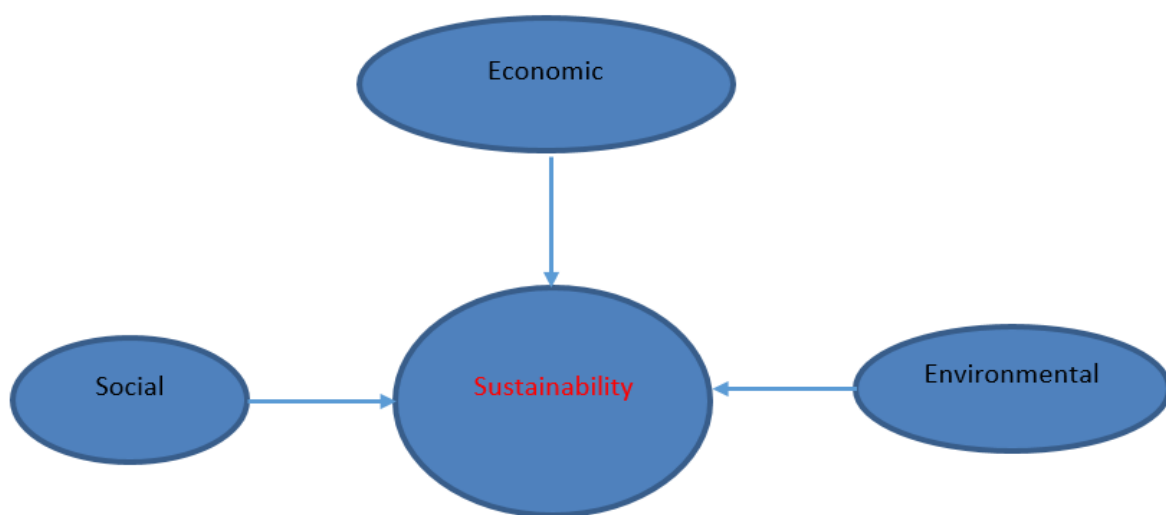


Figure 2.1: Dimensions of sustainability. (Adapted from Hans and Bohm, 2011:679)

2.3.5 Parties involved in sustainable consumption

Casimir and Dutilh (2003:317) have modelled the interactions of the various parties involved in sustainable consumption. In the authors' illustration, consumers are depicted as aiming to consume in a sustainable way. The industry interacts with the consumer where it seeks to produce products that meet the functional and emotional needs of the consumer. To sell well, the products need to meet the expected standards, which is why the consumer is said to provide a "licence to sell". Citizens on the other hand, elect the government which provides to industry the actual rules and "licence to produce" (Casimir and Dutilh 2003:317-318). Citizens have attitudes and opinions concerning society but are not really concerned with the detrimental effects of their consumption behaviours. Both of these roles are usually present in each individual, but never act simultaneously. The model only indicates a relationship to the industry and citizen society because the consumer rarely has a direct relationship to the government. Also illustrated in the figure is the delicate relationship between consumers and citizens.

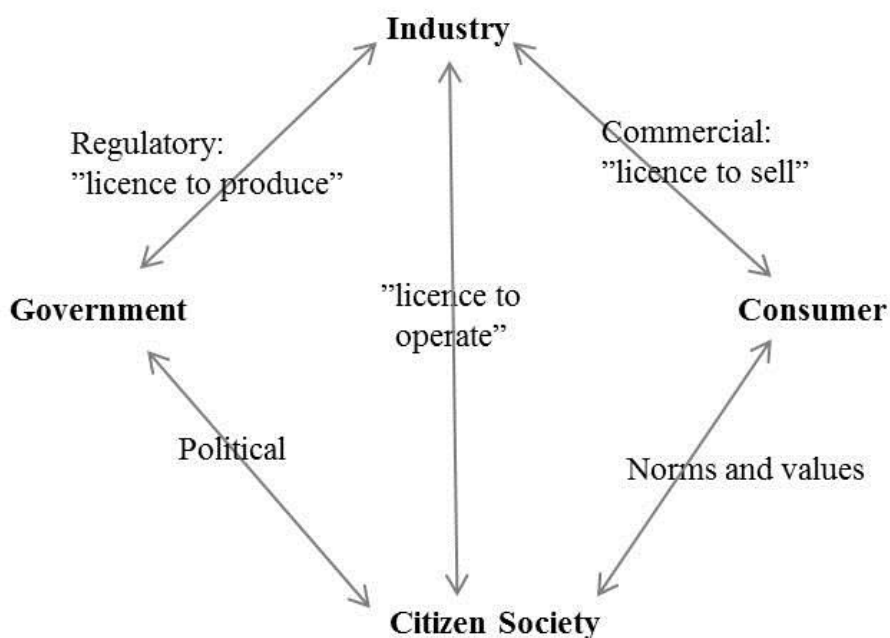


Figure 2.2: Parties involved in sustainable consumption (Adapted from Casimir and Dutilh 2003:317).

2.3.6 Approaches to sustainable consumption

Sustainable consumption can be explained from different perspectives. Peattie and Collins (2009:109) have identified two approaches to sustainable consumption are the **status quo orientation** which aims to continue the current trends of consumption, and to guarantee that they are not interrupted by environmental catastrophes. Then there is **reform orientated** approach which seeks transformational change in pursuit of sustainability by societies and economies via urban planning. The approaches are determined by the extent to which sustainable consumption is ecologically oriented or socially oriented.

2.3.7 Challenges facing sustainable consumption

Scholars such as Moisander (2007) have identified a number of challenges to sustainable consumption. Salonen and Ahlberg (2013:48) opine that consumers do relate to sustainability in a positive manner, yet passively act in a sustainable manner. This gap in attitude and actions is caused by several obstacles such as motives (Moisander 2007:404), ability to perform (Moisander 2007:404; Salonen and Ahlberg, 2013:48), lack of knowledge (Moisander, 2007:406); the environment (Kennedy, Krogman and Krah, 2013:359); different views and strategies on sustainable consumption (Moisander, 2007:405) and differences in personal and collective objectives (Moisander, 2007:407).

The underlying motive to consume products, according to Moisander (2007:404), is that motives are generally understood to be the reasons for a particular behaviour. For consumers to engage in sustainable consumption behaviour there should be compelling reasons for them to do so. The major challenge is that quite a handful of consumers do not really understand the inspiration behind sustainable consumption habits. People simply think if they can afford particular goods and services there is no reason to stop them from enjoying their money.

The inability to consume in a sustainable way could be from the fact that green products normally come at a premium price that consumers may not be able to foot. Moisander

(2007:404) postulates that sustainable consumption behaviour is dependent on the ability to perform one's options consistently. That kind of performance is dependent on personal resources like money, time or tools and opportunity created by the environment. Salonen and Ahlberg (2013:48) emphasise the importance of inability as a result of lack may prevent people adopting sustainable activities, regardless of their positive attitudes.

The environment in which consumers find themselves in can easily determine whether they will be swayed to act in a sustainable way or not. Kennedy, Krogman and Krah (2013:359) emphasise the importance of the external opportunity, as they believe the environment can be a strong predictor of sustainable consumption practice by individuals. Their findings show that engaging into sustainable activities in everyday life is more difficult in suburban areas.

There is a great amount of different views and strategies on what is making it difficult for individuals to comprehend and adopt sustainable consumption practices. According to Moisander (2007:405) despite all the labels for products, there are no general agreed upon criteria for how to determine a sustainably safe and sound product. It therefore seems obscure in practice to estimate the amount of consumption for it to be called sustainable.

Lack of knowledge is also a recognised problem to sustainable consumption. Moisander (2007:406) points out that in order to form personal selective motives for sustainable behaviour, it is necessary to aim to understand the arguments about sustainability. Understanding the complex environmental effects of one's actions requires specialist knowledge. In addition past unsubstantiated environmental claims of sustainability promotion have also resulted in sceptic attitudes. Lack of knowledge has led some individuals to ignore the calls for sustainable consumption.

Sustainable consumption is influenced by both personal and collective objectives. Moisander (2007:407) argues that sustainable consumption is motivated by two different goals, the individual objectives and the collective long-term goals, which make it hard to commit to. To have a clean environment needs the cooperation of all people

but some seek to satisfy personal objectives and leave collective objectives like having a clean environment and fresh to others. People are willing to take a free-ride and let others behave in a sustainable way.

2.3.8 How to recognise sustainable consumers

Consumers can be categorized by their lifestyle and consumption habits. Today's consumers can no longer be treated as a homogenous group with mutual intentions and purposes. McDonald *et al.* (2012) have profiled consumers into three categories which are translators, exceptors and selectors.

Translators, according to McDonald *et al.* (2012:453) do not see sustainability in a holistic way but rather try to do what they perceive to be the right thing to do even though they are not actively seeking it. Translators sacrifice to a certain degree if there is a clear justification for engaging in a new routine. After going through the process of changing a particular behaviour, they may regret for not reacting earlier. They focus on the tangible aspects of sustainability and may be active in composting, but not using the local recycling facilities.

Exceptors are consumers with the most sophisticated understanding of sustainability. They aim to achieve environmental impact by thinking what they eat and where they live. They have at least one aspect of their lives in which they behave like green consumers (McDonald *et al.* 2012:454). This group of consumers typically lives in newly built apartments close to malls and hypermarkets. There is also little possibility to be self-sufficient in areas of consumption, which is why this group may not exist in reality.

Selectors form the largest group of consumers, when compared to the two mentioned above. Selectors tend to choose an aspect of sustainable consumption on which to focus, and can be said to be green in solely this aspect of their lives but grey at all other respects. Selectors are motivated by a single issue and do not see sustainability as holistic as with translators.

2.3.9 Value-action gap in sustainable consumption

An inconsistency in attitude and behaviour better known as the attitude-behaviour gap, expresses how people tend to tell they believe in one thing and then behave in a totally opposite way. According to Emery (2012:81) only 3 % out of 30 % of people who stated their worry about sustainability issues actually changed something about their consuming behaviour. This phenomenon can be partially explained through the concept of locus of control. Newton (1990:26) have earlier described locus of control as an individual's ability to bring about change through his or her behaviour. People with the external locus of control tend to avoid creating change since they tend to believe that change as such is controlled by pure chance. In contrast, people with internal locus of control tend to believe that the way they behave can bring about change. Therefore, people might say and actually have environmental core values but as long as the locus of control is external, there will not be a change in the current behaviour.

2.4 Concluding Summary

In this chapter, green products were described, together with attributes consumers consider when selecting the products. The signalling theory was used to explain sustainable consumption. Sustainable consumption was illustrated to be consumption that does not cause irreversible damage to the environment. The dimensions of sustainability include economic, environmental and social variables. Several challenges relating to sustainable consumption were identified as motives ability to perform, lack of knowledge, the environment, different views and strategies on sustainable consumption and differences in personal and collective objectives

The next chapter presents a review of related literature on perception and purchasing behaviour.

CHAPTER THREE

PERCEPTION AND PURCHASING BEHAVIOUR

3.1 Introduction

This chapter reviews scholarly work on green product perception and purchase behaviour. The purpose is to link perceptions of consumers on green products and green purchasing behaviour to establish how previous scholars have dealt with the concept. This review is approached by conducting a conceptual development of the constructs under study, perception and purchasing behaviour.

3.2 Conceptual development of perception

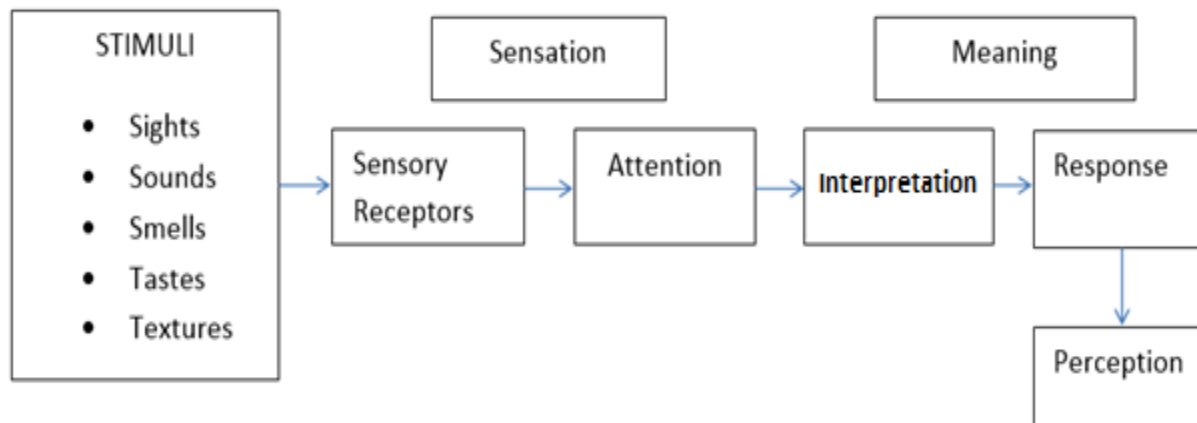
To unpack perception, the study uses the perceptual process model postulated by Solomon, Bamossy, Askegaard and Hogg (2006:37). This theory was selected as no other theory aptly depicts perceptual development as well as it does. Its usefulness has also been proven in studies that include a theoretical approach to the role of perception on the consumer buying decision process (Yakup and Diyarbakirlioglu, 2011:217); how customer perceptions shape online buying decisions (Yee, Cheng, and Yazdanifard, 2014:13); and the impact of product familiarity on beef quality perception (Banović, Marija, Fontes, Barreira and Grunert, 2012:157).

3.2.1 The basic theory of perception

Perception has been a subject of scholarly enquiry for some time. Theories supported by process models have been developed to explain how perception takes place. The whole process of perceiving, according to Solomon *et al.* (2006:37), starts when stimuli are detected by any of the five senses. Once the stimuli have been picked up by sensory receptors, attention is allocated to the sensation. A consumer will then be able to interpret the stimuli for which attention has been made. The interpretation is grounded on personal factors and the same stimulus may be interpreted in a different way by different people. At this point, response and some kind of meaning are given to

the information which means that the stimulus has been perceived. The perceptual process is illustrated in Figure 2.1 by Solomon *et al.* (2006:37).

Figure 3.1 The perceptual process



Source: Adapted from Solomon *et al* (2006:37)

In the context of green products, the sensation and meaning are aroused by stimuli which would be environmentally-friendly products with their associated variables like green packaging, green advertisements and eco-labels, amongst other things. Consumers will receive such stimuli, pay attention to that which is important and interpret the stimuli, which is how they will perceive green products. The following section looks at perception in greater detail.

3.2.2 Perception

Perception refers to the process of selecting, organising and interpreting sensations into a meaningful whole. Sensation, according to Schiffman and Kanuk (2004:159), refers to the response of consumer sensory receptors (eyes, ears, mouth, nose, touch) to environmental stimuli. In the same breath, de Chernatony *et al.* (2011: 91) state that perception consists of three clear stages: sensation, information selection and interpretation of information. de Chernatony *et al.* (2011) explain that sensation is the immediate response of the senses (taste, smell, sight, hearing and touch) to a stimulus, such as an advertisement or a brand name. Perception relies on these senses to

generate a representation of stimulus. In a similar vein, Kotler and Armstrong (2014:172) describes perception as the process by which people select, organize and interpret information to form a meaningful picture of the world. Consumers will thus have standing beliefs of the nature of green products and how they are different from conventional products. All the above definitions of consumer perception converge on three elements, which are selection, organising and interpretation. A brief discussion of these three elements or stages of perception follows.

i. Information selection

Perception starts with the selection of stimuli. According to Schiffman and Kanuk (2004:159) stimulus selection has been described as the experience of sensation. A stimulus arouses one's perception providing an experience of sensation. Stimuli that are selected are influenced by these aspects, namely the nature of the stimulus itself, the nature of the product, its physical attributes, the package design, the brand name, advertisements and commercials. The most persuasive attribute of a stimulus with regard to attracting attention is contrast. Contrast concerns how a stimulus stand out within its surrounding environment. Other aspects of stimuli are previous experience and motives at the time. Previous experience refers to the tendency of consumers to relate to product attributes they are familiar with. Motives relate to increased alertness for stimuli relevant to the consumer's needs and a decreased alertness for stimuli that are irrelevant to those needs.

Schiffman and Kanuk (2004:159) have also observed that stimuli can be sensed at three levels: the **absolute threshold**, which is where a consumer begins to notice the stimulus; **differential threshold**, which is the additional intensity; and thirdly, **subliminal perception**, which is a very weak stimulus unconsciously received by consumers. Both Kotler and Keller (2009:204) and Solomon (2007:63) suggest that subliminal perception is where advertising messages are perceived unconsciously and below the threshold of recognition. A consumer may experience a sensation without actively knowing that he/she is undergoing the experience.

Adding another dimension to the selection process, Solomon *et al.* (2006:47) introduced the perceptual selectivity concept. Perceptual selectivity refers to the selection process where consumer attends only to a fraction of the stimuli they are exposed to. This essentially implies that sensory organs may not process all the information received. This sentiment is echoed by Hanna and Wozniak (2013:84), who refer to perceptual selectivity as the ability of consumers to screen out certain stimuli from the thousands they are confronted with. The various forms of perceptual selectivity are selective exposure, the tendency by consumers to concentrate on certain stimuli ignoring some as Solomon *et al.* (2006:47) put it. Selective attention is explained by Solomon *et al.* (2006:48) as the degree to which consumers focus on stimuli within their range of exposure. Perceptual defence is the conscious act of blocking certain stimuli by consumers (Schiffman and Kanuk, 2007:162). In the same vein, Hanna and Wozniak (2013:94) postulate that perceptual defence is a tendency to block threatening or contradictory stimuli from extensive conscious processing. Hanna and Wozniak (2013) explain that this serves as a defence mechanism to protect an individual's self-image and ego.

ii. Organising information

The second stage in perceptual formation is organisation. Perceptual organisation is the process whereby different sets of stimuli are organised or grouped together so that stimuli are not received as separate sets, but rather as unified sensations. The organisation principle is studied through Gestalt psychology, which has its roots in the German school where it was first developed. Gestalt psychology has three principles of perceptual organisation, namely figure and ground, grouping and closure (Schiffman and Kanuk, 2004:173).

Figure and ground, according Schiffman and Kanuk (2004:174), is the organisation of stimuli so that it may contrast with stimuli from the environment. In order for stimuli to be noticed, marketers should clearly separate the figure (stimuli) from the ground (environment). In the same vein, Solomon (2006:51) explains that with the figure and ground principle, one part of a stimulus (the figure) will dominate, while other parts recede into the background. The figure is dominant and the eye goes straight to it. The

parts of the configuration that will be perceived as figure or ground can vary depending on the individual consumer, as well as other factors.

Grouping refers to the tendency to synthesise small chunks of information to make it easier to recall or to experience as a sensation. The grouping of stimuli consists of any associations that may result in the experience of sensation (Schiffman and Kanuk, 2004:174). Similarly, Solomon (2006:52) explains grouping as the similarity principle where consumers tend to group together objects that share similar physical characteristics. That is, they group like items into sets to form an integrated whole. This principle is used by companies who have extended product lines.

Closure, refers to the completion of stimuli in the mind of the consumer and it is attained by consumers completing incomplete stimuli in the form of images or messages (Schiffman and Kanuk, 2004:174). Consistent with this view, Solomon (2006:52) highlights that consumers tend to perceive an incomplete picture as complete. Consumers tend to fill in the spaces based on prior experience. The onus is thus upon marketers to always associate green products with environmental preservation in their marketing communication efforts.

iii. Interpretation

Interpretation is the last stage of perception formation. Schiffman and Kanuk (2004:199) describe perceptual interpretation as the meaning assigned to stimuli and a consumer's evaluation of an object as either liked or disliked. Consumers evaluate stimuli subjectively, in line to what they expect to see in relation to past experience, clarity of the stimuli, plausible explanations that can be envisioned, motives, and interests. Consumers therefore do not make decisions based on reality but on what they perceive.

In addition, perceptual interpretation is prone to individual consumer judgment, misinterpretations may also be made. Misinterpretations that could distort perception include: physical appearance, stereotypes, halo effects, irrelevant cues, first impressions and over-reactions (Schiffman and Kanuk, 2004:158). Contributing to this discourse, Solomon (2006:47) asserts that perceptual interpretation is the meaning that people assign to sensory stimuli. There can be different interpretation of the same

stimuli by individuals. Stimuli can be interpreted based on a set of beliefs or the schema.

In agreement, Mason *et al.* (2008:277) explain that consumers' interpretation of product information has an important influence on their expectations and use of products. At this stage, a consumer should be sure of the capabilities and limitations of their chosen green products. Similarly, Babin and Harris (2009:43) state that after exposure and paying attention to a stimulus, consumers attempt to derive meaning from the information they received to interpret the stimuli. Furthermore, interpretation combines relevant knowledge structures with expectations and intentions to derive meaning from a stimulus. Consumers rely on their knowledge from previous learning and experience and expectations to interpret stimuli (Hanna and Wozniak, 2013:95)

3.2.3 Factors influencing consumer perception

Fundamental to the understanding of consumer perception is a determination of the factors influencing perception. Angasa and Kinoti (2013:108) contend consumer perceptions of price, value and quality are considered pivotal determinants of shopping behaviours and product choice. A number of authors agree with them, citing the following factors to have significant influence on consumer perceptions: perceived price (Schiffman *et al.*, 2010:193; Koller, Floh and Zauner, 2011:1157; Aertsens, Mondelaers, Verbeke, Buysse and Huylenbroeck, 2011:399 and Chang, 2011:20); perceived quality (Schiffman *et al.*, 2010:195; Chang, 2011:20; Ottman, 2011:110; Chen and Chang, 2012:25); and perceived value (McDougal and Levesque, 2000:394; Aulia, 2016). The factors are explained below.

i. Perceived price

A consumer's perception of price and how these perceptions influence their purchase decision affect their rating of products. In trying to understand consumer preferences for products one needs to understand the degree of satisfaction or value that a consumer acquires when purchasing a product. Perceived price reflects the value the consumer receives from the purchase. The consumer's perception of the price of a product is an

important factor in product choice (Schiffman *et al*, 2010:193). Researchers Koller, Floh and Zauner (2011:1157) employed the term “perceived ecological value” to refer to the deliberate efforts by consumers to seek products that enhance satisfaction and maximise environmental benefits. The product is worthy to consumers if it satisfies needs whilst causing minimal damage to the environment. The dominant perception amongst consumers is that green products are overpriced relative to their conventional substitutes (Aertsens, Mondelaers, Verbeke, Buysse and Huylenbroeck, 2011:399). Confirming the high price tag attached to green products, Chang (2011:20) states that green products tend to be perceived as being relatively costly and the prices of green products typically are higher than conventional products largely due to the high production costs involved.

ii. Perceived quality

Consumers take into account product quality when deciding on which product to purchase. Product quality reflects the perceived quality of a product that is based on a variety of information cues associated with the product. Green products are assessed on how consumers expect them to perform (Schiffman *et al.*, 2010:195). Consistent with this view, Zhuang *et al.* (2010:1) note that quality plays an important role in enhancing purchase intentions by reducing product performance risk and fostering consumer brand loyalty. Whether green products ought to be of superior quality to ensure greater functional value to consumers is the essence of this study.

Chang (2011:28) found that negative perceptions of the quality of green products create ambivalence towards green products. Taking the argument further, Chang (2011:20) insinuates that with regard to product quality, green products are somewhat inferior and under-perform when compared to conventional products. Consistent with this view, Ottman (2011:110) explains that most consumers are not prepared to sacrifice quality or performance just for the sake of going green. It is important that green products compete on quality as well. Taking the argument further, Chen and Chang (2012:25) agree with Ottman (2011), stating that consumers are reluctant to compromise on product quality simply for the “sake of saving the earth” and, for the most part, expect

environmental products to be environmentally safe without the need for sacrificing quality.

iii. Perceived Value (PV)

Customer perceived value (PV) refers to the perceived benefits that customers derive from a product in relation to the total costs that the customer incurs (McDougal and Levesque, 2000:394). Thus, there is an element of comparing costs incurred in procuring the product and benefits derived from the use of the product. The perceived value of products will be high if consumers believe the products will solve their problems. Similarly, Aulia (2016:150) states that perceived value is the consumer's overall assessment of the utility of a product based on perceptions of what is received against the costs incurred. Perceived value is considered instrumental in stimulating purchase intentions (Chen and Chang 2012:516). Thus, environmentally conscious consumers will have strong intentions to purchase green products since they draw some measure of satisfaction from using products that do not harm the environment.

