



The persuasive influence of marketing communication on Tshwane households' sustainable consumption of fresh produce

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Dedication

Dedicated to my family, my husband and my daughter.

Grandma, your relentless belief in my abilities, even when I doubted them myself, was one of the biggest drivers that pushed me forward;

Mom, your determination and commitment to only the best inspired me to attain your high standards myself;

JW and Hendrik, your support and pride humble me, thank you;

My in-laws, my second family, thank you for the support and encouragement throughout this whole process;

Alina, the promise of the future, I loved you before even meeting you;

Darius, for the late nights, the countless cups of tea and all the times you pretended to understand what I was trying to say. You are my rock, my stability and my chaos – without you there would be nothing. Love you more than I love myself.



Declaration

I, Esrida Brits, declare that this dissertation for the M in Consumer Science, submitted to the University of Pretoria, is my own work and has not been submitted to any other tertiary institutions for a degree. Where secondary material has been used, the original authors have duly been acknowledged and referenced according to the University's guidelines and requirements. I am aware of the University's policy, and its implications, regarding plagiarism.

Esrida Brits January 2015



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Abstract

Marketing has been practised for years with the aim to encourage consumer spending through the promotion of goods as a means of acquiring status. This stimulation of needs has never been as effective as what marketers are achieving with modern marketing. Current consumer behaviour suggests that marketing initiatives are promoting irresponsible consumption instead of educating consumers to want less. One potential area where all consumers can contribute towards reducing climate change is through the consumption and wastage of fresh fruits and vegetables. Fresh produce wastage is currently viewed as a major concern because it contributes towards the country's greenhouse gas emission rates. In South Africa, current fresh produce consumption portrays little if any concern for the environment. Globally consumers are urged to adapt their consumption practices as excessive consumption has been proven to be detrimental to society and nature. It is proposed that if used differently, marketing can be implemented towards decreasing the unsustainable consumption of fresh produce.

Due to growing concerns about the state of the planet and how future generations might be affected by humankind's careless use of resources, sustainable consumption is discussed globally. Consumers are nevertheless not necessarily motivated to change their lifestyles and to adapt their consumption behaviour accordingly. A major contributor to the problem is the paradox that is created through marketing media when marketers try to encourage consumer interest in products to enhance sales while these attempts may actually instigate conspicuous consumption. At the same time, marketing communication proclaim the merit of sustainable consumption. Unfortunately it is not always clear whether marketers' efforts to enhance the idea of sustainable consumption are understood by consumers or whether it is contradicted by messages that simultaneously boost conspicuous consumption.

The principal aim of this study was to investigate and describe the influence of marketing communication on consumers' knowledge of sustainable issues and how it is reflected in their purchasing and consumption behadviour of fresh produce.

An explanatory sequential design was used to investigate the problem. Data collection concerning marketing's influence on consumer knowledge took place by means of two phases: focus group discussions, including a projective technique; and a quantitative



questionnaire. Data analysis of phase one involved open coding and categorisation. Phase two involved content analysis as well as descriptive statistics.

Results indicated that consumers lack the necessary knowledge to change their purchasing and consumption habits to be more sustainable. Current fresh produce consumption practices revealed little concern for the environment, especially in consumers' behaviour in rejecting physically unattractive fresh produce, based on illogical consumer demands. A major obstacle identified was consumers' socialisation in terms of acceptable consumer behaviour — external socialisation factors encourage consumers' unsustainable demands in terms of perfect fresh produce.

Because consumers seemed willing to change their fresh produce consumption practices once adequately informed, suggestions are that marketing be used to educate consumers regarding the virtues of sustainable consumption. Future research might focus on exact strategies that can be implemented to ensure an effective and efficient portray of the necessary information from marketing communication to consumers.

Keywords

Consumer behaviour, Marketing, Fresh produce, Sustainability, Climate change, South Africa, Marketing communication