3.3 Conceptual development of purchasing behaviour

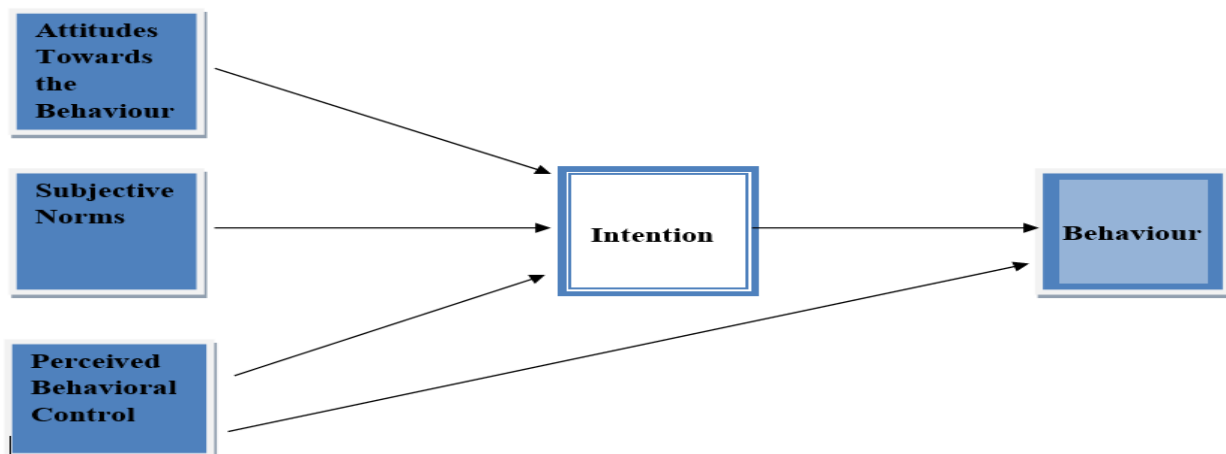
In this study purchasing behaviour is explored using Ajzen's theory of Planned Behaviour. Oreg and Katz-Gerro (2006:463) highlight that the theory of Planned Behaviour seeks to predict behaviour patterns from attitudes. This theory has proved its usefulness in numerous studies that sought to determine behaviour patterns of consumers, for example: application of the theory of Planned Behavior to green hotel choice (Han, Hsu and Sheu, 2010:325); consumers' awareness and consumption intention towards green foods (Rezai, Teng, Mohamed and Shamsudin, 2012:4496); using the theory of Planned Behaviour to explore environmental behavioural intentions in the workplace (Greaves, Zibarras and Stride, 2013:109); and anticipated emotions in consumers' intentions to select eco-friendly restaurants: augmenting the theory of planned behaviour (Kim, Njite and Hancera, 2013:255).

3.3.1 The basic theory of purchasing behaviour

Numerous theories have been expounded to explain purchasing behaviour, but none has done so with the utmost satisfaction as has the theory of Planned Behaviour by Ajzen (2005:118). The theory is chosen because central to it is the prediction of human behaviour. It suits the object of this study which is to explain consumer purchase behaviour with reference to green products. This is complemented by putting forth the definitions of purchasing behaviour; factors influencing purchasing behaviour; and identifying barriers to green purchasing behaviour.

Ajzen (2005:118) posits that purchase behaviour is determined by purchase intention which in itself is a function of attitude towards behaviour, the subjective norm and perceived behavioural control. Kotler and Armstrong (2010:179) reiterate that the consumer's purchase decision is to buy the most preferred brand. A strong intention backed by financial means will see a consumer purchase their product of choice. Figure 2.2 below illustrates the theory of planned behaviour by Ajzen (2005:118).

Figure 3.2: The theory of planned behaviour



Source: Adapted from Ajzen (2005:118)

Niaura (2013:74) describes purchase intention as the extent of a consumer's willingness to perform a specific behaviour. It is informed by attitudes towards behaviour, perceived behavioural control and the subjective norm.

It is the main purpose of this study to establish which factors between product quality, environmental concern, preferences and prevailing situations have an impact on purchase intention and, of course, repurchasing intention or loyalty. Essentially, these are all purchasing behavioural patterns of consumers. Thus, purchasing behaviour is now unbundled below.

3.3.2 Purchasing behaviour

Purchasing refers to a series of activities that involve the selection and acquiring of desired goods and services. These activities include product search, selection, receipt, storage and final use of the product (Davis, Lockwood, Pantelidis and Alcott, 2008:180). Having alluded to purchasing, purchasing behaviour is then described as the activities and decision processes involved in choosing among alternatives, procuring and using the products. The product to be purchased has to be the right product, the right amount and acquired at the right time, place and price (Gregoire, 2010:100).

Green purchase behaviour, according to Lee (2009:87), refers to the consumption of products that align with the consumer's environmental concern and are beneficial for the environment. Similarly, Steg and Vlek (2009:309) state that green purchase behaviour involves purchase decisions that result in customer satisfaction with minimum harm to the environment. Agreeing with this position, Datta (2011:128) describes green purchase behaviour as a positive disposition by consumers towards behavioral actions that enhance the welfare of the natural environment.

Contributing to this discourse, Han *et al.* (2010:327) explain that consumers are changing their buying behaviours to more ecologically sound ways by purchasing products that are recyclable, biodegradable and environmentally friendly. The bulk of green products conform to these requirements. Complimentary findings are also presented by Kumar *et al.* (2011:62.3), who found out consumers are taking action against the omnipresent ecological threat by envisioning environmental issues when they shop. Thus, consumers are actually taking their time to select green products from the maze of available products.

3.3.3 Factors influencing purchase behaviour

A number of scholars have looked into the influences of purchase behaviour, coming up with a vast array of factors. The following variables have been cited; environmental attitude (Lee, 2008:578; Samarasinghe, 2012:91) and product quality (Chang, 2011:28; Ali *et al.* 2011:219; Chen and Chang, 2012:4).

i. Environmental attitude

Environmental attitude refers to an individual's value judgment of environmental protection, which taps into the individual's cognitive assessment of the need to protect the environment (Lee, 2008:578). In the same breath, Samarasinghe (2012:91) states that environmental attitudes imply a predisposition in behaviour that directs an individual to minimise the negative impact of behavioural actions on the natural environment. There is an expressed element of environmental concern within environmental attitudes. Besides environmental concern, environmental knowledge, demographic variables, group factors, environmental factors, price and product quality all contribute the development of an environmental attitude.

Environmental concern refers to the emotional attachment of an individual to the welfare of the environment. It explains the preference for bio-degradable or recyclable products by environmentally inclined consumers (Yeung, 2004:101). From the above insinuation, it might be agreeable that consumers who exhibit high levels of environmental concern are presumed to develop favourable purchase intentions towards green products (Kim and Choi 2005:596). Thus, a pro-environment consumer will favour bio-degradable products over their opposite numbers.

To the extent that environmental concern is an attitude, Tantawi, O'Shaughnessy, Gad and Ragheb (2009:36) agree with Yeung (2004), stating that environmental concern is an attitude that reflects the level of consumer apprehension of the well-being of the environment. The attitudes will be aptly expressed in the products they purchase. Consistent with this view, Lu *et al.*, (2013:5) highlight that environmental concern drives consumer values and lifestyles towards the consumption of green products. According

to Lu *et al.* (2013), consumers with an environmental inclination will purchase green products which cause minimal harm to the environment.

On the contrary, Do Paco and Raposo (2009:376) report that Portuguese consumers' environmental concerns did not translate into any significant environmentally friendly purchase behaviour. Further investigation is therefore required into the relationship between environmental concern and green purchase behaviour. Based on the foregoing discussion, environmental concern is thus part of environmental attitude, which influences the formation of green purchase behaviour. As propounded in Ajzen's theory of Planned Behaviour, environmental attitude will link with subjective norms and perceived behavioural control in influencing purchase intentions for green products.

Environmental knowledge refers to what individuals know about the environment and their impact on the environment. Consumers of green products are deemed to have substantial knowledge on the environmental impact of their purchase decisions (D'Souza, Taghian, Lamb and Peretiatko, (2007:71). Environmental knowledge is also regarded as the consumers' ability to identify green products and green practices. To this end, environmental knowledge of the consumer is associated with their product purchases (Cheah and Phau, 2011:456).

In the same breath, Akehurst *et al.* (2012:976) posit that objective environmental knowledge is considered a strong contributor to the formation of consumer attitudes towards green products. Consumers need to be knowledgeable about environmental issues for them to consider purchasing green products.

Contributing to this debate, Zsóka *et al.* (2013:27) contends that environmental knowledge is an individual's current knowledge and awareness regarding environmental issues. Zsóka *et al.* (2013) stress that consumers of green products appear to make decisions based on what they know is good for the environment. In addition, Hans and Bohm (2013:64) insinuate that inadequate information amongst consumers relating to the performance and availability of green products has become one of the main impediments to the purchase of green products. It is pertinent that consumers have objective knowledge on the performance of green products.

Central to the above discussion is that consumers should have some sound knowledge of pressing environmental issues for them to purchase green products. It is also alluded to that consumer can differentiate green from non-green products.

Pro-environmental behaviour is fostered by some identified demographic factors. Age, gender, income, education level and family size are significant variables that may explain why a consumer may or may not adopt green products (Verain *et al.*, 2012:127).

According to Garcia-Rosell and Moisander (2008:211), factors such as ethical ideologies advocate that it is morally wrong to deplete the natural environment. Social influence is key to green purchase behaviour because individual consumers consider the opinions of relevant others as they make their product choices (Kim and Chung, 2011:42). Cultural orientations are another significant factor where a particular culture realises that there is mutual interdependence between human beings and the natural environment (Brecard *et al.*, 2009:117).

There are environmental factors that influence green product purchasing, such as media exposure which relates to the media's important role in conscientising consumers on climate change, global warming and sustainable development (Biloslavo and Trnavcevic, 2009:1169). Green atmospherics is one such factor, where the shopping environment is of great importance in facilitating the purchase of green products (Kreidler and Joseph-Mathews, 2009:233). Government, with its ability to insist on environmental compliance by businesses, can enforce regulations that will see firms moving towards environmentally friendly practices (Belz and Peattie, 2009:129).

A number of authors give mixed views on price in relation to green purchase behaviour. On one hand, greater concern for the environment has seen consumers becoming less price sensitive (Ali *et al.*, 2011:219). Conversely, Chang (2011:19) contends that the high price of green products is a significant contributor to the ambivalent feelings consumers have towards these products. Consistent with this view, Ottman (2011:40) found the high price of green products to be the leading barrier, followed by scepticism concerning green product purchase. Green products are viewed as expensive when compared with conventional products.

Regarding green products, Smith and Paladino (2010:97) assert that “the higher the natural content, the higher are perceptions of quality as held by the consumer. Organic products are thus favoured by environmentally inclined consumers. As with price, Chang (2011:28) found that negative perceptions of the quality of green products create ambivalence towards green products. Chang (2011) contends that consumers may cherish green products for their environmental benefits, but despise them for inferior quality. Consumers expect environmental products to be environmentally safe, without the need to sacrifice quality. The environmental quality of green products must be enhanced and clearly conveyed to the consumer in order to gain recognition within the market (Ali *et al.*, 2011:219).

Similarly, Van Doorn and Verhoef (2011:167) opine that the low quality tag attributed to green products results in variations in consumers’ willingness purchase green products. It is sometimes difficult for consumers to appraise certain green products on product quality, making it difficult for them to sacrifice their hard earned money on premium priced green products. Complimentary findings are also presented by Chen and Chang (2012:4), who propose that green products must perform better than or just as effectively as conventional products. The reason for this, according to Chen and Chang (2012:25) is that consumers are reluctant to compromise on product quality simply for the “sake of saving the earth”.

ii. Subjective norms

Subjective norms refer to an individual’s perception of significant others (family, friends, colleagues and peers) attitudes towards a specific behaviour. Consumers consider what others think when making a decision to buy or not to buy a product (Fielding *et al.*, 2008:319).

Consistent with this position, Cheah and Phau (2011:456) suggest that social environments such as friends, family or peer networks are a proxy for the subjective norm and have a strong influence on the purchase decision. As such, an individual’s subjective norms are a salient factor underlying environmental behaviours.

Similarly, Greaves (2013:110) states that subjective norms refer to the social pressure that an individual feels from relevant others to display a specific behaviour. Greaves (2013), notes that consumers display some altruistic tendencies in their purchase decisions. Thus, consumers may be prepared to forgo their product choices and go green for the sake of their pro-environmental peers.

From an environmental protection standpoint, Niaura (2013:75) asserts that a subjective norm is the conscious decision of whether or not to implement pro-environmental behaviour. Thus, in the debacle of whether to go green or not, consumers will look at what society approves with regard to environmental issues. This is in sync with the findings of Kim *et al.* (2013:260), who concluded that subjective norms are the best predictor of behavioural intentions when selecting an eco-friendly restaurant. This may also be the case with other categories of green products.

iii. Perceived behaviour control

Perceived behavioural control, point out to an individual's perceptions of the ability to perform a given behaviour (Paco and Raposo, 2009:431). Kim and Chung (2011:47) concur with this position, describing perceived behavioural control as the extent to which consumers control their purchase decisions.

Wahid *et al.* (2011:40) reported that when consumers perceive that their actions have the potential to make a noticeable difference, they are more likely to engage in pro-environmental behaviour. Consequently, consumers can think through their actions and may decide to purchase green products over conventional products. In reference to environmental behaviour, perceived behavioural control shows how an individual perceives his or her ability to implement such behaviour. In extant literature, two dimensions of perceived behavioural control have been put forth, namely perceived effectiveness of environmental behaviour and perceived seriousness of environmental problems (Abdul-Muhmin, 2007:237; Jansson *et al.*, 2010:360; and Chea and Phau, 2011:455).

The perceived effectiveness of environmental behaviour is a component of perceived behavioral control that refers to the capacity of a person to ensure a better environment.

For example, if an individual is disposed and in a position to preserve the environment, he/she will display pro-environmental behaviour (Abdul-Muhmin, 2007:237). Social status, education and income were all found to have significant influence on the willingness to adapt, indicating that co-habitation, higher education and higher income levels were associated with a willingness to adapt to green product offerings (Jansson *et al.*, 2010:360).

Cheah and Phau (2011:455) note that the perceived seriousness of environmental problems is another dimension of perceived behavioral control. According to Cheah and Phau (2011), the engagement of individuals in pro-environmental behaviour depends on the magnitude of the environmental problems. If the environmental problems are acute, there is greater likelihood that consumers will go for green products.

Complementary findings are also presented by Gadenne *et al.* (2011:7686), who found that when consumers understand the implications of their consumption behaviour for the environment, they will engage in pro-environmental behaviours. Similarly, Lin and Huang (2012:17) note that when confronted with contextual situations such as threats, the propensity of consumers to act in a pro-environmental manner is enhanced. Lin and Huang (2012) insinuate that consumers are forced to engage in pro-environmental behaviour to preserve their lifestyles.

Environmental intention is a plan to act on an intended behaviour. It serves as a pre-supposition of favourable environmental activities and encompasses the likelihood of purchasing a particular product as a result of environmental needs (Chen and Chang, 2012:20). Consistent with this view, Ali and Amad (2012:88) state that green purchase intention is the probability and willingness of a consumer to prefer green products relative to conventional products. Rehman and Dost (2013:102) also note that an increase in the intention to purchase a green product is expected to enhance the propensity of consumers to engage in actual green product purchase. Through their activities, green product marketers should look for ways of enhancing consumer purchase intentions.

On the contrary, Chan and Bishop (2013:96) warn against the thought that the more favourable an attitude is regarding the behaviour coupled with the extent of social pressure perceived from relevant others, together with a sense of perceived behaviour control, the stronger the intention towards the behaviour.

This resonates with Chen, Chang and Wu's (2012:368) view, which alludes to the trend-setting nature of green consumers. Green products are considered as innovative offerings that have the potential to accord social status to consumers. This implies that green consumers consider themselves as pacesetters in a particular society.

3.3.4 Barriers to green purchase behaviour

Scholars have identified different barriers to green purchase behaviour. They include scepticism (Albayrak *et al.*, 2012:191); greenwashing (Delmas and Burbano, 2010:66, Vermillion and Peart, 2010:70); consumer perceptions of poor product performance (Chen and Chang, 2012:503); and consumer justification of negative green impacts (McGregor, 2008:265). These barriers are discussed in more detail as follows:

i. Scepticism

In the environmental domain, Albayrak *et al.* (2012:191) explain scepticism as being where consumers think they cannot positively contribute to the protection of the environment. In such a scenario, their participation in green purchase behaviour will be low. Rahman and Haque (2011:84) reinforce this position by stating that consumer scepticism about a product or service's environmental claims negatively impact on green product purchases. Consumers are not convinced that they can contribute to environmental protection by purchasing green products.

ii. Greenwashing

Greenwashing relate to false claims by businesses on the capabilities of their products. When consumers became aware of this, they will stop buying the products (Delmas and Burbano, 2010:66). Consistent with the above view, Vermillion and Peart (2010:70) state that greenwashing is the deceptive practice by companies attempting to make themselves appear more environmentally friendly than they actually are. Eventually

consumers will realise the deceptions, with detrimental effects on the sales of green products.

iii. Consumer Perceptions of Poor Product Performance

Once consumers rate a product low in performance, it will be difficult for marketers to convince them to purchase the products. Green products should compete on all aspects with conventional products. In the event that green and conventional products are not perceived as substitutes (due to perceived poor green product performance), the likelihood that consumers will not purchase green products is high (Gupta and Ogden, 2009:381). To the extent that it is product performance that is important, Chen and Chang (2012:503) state that the greenness of products and services cannot guarantee consumers' positive purchase behaviour.

iv. Consumer justification of negative green impacts

Quite often, consumers pretend that they do not know the detrimental effects of their consumption patterns on the environment. Consumers can justify or neutralise the negative environmental impacts of their purchasing behaviour. For example, individuals will often claim that because they are poor and cannot afford green products, it is acceptable to break their strong green beliefs (McGregor, 2008:265). In short, consumer scepticism about products' environmental claims, greenwashing, the perceived inferiority of green products to non-green products, high prices and justification of consumers' negative environmental impacts are varied barriers to green purchase behaviour.

3.4 Concluding Summary

The perceptual process was explained as the basic theory of consumer perception and perception was conceptualised. Antecedents of consumer perception were given as perceived price, perceived value and perceived quality.

The theory of Planned Behaviour was used to illustrate the development of purchasing behaviour. Factors influencing purchasing behaviour were identified as environmental attitude comprising of environmental concern, environmental knowledge, environmental

factors, demographic variables, group factors, environmental factors, price and product quality, subjective norms, perceived behavioural control and purchase intention. Barriers to green purchase behaviour were highlighted to be scepticism, greenwashing, consumer perceptions of poor product performance and consumer justification of negative green impacts.

The next chapter presents a review of related literature on consumer loyalty.

CHAPTER FOUR

CONSUMER LOYALTY

4.1 Introduction

This chapter reviews scholarly work on consumer loyalty. The purpose is to determine consumer loyalty towards green products and to establish how previous scholars have dealt with the concept. This review is approached by conducting a conceptual development of the construct under study, consumer loyalty. The review of literature on this construct has shown that there is a thin line between the meanings of consumer and customer loyalty and so for the purposes of the study the terms will be used interchangeably.

4.2 Conceptual development of customer loyalty

Consumer or customer loyalty has been researched extensively with scholars coming up with different meanings to the subject. For example, Dowling *et al.* (2003:296) present three conceptualizations of loyalty: attitudinal, behavioral and contingency approaches which have become popular with scholars. Lichtlé and Plichon (2008:121), as well as Peppers and Rogers (2004:56), identify attitudinal and behavioral loyalty. Lichtlé and Plichon (2008:121) add a third approach which they call the mixed/composite approach. This section also reviews the various definitions of customer loyalty and establishes where these converge or differ. Factors influencing customer loyalty are then discussed to ensure a deeper understanding of the concept.

4.2.1 The basic model of customer loyalty

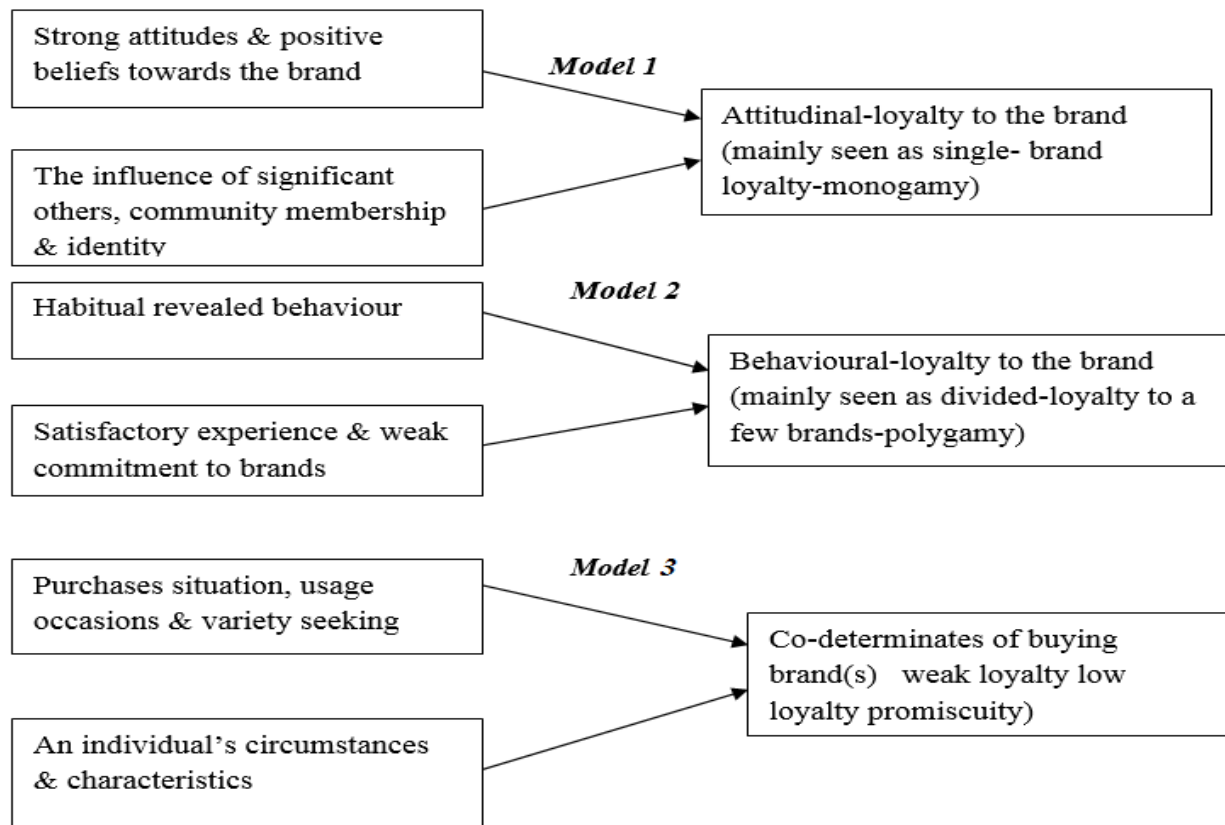
Customer loyalty is dissected using the Three Dimensional Model of Customer Loyalty advocated by Dowling, Hammond and Uncles (2003:296). The importance of the theory to this study is that it recognises the multi-dimensional nature of customer loyalty by incorporating attitudinal, behavioural and cognitive constructs, which are three important constructs of customer loyalty. The model has been relied on in studies which include

an examination of moderator effects in the four-stage loyalty model (Evanschitzky and Wunderlich, 2006:330); lasting customer loyalty: a total customer experience approach (Mascarenhas, Kesavan and Bernacchi, 2006:397); dissecting attitudinal loyalty influences on behavioral loyalty (Bandyopadhyay and Martell, 2007:35); and the royalty of loyalty: customer relation management, quality and retention (Zineldin, 2006:430).

The customer loyalty model by Dowling, Hammond and Uncles (2003:296) is appreciated for this study because it recognises the multi-dimensional nature of customer loyalty. According to Dowling *et al.*(2003:296), there exist three conceptualizations for loyalty: loyalty as primarily an attitude that sometimes leads to a relationship with the brand (Model 1); loyalty mainly expressed in terms of revealed behavior that is the pattern of past purchases (Model 2); and buying moderated by the individual's characteristics, circumstances, and/or the purchase situation (Model 3).

Figure 4.1 illustrates the three models of customer loyalty as conceived by Dowling *et al.*

Figure 4.1 Model of Customer Loyalty



Source: Adapted from Dowling, Hammond and Uncles (2003:296)

Dowling *et al.* (2003:296) explain that attitudinal loyalty is an on-going relationship to a brand, often conditioned on positive customer preferences towards the brand, and is strongly influenced by significant others. On the other hand, behavioural loyalty is taken to be revealed purchase and usage behaviour, often conditioned by customer satisfaction and is measured by the historical purchase of one's brand and competing brands. Lastly, situational loyalty is described as a contingent relationship to the brand that is often determined by the shopping and purchasing situation.

4.2.2 Customer loyalty

Customer loyalty is the behavioral outcome of a customer's preference for a particular brand from a selection of similar brands over a period of time, which is the result of an evaluative decision-making process. Customer loyalty is expressed as a behavior (McMullan and Gilmore, 2002:231). To the extent that customer loyalty is a behaviour, Kincaid (2003:10) agrees with McMullan and Gilmore (2002), stating that customer loyalty is consumer behaviour built on positive experience and value, which leads to buying products even when that may not appear to be the most rational decision. Differing from McMullan and Gilmore (2002), Dowling *et al.* (2003: 295) refer to customer loyalty as a commonly recognised attribute or distinctive characteristic that people exhibit towards a product, service or brand. Customer loyalty is taken to have an attitudinal flavor.

Customer loyalty is also defined as a deeply held commitment to re-buy a product consistently in future, despite situational influences (Oliver, 2007:392). By explaining it as "deeply held commitment", the author highlights the attitudinal dimension of loyalty. The definition goes on to pinpoint repetitive behaviour, revealing some behavioural aspect of customer loyalty. There is some inferred emotional attachment to a product by the customer, which in essence is a favourable attitude towards the product.