TABLE OF CONTENTS

Declaration	iv
Acknowledgements	v
Abstract	vi
LIST OF ADDENDA	
LIST OF FIGURES	
LIST OF TABLES	xiv
CHAPTER 1_THE STUDY IN PERSPECTIVE	1
1.1 THE STUDY IN CONTEXT	
1.2 PROBLEM STATEMENT AND JUSTIFICATION	
1.3 RESEARCH AIM AND OBJECTIVES	6
1.4 THEORETICAL PERSPECTIVE	
1.5 RESEARCH DESIGN AND METHODOLOGY	
1.6 DATA ANALYSIS	11
1.7 ETHICS	14
1.8 PRESENTATION AND STRUCTURE OF THE RESEARCH	15
CHAPTER 2 LITERATURE REVIEW	16
2.1 THE ROLE OF MARKETING IN CONSUMER BEHAVIOUR	
2.1.1 An historical overview	16
2.2 MARKETING AND THE CONSUMER DECISION MAKING PROCESS	18
2.2.1 Problem recognition	19
2.2.2 Information search	21
2.2.3 Evaluation of alternatives	23
2.2.4 Purchase decision	24
2.2.5 Post-purchase evaluation	
2.2.6 Hierarchy of effects model	
2.3 THE MARKETING MIX: THE FOUR Ps OF MARKETING	
2.3.1 Product	
2.3.2 Place	
2.3.3 Promotion	32
2.3.4 Price	
2.4 CONSPICUOUS CONSUMPTION DEFINED	
2.4.1 Consequences of conspicuous consumption of consumer goods	
2.4.2 Conspicuous consumption of fresh produce	
2.5 UNIVERSAL CONCERNS ABOUT CLIMATE CHANGE	38



2.5.1 Global attempts to encourage sustainable consumption	39
2.5.2 South African consumers and sustainable consumption	40
2.6 CONSUMER SOCIALISATION DEFINED	42
2.6.1 Marketing as a medium for consumer socialisation	43
2.6.2 Emergence of green marketing	45
2.6.3 Utilising green marketing to raise knowledge about sustainability issues	45
2.7 SUMMARY	47
CHAPTER 3_THEORETICAL PERSPECTIVE, CONCEPTUAL FRAMEWORK AND RESEARCH OBJE	ECTIVES49
3.1 JUSTIFICATION OF THE USE OF THE SOCIAL COGNITIVE THEORY	49
3.1.1 Observational learning	50
3.1.2 Outcome expectations	51
3.1.3 Perceived self-efficacy	52
3.1.4 Goal setting	53
3.1.5 Self-regulation	53
3.1.5.1 Self-observation	54
3.1.5.2 Self-judgement	54
3.1.5.3 Self-reaction	55
3.2 CONCEPTUAL FRAMEWORK	55
3.3 AIM OF THE STUDY AND RESEARCH OBJECTIVES	57
3.4 SUMMARY	58
CHAPTER 4_RESEARCH DESIGN AND METHODOLOGY	59
4.1 RESEARCH DESIGN	59
4.2 PHASE 1	61
4.2.1 Methodology	61
4.2.1.1 The sample	
4.2.1.2 Sampling method	63
4.2.1.3 Sample size	64
4.2.2 DATA ANALYSIS	
4.2.3 QUALITY OF THE DATA	65
Conceptualisation: theoretical validity	65
Measurement validity	66
1. Content validity	66
2. Face validity	66
3. Criterion validity	67
Data analysis: inferential validity	
Reliability	



Sampling representativeness	68
4.3 PHASE 2 (QUALITATIVE DATA COLLECTION)	68
4.3.1 Methodology	68
4.3.1.1 The sample	71
4.3.1.2 Sampling method	71
4.3.1.3 Sample size of focus groups	72
4.3.2 DATA ANALYSIS	
4.3.3 QUALITY OF THE DATA	77
Credibility	77
Transferability	78
Dependability	78
Conformability	78
4.5 ETHICS	79
4.6 SUMMARY	80
CHAPTER 5_RESULTS AND DISCUSSION	
5.1 INTRODUCTION	
5.2 DEMOGRAPHICS	
5.1.1 Gender distribution of sample	
5.1.2 Age distribution of the sample	
5.1.3 Marital status and average household size	
5.1.4 Level of education	
5.1.5 Home language	
5.1.6 Average monthlyhousehold income	
5.1.7 Population representation of the sample	
5.3 RESULTS: PHASE 1, QUANTITATIVE INVESTIGATION	87
5.3.1 Consumers' use of marketing communication as an information source about is pertaining to climate change (Objective 1.1)	
5.3.1.1 Consumers' knowledge of climate change	90
5.3.2 Consumers' consumption of fresh produce in terms of unnecessary wasteful consumption that might enhance climate change (Objective 1.2)	98
5.3.2.1 Consumers' general consumption of fresh produce	98
5.3.2.2 Possible drivers of consumers' unsustainable fresh produce purchasing behaviou	ur 107
5.3.3 The potential influence of consumers' status consciousness (Objective 1.3)	108
5.4 RESULTS: PHASE 2, QUALITATIVE DISCUSSION	
5.4.1 Introduction	
5.4.2 The relevance of marketing communication as an information source used to encourage sustainable consumer behaviour (Objective 2.1)	
5.4.2.1 Consumers' knowledge of climate change	