Customer loyalty is also explained from an environmental standpoint. Green customer loyalty is the customer's desire to a relationship with an institute which has environmental concerns, and to re-buy its products regularly in the future (Chang and Fong, 2010:2837).

4.2.3 Dimensions of customer loyalty

From the preceding discussion, customer loyalty can thus be seen to be three dimensional: **behavioral** (Arantola, 2003:26; Dowling *et al.*, 2003:295; Peppers and Rogers, 2004:57; Lichtlé and Plichon, 2008:121; Beneke *et al.*, 2011:32); **attitudinal** (Bennett and Thiele, 2002:203; Dowling *et al.*, 2003:295; Peppers and Rogers, 2004:56; Lichtlé and Plichon, 2008:121); and **situational** (Bandyopadhyay and Martell, 2007:38).

Behavioural loyalty refers to the amount of repeat buying from the same supplier under a certain period of time. There is an element of continuity with regard to the purchase of a certain product (Arantola, 2003:26). Dowling *et al.* (2003:295) agree with Arantola (2003), describing behavioural loyalty as “an ongoing propensity to buy the brand, usually as one of “several”. In addition, Dowling *et al.* (2003) find that behavioral loyalty can lead only to weak commitment as loyalty to a brand is a result of repeated satisfaction. The customer chooses the brand that s/he has experienced to provide the most satisfaction. The search for an alternative is seen as so much trouble and so time-consuming that the same brand is bought over and over again, without any attitude or commitment to the brand.

The contribution of Peppers and Rogers (2004:57) to this discussion is that behavioural loyalty is re-purchase activity that does not regard any internally held attitudes or preferences for the brand. Peppers and Rogers (2004) explain that the behaviouristic dimension to customer loyalty involves analysing evidence of consumer behaviour and purchase intentions. Consistent with the above view, Lichtlé and Plichon (2008:121) describe behavioural loyalty as regular purchases of the same brand. This type of customer loyalty can be measured by actual purchase behaviour, such as purchase sequence or retention rate. Beneke *et al.* (2011:32) cite repetitious purchasing behaviour as a fitting example of a behavioural measure of customer loyalty.

Attitudinal loyalty refers to a psychological predisposition exhibited through preferences and commitment that manifests itself through purchasing behaviour. Attitudinal loyalty emphasises commitment to a product (Bennett and Thiele, 2002:203). Adding another dimension, Dowling *et al.* (2003:295) posit that attitudinal loyalty is also called emotional loyalty and exists where customer purchases are guided through positive feelings and favorable attitudes towards the brand. Customers might develop an emotional tie with the brand for diverse reasons and will therefore have greater commitment in the form of attitudinal loyalty towards the brand and its products.

The contribution of Peppers and Rogers (2004:56) to this discourse is that attitudinal loyalty exists where a customer would elect to pay a premium for the brand although another brand has a similar, more inexpensive product. This point proves strong

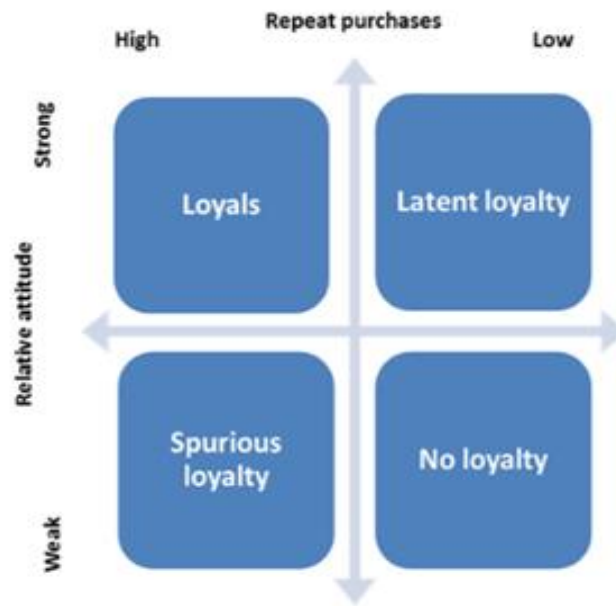
commitment to a particular brand. Lichtlé and Plichon (2008:121) sum it up by saying that attitudinal loyalty is developing a favorable attitude towards the brand. Lichtlé and Plichon (2008) ascribe some emotional attachment of consumers to green products. This implies that consumers experience some utility from continuously using green products. The emotional and psychological bond to a product can be used as an attitudinal measure of customer loyalty (Beneke *et al.*, 2011:32).

There is also a third model to consumer loyalty. The **contingency approach or situational loyalty**, which suggests that the relationship between attitude and behavior is moderated by the consumer's circumstances, such as budget effects, time pressure or purchase situation, for example product availability and promotions. These factors or situations determine whether the brand is seen as desirable when a need for such product emerges (Dowling *et al.*, 2003:295). In the same vein, Bandyopadhyay and Martell (2007:38) state that brand choice is dictated through situations and leaves little room for variations of attitude in predicting purchasing behaviour. Such situations may include a businesses' stock being out or unavailable. These situational factors therefore reinforce the need for customer loyalty to be separated from repeat purchasing behaviour. This brings into contention another form of customer loyalty, situational loyalty.

The spillover of the above models has seen the emergence of the **mixed approach** to consumer loyalty. Huddleston *et al.* (2004:213) and Lichtlé and Plichon (2008:121) suggest that it is not possible to talk of behaviour or attitudinal loyalty at one particular moment, as all dimensions are ever-present. Huddleston *et al.* (2004:213) favour a definition that depicts loyalty as the relationship between relative attitude and patronage behavior. They have specified antecedents that affect the relative attitude to a brand, including cognitive, affective and conative antecedents. Consistent with the above view, Lichtlé and Plichon (2008:121) propose the mixed approach to customer loyalty in addition to the attitudinal and behavioral approaches. Lichtlé and Plichon (2008) propound that combining re-purchase behavior and favorable attitudes results in a two-dimensional construct of loyalty.

The above dimensions can be combined into two dimensions, which Buttle (2009:46) refers to as true loyalty, spurious loyalty, latent loyalty and no loyalty. The following diagram depicts these combined dimensions.

Figure 4.2 Two dimensional model of customer loyalty



Source: Adapted from Buttle (2009:45)

Buttle (2009:45) explains the combined dimensions as follows:

- i. *True loyals* are those who exhibit repetitive buying and a have strong relative attitude.
- ii. *Spurious loyals* are those who exhibit repetitive buying, but have weak relative attitude. Their repeat purchasing can be explained by inertia, high switching costs or indifference.
- iii. *Latent loyalty* exists when there is a strong relative attitude, but there is no consistent purchase of the brand.
- iv. *No loyalty* exists when both repeat purchases and relative attitude are weak.

4.2.4 Development of loyalty

Scholars have come up with different depictions of the development of customer loyalty. Arantola (2001:27) identify stages in the development of customer loyalty whereas Harris and Goode (2004:141) present four phases through which customer loyalty develop. These different approaches to the development of customer loyalty are discussed below.

i. Degree of customer loyalty

The classification by Arantola (2001:27) in Figure 4.3 below is based on a continuum of commitment where different stereotypes of customer loyalty can be identified.

Figure 4.3: Degree of customer loyalty



Source: Adapted from Arantola (2001: 27)

At the other end customers are seen as rational and comparing consumers, who cannot be loyal as they change the supplier whenever it is rational. The next type is a consumer who relies on learned behavior and habits and therefore makes repeat buys from the same supplier. The third type is loyalty to brands that consumers have experienced to be better than others. The nature of these consumers can also be described as making decisions based on emotions. The last type is a deep commitment

to the customer relationship where the product plays a very strong and ideological role in the consumer's life.

ii. Customer loyalty phases

Harris and Goode (2004:141) state that during **cognitive loyalty phase**, consumer preferences toward a brand are only based on brand's attribute's information available to him. The preference towards a specific brand is directed because of the brand's attributes like performances compared to other brands, price, costs or any other characteristics. Consumer decisions are mainly based on beliefs that brand is preferable to others. Usually at this stage, a consumer has no past experience with the brand and therefore has no real experience. Also, at this stage there is a high level of brand switching, due to lack of bond with the brand.

At the **affective loyalty phase**, Harris and Goode (2004:141) explain that a consumer starts to develop a pleasure dimension associated with the brand. Consumer brand loyalty is defined by the degree of affection for the brand. In comparison to the previous phase, where cognitive loyalty can be unsettled by argumentation, affective loyalty is more anchored in consumer's mind. However, consumers remain vulnerable to competitors' incentives like promotions. At this stage, the company has an opportunity to influence and strengthen relationships with customers.

At the **conative loyalty phase**, Harris and Goode (2004:141) state that customer's decision is influenced by repeated positive interactions with the brand that develop a deeper level of commitment. The consumer is committed to repurchase the brand and is usually very well educated about the brand's advantages. Commitment is deeply anchored in the customer's mind and motivates repurchases of the brand's product/service. However, it is not guaranteed that the customer will not switch the brand. Consequently, the company must continue to invest in the existing relationship.

The **action loyalty phase** is a point where customer's intentions are converted to actions or readiness to act. The consumer is ready to act or in certain cases, to overcome the obstacle that might be preventing his actions. Brand switching is

minimized as the consumer is already aware the brand is the most suitable compared to other alternatives (Harris and Goode, 2004:141).

4.2.5 Factors influencing customer loyalty

Fundamental to the understanding of customer loyalty is an analysis of the factors influencing customer loyalty. This section details the various factors influencing customer loyalty examined in literature, including customer satisfaction (Cohen *et al.*, 2007:42; Liu and Wu, 2007:141); customer delight (Verna, 2003:130; Kulkarni, 2009:14; Hasan *et al.*, 2011:511; Yang, 2011:84); and perceived value (McDougal and Levesque, 2000:394; Lai, Griffen and Babin, 2009:984).

Customer satisfaction refers to an emotional state arising from customers' interactions with a product over a period of time, whereby their minimum expectations are met (Liu and Wu, 2007:141). In the same vein, Cohen *et al.* (2007:42) explain that customer satisfaction has been perceived as one of the key role-players as to why customers choose to re-purchase a product and remain loyal or not. A customer dissatisfied with a green product may move back to conventional brands.

Customer delight, according to Verna (2003:130), refers to an exceptionally positive emotional reaction resulting from having one's expectations exceeded to a surprising and unexpected degree. Kulkarni (2009:14) agrees and explains that customer delight is giving customers more than they expect. Explained further, customer delight is a heightened sense of satisfaction achieved through the immediate fulfillment of customer's needs at the time when those needs are desired most (Hasan *et al.*, 2011: 511). Consistent with the above view, Yang (2011:84) contends that customers that experience delight are six times more likely to exercise re-purchasing behaviour of a brand than customers that are merely satisfied.

Perceived value (PV), according to McDougal and Levesque (2000:394), refers to the perceived benefits customers receive from a product relative to the costs incurred by the customer. Yang and Peterson (2004:803) state that customers with high PV are more motivated to take part in repeat patronage as they have received what they

consider to be “value for money”. Contributing to this discourse, Lai, Griffen and Babin (2009:984) emphasise the need to create PV for customers to enhance customer loyalty. Environmentally-oriented customers consider the benefits that accrue for purchasing and using green products when making their purchase decisions.

4.2.6 Measurement of customer loyalty

Beneke *et al.* (2011:31) identify three approaches to measure customer loyalty namely; **behavioural** measures, **attitudinal** measures and **composite** measures. According to Beneke *et al.* (2011:32) repetitious purchasing behaviour is a good example of a behavioural measurement of customer loyalty. If consumers are satisfied with their green product purchases they will continue buying them. Attitudinal measurement of customer loyalty is represented by the emotional and psychological bond that a customer has towards an organisation or product. Green product consumption elicits some utility on the part of environmentally-orientated consumers. Then there is also the composite measure that describes loyalty as a combination of behavioural and attitudinal dimensions. Customer loyalty is determined by the strength of the relationship between relative attitude and repeat patronage (Beneke *et al.*, 2011:32).

4.3 Concluding Summary

Models 1, 2 and 3 of customer loyalty were used to explain customer loyalty. Consumer loyalty was illustrated to be mainly attitudinal and behavioural in nature. The degree of loyalty was established to range from true loyalty, spurious loyalty, latent loyalty and no loyalty at all. The development of customer loyalty was explained through the customer loyalty phases and degree of customer loyalty approaches. Factors influencing customer loyalty were identified as customer satisfaction, customer delight and perceived value. Three measures of customer loyalty were identified and discussed.

The next chapter presents the research methodology that was used in this study.

CHAPTER FIVE

RESEARCH METHODOLOGY

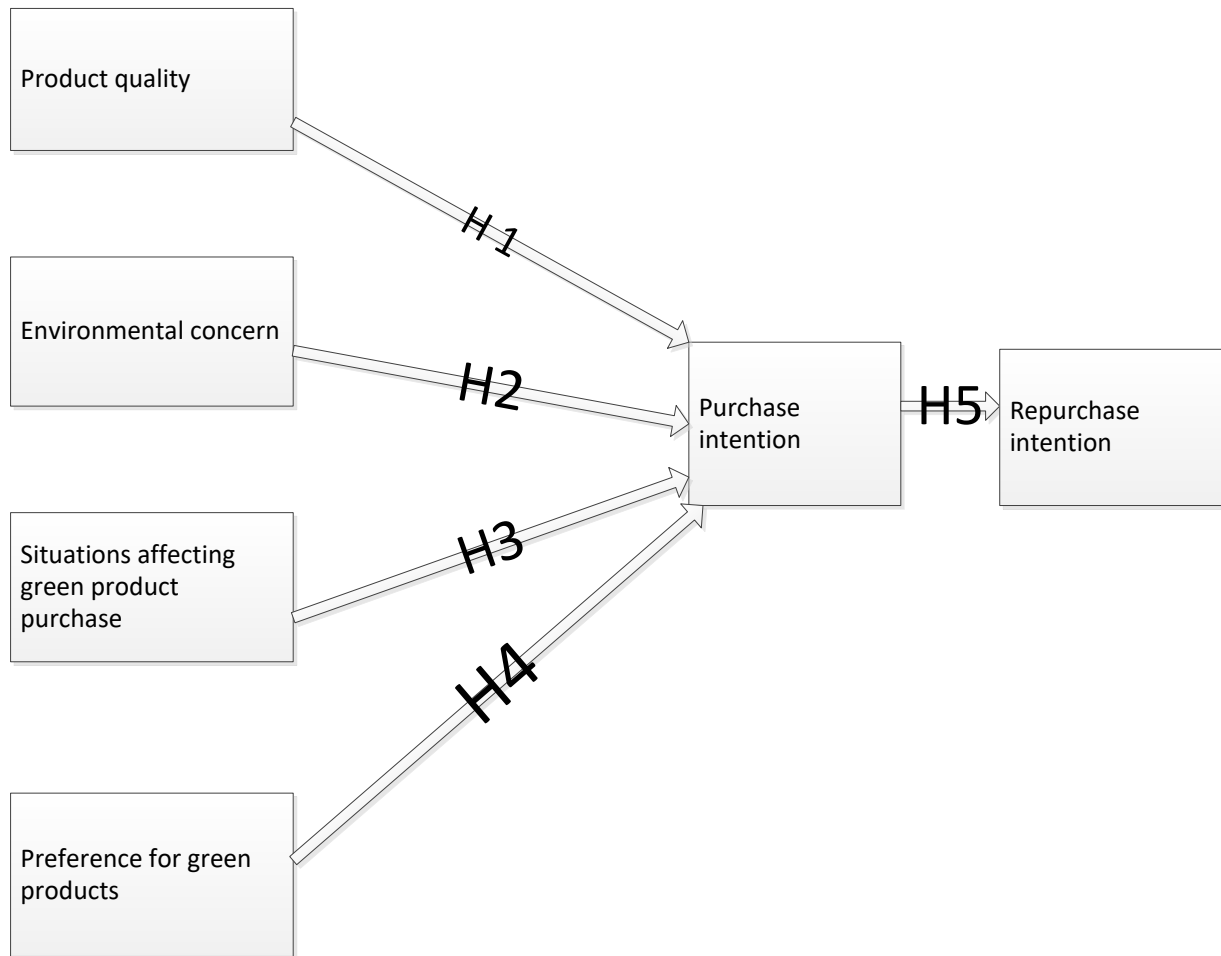
5.1 Introduction

This chapter will discuss in detail the research methods applied in this research. The relevant aspects of the methodology discussed include the research philosophy, research strategy, research design, data collection methods, data analysis methods as well as ethical issues. The methodological assumptions will clarify the use of positivism for epistemological stance and objectivism for ontological position. Then, the use of deductive approach, and the combined use of quantitative research method is justified. In addition, this chapter will present the hypothesised model.

5.2 The hypothesised model

The following hypotheses were developed on the basis of the research problem as outlined in Chapter One. These are then depicted in a hypothesised model in Figure 5.1 overleaf.

Figure 5.1: The hypothesised model



H₁: Product quality positively impacts on the purchase intention of green products.

H₂: Environmental concern positively influences the purchase intention of green products.

H₃: Situations affecting green product purchase positively influence the purchase intention of green products.

H₄: Preference for green products positively influences the purchase intention of green products.

H₅: Purchase intention of green products positively impacts on the re-purchase intention of green product.

5.3 Rationale for the methodology

The rationale for choosing the deductive and quantitative approach was that the methodology provided the data that could inform the problem. The deductive approach is premised on what is already done and known on the research topic and it applies appropriate theories to the topic to guide the formulation of hypotheses (Bryman and Bell, 2011:11). The study is premised on well-known theories from which hypotheses were developed and tested. The research process is in line with deductive and quantitative research approaches, which are discussed herein.

In the deductive approach, one uses hypotheses based on a theory relating to their field of study to get findings (Bryman, 2012:24). Following with this advice, the study looked at theories on consumer perception, purchasing behaviour and consumer loyalty and the factors influencing these constructs. To understand the link between the factors, hypotheses have been developed.

A hypothesis for research can be refined from the objectives set for that study. Traditionally, hypotheses come in two forms: the null hypothesis and the alternate hypothesis. The null hypothesis is the opposite of the truth and it is the one that is tested (Muijs, 2004:17). For this study, the objectives were used to generate the hypotheses.

The quantitative study takes the deductive approach that seeks to generalise findings through statistically proven empirical evidence (Borrego, Douglas and Amelink, 2009:53). The research method for this study was quantitative in that data was collected from respondents using a structured questionnaire which yielded numeric data. There are notable advantages to using the quantitative research method. It has merits on validity, reliability, replication and generalization which are valuable for the quality criteria of the study (Bryman, 2012:170).

The quantitative research approach has its shortcomings though. It lacks exactitude because people interpret questions from a survey differently. The method is not linked to real life because responses from people can sometimes be different from their actual

behaviour. Finally, data from quantitative research creates a static view of social life, different from everyday life.

5.4 The research design

Conceptually, a research design is a blueprint that specifies the procedures employed for data collection and analysis in a study. It gives overall direction to the entire research process (Gupta, 2011:39). Consistent with this view, Welman, Kruger and Mitchell (2011:52) state that the research design directs the researcher in the choice of suitable data collection and analysis methods. There are a number of research methods and their choice is guided by the research objectives. There are three broad streams of research design; exploratory research, descriptive research and causal research (Silver *et al.*, 2013:54).

5.4.1 The research design for this study

This study used the descriptive research design because it aims to describe phenomena, such as market characteristics (Hair *et al.*, 2013:36). In this study, the purpose is to determine consumer perceptions of green products, purchasing behaviour and loyalty to green products. The aim was to find a pattern in consumer perceptions, purchase behaviour and loyalty. Furthermore, descriptive research is appropriate when investigating the frequency of occurrence of marketing phenomena and is useful in predicting associations between variables. As such, quantitative descriptions can be made for the phenomena under study (Fienberg *et al.*, 2013:57).

Descriptive research was adopted for this study because the intention was to describe consumer perceptions of green products, purchasing behaviour and loyalty and the factors underlying the development of these phenomena. The overall results should enumerate the factors influencing consumer perceptions of green products, purchasing behaviour and loyalty and delineate them according to level of influence.

5.5 The research philosophy

The research philosophy relates to the way to approach and understand the world by researchers (Saunders, Lewis and Thornhill, 2009:107). It is associated with the construction of knowledge and the nature of this knowledge with regard to the research. A research philosophy therefore guides the researcher by defining the study dimensions (Saunders *et al.*, 2009:119). A research philosophy is at times referred to as a research paradigm. According to Jonker and Pennink (2010:29), a research paradigm constitutes philosophical assumptions and beliefs that direct research execution. It defines the world, highlighting an individual's place in it and the relationships in that world.

Epistemology and ontology are the two sets of philosophical assumptions that distinguish research paradigms, where epistemology mainly deals with how the researcher views or considers as valid the perceived knowledge in the boundary of the research. It concerns itself with reality and the basics of knowledge (Bryman and Bell 2011:15). It is a belief system that informs the generation of what constitutes acceptable and valid knowledge in a study (Wahyni, 2012:69). Epistemological research has two categories namely positivism and interpretivism.

Positivism alludes to social phenomena studied with natural science rules. Objective analysis forms the base for researchers to take this position, where they collect, analyze and process data in a value-free environment. The researcher is not influenced by the research subjects (Saunders *et al.*, 2009:113). Consistent with this view, Bryman and Bell (2011:15) indicate that with positivism, only phenomena confirmed by the senses can be regarded as knowledge, and knowledge is generated through testing hypotheses and gathering facts. Positivism has an ingrained element of objectivity. In addition, Easterby-Smith, Thorpe and Lowe (2002) highlight that positivism views the social world as external and is therefore measured through objective methods. The nature of reality is taken to be independent of the human mind and is interpreted through objective analysis of human objects.

Interpretivism, on the one side, emphasises understanding and explaining human actions and behaviour. Interpretivism pays attention to people rather than objects.

Analysis of data is mostly subjective (Bryman and Bell, 2007:17). Confirming the prominence of human actions in interpretivism, Saunders *et al.* (2009:115) postulate that humans are social factors who play an active part in the construction of reality. Thus, interpretivism considers the differences in humans with regard to their roles as social actors.

The other research paradigm, which is ontology, describes the researcher's perceptions of what comprise knowledge and reality. It basically answers the question as to whether reality is external to social actors or is created by the social actors and this is explained in two dimensions, which are objectivism and constructivism (Saunders *et al.*, 2009:119).

Objectivism, according to Bryman and Bell (2007:22), refers to social phenomenon and its meanings exist independently, with no influence of social actors on it. The social phenomenon observed is developed by the interaction of human beings, the social actors. From an ontological perspective, the constructionism approach subscribes to the view point that social phenomena and its meanings are constructed by social actors. Individuals are taken here to shape the form of reality (Bryman and Bell, 2007:22).

5.5.1 The research philosophy for the study

This study takes a positivist position for epistemological stance and an objectivist position for social occurrences. This is because the phenomena under study, consumer perception, purchasing behaviour and loyalty, can be observed. Appropriate theories were selected, followed by the subsequent generation of objectives which were then refined to hypotheses. A survey on consumers was then conducted. Data generated from the survey was analysed with the purpose of proving existing knowledge or revising it. This was all done without the immersion/interaction of the researcher with the subject matter or research environment.

5.6 Research strategy

There are numerous strategies employed in research. These include experiments, surveys, ethnography, case studies, action research, grounded theory and archival

research (Saunders *et al.*, 2007:135). The strategies are categorised under positivism, interpretivism and combined strategies below.

The strategies that stem from the positivist philosophical stance intend to use natural science techniques to collect research data. They include surveys and experiments, where survey research, according to Creswell (2009:12), provides a numeric description of trends, attitudes or opinions of a chosen population by studying a sample of that population. A frequency pattern of phenomena occurrence can be determined by using survey strategy. Surveys have many variations, including mail surveys, door-to-door interviews, telephone interviews and computer-assisted interviews. The questionnaire is the most used research instrument in almost all survey methods (McDaniel and Gates, 2010:129). Smith, Thorpe and Jackson (2012:39) add that the survey technique is associated with positivism as they both assess patterns and causal relations that cannot be accessible directly for a number of multiple factors making simultaneous impact.

Experimental research aims to determine if an applied treatment determines an outcome. The impact is determined by providing the treatment to one group and comparing the outcome with that of a control group for which treatment was not given. Experiments include true experiments, with the random exposure of subjects to treatment conditions and quasi experiments that use non-randomized designs (Creswell, 2009:12).

5.6.1 Interpretivist and combined research strategy

Within the interpretivist research strategy, one finds case studies, experimental research, action research, grounded theory, ethnography and archival research. A case study denotes research on a system bounded in space and time and embedded in a particular physical and socio-cultural context. Research is conducted using diverse methodologies, methods, and data sources, like participant observation, interviews, and audio-visual materials (Silverman, 2011:16). In a similar vein, Bryman and Bell (2011:59) explain that a case study implies that data are collected on one case, such as a single organization/location/event or a single person. The general objective is to fully understanding the case as much as possible.

Creswell (2009:12) postulates that experimental research seeks to determine if a specific treatment influences an outcome. The impact, as Creswell points out, is assessed by providing a specific treatment to one group and withholding it from another group and then determining how both groups fared on an outcome.

Koshy (2005:24) explains that action research involves observing and describing individual action to provide understanding of how they behave. Denscombe (2010:6) advises that the drive of action research is to solve a particular problem and to produce guidelines for best practice.

Grounded theory is an approach of qualitative inquiry in which researchers develop an inductive theoretical analysis from their collected data and subsequently gather further data to check these analyses. Grounded theory focuses on theory construction, rather than description or application of existing theories (Silverman, 2011:292).

Ethnography concerns itself with perceptions, social interactions and behaviours that occur within organisations, communities, groups and teams. The object of ethnography is to get an understanding of a population's actions and views, as well as the nature of the location they inhabit, by way of interviews and observations (Reeves, Kuper and Hodges, 2008:337).

McBurney and White (2009:228) explain that archival research involves the usage of data which research has not contributed in collecting. These records would have been amassed over a long period by an institution.

There are times when there is need to use a number of methods to neutralise the biases of each method (Creswell, 2009:14). This is where three mixed methods strategies are used, namely sequential, concurrent and transformative mixed methods. The sequential mixed method uses one method first and then adopts another for the same research. This is meant to elaborate or expand on the results of one method with another. The concurrent mixed method where the qualitative and quantitative data are merged to provide to enable detailed analysis of the problem under investigation. Data is collected concurrently and then combined into the interpretation of results. Lastly, the transformational mixed method uses an overarching theory within a research design

that has both qualitative and quantitative data. The theory provides a framework for topics of interest, methods of collecting data and outcomes.

5.6.2 The research strategy used for the study

Overall, the study took a positivist survey strategy which met the requirements of the study, namely to describe consumer perception, buying behaviour and loyalty with regard to green products. In particular, the survey method was used where a structured questionnaire was utilised. The questionnaire allows for gathering data which can be analysed quantitatively.

5.7 Target population

Malhotra (2010:372) advises that a target population describes specified elements or entities that hold the data pertinent in addressing the stipulated research issue. The elements share some common characteristic pertaining to a particular marketing issue. Wiid and Diggins' (2011:193) view is that population elements that are examined as spelt by the research problem are known as the target population.

Individual households in towns of Zimbabwe comprised the target population. The households were extracted from the locations, city center and suburban areas. The three segments were chosen so ensure the study had a fair representation of all social classes with regard to residential area. Owing to financial constraints, the key criterion for choosing target cities was that they would be within reasonable travelling distance from the researcher and the research assistants. The four cities chosen were Bindura, Marondera, Chinhoyi and Gweru.

5.8 Sampling strategy

A sample is a sub-group of the population that is taken for participation in a study. Normally it is impossible to investigate each and every element within a population hence the need to take a sample for study. To be of valuable use, a sample must be a true representation of the total population (Salkind, 2012:95). Similarly, Englander (2012:17) refers to sampling as the selection of respondents for a particular study. The

main reasons for sampling are that it is cost-effective and faster, as compared to conducting a census.

Generally there are two forms of sampling namely probability sampling and non-probability sampling. In probability sampling, the probability for selection for each population element is known, whereas it is unknown for non-probability sampling (Wiid and Diggines, 2011:199). Simple random sampling, cluster sampling, stratified random sampling and systematic sampling are the different forms of probability sampling. On the other hand, non-probability sampling techniques comprise of convenience, purposive, quota and snowball sampling (Shiu *et al.*, 2009:469).

5.9 Sampling technique for the study and the Research Instrument

Stratified random sampling was employed for this study. Firstly, residential areas were divided into strata, namely locations, suburbs and the city center. Within these strata, simple random sampling was employed to select households that were included in the survey. The sampling technique ensures that locations had the biggest representation because proportionally, most of the consumers stay in locations followed by suburbs and the city center.

The study utilised a structured, self-administered questionnaire to gather data for the quantitative study. A questionnaire is a formalized framework consisting of a set of questions and scales designed to generate primary data (Shiu *et al.*, 2009:329). The purpose of a questionnaire is to get responses from respondents in a written or verbal format (Shukla, 2008:47). In this present study, the questionnaire required respondents to present responses by filling in the questionnaire.

The advantages of the structured self-questionnaire survey are that it is “cheaper to administer”; “quick to administer”; “there is absence of interviewer effects”; “no interviewer variability”; and offers “convenience for respondents” (Bryman and Bell, 2011:232).

On the downside, the structured self-questionnaire survey includes non-responses as the respondents may not be willing to provide answers to certain questions; provision of

wrong responses where questions are not properly worded; lack of flexibility; and the likelihood of misleading results in the event of a biased attitude on the part of respondents (Wiid and Diggines, 2011:17).

The questionnaire was constructed in a manner that motivated the respondents to be part of the study. Respondents found the questionnaire interesting and easy to complete. The need for a well-written questionnaire was to ensure that precise data is collected. The questionnaire included a covering letter that explained the object of the research and sought the consent of the respondents. The letter also implored respondents to furnish the correct information when completing the questionnaire. Clear instructions were given on how to complete the questionnaire. Respondents simply checked the right answer to a question.

Following the advice of Wiid and Diggines (2011:177), the questionnaire consisted of closed-ended questions, meaning they required the respondent to select from a set of fixed responses. Salkind's (2012:149) advice is that a questionnaire should start with basic demographic questions and later focus on specific questions related to the objectives of the study. The questionnaire thus had seven sections namely:

Section A sought to capture the profile of the respondents. Demographic variables encompassed age, income, gender and residential area, employment status and type(s) of green products purchased. The demographic variables were incorporated to get insights into green consumers' profile.

Section B had statements which aimed to ascertain consumer insights on the quality of green products. Green product quality dimensions that were measured included reliability, durability and whether or not green products reduce wastage.

Section C covered questions on purchase intention. Elements of purchase intention measured were purchases of green products over the previous three months; relative amounts of green products one intended to purchase; and whether one would recommend them to friends and family.

Section D comprised questions on environmental concerns. Questions revolved on the level of environmental responsibility, environmental knowledge and on whether one actually uses green products.

Section E covered questions on repurchase intention. Measures of repurchase intention revolved around usage of green products, satisfaction with green products and on forecasted intention to purchase green products.

Section F comprised questions on preference for green products. Issues dealt with included preference for green products over conventional products, priorities when purchasing and on whether one would not buy there is a stock out of green products.

Section G covered questions on situations that affect green product purchase. A key question asked on whether one would alter the budget to accommodate green products. Another issue was whether one would change one's lifestyle to promote the environment. Lastly, it was important to establish if consumers really their spend energy on environmental activities such as recycling.

Sections B to G were designed on a 5-point Likert scale where the respondents were tasked to choose between: Strongly Agree, Agree, Not Sure, Disagree and Strongly Disagree. The advantages of the Likert scale are that it is simple to administer, interpret, compile and complete (Malhotra, 2010:309).

5.11 Pilot study

A pilot study was conducted as a prelude to the main study. Delport and Roestenburg (2011:195) postulate that the objective of the pilot study is to assess the feasibility of conducting the study, the appropriateness of the research methodology and questionnaire.

Employing convenience sampling, pilot study participants were selected from the different strata of the target population. The questionnaire was administered to a convenience sample of 20 respondents from the target population, distributed as follows: 10 in a location, 5 in a suburb and 5 in the city center. The researcher visited Chiwaridzo location to select respondents. Two research assistants covered the city

center and the suburbs. This was all in Bindura, which was easily accessible to members of the researcher team.

Upon examining the responses of the pilot study, certain language barriers were detected. Some statements needed to be re-worded. The questionnaire was thus refined and was ready to be widely distributed.

5.12 Administration of questionnaire

The researcher and four research assistants distributed the questionnaire in selected homes and for the city center, in shopping malls. The survey was administered over three months; April, May and June 2017. For the suburban areas and locations, simple random sampling was done by arbitrarily picking out a number from the housing list secured from the municipality. In the city center, simple random sampling was done by arbitrarily approaching consumers buying in shopping malls.

Questionnaires were collected fortnightly and those respondents who had not completed the document were given another week to do so. By the end of June 2017, the required 500 questionnaires had been collected, 125 apiece from the four towns, Bindura, Gweru, Marondera and Chinhoyi.

5.13 Sample size

Sample size refers to the elements of the population which are included in a study (Malhotra, 2007:338). Data analysis methods, accessibility of sampling frame and financial costs are the common factors that determine samples size (Malhotra, 2010). The proposed data analysis technique for this research is Structural Equation Modeling, as Tabachnick and Fidel (2001:117) advise. As a rule of thumb, for Structural Equation Modeling to be meaningful, 300 cases are deemed adequate. Thus, a sample size of 500 was deemed sufficient for this study.

5.14 Data Analysis

The Statistical Package for the Social Sciences (SPSS 22.0) and Analysis of Moments of Structure (AMOS 24.0) were used to analyse data gathered from the research exercise. The analysis of quantitative data was structured as follows:

5.14.1 Descriptive Statistics

Descriptive statistics comprise of techniques that allow the researcher to tabulate and summarise the profile of research objects for a given study. The study employed descriptive statistics to analyse the structure of the sample, using SPSS 22.0 (Lomax and Hahs Vaughn, 2012:6). These statistics included frequencies, mean and standard deviation. The normality test was done to inform the researcher on whether to employ parametric or non-parametric statistics. The data normality was ascertained by computing the skewness and kurtosis statistics, using SPSS v. 22.0 (Pallant, 2011:57).

5.14.2 The measurement model

The measurement model sought to outline the underlying connection between the unobserved and observed variables (Byrne, 2010:12). The suitability of the measurement model was assessed by conducting confirmatory factor analysis (CFA). The CFA model in this study comprises all latent and manifest variables, which are product quality, environmental concern, preference for green products, purchase intention, situations affecting purchase of green products and re-purchase intention.

To evaluate the measurement model's quality the study used the significance of the item loadings of all the constructs. Following the guidelines of Chinomona, Dhurup and Chinomona (2013:7), items reporting loadings below the minimum acceptable threshold of 0.500 were deleted. Model-fit assessment was achieved by subjecting the measurement model to AMOS version 24.0. This was meant to check whether the sample data fit the measurement model.

5.14.3 Absolute fit indices

On McDonald and Ho's (2002:72) advice, the absolute fit indices were employed to determine how well the *a priori* model fits the sample data. To assess the fitness of the measurement model the Goodness-of-Fit Index (GFI), Chi-Squared Goodness-of-Fit test statistic, including its degrees of freedom value (χ^2/DF) and p-value and root mean square error of approximation (RMSEA) were used.

5.14.4 Incremental fit indices

Bentler (1990:238) posits that the incremental fit indices are employed to complement the chi-square test. The study used the Comparative Fit Index (CFI) and Tucker-Lewis index (TLI). The CFI take it that latent variables are uncorrelated and compares the measurement model's sample covariance matrix to that of a null model by assessing the non-centrality and distribution values of model parameters (Schumacker and Lomax 2004:89). The CFI values between 0.0 and 1.0 with a value of $CFI \geq 0.90$ is generally accepted as pointing to good model fit (Hu and Bentler, 1998:459). The TLI is employed to either compare alternative models or to compare a measurement model against a baseline null model (Schumacker and Lomax 2004:88). Hu and Bentler (1998:449) recommended $TLI \geq 0.90$ as the acceptable threshold.

5.14.5 Structural model

After assessing the measurement model's quality, the structural model was assessed by means of AMOS version 22.0, employing the maximum likelihood estimates. The structural model captures the relationships among the latent variables. Structural models provide estimates of correlations amongst latent variables differing from measurement models in that they emphasis the nature and magnitude of the relationship between constructs than just the relationship between latent constructs and their measured variables (Arslan *et al.*, 2012:323).

The constructs correlations were assessed using model fit indices such as GFI, IFI, RMSEA, and CFI, TLI and $\chi^2 / (DF)$. In assessing the appropriateness of the

measurement and the structural model, the acceptable thresholds of model fit indices were guided by Bagozzi and Yi (2012:15), as shown in the table below.

Table 5.1: Measurement and structural model fit indices

Fit Index	Acceptable threshold
$\chi^2/ (df)$	< 3.000
GFI	≥ 0.800
RMSEA	≤ 0.080
IFI	≥ 0.900
CFI	≥ 0.900
TLI	≥ 0.900

Source: Specification, evaluation and interpretation of structural equation models, Bagozzi and Yi (2012:15)

After establishing the appropriateness of the models, structural equation modelling was used to conduct path modelling to predict the nature and direction of relationships of the factors influencing consumer perception of green products, purchasing behaviour and loyalty. SEM aids precision in the specification of research models and the operationalisation of constructs.

5.14.6 Correlation analysis

To complement the results of path modelling, Pearson product moment coefficient measure was employed to establish the relationship among the latent variables. The guidelines summarised in Table 3.2 were relied on to explain the relationships among variables.

Table 5.2: Pearson product correlation analysis

Value	Relationship significance
$r = -1$	Strong negative linear relationship
$r = 0$	No relationship exist
$r = +1$	Strong positive linear relationship

5.14.7 Reliability

Reliability points to the ability of a measurement procedure to produce consistent results if repeated under similar conditions (Yusoff, 2011:24). Various measures such as Cronbach's alpha coefficient and composite reliability (CR) can be employed in measuring internal consistency. Internal consistency measures the degree of interrelatedness of measurement items that are designed to measure the same construct (Takakol and Dennick, 2011:53). Cronbach's alpha estimates the correlation coefficient of measurement items in a test (Malhotra, 2007:285). Composite reliability measures the degree to which observable variables measure the latent variable. It provides a robust measure of reliability by considering contribution of each latent factor to each item and each item's error.

The Cronbach's alpha, also known as the alpha coefficient, is the most frequently used measure of internal consistency. A high alpha value of 0.7 or higher implies high internal consistency, whereas an alpha value below 0.7 suggests that the measurement items are not reliable (Blunch, 2008:200). The reliability analysis results show that the Cronbach alpha coefficient ranges between 0.676 and 0.771 for the six constructs,

suggesting some degree of internal consistency in each construct. The scales' reliability was therefore deemed adequate and all the constructs were taken to be reliable. The composite reliability values for the constructs range from 0.678 to 0.773, which largely satisfies the recommended criterion of above 0.6 (Bagozzi and Yi, 1988). All these reliability tests outcomes indicate reliability of the scales and constructs

5.14.8 Validity

Validity refers the ability of a measuring instrument to measure what is intended to be measured (Gupta 2011:133). Where structural equation modelling is employed, convergent validity is evaluated by inspecting the factor loadings and estimating the AVE.

Convergent validity was confirmed for each construct in the model. The factor loadings of all constructs are all above the recommended threshold of 0.5 (Field, 2013). The AVEs of all constructs surpassed the usual cut-off of 0.5 except for SA (AVE= 0.474) and PQ (AVE=0.478), however this is still marginally acceptable especially given the fact that the factor loadings of all the manifest variables (items) were over 0.6 (Chin et al., 1997). This means that all the items in each construct converged towards the concept measured by the construct.

5.14.9 Elimination of bias

Probability sampling, in particular, stratified random sampling, was employed to select survey respondents to ensure absence of bias when picking up respondents.

5.15 Ethical considerations

In research, ethics refer to the moral principles or standards that guide the ways in which individuals treat other human beings in situations where they can cause actual or potential harm, whether economic, physical or mental (Kent, 2007:38). The researcher ought to be honest with both the respondents and the results of the study.

To this regard, Bryman and Bell (2011:128) identify four main ethical considerations; ensuring participants have given informed consent, ensuring no harm comes to

participants, ensuring anonymity and confidentiality and ensuring that permission is obtained. These considerations were given due respect in the following manner:

i. Ensuring participants give informed consent

Informed consent point out to the duty of the researcher to provide the potential participants with information on the nature of the research to be undertaken. In obtaining consent, the participant should be given adequate time to decide on their participation in the research. Ideally, details must be given before commencement of fieldwork (David and Sutton, 2011:212). The purpose of this study was explained to the respondents and detailed in the covering consent letter as well.

ii. Ensuring no harm comes to participants

According to Bryman and Bell (2011:136), harm to participants can include physical or mental harm. There was no likelihood of physical harm as the study was placed in ethics level two, implying the study posed minimal risk to humans, animals and the environment.

iii. Ensuring confidentiality and anonymity

Confidentiality refers to ensuring that the responses of the individuals are not divulged to others. Anonymity refers to the practice of ensuring that study participants cannot be identified by anyone (David and Sutton, 2011:211). In a similar vein, Bryman and Bell (2011:128) explain that the research report should not reveal the identity of the respondents. Furthermore, the information collected should be used solely for the object of the research and not given to any other individuals or entities for other use. To ensure confidentiality and anonymity, data collected was only used for the thesis and the identities of respondents were not divulged.

iv. Ensuring that permission is obtained

Permission to conduct research in the selected homes was sought from the municipalities with jurisdiction in the residential areas of interest. Furthermore, survey

participation by individual respondents was strictly voluntary and no individual was coerced to take part in it.

Additionally, the questionnaire, together the research proposal went through the Durban University of Technology's Ethics Committee to ensure the study is within the required ethical standards. The questionnaire successfully passed the Faculty Research Ethics Committee (FREC) standards and received the following ethical clearance number: 96/15 FREC.

5.16 Concluding summary

This chapter covered in detail, research methodology aspects, such as the research philosophy, research strategy, sampling strategy, target population and research instrument. The rationale for adopting a positivist research philosophy and a quantitative research approach were explained. Consumer households comprised the study's target population. The research instrument was a structured self-administered questionnaire. The Statistical Package for Social Sciences (SPSS) v 22.0 and the Analysis of Moments of Structure (AMOS) v 24.0 are the statistical tools that were employed for data analysis. The chapter concluded by discussing the approaches for enhancing reliability and validity.

The next chapter presents and discusses the empirical findings of the study.

CHAPTER SIX

EMPIRICAL FINDINGS OF THE STUDY

6.1 Introduction

The chapter addresses the research objectives of the study and tests the research hypotheses. The objectives of the study include:

To determine the impact of product quality on purchase intention for green products;

To ascertain the influence of environmental concern on purchase intention for green products;

To establish the influence of situations affecting green product purchase on purchase intentions for green products;

To establish the impact of preference for green products on purchase intention; and

To assess the impact of purchase intention on re-purchase of green products.

The strength of all the hypothesised relationships is estimated using Structural Equation Modelling (SEM). SEM as a statistical modelling technique is more confirmatory than exploratory in form, it is used to test the validity of the model presented in Figure 5.1. The latent constructs of interest in this study as indicated in the foregoing chapters are (1) Product quality; (2) Environmental concern; (3) Preference for green products; (4) Situations affecting green product purchase; (5) Purchase intention and (6) Re-purchase intention.

The first part of the chapter deals with the demographic profile of the sample. The second part provides summary measures of the key variables under study. The third part looks at the composite measures used for the SEM, the reliability of the measuring scales as well as the specification of the measurement and structural models.

Evaluation for Goodness-of-Fit, re-specification and modification of the model are dealt with. In the final part, a concluding summary of the chapter is provided.

6.2 Results

The results presented here were obtained from the 497 respondents who made up the sample size of the study.

6.2.1 Demographic profile

Age and Gender

Table 6.1: Age and Gender

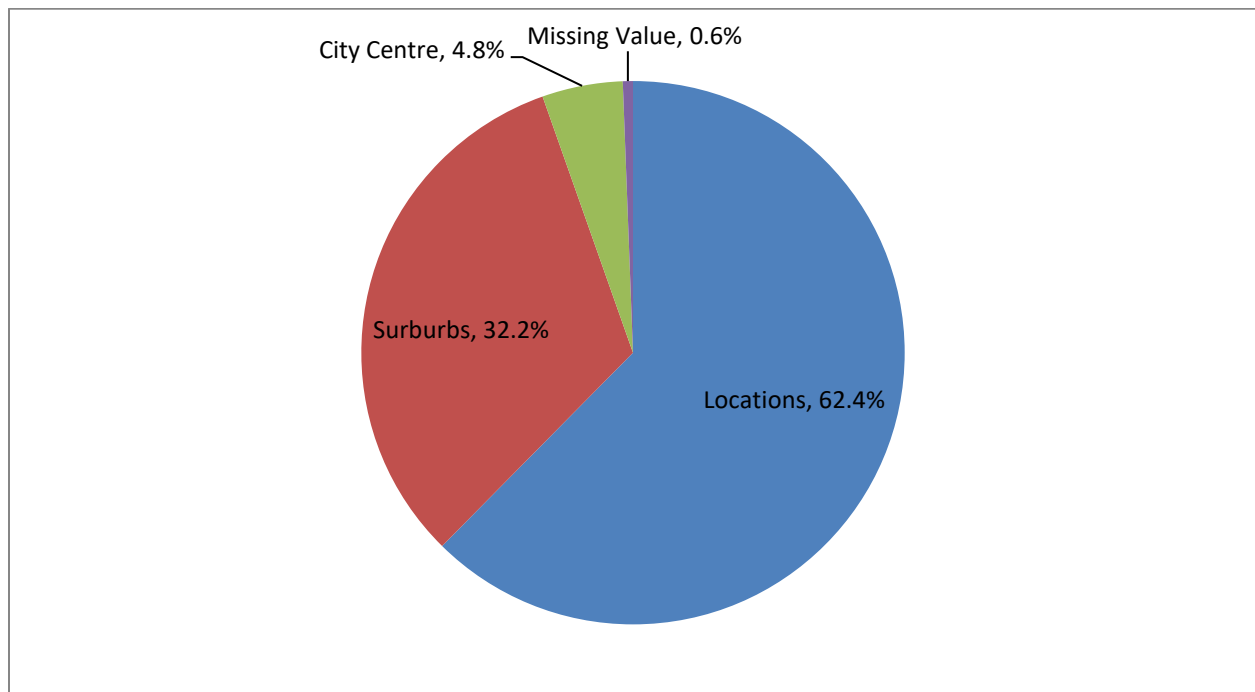
Gender	Age (years)						
	Less than 21	21-30	31-40	41-50	51 and above	Non-response	Total
Male	21	72	77	55	18	1	244
Female	26	72	72	56	24	3	253
Total	47	144	149	111	42	4	497

The table above shows there is almost an equal proportion of females (n= 253; 50, 9%) and males (n= 244; 49.1%). This implies a more or less equal number of females and males were eager to complete the questionnaire in the selected households.

The table also reveal that the majority of the respondents are between 31 – 40 years old (n= 149; 30%). They are closely followed by the 21-30 (n=144, 29%) and 41-50 (n=111, 22.3%) age groups highlighting that the respondents are middle aged and economically active. These groups are involved in most of the shopping activities.

Residential area

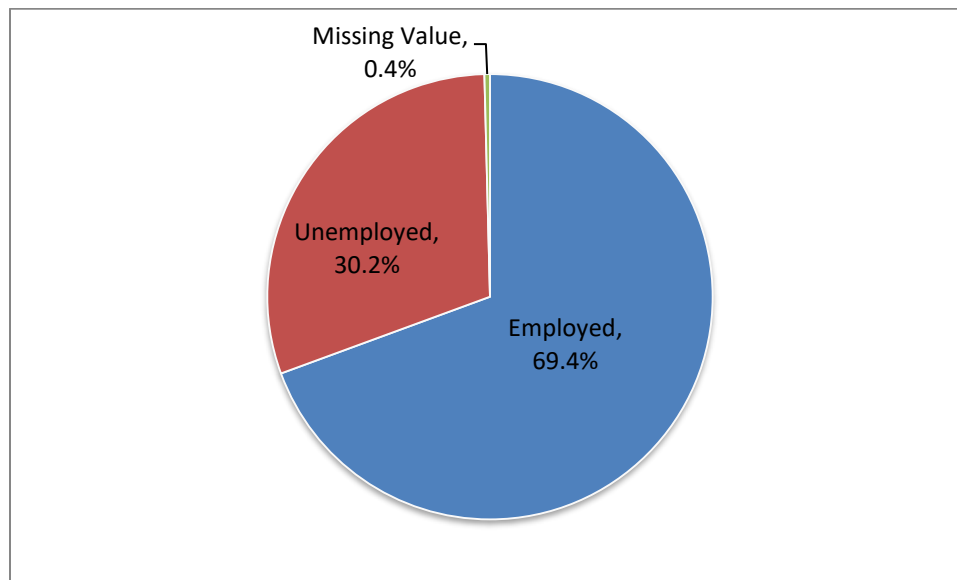
Figure 6.1: Residential area



The figure above shows that the majority of the respondents live in locations (n= 310; 62.4%) largely because it is affordable to own a house or rent in these areas. The suburban group follows (n=160, 32, 2%) and then the city center with (n=24, 4.8%). This geographical sample distribution typifies the demography of Zimbabwe.

Employment

Figure 6.2: Employment



The figure above shows that most of the respondents are employed ($n = 345$; 69.4%). This indicates increased capacity by respondents to afford green products which are deemed more expensive compared to non-green products.

Type of green product purchases

Table 6.2: Type of green product purchases

Frequency		Percent
Food	265	54.2
Health care	167	34.2
Cleaning products	113	23.1
Electrical	165	33.7
Other	18	37.7

The table above shows that the majority of people purchased green food products (54.2%). Other green products that were purchased by a sizable number of people were

healthcare products (34.2%) and electrical products (33.7%). This is mainly attributed to a heightened consciousness among consumers on their product purchases. In the same breath, Kim and Choi (2005:596) note that pro-environmental consumers favour bio-degradable products over their opposite numbers.