5.4.2.2 Popular sources used by marketers	118
5.4.3 Consumers' knowledge of sustainable fresh produce consumption practices (Ob 2.2) 121	jective
5.4.3.1 Consumers' current fresh produce consumption practices: a general overview	121
5.4.3.2 Reasons for unsustainable fresh produce consumption practices	125
5.4.3.3 Summary of participants' knowledge and skills pertaining to sustainable consum	ption
	132
5.4.4 The influence of marketing communication in terms of status consumption during fresh produce purchases (Objective 2.3)	_
5.4.5 The possibility of green marketing in terms of mitigating unsustainable fresh proconsumption practices (Objective 2.4)	
CHAPTER 6_CONCLUSION	147
6.1 INTRODUCTION	147
6.2 THE QUANTITATIVE INVESTIGATION: THE TSHWANE FRESH PRODUCE CONSUMER	148
6.2.1 Consumers' use of marketing communication as an information source about is pertaining to climate change (Objective 1.1)	
6.2.2 Consumers' consumption of fresh produce in terms of unnecessary wasteful consumption that might enhance climate change (Objective 1.2)	151
6.2.3 The potential influence of consumers' status consciousness (Objective 1.3)	152
6.3 THE QUALITATIVE INVESTIGATION: FOCUS GROUP DISCUSSIONS AND PROJECTIVE TECHNIC	
	153
6.3.1 The relevance of marketing communication as an information source used to encourage sustainable consumer behaviour (Objective 2.1)	154
6.3.2 Consumers' knowledge of sustainable fresh produce consumption practices (Ob2.2) 156	jective
6.3.3 Marketing's influence on consumers' status consciousness (Objective 2.3)	158
6.3.4 The possibility of green marketing in terms of mitigating unsustainable fresh proconsumption practices (Objective 2.4)	
6.4 THE RESEARCH IN RETROSPECT	159
6.5 LIMITATIONS OF THE STUDY	160
6.6 SUGGESTIONS FOR FURTHER RESEARCH	
6.7 CONCLUDING REMARKS	161
DEFENDATION LICT	463



LIST OF ADDENDA

ADDENDUM A– QUESTIONNAIRE	186
ADDENDUM B – FOCUS GROUP DISCUSSIONS' PROMPTS	208
ADDENDUM C – FOCUS GROUP DISCUSSIONS' TRANSCRIPTS	209
ADDENDUM D – PROJECTIVE TECHNIQUE	249
ADDENDUM F – GLOSSARY	252



LIST OF FIGURES

Figure 2.1: A general model of the hierarchy of effects (Wijaya, 2011)	27
Figure 3.1: Conceptual framework	56
Figure 5.1: Household size (N = 560)	84
Figure 5.2: Sources consulted by respondents regarding environmental issues	8
Figure 5.3: Drivers of consumers' fresh produce nurchasing hehaviour	107



LIST OF TABLES

Table 1.1: Outline of the dissertation15
Table 4.1: Operationalisation73
Table 4.2: Operationalisation76
Table 5.1: Age group distribution of the sample (N = 560)83
Table 5.2: Level of education of the sample (N = 560)84
Table 5.3: Income distribution of the sample (N = 560)86
Table 5.4: Consumers' knowledge of climate change (N=560)92
Table 5.5: Consumers' knowledge of climate change across demographic categories94
Table 5.6: Consumers' knowledge of climate change in terms of income96
Table 5.7: Consumers' knowledge of climate change in terms of population group97
Table 5.8: Consumers' purchasing and consumption behaviour with regards to fresh produce
Table 5.9: Fresh produce consumption reflecting status consciousness



CHAPTER 1

THE STUDY IN PERSPECTIVE

This chapter provides the background of the study and introduces the research problem. It also briefly explains the research design, methodology, theoretical perspective and presents the structure of the study.

1.1 THE STUDY IN CONTEXT

For many years, civilisations have been dabbling with novel ideas to market goods and services, mostly to increase companies' competitiveness in the market place (Jordan, Gilmore, McCartan-Quinn, & Durkan, 2011; De Wulf & Odekerken-Schroder, 2003). As the world grew and became more sophisticated, so did companies' marketing strategies. This progression started with the simple trade era, proceeding to the production orientation era characterised by mass manufacturing (Peattie & Peattie, 2009), followed by the sales orientation era during which consumer demand became saturated (Erasmus, in Mpinganjira & Dos Santos, 2013; Jordan et al., 2011; Zaichkowsky, 1991). In the 1960s, the marketing orientation era was introduced, with the customer hailed as king (White, 2012; White, 2010; Peattie & Peattie, 2009; Zaichkowsky, 1991). The next era introduced relationship marketing, which aimed to foster loyal relationships with customers with the intention of encouraging repeat buying and to ensure that consumers' needs are primary in terms of product decisions (Kotler, Kartajaya, & Setiawan, 2010:4; Sheth & Sisodia, 2006:23). At present, the social or mobile marketing era offers real-time connections and social media platforms that instantly connect companies with customers (Erasmus, in Mpinganjira & Dos Santos, 2013; Jordan et al., 2011; Hollander, Rassuli, Jones & Farlow, 2005).