6.2.2 Green product quality

The following results relate to questions that aimed at establishing the respondents' views on how product quality impacts the intention to purchase green products.

Table 6.3: Green product quality

RESPONSES	VARIABLES						CONSTRUCT MEAN
	PQ ₁ Green Product Reliability		PQ ₂ Green Product Durability		PQ ₃ Green Products Reduce Wastage		
	N	%	N	%	N	%	
Strongly Disagree	3	0.6	4	0.8	4	0.8	-
Disagree	24	4.8	58	11.7	19	3.8	-
Not Sure	58	11.7	93	18.7	69	13.9	-
Agree	303	61.0	236	47.5	274	55.1	-
Strongly Agree	109	21.9	106	21.3	131	26.4	-
TOTAL	497	100	497	100	497	100	-
Mean	3.99		3.77		4.02		3.93
Standard Deviation	0.765		0.942		0.793		-

Table 6.3 above reveals that the majority of the consumers agree, n=412, 82, 9% that green products are reliable. Only 5.4% think green products are not reliable. The view that green products are considered more reliable than conventional products was also confirmed by Ali and Amad (2012:88) in a study done in Pakistan. Smith and Paladino (2010:97) also assert organic products are considered to be high in natural content than conventional products.

In general, consumers feel green products are durable, n=342, 68.8%. A paltry 12.5% feel green products do not last long enough. The results imply green products are more durable than non-green products. The table also reveals that consumers regard green

products to be efficient, leading to minimal wastage of resources. This is buoyed by 81.5% who agree that indeed green products minimise resource wastage. Consumers feel green products allow for efficient resource utilisation.

All the means of product quality items are above 3 signaling high rating for green products with regard to quality. With an overall mean of 3.93 consumers agree that green products are of superior quality.

6.2.3 Environmental concern

The following results relate to questions on environmental concern embodied by environmental responsibility, environmental knowledge and environmental friendliness.

Table 6.4: Environmental concern

RESPONSES	VARIABLES						CONSTRUCT MEAN
	EC ₁ Environmental Responsibility		EC ₂ Environmental Knowledge		EC ₃ Usage of environmental friendly products		
	N	%	N	%	N	%	
Strongly Disagree	2	0.4	5	1.0	4	0.8	-
Disagree	13	2.6	24	4.8	14	2.8	-
Not Sure	53	10.7	58	11.7	45	9.1	-
Agree	270	54.3	319	64.2	275	55.3	-
Strongly Agree	159	32.0	91	18.3	159	32.0	-
TOTAL	497	100	497	100	497	100	-
Mean	4.15		3.94		4.15		4.08
Standard Deviation	0.739		0.762		0.758		-

Consumers allude to having a high level of environmental responsibility, with n=429, 86.3% expressing high environmental responsibility. Few, n=15, 3.0% declared they are not obliged to protect the environment. The findings indicate an increasing number of consumers that are becoming more environmentally responsible.

A whole 410 respondents (82.5%) believe they possess a high level of environmental knowledge. A meager 5.8% expressed ignorance on environmental matters.

Environmentalists can be commended for this as many consumers are conscious about environmental issues. This is Akehurst *et al.*'s (2012:976) conception as well. Their research study found out that objective environmental knowledge is taken to be a strong contributor to the development of consumer attitudes towards green products.

Table 6.4 highlights high usage of green products by consumers, n=434, 87.3%. This shows that consumers are doing their best to protect the environment by using green products.

The mean score for environmental concern (mean=4.08) was the highest among the sampled respondents revealing high consciousness and concern for the environment. It is therefore heartening that people are environmentally responsible and that they highly consider products that are environmentally-friendly.

6.2.4 Preference for green products

The following results relate to questions that aimed at establishing consumer preference for green products over conventional products. The questions center on the superiority or not of green products over non green products.

Table 6.5: Preference for green products

RESPONSES	VARIABLES						CONSTRUCT MEAN
	PGP ₁ Preference for green products over conventional products		PGP ₂ Consumers first look for green products		PGP ₃ Consumers do not buy if green products are not available		
	N	%	N	%	N	%	
Strongly Disagree	7	1.4	10	2.0	41	8.2	-
Disagree	41	8.2	86	17.6	231	46.5	-
Not Sure	51	10.3	54	10.9	89	17.9	-
Agree	286	57.5	259	52.1	101	20.3	-
Strongly Agree	112	22.5	88	17.7	35	7.0	-
TOTAL	497	100	497	100	497	100	-
Mean	3.92		3.66		2.71		3.43
Standard Deviation	0.883		1.023		1.096		-

A total of 398 people (80%) indicated that they preferred green products ahead of conventional products. The other side reveals that just 48, 9.6% felt green products are no match to conventional products. This is an indication that an increasing number of people are buying into the concept of using green products, a view shared by Chen and Chang (2012:516).

Table 6.5 highlights that consumers are on the lookout for green products brands when they do their shopping. This is affirmed by n=347, 69.8% of the respondents. Few, n=96, 19.6% indicated that they really do not consider the green aspect when shopping.

The table shows an insignificant proportion of consumers who will refrain from buying if green products are not available, n=136, 27.3%. The majority of the consumers, n=272, 54.7% will still go on with their shopping even if there is no stock of green products are not available. This implies that green product marketers should not relax as consumers will go on to buy other items if green products are not available.

With a low mean score of 2.71, consumers indicated that green products are not indispensable and will buy other products if they are not in stock. Above average means

of 3.92 and 3.66 reveal that consumers prefer green products to non-green products and first look for green products when shopping.

The least mean score for all the constructs was 3.43 for green products preference but it was still above the benchmark mid-point value of 3.00. This shows a high inclination by consumers to accommodate green product purchases in their budgets. This result also points to respondents' lifestyle that promotes the environment, occasionally participating in pro-environmental activities such as recycling.

6.2.5 Situations that affect green product purchase

The following results relate to questions on situations that affect green product purchase which include consumer budgets, consumer lifestyle and time and effort spent on environmental activities.

Table 6.6: Situations that affect green product purchase

RESPONSES	VARIABLES						CONSTRUCT MEAN
	SA ₁ Consumer budgets include green products		SA ₂ Consumers may change lifestyle to promote the environment		SA ₃ Time and effort spent on environmental activities		
	N	%	N	%	N	%	
Strongly Disagree	9	1.8	2	0.4	10	2.0	-
Disagree	72	14.5	30	6.0	105	21.1	-
Not Sure	65	13.1	63	12.7	69	13.9	-
Agree	295	59.4	277	55.7	257	51.7	-
Strongly Agree	56	11.3	125	25.2	56	11.3	-
TOTAL	497	100	497	100	497	100	-
Mean	3.64		3.99		3.49		3.71
Standard Deviation	0.925		0.811		1.010		-

Table 6.6 reveals consumers take consideration to include green products in their budgets, n=351, 70.7%. Only n=81, 16.3% do not really care about including green products in their budgets. Related to this, Jansson *et al.* (2010:360) posit higher income levels are associated with willingness to adapt to green product offerings.

A total of 402 respondents (80.9%) iterated that they may change their lifestyle to accommodate green products. This is in sync with the overall trend that has seen people adopt environmentally friendly behaviours like conserving energy and moving to organic foods, for example. This view that environmental concern drives consumer values and lifestyles towards the adoption of green products was also confirmed by Lu *et al.* (2013:5) in a study done in southern USA.

A significant number of 313, 63% professed that they take time and some effort to participate in environmental activities. A disturbing 115, 22.1% expressed no concern for expending time energy on environmental activities. This means that whilst there is a commendable population with knowledge of environmental issues, there is still a lot to be done on environmental education.

All the means in Table 6.6 point out non-existence of cases that hinder the purchase of green products. Consumers include green products in their budgets, spend time to participate in environmental activities and are keen to alter their lifestyles for green products. The overall mean of 3.71 signifies a conducive atmosphere for the purchase of green products.

6.2.6 Purchase intention

The following results relate to questions on purchase intention for green products which include purchase of green products over the previous three months, intention to increase purchase of green products and recommendation of green products to friends and family.

Table 6.7: Purchase intention

RESPONSES	VARIABLES						CONSTRUCT MEAN
	PI ₁ Purchase of green products over the last three months		PI ₂ Intention to purchase green products more		PI ₃ Recommendation of green products to friends and family		
	N	%	N	%	N	%	
Strongly Disagree	14	2.8	5	1.0	3	0.6	-
Disagree	75	15.1	32	6.4	11	2.2	-
Not Sure	37	7.4	63	12.7	31	6.2	-
Agree	298	60.0	291	58.6	320	64.4	-
Strongly Agree	73	14.7	106	21.3	132	26.6	-
TOTAL	497	100	497	100	497	100	-
Mean	3.69		3.93		4.14		3.92
Standard Deviation	0.991		0.827		0.672		-

Table 6.7 reveals in the last three months green product purchases escalated. It is probable this trend was not monopolistic to the particular period but indeed green products are receiving attention and preferred with people.

It is shown in Table 6.7 above that n=397, 79.9% intend to increase the amount of green products they purchase in the near future. This is a sign of better awareness and knowledge of green products. This is buoyed by Rehman and Dost (2013:96) who posit that an increase in intention to purchase a green product is expected to increase the propensity of consumers to actually purchase the green product.

The majority of the respondents agreed they would recommend green products to their friends and family=452, 91.0%. Green product marketers will benefit from this word of mouth strategy. This is buoyed by Ottman (2011:10), who note that consumers are heavily influenced by the recommendations of friends, family and trusted third parties when making purchase decisions.

All the means for purchase intention are above average implying that consumers generally intend to keep on purchasing green products. The construct mean of 3.92 also confirms consumers' future intentions to patronise green products.

6.2.7 Re-purchase intention

The following results relate to questions on re-purchase intention which comprise of usage of green products, satisfaction with green products and future intention to purchase green products.

Table 6.8: Re-purchase intention

RESPONSES	VARIABLES						CONSTRUCT MEAN
	RI ₁ Usage of green products		RI ₂ Satisfaction with green products		RI ₃ Future intention to purchase green products		
	N	%	N	%	N	%	
Strongly Disagree	6	1.2	6	1.2	5	1.0	-
Disagree	41	8.2	54	10.9	18	3.6	-
Not Sure	34	6.8	44	8.9	52	10.5	-
Agree	338	68.0	309	62.2	300	60.4	-
Strongly Agree	78	15.7	84	16.9	122	24.5	-
TOTAL	497	100	497	100	497	100	-
Mean	3.89		3.83		4.04		3.92
Standard Deviation	0.808		0.879		0.765		-

The majority of the respondents have used green products, n=416, 83.7%. A small number, 47 (9.4%) state they have never used green products before, whilst n=34, 6.8% are not sure if they have used them before. As such there is likelihood for re-purchase of green products as most consumers have had an experience with them. It is the 6.8% of respondents who are not sure which should be of concern to green marketers because it means they are not knowledgeable of green products. That is a challenge that needs focus.

Table 6.8 highlight that the majority of the consumers, n=393, 79.1% are satisfied with their green product purchases. They are therefore likely to re-purchase the products. Only a few, n=60, 12.1 % have not been satisfied with their green products purchases. The view that customers will remain loyal to brands is satisfies was also confirmed by Cohen *et al* (2007:42) in a study done in New Zealand.

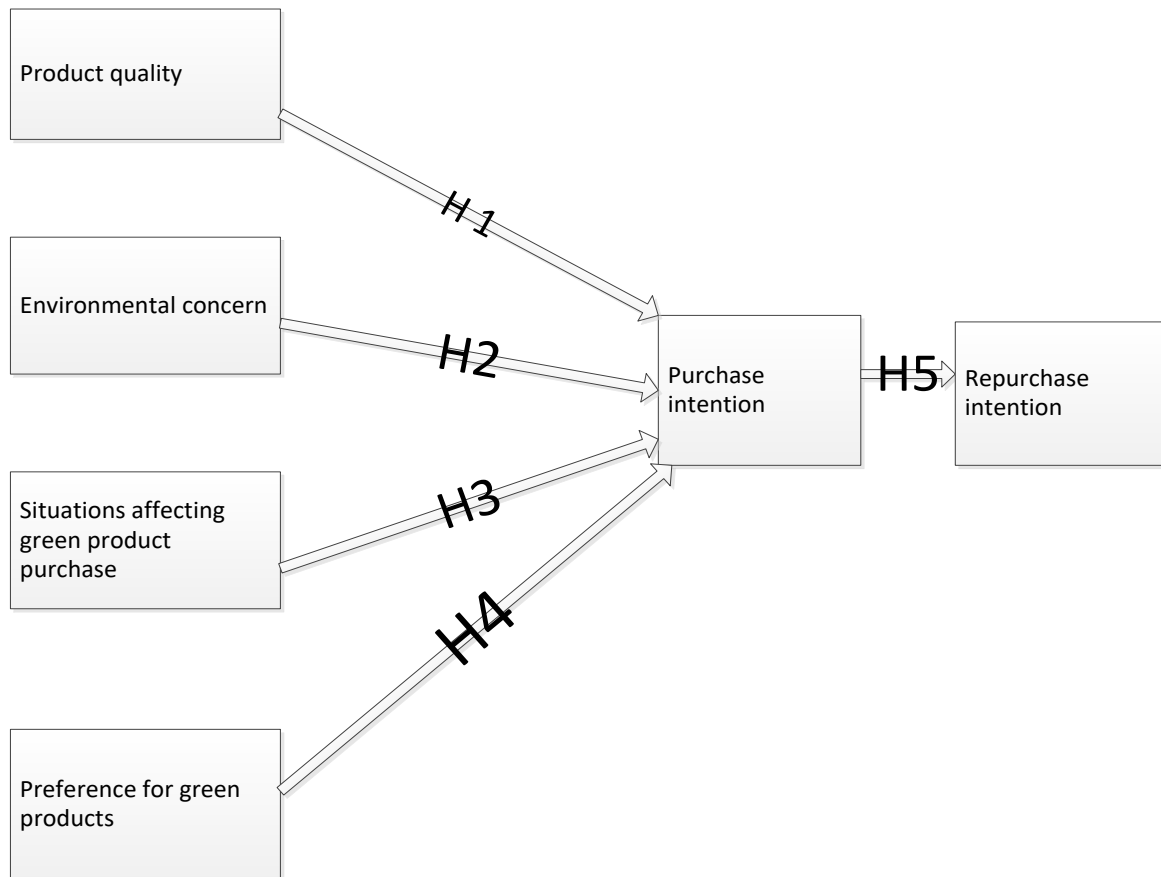
The table reveals that re-purchase intention for green products scored very high with n=422, 84.9% agreeing they are sure to buy green products in the near future. This confirms the continued trend by consumers to move towards environmental preservation.

With an extremely high mean of 4.04, intention to re-purchase green products signals the growing importance of green products on the Zimbabwean market place. Corresponding high means of 3.89 and 3.83 for green product usage and satisfaction point to strong re-purchase intention for the products. The overall mean of 3.92 also points to a strong desire re-purchase green products.

6.3 Structural equation modelling

The hypothesised model was tested using the Structural Equation Modelling technique.

Figure 6.3: Proposed model derived from the hypotheses



6.3.1 Assumptions to structural equation modelling

The SEM process was based on certain assumptions to prevent spurious results, and these were:

- i. That the data was normal, with no outliers
- ii. The variables and constructs should meet a certain minimum level of reliability and validity above the requirement that they should be positively correlated.

- iii. That before interpretation of results, the measurement model together with the structural model should meet certain ranges of values for respective measures of fit indices.

Model fit indices include the chi-square value over degree of freedom (χ^2/df), Goodness-of-Fit Index (GFI), Incremental Fit Index (IFI), Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), and the Tucker-Lewis Index (TLI). A comparison with acceptable thresholds was done so as to yield satisfactory results that are consistent with modelling assumptions. The use of many varied fit indices for aided in averting possible pitfalls in specification and procedures. Gross deviations from SEM assumptions are understood to pose serious problems as they may lead to biased estimates of regression weights in the final model.

6.3.2 Outlier and Normality Screening

As per the assumptions of the structural modelling equation, survey data was screened for normality and outliers before anything was done. Outliers were spotted using the Mahalanobis distance. Three observations that were farthest from the centroid were spotted and they indicated the typical nature of the responses and thus were labelled as outliers. The three cases in the questionnaire were subsequently deleted for their high distance from the centroid. Concerning the normality of variables, Field (2013:172) points out that for a large sample size like the one in this study, the central limit theorem contends that the assumption of normality does not have much bearing on data analysis. Although the central theorem caters for the issue of normality in this study, the skewness and kurtosis of each item in the model have been done and are shown in the table below.

Table 6.9: Assessment of normality

Variable	Skewness	Kurtosis
PGP1	-1,051	1,162
PGP2	-0,716	-0,313
SA3	-0,559	-0,637
SA2	-0,85	0,853
SA1	-0,878	0,216
EC1	-0,876	1,392
EC3	-1,09	2,219
PI2	-0,978	1,302
PI3	-1,089	3,404
PQ1	-1,118	2,485
PQ2	-0,671	0,073
PQ3	-1,044	2,097

Generally, in order to prove normal univariate distribution, the value for the skewness and kurtosis between -2 and +2 are considered acceptable (George and Mallery, 2010). The table indicates that overall, there are decent values and with the backing of the central limit theorem, the study confidently asserts that the data meets the normality assumption. Having eliminated outliers and demonstrated the normality of the remaining data, the analysis proceeded to run structural equation model with the data. Running a structural equation model took a two-step approach that included designing, testing, and improving a measurement model and subsequently the building of a structural model.

6.3.3 Measurement Model

The initial model that delineates and stipulates how the observed variables depend on the latent unobserved variables is referred to as the measurement model. The use of the measurement model is to confirm the structure of each construct. The measurement model was constructed in the IBM package AMOS version 24 and was accessed using confirmatory factor analysis (CFA).

Before completing confirmatory factor analysis, measures of sphericity and sampling adequacy need to be computed for the 18 items that are to be used to measure the six constructs. The table below shows the results for measures of sphericity and sampling adequacy.

Table 6.10: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.929
Bartlett's Test of Sphericity	Approx. Chi-Square	3729.004
	Df	153
	Sig.	0.000

To check whether partial correlations were high enough the Kaiser-Meyer-Olkin measure of sampling adequacy was relied on. From the results above, the KMO was found to be 0.929 indicating that the correlations between variables were not too low. The acceptable benchmark value of 0.6 gives green light to go ahead with confirmatory factor analysis. The factor model would be inappropriate if the Bartlett's test of sphericity reveal the correlation matrix to be an identity matrix. The results above, however, show a statistically significant Bartlett's Test of Sphericity with approximate chi-square of 3729.004 (p-value=0.000). It is therefore prudent to proceed with confirmatory factor analysis. Both measures confirm the appropriateness of the data and hence the analysis to reduce the number of items, and identify the dimensions of latent variables can be done.

The starting point is to turn the proposed model, Figure 4.4 into an initial measurement model. From the initial measurement model, the CFA results displayed marginally acceptable fit indices but not great enough for further analysis: ($\chi^2 = 421,729$, $\chi^2/df = 3.514$, GFI = 0.911, TLI = 0.894, CFI = 0.917, IFI = 0.888, RMSEA = 0.071). A close diagnosis of factor loadings, modification indices and the standardised residual covariance matrix retrieved from AMOS output showed that items GP3, PI1, RI3 and EC2 had to be deleted from the measurement model. These items were subsequently

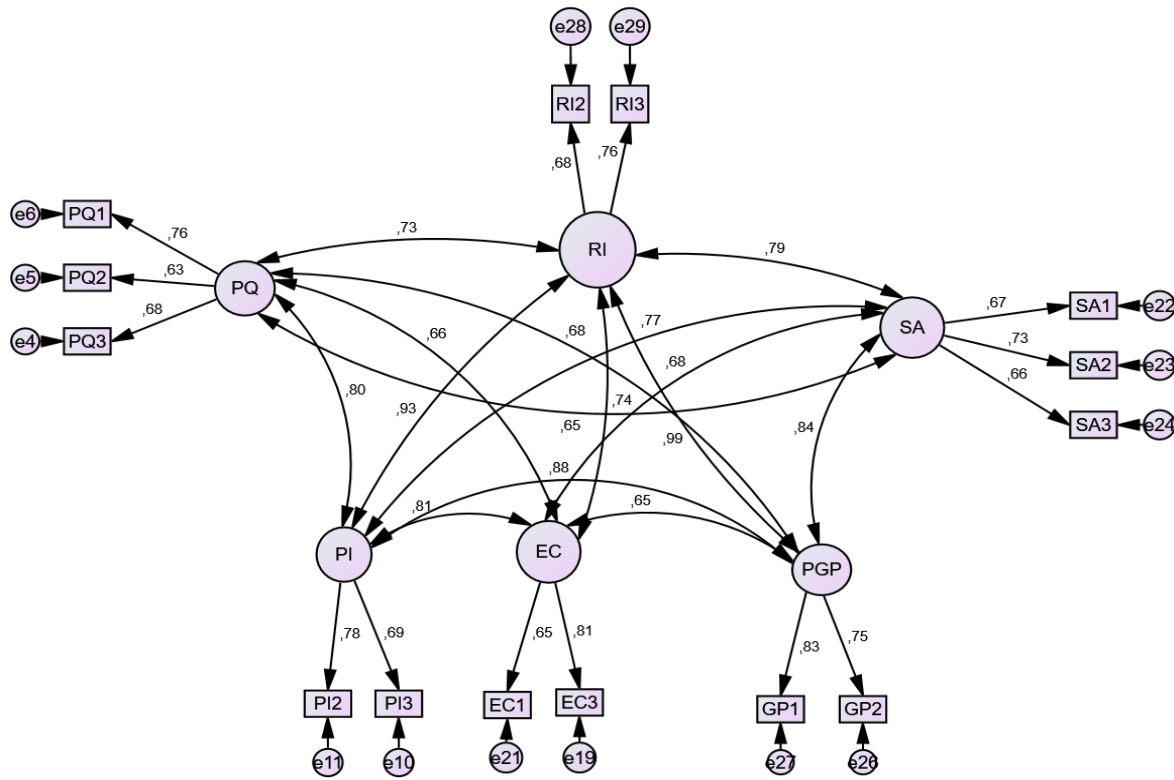
deleted because of their poor factor loadings (which were below 0.5), observed cross-loading in other constructs, and high standardised residual covariance matrix (above |2.4|), as Hair *et al.* (2014) advise. According to Ford *et al.* (1986), deleting items with poor factor loadings aid in reducing the measurement error and increasing reliability among items, which in turn enhances the model fit. Accordingly, the measurement model was adjusted and an improved model without the deleted items was arrived at. New fit indices were calculated and this resulted in acceptable values enough for further analysis. Table 6.11 below shows the modified model fit indices.

Table 6.11: Modified Model Fit Indices

Fit index	Acceptable threshold (Hair et al., 2014)	Modified Model fit index value	Comment
χ^2/DF	< 3.000	2.759	Acceptable
GFI	≥ 0.800	0.954	Satisfactory
RMSEA	≤ 0.080	0.060	Acceptable
IFI	≥ 0.900	0.943	Acceptable
CFI	≥ 0.900	0.963	Acceptable
TLI	≥ 0.900	0.945	Acceptable

After accepting the measurement model fit indices the study proceeds to show the final measurement model. Figure 6.4 below presents the final measurement model.

Figure 6.4: Measurement model



6.3.4 Reliability and Validity of Scales

Given that the main purpose of conducting a CFA is to confirm the structure of the measurement (constructs), the reliability and convergent validity of the scales were evaluated.

Cronbach's alpha and Composite Reliability (CR) were used to measure the reliability of each construct. Cronbach's alpha measures the internal consistency of the construct and its cut-off value is 0.7 although 0.6 is sometimes permissible (Field, 2009: 675). As recommended by Hair *et al.*, (2014:101), convergent validity was assessed using factor loading (standardized estimates) which is expected to be above 0.5 and Average Variance Extracted (AVE), also required to be above 0.5. The table below summarises the assessment of reliability and convergent validity of the scales.

Table 6.12: Summary of reliability and convergent validity of scales

Constructs	Items	Factor loading	<i>p-value</i>	Cronbach α	CR	AVE	Final number of Items (and Initial)
EC	EC1	0,650	***	0,689	0,697	0,538	2 (3)
	EC3	0,808	***				
PGP	PGP1	0,834	***	0,771	0,773	0,631	2 (3)
	PGP2	0,752	***				
PI	PI2	0,779	***	0,702	0,704	0,544	2 (3)
	PI3	0,693	***				
PQ	PQ1	0,761	***	0,737	0,732	0,478	3 (3)
	PQ2	0,628	***				
	PQ3	0,678	***				
RI	RI2	0,676	***	0,676	0,678	0,514	2 (3)
	RI3	0,755	***				
SA	SA1	0,675	***	0,728	0,730	0,474	3 (3)
	SA2	0,734	***				
	SA3	0,655	***				
Notes: ***: significant at 0.01 level. CR= composite reliability; AVE: Average variance extracted							

The table above shows that the factor loadings of all constructs are all above the recommended threshold of 0.5 (Field, 2013). The AVEs of all constructs were above the usual cut-off of 0.5 except for SA (AVE= 0.474) and PQ (AVE=0.478). However this is still marginally acceptable especially given the fact that the factor loadings of all the manifest variables (items) were above 0.6 (Chin *et al.*, 1997). The composite reliability values for the constructs range from 0.678 to 0.773, which largely satisfies the recommended criterion of above 0.6, (Bagozzi and Yi, 1988). The above results confirm that there is convergent validity in all the constructs in the model. This means that all the items in each construct converged towards the concept measured by the construct.