Some of the most drastic changes in marketing occurred during the 1960s (Jordan et al., 2011; Grikscheit & Granzin, 1975; Hilton, [s.a.]) when the Consumer Bill of Rights was introduced (in 1962) in the United States of America by John F. Kennedy as part of his presidential campaign. At its core and as part of the social consumerism movement, this Bill of Rights was meant to protect consumers by guiding any transaction process between a consumer and a supplier



with the intention to prevent exploitation in the market place, and to prevent product misuse and abuse. Under the protection of the Bill, stakeholders such as retailers and marketers encouraged consumers to buy exorbitantly. This prolific spending resulted in an unsustainable consumer culture (Briceno & Stagle, 2006; Cronk, 1996) which marked the start of the 'age of consumerism'. Per alternative definition (Kaplan, 2008), this refers to excessive consumption in the same way that alcoholism and brutalism refer to excessive behaviours (Hume, 2010). From a marketing point of view, this interpretation of consumerism also infers materialism and conspicuous consumption – the conviction that extravagant and flamboyant spending will satisfy a person's cravings for status, esteem and the admiration of others (Trigg, 2001; Bagwell & Bernheim, 1996; Page, 1992; Basmann, Molina & Slottje, 1988). Marketers' current movement of encouraging consumer spending through the promotion of goods and services as a means of acquiring status is therefore not new (Gierl & Huettl, 2010). However, stimulating or creating needs have never been as effective as what marketers are achieving with current, modern marketing. Today the use of social media platforms enables brand managers to interact directly with consumers as well as potential customers on a personal, almost intimate, level. Because of these interactions brand loyalty is fostered, stimulating very specific wants or needs (Kotler & Armstrong, 2013:42; Sheth & Sisodia, 2006:45). Marketing is thus not only used to simply influence consumers' knowledge and needs but also their desires and ultimate lifestyles. Current consumer behaviour suggests that marketing initiatives are extremely successful in stimulating consumer needs and even excessive consumption that have been proven to be to the detriment of society and nature (Kennedy, 2011; Kilbourne & Pickett, 2008; Gore, 2006:79).

Scientists have proven that if the consumption of resources such as fosil fuels, gas, and water continues at the present rate, humans will leave behind a planet not capable of supporting further life (Hawcroft & Milfont, 2010; Briceno & Stagl, 2006; Sanne, 2002; Cronk, 1996). Over the last decades, earth has seen many environmental tragedies such as flash floods, droughts, and heat waves, which can directly be attributed to an increase in greenhouse gas emissions. These greenhouse gasses (i.e. CO2 and Methane) are proven to be the direct consequence of excessive consumer consumption, suggesting that global environmental tragedies will continue unless consumers dramatically change their lifestyles and consumption patterns (Schmidt, Ivanova & Schafer, 2013; Joshi & Mishra, 2011; Gore, 2006:163). Currently South African consumers acknowledge climate change as a problem, but only 17% of these