The table also displays results for the reliability analysis done using the Cronbach's alpha coefficient. Pallant (2011:100) asserts that the alpha value should be above the minimum threshold value of 0.70 to be considered a good measure for internal

consistency of the variables within a construct. The closer the value is to 1, the higher the internal consistency reliability of the construct as Sekaran (2003:311) advises. However, it sets a less stringent benchmark measure of reliability at 0.6. The results from the reliability analysis show that the Cronbach alpha coefficient ranges between 0.676 and 0.771 for the six constructs, suggesting that there is internal consistency in each construct. The reliability of the scales was therefore deemed adequate and all the constructs were reliable.

6.3.5 Inter-correlation between constructs

Inter-correlation between constructs was also computed from the measurement model and the result was a pair-wise correlation matrix. The Pearson product moment correlation coefficient measure was preferred because the variables and their constructs were assumed to have an underlying continuous distribution. The table below presents the correlations between constructs in the model.

Table 6.13: Inter-correlation between constructs (N=497)

	SA	PQ	PI	EC	PGP	RI
SA	1.000	-	-	-	-	-
PQ	0.648	1.000	-	-	-	-
PI	0.771	0.795	1.000	-	-	-
EC	0.682	0.656	0.805	1.000	-	-
PGP	0.837	0.678	0.880	0.652	1.000	-
RI	0.791	0.731	0.932	0.741	0.987	1.000
Note: All correlations are significant at the 0.01 level						

The table above indicates that there are strong and positive correlations between constructs. For example there is a strong and positive correlation between PI and SA ($r = 0.771$; $p < 0.01$), PI and PQ ($r = 0.795$; $p < 0.01$), PI and EC ($r = 0.805$; $p < 0.01$), PI and

PGP ($r = 0.880$; $p < 0.01$), and PI and RI ($r = 0.932$; $p < 0.01$) respectively. The six constructs in the model measured different aspects of green product perception and subsequent purchasing behaviour; hence a high degree of inter-correlation was expected. To establish cause and effect relationship between variables, it is necessary that the variables correlate. The resulting correlation statistics indicate that there is a significant linear relationship between any two constructs in the model. However, too high a correlation between two constructs might be an indication that the constructs are in fact the same thing. This is exemplified by a high correlation between PGP and RI ($r = 0.987$; $p < 0.01$). These constructs were however understood to be completely different as one measured preference for green products and the other specifically solicited for re-purchase intentions. Violation of model assumptions such as these may have occurred by chance due to the sheer size of the correlation matrix.

This concludes the confirmation process for the structure of the constructs through the measurement model. The next section presents the results for the hypotheses testing through the structural model.

6.3.6 Structural model

The structural model is an essential part of the modelling process that specifies how the latent variables are related to each other. In this study, the latent variables were constructs PQ, PGP, SA, EC, PI, and RI. Unlike with the measurement model, the structural model enables the researcher to empirically test the hypotheses postulated in the study as well as testing the conceptual model. Thus in this section, research hypotheses are tested. As with the measurement model, the structural model was subjected to model fit indices.

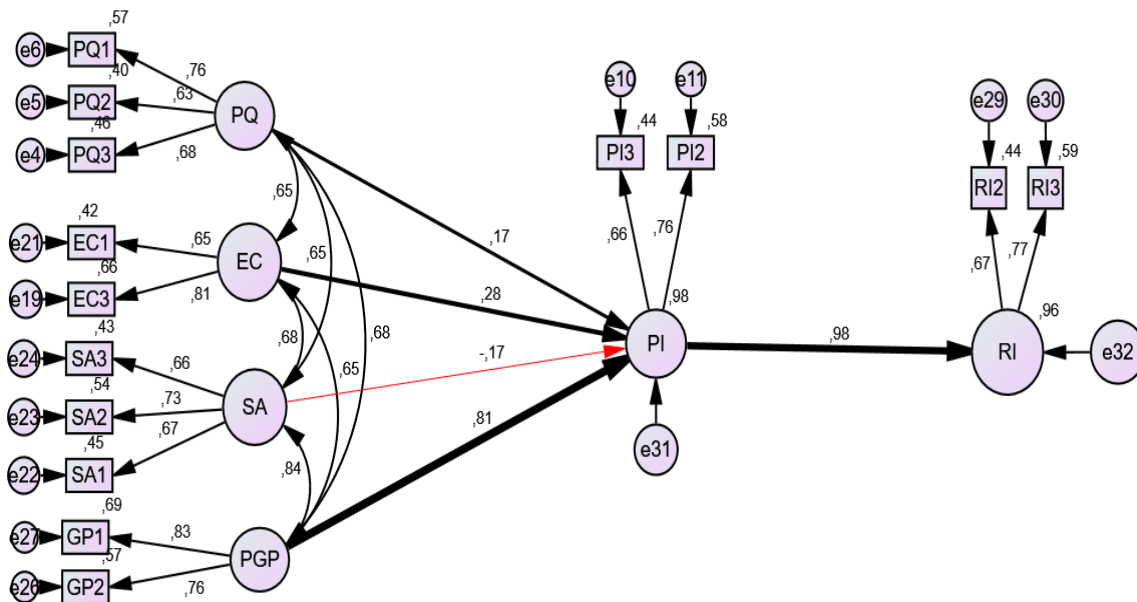
The assessment results obtained from the postulated structural model generated various indices of model fit by means in AMOS program. The table below shows the results for the various indices computed.

Table 6.14: Structural model fit indices

Fit index	Acceptable threshold (Hair et al., 2014)	Modified Model fit index value	Comment
χ^2/DF	< 3.000	2.875	Acceptable
GFI	≥ 0.800	0.949	Acceptable
RMSEA	≤ 0.080	0.061	Acceptable
IFI	≥ 0.900	0.937	Acceptable
CFI	≥ 0.900	0.958	Acceptable
TLI	≥ 0.900	0.942	Acceptable

The structural model had a good fit as informed by the acceptable thresholds (Hair *et al*, 2014). This set the way for full hypothesis testing and interpretation of the model. The figure below presents the resulting structural model of the present study retrieved from AMOS version 21

Figure 6.5: Structural equation model path diagram



In the above structural model path diagram, unidirectional arrows represent causal relationship between variables and its direction. The bidirectional arrows represent a

correlational relationship between variables without a clearly defined causal direction. Circles and ovals represent latent variables, while squares or rectangles signify measured variables. Residuals to each variable are always unobserved and so are denoted by small ovals or circles. It is instructive to also highlight that all constructs in the current study were not measured directly and are thus latent variables in the model. From the path diagram, it is immediately evident that PI is predicted by PGP, SA, EC and PQ. However, only PGP, EC and PQ have a statistically significant causal impact on PI. This is made even more apparent in the table below showing the statistical significance. From the path diagram, PI can in turn predict RI. The model is able to explain a large percentage of the variance of PI as shown by a high squared multiple correlations ($R^2=98\%$) and 96% for RI.

6.4 Revised model confirming hypotheses

Following the path diagram that has been presented and discussed above, the following table summarises the results of the structural model of this study.

Table 6.15: Paths relationships among constructs and confirmation of hypotheses

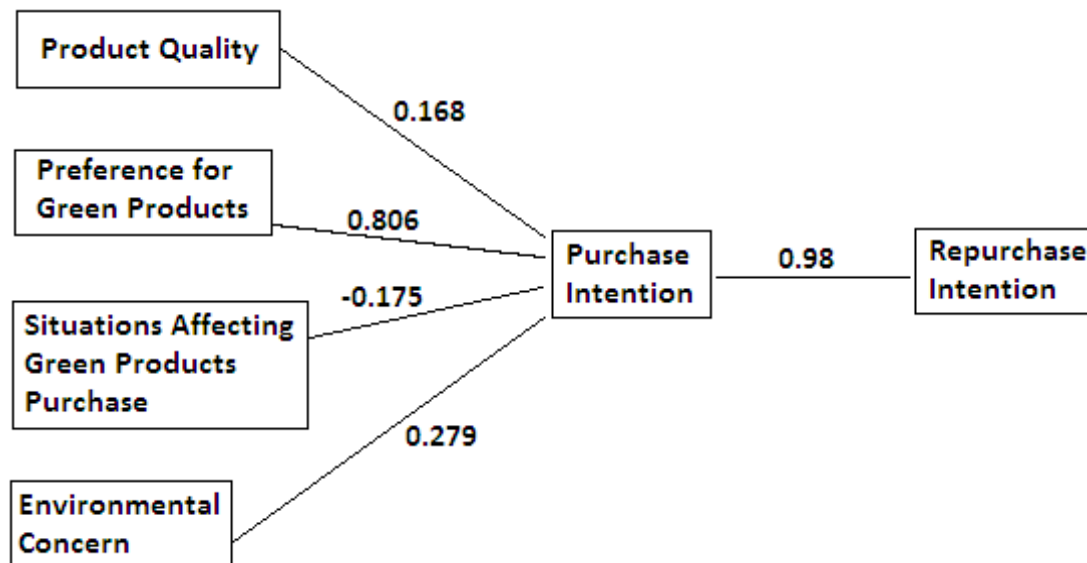
IV		DV	Standardised Estimates (β values)	p values	S.E.	Decision on Hypotheses	Variance Explained
PQ	--->	PI	0.168	0.014	0.056	Accepted	0.983
EC	--->		0.279	0.001	0.053	Accepted	
SA	--->		-0.175	0.148	0.086	Rejected	
PGP	--->		0.806	0.001	0.082	Accepted	
PI	--->	RI	0.981	0.001	0.088	Accepted	0.962
Notes: IV= Independent variables; DV= Dependent variables; SE: Standard Error							

Standardised estimates are the regression weights for the model. These values may be understood to represent the strength of the predictive influence of the IV on the DV. From this column, it is apparent that PGP is the strongest predictor of PI ($\beta = 0.806$; p -value=0.001). This shows that preference for green products may be the leading

predictor of purchase intentions. This result may be explained by the fact that a high preference for green products predisposes an individual to exhibit high purchase intentions for the products and may further influence family and friends.

The figure below depicts the revised model which confirms the hypotheses:

Figure 6.6: Revised model - consumer perception of green products, purchase behaviour and loyalty



6.4.1 Confirming hypothesis one

Through **hypothesis H1** it was conjectured that product quality positively impacts the intention to purchase green products. This is in line with the contention of Zhuang *et al.* (2010:1) that quality plays a central role in enhancing purchase intentions by reducing product performance risk and fostering brand loyalty among consumers. Given the analysis result, the hypothesis is therefore accepted and the conclusion is that product quality positively impacts the intention to purchase green products.

4.4.2 Confirming hypothesis two

After PQ another strong predictor of purchase intention is environmental concern ($\beta = 0.279$; $p\text{-value}=0.001$). This statistically significant causal relationship may partly be

explained when individuals who are environmentally responsible and knowledgeable about green products buy more of green products and continue to do so successively.

The model also informs that product quality (PQ) has a statistically significant positive causal relationship with purchase intentions ($\beta = 0.168$; $p\text{-value}=0.014$). This analysis result may be attributable to the positive perception of consumers towards green products, that they are engineered to reduce wastage at the same time equally reliable and durable as any other products. This impacts positively on purchase intentions for such products and similarly labelled commodities.

Through **hypothesis H2** it was speculated that consumer environmental concerns positively influence the purchase intention of green products. This is supported by the assertion of Kim and Choi (2005:596) that consumers who exhibit high levels of environmental concern are presumed to develop favourable purchase intentions towards green products.

In light of the above result, the hypothesis is thus supported and it is resolutely held that consumer environmental concerns positively influence the purchase intention of green products.

6.4.3 Confirming hypothesis three

SA however, had a negative effect on purchase intentions ($\beta = -0.175$; $p\text{-value}=0.148$) and the beta was not statistically significant. This rather contradictory result may be due to uniqueness between individuals in their readiness to accommodate and promote green products. In some individuals, situations that affect product purchase can hinder purchase intentions thus resulting in a negative causal relationship. This effect can however be considered of little consequence to the purchase intentions of an individual because of the non-significant regression weight.

Through **hypothesis H3**, it had been predicted that SA has a positive impact on the intention to purchase green products. In view of the above result, the hypothesis is thus rejected and the conclusion is that situations do not impact on purchase intentions for green products.

6.4.4 Confirming hypothesis four

The structural model showed that 98% of the variance of PI is explained by variables PGP, EC, PQ and SA. This result confirms that the model choice fits well to the data collected and hence making the model useful for predictive purposes. Through **hypothesis H4** it had been conjectured that PGP has a positive impact on consumers' intention to purchase green products.

In view of the above result the hypothesis is thus accepted and we deduce that PGP has a positive impact on consumers' intention to purchase green products. The findings are in line with Chen and Chang's (2012:516) assertion that perceived value instrumental in stimulating purchase intentions for green products.

6.4.5 Confirming hypothesis five

Through **hypothesis H5**, it had been speculated that purchase intention of green product positively influences the intention to repurchase a green product. This is in line with Rehman and Dost's (2013:102) contention that an increase in the intention to purchase a green product is expected to enhance the propensity of consumers to engage in actual green product purchase. From the research results it can be concluded definitively that purchase intention of green product positively influences the intention to repurchase a green product.

The results from the foregoing structural equation modelling suggest that, in order to increase purchase intention of green products, green marketers should focus more on the PGP factors given that it has the strongest predictive power on PI. By comparison, environmental concern and product quality have a lower effect on PI although they are equally significant.

6.4.6 Confirming hypothesis six

The structural model was designed so as to test the causal relationship between purchase intentions (PI) and re-purchase intention (RI). The results show a strong causal link which was statistically significant ($\beta = 0.981$; $p\text{-value}=0.001$). This was also confirmed by the squared multiple correlation value of 0.96 indicating that PI alone

explained up to 96% of the variance of RI. This confirms **hypothesis H6**, that purchase intention positively impacts on re-purchase intention of green product.

6.5 Construct correlations

The structural model also materialised (double headed-arrows) correlations between the predictors of PI. The correlations are shown below.

Table 6.16: Correlations materialised in the model

Correlations			Pearson correlation coefficient
PQ	<-->	EC	0,655
PQ	<-->	SA	0,649
PQ	<-->	PGP	0,679
EC	<-->	SA	0,68
EC	<-->	PGP	0,651
SA	<-->	PGP	0,838
All correlations are significant at the 0.001 level			

In the table above, the Pearson product moment correlation coefficients show strong, positive and statistically significant correlations between predictors of PI. This is exemplified by PQ which is strongly correlated to EC ($r = 0.655$; $p < 0.001$), SA ($r = 0.649$; $p < 0.001$) and PGP ($r = 0.679$; $p < 0.001$). There is also a noticeable strong correlation between SA and PGP ($r = 0.838$; $p < 0.001$). These results meet the assumptions of structural equation modelling that the independent variables should be reasonably correlated in order for the model to generate a sensible set of results, thereby reinforcing the acceptability of the model.

6.6 Concluding summary

The aim of the chapter was to present and interpret the findings of the study. The analysis of data was conducted through the SPSS 22.0 and AMOS 24.0 statistical packages. The means and standard deviations of the data were reported on and used to make the necessary inferences. The accuracy of data was assessed for reliability and validity. The Pearson product moment correlations were computed to assess the

relationship between variables under study. Prior to testing the hypothesised relationships, confirmatory factor analysis and structural equation modelling were conducted to assess the fitness of the measurement and structural models. The measurement and structural model fitted well with the data. Thereafter, the study proceeded with hypothesis testing. The relationship between environmental concern, product quality, purchase intention, preference for green products and re-purchase intention was deemed significant. The hypothesised relationship between situations affecting purchase behaviour and purchase intention was not supported.

The following chapter provides the conclusions drawn from the research findings, makes recommendations, and suggests possible directions for future studies.

CHAPTER SEVEN

RECOMMENDATION AND CONCLUSION

7.1 Introduction

This concluding chapter is positioned to make a very significant contribution to the field of green marketing. It undertakes very important research on variables critical to marketers and environmentalists. In addition to applying current theory to new contexts, the research also examines the link between two variables pertaining to consumer perceptions, proposing a new theoretical model. A comprehensive review of literature was conducted and quantitative methodologies were employed to develop well informed insights into the observed results. The final results center around the main constructs: product quality, environmental concern, preference for green products, the situations that affect the purchase of green products, purchase and re-purchase intention to see how the Zimbabwean consumer perceives green products and how their purchase behaviour was linked to loyalty or purchase and re-purchase intentions. The empirical findings in the previous chapter have produced several themes, most of which bear relevance to the theoretical discourse on consumer perception as a link to purchase and re-purchase intentions. Pertinent observations that have emerged from these results are now discussed in this chapter.

7.2 Product quality

Anecdotal evidence suggests that product quality positively impacts on the purchase intention of green products. The hypothesis was accepted that product quality positively impacts on the intention to purchase green products. This revealed that positive perceptions of consumers towards green products are influenced by product quality. This finding corresponds to the views of many researchers, which were reviewed in Chapter Two above.

Chang (2011:28) found that low opinions on the quality of green products create ambivalence towards green products. As a counter measure, Ali et al. (2011:219) suggest that the environmental quality of green products must be enhanced and clearly conveyed to the consumer to ensure their recognition within the market.

7.3 Environmental concern

Environmental concern positively influences the purchase intention of green products. Since environmental concern is a positive predictor purchase intention, the conclusion was that consumers' environmental concern positively influences the purchase intention of green products. This is buttressed by Lu *et al.* (2013:5) who highlight that environmental concerns drive consumer values and lifestyles towards green products adoption. Consumers with an environmental inclination will buy green products which cause negligible damage to the environment. On the contrary, Do Paco and Raposo (2009:376) report that Portuguese consumers' environmental concerns do not translate into any significant environmentally friendly purchase behaviour. This calls for more research on the influence of environmental concern on purchase intention.

7.4 Situations affecting green product purchase

The hypothesis could not stand. Situations affecting green product purchase do not really have an important bearing on the intention to purchase green products. In respect of the result, situations affecting green product purchase are considered to have little effect on purchase intention towards green products. The negative result reflects that situations affecting green product purchase do not influence the purchase of green products.

7.5 Preference for green products

Since preference for green products is the strongest predictor of purchase intention, the researcher concluded that preference for green products has a positive impact on consumer intention to purchase green products. This shows that preference for green products leads to purchase intentions.

The findings are in line with Chen and Chang's (2012:516) contention that green products' perceived value is instrumental in stimulating purchase intentions. This is in sync with Yang and Peterson's (2004: 803) assertion that customers with a high perceived value are more motivated to take part in repeat patronage as they have received what they perceive as being value for money.

7.6 Purchase Intention

Purchase intention of green products positively impacts on re-purchase intention of green product. The hypothesis was accepted that the purchase intention of green products positively influence the intention to re-purchase a green product. Strong intentions to purchase a green product imply an increased likelihood for the re-purchase of the product once the initial purchase has been made. This is consistent with Rehman and Dost's (2013:102) assertion that an increase in the intention to purchase a green product is expected to enhance consumer propensity to actually purchase green products.

7.7 Implications for government, consumers and green marketers

Government, consumers and green marketers in one way or the other find themselves enmeshed in environmental issues. They are all affected by the scourge of climate change and environmental degradation. Escalating environmental problems partly due to business and consumer consumption activities are enough evidence to steer the government, business and consumers to engage in pro-environmental behaviours, some of which are advised below.

7.7.1 Implications for government

Government must actively engage in providing information on environmental problems. Objective environmental knowledge is considered a strong contributor to the formation of consumer attitudes towards green products. Through the responsible environment ministry, central government can make efforts to provide consumers with pertinent information on environmental problems.

Since environmental concern has been found to be a significant factor in the formation of purchase intention, it is pertinent that government conducts environmental awareness campaigns to educate consumers on the importance of preserving the environment. Individual consumers should feel it is their responsibility to maintain a healthy environment. Consumers who exhibit high levels of environmental concern are presumed to develop favourable purchase intentions towards green products (Kim and Choi, 2005:596).

Sometimes moral persuasion to encourage pro-environmental behaviour may fall on deaf ears. Central government and local authorities must put in place measures to ensure that businesses consumers behave in an environmentally friendly way. For example, the Zimbabwean government outlawed the use of infra-red bulbs in favour of energy saving bulbs. Retailers are also no longer allowed to sell thin plastic bags which are not reusable.

The government should move further to impose stiff penalties on businesses and consumers who engage in unsustainable environmental practices. Government may also introduce tax exemptions and subsidies for organisations that operate in an environmentally sustainable way. This will see a lot of organisations turn to the production of green products.

7.7.2 Implications for marketers

In this study, preference for green products was found to have the most profound influence on green purchase intentions. Factual content on green products has to be the mainstay of green product advertisements to make sure consumers develop a liking for green products. Consumers should always associate green products with environmental preservation whenever they think of these products.

The study results illustrated that product quality has a direct impact on purchase intention. Quality plays a key role in enhancing purchase intentions by reducing product performance risk and fostering consumer brand loyalty. This suggests that in terms of performance, green products must always perform better than conventional products. Green products should give consumers value for money.

As preference for green products emerged as the outstanding predictor of purchase intention, green marketers should avoid green washing tendencies. Green washing, which essentially is deceptive marketing, creates negative feelings for green products. Green product marketers must avoid making unfounded claims about their products. Instead, they should focus on promoting the real strengths of their products to enhance their credibility. They must focus on consumer value positioning, calibration of consumer environmental knowledge and the credibility of green product claims.

Besides producing green products, business may have to turn to green marketing strategies that may include green advertising and eco-labelling to sensitise consumers on environmental matters. Green advertising is considered as the most common tool for conveying environmental messages to the public (Leonidou *et al.*, 2011:6).

Re-purchase intention signifies a satisfied consumer who is likely to stay loyal to a product offering. There should be ways to increase repeat purchase of green products. Green product businesses should devise place consumer loyalty programs to ensure increased patronage. Such programs may include perennial sales promotions to induce trial and repeated purchase of green products; and giving awards to individuals and institutions for significant purchase of green products.

7.7.3 Implications for consumers

Once consumers understand their contribution to environmental problems, they will more actively increase their green product purchases. Consumers will also actively participate in recycling activities.

Social networking media is being used to make pro-environmental behaviour trendy by green consumers. This is may have a snowball effect on the wider population in Zimbabwe and the world over.

Consumers must really take severe action to preserve the environment as continued environmental degradation seriously affects their health and quality of life. Worsening of environmental problems not only will affect the healthiness of Zimbabweans, but also will negatively impact future generations.

7.8 Contribution to knowledge

This is the first study that has linked consumer perceptions, purchase behaviour and loyalty. Previous studies have dealt with consumer perceptions, purchase behaviour and loyalty individually, but this study has collectively related these in the green product context. A vital contribution to literature is that this study revealed that consumer perceptions are a strong determining factor of purchase intention and re-purchase intention. This suggests that to elicit pro-environmental behaviour, it is important to manipulate influences of consumer perceptions.

The study developed a model of factors influencing purchase intention leading to re-purchase intention. The model is an important tool for predicting consumer perception of green products, purchasing behaviour and loyalty in the Zimbabwean scenario. The model may be generalised to predict consumer perceptions of green products, purchasing behaviour and loyalty in other countries and it can be used by green product marketers to craft better marketing strategies for green products.

Specifically, the study has contributed to the body of knowledge by showing that product quality; environmental concern and preference for green products directly impact on purchase intentions. Situations affecting green product purchases have no significant influence on purchase intentions. Overall the findings imply that strong purchase intention increases the likelihood of re-purchase intention.

7.9 Limitations of the study

In conducting the study, the following limitations were encountered:

- i. This study relied on one technique, a self-reporting questionnaire, to measure green purchase behaviour. Combining this with other techniques like observation might have brought in more information on the research questions posed.
- ii. Another limitation of this study has been the fact that green products are not in abundance in Zimbabwe. As such, the level of understanding of green product issues amongst the respondents affected their responses.

7.10 Avenues for further research

From the study, the following avenues for further research are proposed:

- i. Future research may need to be conducted in bigger and more affluent suburbs, like Harare and Bulawayo, to see if results would be different.
- ii. It may be necessary to establish if the confirmed close link between purchase intention and re-purchase intention results in the actual purchase of green products.
- iii. A new study may harness other data collection techniques like observation and interviews to enrich the quality of the research results.
- iv. Future research may also be directed at green marketing strategies to see what business is doing to enhance the adoption of green products by consumers.

7.11 Conclusion

The study proved that consumer perceptions of green products has a direct impact on purchase intention and re-purchase intention. Consumers perceive green products as environmentally friendly, thus causing minimal damage to the environment. The study revealed that green products should be able to compete on quality with non-green products if they are to be bought. Green products were found to be reliable and more durable than conventional products. Consumers also think green products reduce wastage. The study found that consumers now have a heightened concern for the environment due to an escalation of environmental degradation. Consumers have significant knowledge of green products and are likely to patronise them for the sake of environmental preservation. It was also shown that consumers prefer green products to non-green products. Consumers prioritise green products when shopping, but nevertheless will buy non green products if green products are not available or are expensive. There were no reported situations that would impede a consumer from purchasing green products. The study shows that consumers often include green products in their budgets and are changing their lifestyles for the sake of preserving the

environment. The study reported a strong link between purchase intention and re-purchase intention. Most consumers have experience with green products and intend to increase their purchase of green products. More so, they intend to increase their purchase and consumption of green products.

REFERENCES

- Abdul-Muhmin, A.G. 2007. Explaining consumers' willingness to be environmentally friendly. *International Journal of Consumer Studies*, 31(3):237–247.
- Aertsens, J., Verbeke, W., Mondelaers, K. and Huylenbroeck, G.V. (2011). Personal determinants of organic food consumption: A review. *British Food Journal*, 111(10):399
- Ajzen, I. (2005). *Attitudes, Personality and Behaviour* .2nd ed. Open University Press, McGraw-Hill Education: 118
- Akehurst, G., Afonso, C. and Goncalves, H. (2012). Re-examining green purchase behaviour and the green consumer profile: New evidences. *Management Decision*, 50(5): 972-988.
- Albayrak, K., Caber, M., Moutinho, L. and Herstein, R. (2011).The influence of skepticism on green purchase behaviour. *International Journal of Business and Social Science*, 2(13):189-197.
- Al-Debei, M.M., Al-Lozi, E. and Papazafeiropoulou, A. (2013). Why people keep coming back to Facebook: explaining and predicting continuance participation from an extended theory of planned behaviour perspective. *Decision Support Systems*, 55(1): 43-54.
- Ali, A. and Ahmad, I. (2012). Environment friendly products: Factors that influence the green purchase intentions of Pakistani consumers. *Pakistani Journal of Engineering and Technological Science*, 2(1):84-117.
- Ali, A., Khan, A. A., and Ahmed, I. (2011). Determinants of Pakistani consumers' green purchasing behaviour: Some insight from a developing country. *International Journal of Business and Social Science*, 2(3):217-226.

- Alsmadi, S. (2007). Green marketing and the concern over the environment: measuring environmental consciousness of Jordanian consumers. *Journal of Promotion Management*, 13(3): 339-361.
- Angasa, P and Kinoti, M. W. (2013). Factors Affecting Consumer Perception Of Kenyan Manufactured Fast Moving Consumer Goods In The East African Community. A Case of Laundry Detergents Products. *DBA Africa Management Review*, 3 (2):108-123
- Arantola, H. (2001). Uskollinen asiakas – Kuluttaja asiakkuuksien johtaminen. *Porvoo*: 26-27
- Arslan, T., Yilmaz, V. and Aksoy, H. K. (2012). Structural equation model for environmentally conscious purchasing behaviour. *International Journal of Environmental Research*, 6(1):323-334.
- Asgharian, R., Salehi, M., Saleki, Z.S., Hojabri, R. and Nikkheslat, M. 2012.Green product quality, green customer satisfaction, and green customer loyalty. *International Journal of Research in Management & Technology*, Vol. 2, No. 5, pp.499-503
- Ashworth, L. and Matear, M. (2009). The impact and accuracy of beliefs relating to impressions caused by products. *Advances in Consumer Research*, 8:128-129.
- Atkinson, L. and Kim, Y. (2014). I drink it anyway and I know I shouldn't: Understanding green consumers' positive evaluations of norm-violating non-green products and misleading green advertising. *Environmental Communication*, 1:1-21.
- Aulia, S.A., Sukati, I. and Sulaiman, Z (2016). A Review: Customer Perceived Value and its Dimension. *Asian Journal of Social Sciences and Management Studies*, 3(2): 150-162.
- Autio, M., Heiskanen, E. & Heinonen, V. (2009). Narratives of green consumers: The antihero, the environmental hero and the anarchist. *Journal of Consumer Behaviour*,

- Babin, B.J. and Harris, E.G. (2009). Consumer behaviour. Mason, Oh.: South-Western Cengage Learning, 43
- Bagozzi, I. R. P. and Yi, Y. (2012). Specification, evaluation and interpretation of structural equation models. *Journal of the Academy of Marketing Science*, 40:8-34.
- Bagozzi, R.P. and Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, Vol. 16 No. 1, pp. 74-94
- Bandyopadhyay, S. and Martell, M (2007). Does attitudinal loyalty influence behavioral loyalty? A theoretical and empirical study. *Journal of Retailing and Consumer Services*, 14(1):35-44.
- Banović, Marija, Fontes, Barreira, M. M and Grunert. (2012). Impact of product familiarity on beef quality perception. *Agribusiness*, 28(2): 157-172.
- Banyte, J., Brazioniene, L. and Gadeikiene, A. (2010). Expression of green marketing developing the conception of corporate social responsibility. *Inzineine Ekonomika- Engineering Economics*, 21(5):374.
- Barkman, H. (2014). *Barriärer och broar för hållbar konsumtion*. Stockholm Universitet, 23
- Basuroy, S., Desai, k.k and Talukdar, D 2006. An empirical investigation of signalling in the motion picture industry. *Journal of Marketing Research*, 43:287-295).
- Belz, F. and Peattie, K. (2009). Sustainability Marketing: A Global Perspective. *West Sussex: John Wiley and Sons*, 10,129
- Beneke, J., Adams, E., Demetriou, O and Solomon, R. (2011). An Exploratory study of the relationship between store image, trust, satisfaction and loyalty in a franchise setting. *South African Business Review*. 15(2):32.

- Beneke, J., Adams, E., Demetriou, O. and Solomons, R., (2011). An exploratory study of the relationship between store image, trust, satisfaction and loyalty in a franchise setting. *South African Business Review*. 15(2):32-74.
- Bennett R. and Rundle-Thiele S. (2002). A comparison of attitudinal loyalty measurement approaches. *Journal of Brand Management*, 9(3):193 – 209.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2):238-246.
- Bentley, M. and Fien, J. and Neil, C (2005). Sustainable Consumption: Young Australians as Agents of Change. National Affairs Research Scheme, *Canberra*, 2
- Berndt, A. and Petzer, D. (2011). *Marketing research*. South Africa: Heinemann, 186
- Biloslavo, R. and Trnavcevic, A. (2009). Web sites as tools of communication of a green company. *Management Decision*, 47(7):1158-1173.
- Bird, R.B and Smith E.A (2005) Signalling theory, strategic interaction and symbolic capital. *Current Anthropology*, 46:221-248.
- Blunch, N. J. (2008). Introduction to Structural Equation Modeling Using SPSS and AMOS. *New Delhi: Sage Publications*.
- Borrego, M., Douglas, E. P. and Amelink, C. T. (2009). Quantitative, qualitative and mixed research methods in engineering education. *Journal of Engineering Education*, 98(1):53-66.
- Branzei, O., Ursacki-Bryant, T.J., Vertinsky, I., and Zhang, W. (2004) The formation of green strategies in Chinese firms: Matching corporate environmental responses and individual principles. *Strategic Management Journal*, 25:1075-1095;
- Brecard, D., Hlaimi, B., Lucas, S., Perraudau, Y. and Salladarre, F. (2009). Determinants of demand for green products: An application to eco-label demand for fish in Europe. *Ecological Economics*, 69:115-125.

- Bryman, A., (2012). *Social Research Methods*. 4th ed. Oxford University Press, 24-170
- Bryman, A., and Bell, E., (2007). *Business Research Methods*. 2nd ed. Oxford University Press, 17-22
- Bryman, A., and Bell, E., (2011). *Business Research Methods*. 3rd ed. Oxford University Press, 11-232
- Buttle, F. (2009), *Customer Relationship Management Concepts and Technologies*. Elsevier Ltd. Oxford, USA.
- Byrne, B.M. (2010). Structural equation modelling with AMOS: basic concepts, applications and programming. 2nd Ed. New York: Routledge, 12
- Casimir, Gerda and Chris Dutilh (2003). Sustainability: a gender studies perspective. *International Journal of Consumer Studies*. 27:4, 316–325.
- Chan, L. and Bishop, B. (2013). A moral basis for recycling: Extending the theory of planned behaviour. *Journal of Environmental Psychology*, 36(1): 96-102.
- Chang N and Fong, C (2010). Green product quality, green corporate image, green customer satisfaction, and green customer loyalty. *African Journal of Business Management* Vol. 4(13), pp. 2836-2844
- Chang, C. (2011). Feeling ambivalent about going green: Implications for green advertising processing. *Journal of Advertising*, 40(4):19-31.
- Chari, F., Zivanai O, and Kandenga F (2016). Factors that Affect Green Procurement Implementation in the Manufacturing Industry: A Case of Harare Firms in Zimbabwe. *The International Journal of Business and Management*, 4(3):215-220
- Cheah, I. and Phau, I. (2011). Attitudes towards environmentally friendly products: The influence of eco-literacy, interpersonal influence and value orientation. *Marketing Intelligence and Planning*, 29(5):452-472.

- Chen, T. and Chai, L. (2010). Attitude towards the environment and green products: perspective. *Management Science and Engineering*, 4(2):27-39.
- Chen, Y. and Chang, C. (2012). Enhance green purchase intentions: The roles of green perceived value, green perceived risk and green trust. *Management Decision*, 50(3):4-520.
- Chen, Y. S., Chang, C. H. and Wu, F. S. (2012). Origins of green innovations: The differences between proactive and reactive green innovations. *Management Decision*, 50 (3):368-398.
- Chin, W.W., Gopal, A., Salisbury, W.D., (1997). Advancing the theory of adaptive structuration: the development of a scale to measure faithfulness of appropriation. *Inf. Syst.Res.* 8 (4), 342–367.
- Chinomona, R., Dhurup, M. and Chinomona, E. (2013). Does employee perceptions of fit to job, fit to organisation and fit to community influence job performance? The case of Zimbabwe's manufacturing sector. *South African Journal of Human Resource Management*, 11(1):1-10.
- Cohen D., Gan C., Yong H. H. A., Chong E. (2007). "Customer retention by banks in New Zealand". *Banks and Bank Systems*, 2(1):40 – 55.
- Creswell, J. W. (2009). Research Design, Qualitative, Quantitative and Mixed Methods Approaches. 3rd Ed. *Thousand Oaks: Sage Publications*, 12-14
- D'Souza, C., Taghian, M., Lamb, P., and Peretiatko, R. (2007). Green decisions: demographics and consumer understanding of environmental labels. *International Journal of Consumer Studies*, 71.
- D'Souza, C., Taghian, M. and Khosla, R. (2007). Examination of environmental beliefs and its impact on the influence of price, quality and demographic characteristics with respect to green purchase intention. *Journal of Targeting, Measurement and Analysis for Marketing*, 15(2): 69-78.

- Datta, K. and Ishaswini, I. (2011). Pro-environmental concern influencing green buying: A study on Indian consumers. *International Journal of Business and Management*, 6(6):124-133.
- David M and Sutton C. (2011). *Social Research*. 2nd ed Sage Publications, 211-212
- Davis, B., Lockwood, A., Pantelidis, I. and Alcott, P. (2008). *Food and beverage management*. 3rd ed. Oxford. Butterworth-Heinemann, 180
- de Chernatony, Leslie, Malcolm, McDonald and Elaine, Wallace. (2011). *Creating powerful Brands*. 4th ed. New York: Routledge, 91
- Delmas, M., and Burbano, V.C. (2011). The drivers of green washing, *California management review*, 54(1): 64-87.
- Delport, C. S. L. and Roestenburg, W. J. H. (2011). Quantitative data collection methods research. In De Vos, A.S., Strydom, H., Fouche, C.B. and Delport, C.S.L. *Research at Grass Roots for the Social Sciences and Human Service Professions* 4th ed. Pretoria: Van Schaik Publishers, 195-196.
- Denscombe M. (2010). *Good Research Guide: For small-scale social research projects* 4th ed. Open University Press. Berkshire, 6
- Dietz, T, Fitzgerald, A. and Shwom, R. (2005). Environmental values. *Annual Review of Environment and Resources*, 30(1): 335-372.
- Do Paco, A. and Raposo, M. (2009). "Green segmentation": an application to the Portuguese consumer market. *Marketing Intelligence & Planning*, 27(3): 364-379.
- Dolan, P (2002). The Sustainability of Sustainable Consumption. *Journal of Macro-marketing*. 22(2):170–181.
- Dowling G. R, Hammond, K and Uncles M. D (2003). Customer loyalty and customer loyalty programs. *Journal of Consumer Marketing*, 20(4): 294-316.

- Durif, F., Boivin, C., and Julien, C. (2010). In search of a green product definition. *Innovative Marketing*, 6(1), 25–33.
- Easterby-Smith, M., Thorpe, R. and Lowe, A. (2002). *Management Research: An Introduction*. 2nd ed. London: Sage Publications.
- Elliot, R. (2013). The taste for green: The possibilities and dynamics of status differentiation through green consumption. *Poetics*, 41:294-322.
- Emery, B., (2012). *Sustainable Marketing*. 1st ed. Harlow, England: Pearson Education Limited, 81
- Englande R, M. (2012). The Interview: Data collection in descriptive phenomenological human scientific research. *Journal of Phenomenological Psychology*, 43:13-35.
- Evanschitzky, H. and Wunderlich, M., (2006). An examination of moderator effects in the four-stage loyalty model. *Journal of Service Research*, 8(4):330-345.
- Feinberg, M.F., Kinnear, C.T., and Taylor, R.J. (2013). Modern marketing research concepts, methods, and cases. 2nd ed. *South-Western, Cengage Learning*, 57
- Field, (2013). *Discovering statistics using IBM SPSS statistics*. 4th ed. London, Sage.
- Field, A. (2009). *Discovering statistics using SPSS*. 3rd Ed. SAGE Publications Inc, 675
- Fielding, K., McDonald, R. Louis, W. R. (2008). Theory of planned behaviour, identity and intentions to engage in environmental activism. *Journal of Environmental Psychology* 28 (4): 318–326.
- Ford, J.K., MacCallum, R.C., Tait, M., (1986). The applications of exploratory factor analysis in applied psychology: A critical review and analysis. *Pers. Psychol.* 39, 291–314.
- Gadenne, D., Sharma, B., Kerr, D. and Smith, T. (2011). The influence of consumers' environmental beliefs and attitudes on energy saving behaviours. *Energy Policy*, 39(12):7684-7694.

- Garcia-rosell, J. and Moisander, J. (2008). Ethical dimensions of sustainable marketing: A Consumer policy perspective. *European Advances in Consumer Research*, 8:210-214.
- George, D. and Mallery, M. (2010). Using SPSS for Windows step by step: a simple guide and reference. Boston.
- Greaves, M., Zibarras, L.D. and Stride, C. (2013). Using the theory of planned behavior to explore environmental behavioural intentions in the workplace. *Journal of Environmental Psychology*, 34(1): 109-120.
- Gregoire, M.B. (2010). *Food service organization: a managerial and system approach*. Boston, Prentice Hall, 100
- Griskevicius, V., Cantu, S. and Vugt, M. (2012). The evolutionary bases for sustainable behaviour: Implications for marketing, policy and social entrepreneurship. *Journal of Public Policy & Marketing*, 31(1):115-128.
- Griskevicius, V., Tybur, J., and Bergh, B. (2010). Going green to be seen: Status, reputation, and conspicuous conservation. *Journal of Personality and Social Psychology*, 98(3): 392-404.
- Gupta, S. and Ogden, D.T. (2009). To buy or not to buy? A social dilemma perspective on green buying. *Journal of Consumer Marketing*, 26(6): 376-391.
- Gupta, S. L. (2011). *Marketing Research*. New Delhi: Excel Books, 39.
- Hair, J. F., Jr., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2014). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Thousand Oaks, CA: SAGE Publications Ltd.
- Hair, J.F., Wolfinbarger, M., Ortinau, D.J. and Bush, R.P. (2013). 3rd ed. *Essentials of marketing research*. New York: McGraw-Hill.

- Han, H, Hsu, L. and Sheu, C. (2010). Application of the Theory of Planned Behavior to green hotel choice: Testing the effect of environmental friendly activities. *Tourism Management*, 31(1): 237-334.
- Han, Y.J., Nunes, J.C., and Dreze, X. (2010). Signaling Status with Luxury Goods: The Role of Brand Prominence. *Journal of Marketing*, 74 (4):15-30.
- Hanna, N. and Wozniak, R. 2013. *Consumer Behaviour- an applied approach*. Upper Saddle River, N.J.: Prentice-Hall, 84-95.
- Hans, D and Böhm, G. (2011). Sustainability in the perspective of consumers. *International Journal of Consumer Studies*. 36:678–687.
- Hanss, D. and Bohm, G. (2013). Promoting purchases of sustainable groceries: An intervention study. *Journal of Environmental Psychology*, 33:53-67.
- Harris, L. C. and Goode, M. M. H. (2004). The four levels of loyalty and the pivotal role of trust: a study of online service dynamics. *Journal of Retailing*, 80 (2), 139-158.
- Hasan, S. A., Raheen, S and Subhani M. I. (2011). “Measuring customer delight: A model for banking industry”. *European Journal of Social Sciences*, 22(4):510 – 518.
- Haytko, L. D. and Matulich, E. (2008). Green advertising and environmentally responsible consumer behaviours: Linkages examined. *Journal of Management and Marketing Research*, 1(1):1-10.
- Hessami, H. Z., Yousefi, P. and Goudarzi, G. (2013). The conceptual model of effective factors on consumer’s green purchasing intentions. *International Journal of Engineering and Innovative Technology*, 2(7):10-17.
- Hu, L. T. and Bentler, P. M. (1998). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1): 449-459.

- Huddleston, P. and Whipple, J. and Van Auken, A. (2004). Food Store Loyalty: Application of Consumer Loyalty Framework. *Journal of Targeting, Measurement and Analysis for Marketing*, (12)3: 213-230.
- Hume, M. (2010). Compassion without action: Examining the young consumers' consumption and attitude to sustainable consumption. *Journal of World Business*, 45:385-394.
- Husted, B.W., Russo, M. V., Meza, C. E. B. and Tilleman, S. G. (2013). An exploratory study of environmental attitudes and the willingness to pay for environmental certification in Mexico. *Journal of Business Research*, 1:1-9.
- Jansson, J., Marell, A. and Nordlund, A. (2010). Green consumer behaviour: determinants of curtailment and eco-innovation adoption. *Journal of Consumer Marketing*, 27(4):358-370.
- Jonker, J. and Pennink, B. (2010). The Essence of Research Methodology: A Concise Guide for Masters and PHD Students in Management Sciences. *Heidelberg: Springer*, 29
- Kaufmann, H., Panni, M. and Orphanidou, U. (2012). Factors affecting consumers' green purchasing behaviour: An integrated conceptual framework. *Amfiteatru Economic*, 14(31):50-69.
- Kennedy, E. H, Krogman. N and Krahn, H (2013). Sustainable consumption and the importance of neighbourhood: A central city/suburb comparison. *Canadian Journal of Sociology*. 38(3):359–383.
- Kent, R., (2007). *Marketing Research. Approaches, Methods and Applications in Europe*, Thomson, 38.
- Kim, H. Y. and Chung, J. E. (2011). Consumer purchase intention for organic personal care products. *Journal of Consumer Marketing*, 28(1):40-47.

- Kim, Y. and Choi, S.M. (2005). Antecedents of green purchase behavior: an examination of collectivism, environmental concern, and PCE. *Advances in Consumer Research*, 32 (1): 592-599.
- Kim, Y.J., Njite, D. and Hancera, M. (2013). Anticipated emotion in consumers' intentions to select eco-friendly restaurants: Augmenting the theory of planned behaviour. *International Journal of Hospitality Management*, 34(1): 255-262.
- Kincaid, J. (2003) *Customer relationship management: getting it right*, London: Prentice Hall Professional, 10.
- Kinley, T. K., Josiam, B. M. and Lockett, F. (2010). Shopping behaviour and the involvement construct. *Journal of Fashion Marketing and Management*, 14(4):562-575.
- Ko, E., Hwang, Y. K. and Kim, E. Y. (2013). Green marketing' functions in building corporate image in the retail setting. *Journal of Business Research*, 66:1709-1715.
- Koller, M., Floh, A. and Zauner, A. 2011. Further insights into perceived value and consumer loyalty: A green perspective. *Psychology and Marketing*, 28(12):1154-1176.
- Koshy, V. 2005. *Action research for improving practice: a practical guide*: Paul Chapman Publishing.
- Kotler, P. and Armstrong, G. (2010). *Principles of Marketing*. 13th ed. Pearson Education, New Jersey, 179
- Kotler, P., and Armstrong, G., (2014). *Principles of Marketing*: Global edition. Edinbourg: Pearson Education limited.
- Kotler, P., and Keller, K., L. (2009). *Marketing Management*. 13th ed, Prentice Hall, Pearson Education Inc.

- Kreidler, N. B. and Joseph-Mathews, S. (2009). How green should you go? Understanding the role of green atmospherics in service environment evaluations. *International Journal of Culture, Tourism and Hospitality Research*, 3(3):228-245.
- Kulkarni A. (2009). “Give customers what they don’t expect”. Customer Relationship Management, 14.
- Kumar, B. (2012). Theory of Planned Behaviour Approach to understand the purchasing behaviour for environmentally Sustainable Products: Working Paper Series. *Indian Institute of Management*.1:1-43.
- Lai F., Griffin M., Babin B. J. (2009). “How quality, value, image, and satisfaction create loyalty at a Chinese telecom”. *Journal of Business Research*, 62:980 – 986.
- Lee, K. (2008). Opportunities for green marketing: Young consumers. *Marketing Intelligence and Planning*, 26(6):573-586.
- Lee, K. (2009). Gender differences in Hong Kong adolescent consumers' green purchasing behaviour. *Journal of Consumer Marketing*, 26(2):87-96.
- Leonidou, N.C. and Leonidou, C.L. (2011). Research into environmental marketing/management: a bibliography analysis. *Journal of European marketing*, 45(2): 68-103
- Lichtlé, M.C. and Plichon, V., (2008). Understanding better consumer loyalty. *Recherche et Applications en Marketing*, 23(4):121.
- Lin, P. and Huang, L. (2012). The influence factors on choice behaviour regarding green products based on the theory of consumption values. *Journal of Cleaner Production*, 22:11-18
- Liu T. C and Wu L. W. (2007). “Customer retention and cross-buying in the banking industry: An integration of service attributes, satisfaction and trust”. *Journal of Financial Services Marketing*, 12(2):132 – 145.

- Lomax, R. G. and Hahs-Vaughn, D. L. (2012). *An Introduction to Statistical Concepts*. 3rd ed. New York: Taylor and Francis Group, 6
- Lu, L., Bock, D. and Joseph, M. (2013). Green marketing: What the millennials buy. *Journal of Business Strategy*, 34(6):3-10.
- Malhotra, K. N. (2007). Marketing Research: An Applied Orientation. 5thed. New Jersey: Pearson Education International innovative market. *European Journal of Innovation Management*, 15(4):285-338.
- Malhotra, K.N. (2010). Marketing research: an applied orientation. 6th ed. *Upper Saddle River, N.J: Pearson Education*, 287-372
- Mascarenhas, O.A., Kesavan, R. and Bernacchi, M., (2006). Lasting customer loyalty: a total customer experience approach. *Journal of consumer marketing*, 23(7):397-405.
- Mason, A.M., De Klerk, H.M., Sommerville, J. and Ashdown, S.P. 2008. Consumers knowledge on sizing and fit issues: a solution to successful apparel selection in developing countries. *International journal of consumer studies*, 32:276-284.
- McBurney, D.H and White, T.W (2009). Research Methods. Cengage, 228
- McDaniel, C. and Gates, R. (2010). *Marketing research essentials*. 7th ed. USA: John Wiley and Sons, Inc, 129
- McDonald, R. P. and Ho, M. H. R. (2002). Principles and practice in reporting statistical equation analyses. *Psychological Methods*, 7(1):64-82.
- McDonald, S. and Oates C. (2006), Sustainability: Consumer perceptions and marketing strategies, *Business Strategy and the Environment*, 15 (3):157–170.
- McDonald, Seonaidh, Caroline J. Oates, Panayiota J. Alevizou, C. William Young and Kumju Hwang (2012). Individual strategies for sustainable consumption. *Journal of Marketing Management*. 28(3–4):445–468.

- McDougall H. G., Levesque T. (2000). Customer satisfaction with services: putting perceived value into the equation. *Journal of Services Marketing*, 14(5):392-410.
- McGregor, S. (2008). Conceptualizing immoral and unethical consumption using neutralization theory, *Family and Consumer Sciences Research Journal*, 36(3), 261-276.
- McMullan, R., and Gilmore, A. (2002). The conceptual development of customer loyalty measurement: A proposed scale. *Journal of Targeting, Measurement and Analysis for Marketing*, 11 (3), 230 – 243.
- Mishra, P., and Sharma, P. (2012). Green Marketing: Challenges and Opportunities for Business. *Journal of Marketing and Communication*, 8(1):35–41.
- Moisander, J. (2007). Motivational complexity of green consumerism. *International Journal of Consumer Studies*, 31(4):404-409.
- Mostafa, M. M. (2007). Gender differences in Egyptian consumers' green purchase behaviour: the effects of environmental knowledge, concern and attitude. *International Journal of Consumer Studies*, 31(3):220-229.
- Mostafa, M. M. (2009). Shades of green: A psychographic segmentation of the green consumer in Kuwait using self-organizing maps. *Expert Systems with Applications*, 36 (8):11030-11038.
- Mostafa, M.M. (2007). A hierarchical analysis of the green consciousness of the Egyptian consumer. *Psychology and Marketing*, 24(5): 445-473.
- Muijs, D. (2012). *Doing quantitative research in education with SPSS*. 2nd ed. London: Sage Publications Ltd.
- Newton, N., (1990). Implications of Attitude and Behavior Research for Environmental Conservation. *Journal of Environmental Education*, 22(1):26-32.

- Niaura, A. (2013). Using the theory of planned behavior to investigate the determinants of environmental behavior among youth. *Environmental Research, Engineering and Management*, 1(63): 74-81.
- Oliver, R. L. (2007). *Satisfaction: A Behavioral Perspective on the Consumer*, New York: McGraw Hill, 392
- Oreg, S. and Katz-Gerro, T. (2006). Predicting pro-environmental behaviour cross-nationally: Values, the theory of planned behaviour, and value-belief-norm theory. *Environment and Behaviour*, 38 (4):462-483.
- Ottman, A.J. (2011). The new rules of green marketing: Strategies, tools, and inspiration for sustainable branding. *Sheffield, United Kingdom: Greenleaf Publishing Limited*: 110
- Paco, A.D. and Raposo, M. (2009). Green segmentation: An application to the Portuguese consumer market. *Marketing Intelligence & Planning*, 27:364-431.
- Pallant, J. (2011). *SPSS Survival Manual: A Step By Step Guide to Data Analysis Using SPSS*. 5th Ed. *Berkshire: McGraw-Hill Education*, 57-100
- Park, J. S. and Lee, J. (2014). Segmenting green consumers in the United States: Implications for green marketing. *Journal of Promotion Management*, 20(5):571-589.
- Paul, J. and Rana, J. (2012). Consumer behaviour and purchase intention for organic food. *Journal of Consumer Marketing*, 29(6):412-422.
- Peattie, K. (2001). Golden goose or wild goose? The hunt for the green consumer. *Business Strategy and the Environment*, 10:187-199.
- Peattie, Ken and Andrea Collins (2009). Guest editorial: perspectives on sustainable consumption. *International Journal of Consumer Studies*, 33:107–112.
- Peppers, D. and Rogers, M. (2004). *Managing customer relationships: a strategic framework*, New York: John Wiley and Sons, 57

- Pirani, E. and Secondi, L. (2011). "Eco-Friendly Attitudes: What European Citizens Say and What They Do". *International Journal of Environment Research*, 5:67-84.
- Rahbar, E. and Wahid, N.A. (2011). Investigation of green marketing tools" effect on consumers" purchase behavior. *Journal of Business Strategies Series*, 12(2):73-83.
- Rahman, K. M. and Haque, M. (2011). Exploring price sensitivity of a green brand: A Consumers' perspective. *World Review of Business Research*, 1(2):84-97.
- Rakhsha, R. and Majidazar, M. (2011). Evaluation of effectiveness of green marketing mix on consumer satisfaction and Loyalty: Case study of the East Azarbaijan Pegah dairy company in Tabriz, Iran. *Middle-East Journal of Scientific Research*, 10(6):755-763.
- Reeves, S., Kuper, A and Hodges B.D. (2008) Qualitative research methodologies: ethnography. *British Medical Journal*, 337-407.
- Rehman, Z. and Dost, M. K. D. (2013). Conceptualizing green purchase intention in emerging markets: An empirical analysis on Pakistan. Paper presented at the West East Institute Academic Conference held in Istanbul 1n 2013.Turkey: 99-120.
- Rezai, G., Teng, P. K., Mohamed, Z. and Shamsudin, M. N. (2013). Consumer willingness to pay for green food in Malaysia. *Journal of International Food and Agribusiness Marketing*, 25(1):1-18.
- Rezai, G., Teng, P.K., Mohamed, Z. and Shamsudin, N.M. (2012). Consumers' awareness and consumption intention towards green foods. *African Journal of Business Management*, 6(12): 4496-4503.
- Salkind, N, J. (2012). *Exploring Research*. 8th ed. New Jersey: Pearson Education, 95-149.

- Salonen, Arto O. and Mauri Åhlberg (2013). Obstacles to sustainable living in the Helsinki Metropolitan Area. *Sustainable Cities and Society*, 8:48–55.
- Samarasinghe, R. (2012). The influence of cultural values and environmental attitudes on green consumer behaviour. *International Journal of Behavioural Science*, 7(1):83-98.
- Saunders, M., Lewis, P. and Thornhill, A. (2007). Research Methods for Business Students. 4th ed. *Edinburgh: Pearson Education Limited*, 135
- Saunders, M., Lewis, P., and Thornhill, A., (2009). Research Methods for Business Students. 5th ed. FT Prentice Hall. Pearson Education Limited, UK, 107-119.
- Schiffman, L.G. and Kanuk, L.L. (2007). *Consumer behaviour*. 9th ed. Upper Saddle River, NJ: Prentice Hall.
- Schiffman, L.G. and Kanuk, L.L. (2004). *Consumer behavior*. Boston, MA: Pearson Prentice Hall.
- Schiffman, L.G., Kanuk, L.L. and Wisenblit, J. (2010). *Consumer Behavior*. 10th ed. Upper Saddle River, NJ, USA: Pearson Prentice Hall.
- Schumacker, R. Lomax, R. (2004). *A Beginner's Guide to Structural Equation Modeling* 2nd ed. Mahwah, NJ: Lawrence Erlbaum. 88-89.
- Sekaran, (2003) *Research methods for business. A Skill-Building Approach*. Southern Illinois University at Carbondale, 4th ed John Wiley & Sons, Inc., 311
- Sheth, J. N., Newman, B. I. and Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22(2):159-170.
- Shiu, E., Hair, J., Bush, R., and Ortinau, D., (2009). *Marketing Research European Edition*. McGraw-Hill higher Education, London UK, 329-469
- Shukla, P. (2008). *Essentials of marketing research*. Ventus Publishing, 47.

- Silver, L., Stevens, R., Wrenn, B. and Loudon, D. (2013). *The essentials of marketing research*. 3rd ed. USA, NY: Routledge, Taylor and Francis Group.
- Silverman D. (2011). *Qualitative Research: Issues of Theory, Method and Practice*. 3rd ed, Sage London, 16,292.
- Smith, S. and Paladino, A. (2010). Eating clean and green? Investigating consumer motivations towards the purchase of organic food. *Australasian Marketing Journal*, 18:93-104.
- Sodhi, K. (2011). Has marketing come full circle? Demarketing for sustainability. *Journal of Business Strategies*, 12(4): 177-185.
- Solomon, M., Bamossy, G., Askegaard, S. and Hogg, M. K. (2006). *Consumer Behaviour: A European Perspective*. 3rd ed. Pearson Education Ltd. Essex, 37-48.
- Solomon, M.R. (2007). *Consumer behaviour: buying, having and being*. 7th ed. Upper Saddle River, NJ: Prentice Hall, 63
- Steg, L. and Vlek, C. (2009). Encouraging pro-environmental behaviour: An integrative review and research agenda. *Journal of Environmental Psychology*, 29:307-317.
- Suki, N.M. (2015) Customer environmental satisfaction and loyalty in the consumption of green products, *International Journal of Sustainable Development and World Ecology*, 22(4):292-301.
- Synodinos, C., Bevan-Dye, A. L. and De-Klerk, N. (2013). Influence of Conative attitudes towards green advertising on black Generation Y students' environmental behaviour. *Mediterranean Journal of Social Sciences*, 4(3):17-24.
- Tabachnick, B.G and Fidell, L.S (2001). *Using multivariate statistics*, 4th Ed, Allyn and Bacon, Boston, 117.

- Takakol, M. and Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2:53-55.
- Tan, B. C. and Lau, T.C. (2011). Green purchase behavior: examining the influence of green environmental attitude, perceived consumer effectiveness and specific green purchase attitude. *Australian Journal of Basic and Applied Sciences*, 5(8): 559-567.
- Tantawi, P., O'shaughness Y, N., Gad, K. and Ragheb, M. A. S. (2009). Green consciousness of consumers in a developing country: A study of Egyptian consumers. *Contemporary Management Research*, 5(1):29-50.
- Thøgersen, J. (2006). Media attention and the market for green consumer products. *Business Strategy and the Environment*, 15(3), 145-156.
- Van Doorn, J. and Verhoef, P. C. (2011). Willingness to pay for organic products: Differences between virtue and vice foods. *International Journal of Research in Marketing*, 28:167-180.
- Vermillion, L.J., and Peart, J. (2010). Green marketing: Making sense of the situation, *Allied Academies International Conference: Proceedings of the Academy of Marketing Studies*, 15(1):68-72.
- Verna H. V. (2003). "Customer outrage and delight". *Journal of Services Research*, 3(1):119 – 133.
- Vernekar, S.S, and Wadhwa, P. (2011). Green Consumption an Empirical Study of Consumers Attitudes and Perception regarding Eco-Friendly FMCG Products, with special reference to Delhi and NCR Region. *Opinion*. 1(1):64-74.
- Verrain, M. C. D., Bartels, J., Dagevos, H., Sijtsema, S. J., Onwezen, M.C. and Antonides, G. (2012). Segments of sustainable food consumers: A literature review. *International Journal of Consumer Studies*, 36:123-132.

- Wahid, N.A., Rahbar, E. and Tan, S. S. (2011). Factors influencing the green purchase behaviour of Penang environmental volunteers. *International Business Management*, 5(1):38-49.
- Wahyuni, D. (2012). The research design maze: Understanding paradigms, cases, methods and methodologies. *Journal of Applied Management Accounting Research*.
- Welman, C., Kruger, F. & Mitchell, B. (2011). *Research Methodology*. 3th ed. Cape Town: Oxford University Press, 143.
- Wiid, J. and Diggins, C. (2011). *Marketing Research*. Cape Town: Juta and Company, 17-199.
- Yakup, D., and Diyarbakirlioglu, I. (2011). A Theoretical Approach to the Role of Perception on the Consumer Buying Decision Process. *Asian Journal of Business and Management Sciences* 1(3): 217-221.
- Yang C. C. (2011). "Identification of customer delight for quality attributes and its applications". *Total Quality Management*, 22(1):83 – 98.
- Yang Z., Peterson R. T. (2004). "Customer perceived value, satisfaction, and loyalty: The role of switching costs". *Psychology and Marketing*, 21(10):799 – 822.
- Yee, Cheng, and Yazdanifard, C.R. (2014) .How customer perception shape buying online decision. *Global Journal of Management and Business Research* 14 (2):13-20.
- Yeung, S. P. M. (2004). Teaching approaches in Geography and students environmental attitudes. *Environmentalist*, 24:101-117.
- Young, W., Hwang, K., Mcdonald, S. and Oates, C. J. (2010). Sustainable consumption: Green consumer behaviour when purchasing products. *Sustainable Development*, 18:20-31.

- Yusoff, M. S. B. (2011). Psychometric properties of the learning approach inventory: A confirmatory factor analysis. *Education in Medicine Journal*, 3(2):24-31.
- Yusuf, S and Fatima, Z. (2015). Consumer Attitude and Perception towards Green Products. *The International Journal of Indian Psychology*, (2) 3:141-146
- Zakaria, A., Alhady, S. M., Sawal, M. Z. H. M., Ahmad, S .S. and Noordin, N. (2011). Generation Y and their buying behaviour towards local delicacies. *Inter-disciplinary Journal of Contemporary Research in Business*, 3(4):35-39.
- Zaman, A., Miliutenko, S. and Nagapetan, V. (2010). Green marketing or greenwashing? A comparative study of consumer's behaviour on selected Eco and Fair Trade labelling in Sweden. *Journal of Ecology and Natural Environment*, 2(6):104-111.
- Zhu, Q. L. N., Geng, Y. and Qi, Y. (2013). Green food consumption intention, behaviours and influencing factors among Chinese consumers. *Food Quality and Preference*, 28(1):279-286.
- Zhuang, W., Cumiskey, K. J., Xiao, Q. and Alford, B. L. (2010). The impact of perceived value on behaviour intention: An empirical study. *Journal of Global Business Management*, 6(2):1-7.
- Zineldin, M., (2006). The royalty of loyalty: CRM, quality and retention. *Journal of consumer marketing*, 23(7):430-437.
- Zsóka, A., Szerényi, Z.M., Széchy, A. and Kocsis, T. (2013). Greening due to environmental education? Environmental knowledge, attitudes, consumer behavior and everyday pro-environmental activities of Hungarian high school and university students. *Journal of Cleaner Production*, 48(1): 126-138.

Appendix 1 Ethics Clearance from FREC



MANAGEMENT SCIENCES: FACULTY RESEARCH ETHICS COMMITTEE (FREC)

23 January 2017

Student No: 21649802

FREC No: 96/15FREC

Dear Mr F Chikosha

DOCTOR OF PHILOSOPHY: MANAGEMENT SCIENCES (PUBLIC MANAGEMENT)

TITLE: LINKING CONSUMER PERCEPTIONS, PURCHASING BEHAVIOUR AND LOYALTY TO GREEN PRODUCTS

Please be advised that the FREC Committee has reviewed your proposal and the following decision was made: Ethical Level 2 -Full Approval

Approval has been granted for a period of two years, after which you are required to apply for safety monitoring and annual recertification. Please use the form located at the Faculty. This form must be submitted to the FREC at least 3 months before the ethics approval for the study expires.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the FREC according to the FREC SOP's.

Please note that ANY amendments in the approved proposal require the approval of the FREC as outlined in the FREC SOP's.

Yours Sincerely

Prof JP Govender

Chairperson: FREC

Appendix 2a Permission from Bindura Municipality

S/4/4

40



The Town Clerk
Bindura Municipality

01 June 2015

Dear Sir,

Request for Permission to Carry Out Research in Bindura Municipality Residential Areas

My name is Felix Chikosha. I am a lecturer with Zimbabwe Open University in Mashonaland Central Region. I am carrying out a research study towards a Doctor of Philosophy in Marketing with Durban University of Technology (DUT) in South Africa.

I request for permission to conduct research in Bindura involving selected households. My research topic is titled **"Linking consumer perceptions, purchase behaviour and loyalty to green products"**. The study will involve interviewing selected households on their green products purchases. Research ethics require that the researcher be granted permission to carry out research in the stated area.

The aim of the study is to assess the uptake, use and satisfaction with environmentally friendly products by customers. It is pertinent to establish whether customers really appreciate green products.

A self-administered questionnaire will be used to collect data from the respondents. The researcher, with the help of three research assistants will complete the questionnaires themselves as they conduct the interviews.

Respondents' identities will not be revealed and so will be their responses which will be treated confidentially and used solely for the purposes of the research.

Besides being an ethical requirement, this request, if approved will help the researcher to personally introduce himself to area councillors and selected respondents.

Thank you.

Researcher: FELIX CHIKOSHA

Cell: 0776346402

Supervisor: DR NOBUBELE POTWANA

Cell: 0828607187

DUT Research Ethics Administrator

Cell: 031373 2900

Approved.

Town Clerk
Bindura Municipality



Appendix 2b Permission from Chinhoyi Municipality



Municipality of Chinhoyi

The Park

Telephone: 22156, 22456, 22479
Fax: 22554

*PLEASE ADDRESS ALL
CORRESPONDENCE TO
THE TOWN CLERK*

Office of the Town Clerk
P.O. Box 93
Chinhoyi
Zimbabwe

OUR REF.....
YOUR REF.....

06 June 2017

Attention: Felix Chikosha

Dear Sir

REF: APPROVAL OF AUTHORITY TO UNDERTAKE AN ACADEMIC RESEARCH

Reference is made to your letter dated 16 March 2017 and we acknowledge the contents thereof.

Council has approved your request to undertake a field research in Municipality of Chinhoyi Local Authority.

Wish you the best.

Yours Faithfully



F.A. CHARUMA
HUMAN RESOURCES MANAGER



Chinhoyi is committed to the efficient and effective delivery of total quality services to its stakeholders.

Appendix 2c Permission from Gweru Municipality



If calling or phoning this matter,
Please ask for
MR MARUSENGA

ALL COMMUNICATIONS TO BE ADDRESSED TO THE CHAMBER SECRETARY

CITY of GWERU

CHAMBER SECRETARY'S DEPARTMENT

Municipal Offices

P.O. Box 278 Telephone 263-054-224071-9

Fax 263-054-24309-Gweru, Zimbabwe

E-mail: gweruchambersec@comone.co.zw

Your Ref:

Our Ref: JN/bs/Personnel

28th March 2017

Mr. Felix Chikosha
Durban University of Technology
DURBAN

Dear Sir/Madam

RE: REQUEST TO CARRY OUT A RESEARCH AT CITY OF GWERU.

Your application to carry out a research has been approved on the following conditions: -

- 1) That you do not publish the name of Council officials.
- 2) That you also seek police clearance in the case that you want to interview residents.
- 3) That City of Gweru shall not be liable for any action arising from your research.
- 4) That you undertake to deposit of the said research which shall be submitted to the Town Clerk's office.

Note that this letter serves as an introduction to whoever it may concern.

E GWATIPEDZA
TOWN CLERK
cc. Chamber Secretary
Human Resources Manager
File

CITY OF GWERU

28 MAR 2017

P.O. BOX 278, GWERU
TOWN CLERK

Appendix 2d Permission from Marondera Municipality

 **DUT** DURBAN
UNIVERSITY OF
TECHNOLOGY

The Town Clerk
Marondera Municipality

08 June 2015

Dear Sir,

Municipality of Marondera
11 JUN 2015
Pen
P.O. BOX 261, MARONDERA
TEL. (0279) 21801, 24941/2

Request for Permission to Carry Out Research in Marondera Municipality Residential Areas

My name is Felix Chikosha. I am a lecturer with Zimbabwe Open University. I am carrying out a research study towards a Doctor of Philosophy in Marketing with Durban University of Technology (DUT) in South Africa.

I request for permission to conduct research in Marondera involving selected households. My research topic is titled **"Linking consumer perceptions, purchase behaviour and loyalty to green products"**. The study will involve interviewing selected households on their green products purchases. Research ethics require that the researcher be granted permission to carry out research in the stated area.

The aim of the study is to assess the uptake, use and satisfaction with environmentally friendly products by customers. It is pertinent to establish whether customers really appreciate green products.

A self-administered questionnaire will be used to collect data from the respondents. The researcher, with the help of three research assistants will complete the questionnaires themselves as they conduct the interviews.

Respondents' identities will not be revealed and so will be their responses which will be treated confidentially and used solely for the purposes of the research.

Besides being an ethical requirement, this request, if approved will help the researcher to personally introduce himself to area councillors and selected respondents.

Thank you.

Researcher: FELIX CHIKOSHA	Cell: 0776346402
Supervisor: DR NOBUBELE POTWANA	Cell: 0828607187
DUT Research Ethics Administrator	Cell: 031373 2900

Approved.....

Town Clerk
Marondera Municipality

11-06-15

Appendix 2e Editor's Letter

696 Clare road
Clare Estate
Durban
4091

7 June 2018

To: Whom it may concern

Editing of PhD thesis: F Chikosha (21649802)

This letter serves to confirm that Mr Chikosha's thesis was language edited.

Please contact me at the email address below should you have any queries.

Regards



MP Mathews

083 676 4778

mercillenem@dut.ac.za

Appendix 3a Letter of information



Title of the Research Study: Consumer perceptions of green products, purchasing behaviour and loyalty to green products.

Researcher: Felix Chikosha, PhD Marketing

Supervisor: Dr Nobubele Potwana (PhD)

Brief Introduction and Purpose of the Study: The purpose of this research is to assess the uptake, use and satisfaction with environmentally friendly products by customers. It is pertinent to establish whether customers really appreciate green products.

Outline of the Procedures: Questionnaires will be hand delivered to respondents in selected households. Questionnaires will be collected from respondents' homes after one week.

Benefits: The output will enable the participants to gain knowledge so as to make meaningful decisions while enabling the researcher to publish journal articles as well as a Doctoral thesis.

Reason/s why the Participant May Be Withdrawn from the Study: There will be no adverse consequences for the participants should they choose to withdraw from participating in the study.

Remuneration: Participants will not be paid for participating in this study.

Costs of the Study: (N/A)

Confidentiality: Information obtained will be treated in a strictest confidence.

Research-related Injury: (N/A)

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

1. F. Chikosha: Researcher - +263 776 346 402

- 2. Dr N. Potwana - +27 82 860 7187
- 3. Research Ethic Administrator - +27 31 373 2900

Complaints can be reported to the DVC: TIP, Prof F. Otieno on +27 31 373 2382 or dvctip@dut.ac.za.

General:

Potential participants must be assured that participation is voluntary and the approximate number of participants to be included should be disclosed. A copy of the information letter should be issued to participants. The information letter and consent form must be translated and provided in the primary spoken language of the research population e.g. isiZulu.

Appendix 3b Consent Letter



20th May, 2016.

.....
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Dear Respondent,

Letter of Consent

My name is **Felix Chikosha**, a Doctoral student of Business Administration at Durban University of Technology. I hereby seek your consent to conduct a research study on the topic “**Linking Consumer Perceptions, Purchasing Behaviour and Loyalty to Green Products.**”

The aim of this study is to identify the factors that contribute to the formation of green product perception and the subsequent green purchasing behaviour. Through your participation, I hope you understand the importance of environmentally friendly behaviour mirrored through the purchase and consumption of green products. The results of the study are to contribute to the existing body of knowledge about green purchasing behaviour by making recommendations needed to promote purchasing behaviours that minimise damage to the environment.

Please, know that your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. Your name will not be attached to the questionnaire and all information will be held in the strictest confidence. Therefore, should you have any query with regards to the questionnaire or about participating in this study, do not hesitate to contact me or my supervisor on the telephone numbers below.

Thank you in anticipation.

Researcher's Name: Felix Chikosha
Supervisor: Dr N. Potwana
DUT Research Ethic Administration

Cell Number: +263778346402
Cell Number: 082 860 7187
031 373 2900



Statement of Agreement to Participate in the Research Study:

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

Full Name of Participant	Date	Time	Signature/Right Thumbprint

I, **Felix Chikosha** herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Felix Chikosha		
Full Name of Researcher	Date	Signature

Full Name of Witness (If applicable)	Date	Signature

Full Name of Legal Guardian (If applicable)	Date	Signature

Please note the following:

Research details must be provided in a clear, simple and culturally appropriate manner and prospective participants should be helped to arrive at an informed decision by use of appropriate language (grade 10 level - use Flesch Reading Ease Scores on Microsoft Word), selecting of a non-threatening environment for interaction and the availability of peer counseling (Department of Health, 2004)

If the potential participant is unable to read/illiterate, then a right thumb print is required and an impartial witness, who is literate and knows the participant e.g. parent, sibling,

friend, pastor, etc. should verify in writing, duly signed that informed verbal consent was obtained (Department of Health, 2004).

If anyone makes a mistake completing this document e.g. wrong date or spelling mistake a new document has to be completed. The incomplete original document has to be kept in the participant file and not thrown away and copies thereof must be issued to the participant.

References:

Department of Health: 2004. *Ethics in Health Research: Principles, Structures and Processes* <http://www.doh.gov.za/docs/factsheets/guidelines/ethnics/>

Department of Health. 2006. *South African Good Clinical Practice Guidelines*. 2nd Ed. Available at: http://www.nhrec.org.za/?page_id=14

Appendix 4 Questionnaire



Please tick the relevant box below

Section A: Respondent's Profile

1. Gender

Male	Female
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2. Age

Less than 21	21 – 30	31 - 40	41 – 50	51 and above
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3. Residential Area

Locations	Suburbs	City Centre
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4. Employment Status

Employed	Unemployed
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5. Type of Green Product Purchases

Food	Health Care	Cleaning Products	Electrical	Other
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From Section B to Section G indicate the extent to which you agree with the statements below by ticking the appropriate box, that is, either Strongly Agree; Agree; Not Sure; Disagree and Strongly Disagree.

Section B: Green product quality

6. Green products are reliable

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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7. Green products are durable

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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8. Green products reduce wastage

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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Section C: Purchase intention

9. I have been buying green products over the last three months

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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10. I am going to purchase green products more

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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11. I will recommend green products to my friends and family

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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Section D: Environmental concern

12. I am environmentally responsible

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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13. I am knowledgeable on green products

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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14. It is important to me that the products I use do not harm the environment

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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Section E: Repurchase intention

15. I have used green products before

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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16. I was satisfied with most of eco-friendly products I bought

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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15. I intend to buy green products in future

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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Section F: Preference of green products

18. I prefer green products over conventional products

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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19. I first look for green products when shopping

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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20. I will not buy if green products are not available

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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Section G: Situations that affect green product purchase

21. I will revise my budget to accommodate green product purchases

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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22. I want to change my lifestyle to promote the environment

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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23. I spend time and effort in environmental activities such as recycling

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
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End of questionnaire

Thank you for your valued assistance