consumers are willing to take ownership (Wilkins, 2008). To make matters worse recent research revealed that South Africa (SA)'s greenhouse gas emissions are on par with first world countries such as the United Kingdom (Marx-Pienaar & Erasmus, 2013; Wilkins, 2008; DEAT, 2012), even though SA is classified as an emerging economy. Globally consumers are urged to adapt their consumption practices; however, success stories are rare, with marketing once again being blamed for promoting irresponsible consumption instead of educating and steering consumers towards wanting less. One potential area where all consumers can contribute towards reducing climate change is through the consumption and wastage of fresh produce (i.e. fresh fruits and vegetables). Unsustainable consumption behaviour of fresh produce (fruit and vegetables) can be defined as consumers demanding and purchasing fresh produce in quantities that are not realistic in terms of consumption, i.e. consumers demand fresh produce in unreasonable quantities, consumers purchase fresh produce simply because the appearance of the products appeals to them or as a result of so called health reasons, often consumers do not consume the fresh produce, leading to elevated levels of household waste. Furthermore these unrealistic demands result in unneccassary wastage at retail level due to low volume sales. Wastage from unsold / unconsumed fresh produce are often send to landfills where it decomposes, releasing methane (a greenhouse gas) into the atmosphere. High levels of greenhouse gasses have been scientifically linked to climate change, i.e. heat waves, droughts, floods, etc. (Schmidt, Ivanova & Schafer, 2013; Joshi & Mishra, 2011). Sustainable consumption on the other hand means consumers consume what they buy and do not demand from retailers excessive levels of perfect produce, thus contributing to less waste at both household and retail level (retailers don't throw away less than perfect produce nor do they have large quantities of unsold produce). In SA, current fresh produce consumption portrays little if any concern for the environment; it is estimated that the average SA consumer throws away 31% of food purchased, of which fresh produce comprise more than 50%. Fresh produce wastage is currently viewed as a major concern because it contributes towards the country's greenhouse gas emission rates (Marx-Pienaar & Erasmus, 2013; Nahman & Oelofse, 2012). It is proposed that if used differently, marketing can be implemented towards a worthy cause i.e. decreasing unsustainable consumption of fresh produce (Kumar & Christodoulopoulou, 2013; Dangelico & Pantrandolfo, 2010; Lampe & Gazdat, 1995).



Evidence of steering consumers towards more sustainable consumption practices can be found throughout history. Amidst all the marketing and socio-political developments that occurred during the 1960s, the first wave of environmentalism was brought on by the American and European so-called "green" consumers' heightened knowledge of environmental threats that could be attributed to reckless consumption (Peattie & Peattie, 2009). Concerned consumers were further encouraged by the establishment of green political parties, green laws, and green watchdog agencies (Lampe & Gazdat, 1995), all driven by internal social responsibility. In the 1980s interest in sustainable consumption hit the European continent and started to gain worldwide support. The 1990s were subsequently predicted to be the "decade of the environment" (Do Paco & Raposa, 2009). Businesses had to adopt green marketing strategies that focussed on environmentally friendly or sustainable approaches (Haytko & Matulich, 2008; Lampe & Gazdat, 1995).

Even though some marketers still exploit the growing environmental movement for self-gain in the form of inflated profits, there are firms that act out of sincere and genuine interest in creating an awareness of the dangers of excessive consumption. Such firms intentionally adapted their tactics because they care about the planet and their customers, and are often rewarded for their commitment with customer loyalty and financial proceeds. Through marketing, they strive to educate and encourage consumers to become part of the solution as opposed to contributing to the problem. The underlying theory is that knowledge and education would increase consumers' knowledge about an issue such as sustainable consumption and ultimately enlarge the green consumer market segment (Hartmann & Apaoloza-Ibanez, 2011; Neagu, 2011; Maibach, Roser-Renouf & Leiserowitz, 2008). However, when considering the consumption behaviour of consumers concerning fresh produce it seems that marketing may subconsciously be causing a "tug-of war" during decision-making (Neagu, 2011). Marketing, on the one end, is still exploiting and capitalising on consumers' vulnerabilities by pushing consumption as a means to life fulfilment, while on the other end also realising that the green (sustainable) consumer segment is a growing market and thus a profitable target. With this said, it is evident that consumers can easily feel caught, or rather torn, between the prestige of prolific consumption and the sustainable virtues of consuming less (Hume, 2010). Being misguided and/or ill-informed about sustainable consumption only adds to consumers' confusion and distress. Research suggests that the more informed consumers are about climate change, the more willing they are to take remedial action



(Sundblad, 2008). Therefore, raising consumers' knowledge about climate change may induce sustainable consumption.

Some marketers are attempting to educate consumers to make more sustainable choices and to persuade consumers to purchase and consume less (Kotler & Armstrong, 2013:613; Peattie & Peattie, 2009). In terms of this study, it means that marketers should educate and encourage consumers to purchase their day-to-day fresh produce more responsibly, planning their purchases in order to minimise waste, with their buying decisions being driven by necessity and availability as opposed to price, and to dispose of waste in a sustainable manner.

1.2 PROBLEM STATEMENT AND JUSTIFICATION

Due to growing concerns about the future state of the planet and how future generations might be affected by humankind's careless use of global resources, sustainable consumption has evoked vibrant discussions across the world in recent years (Opole University, 2015). Consumers are nevertheless not necessarily motivated to change their lifestyles and to adapt their consumption behaviour accordingly. A major contributor to the problem is the paradox that is created through marketing media when marketers continuously try to encourage consumer interest in products to enhance sales while these attempts may actually instigate conspicuous and excessive consumption. The promotion of perfect and abundant fresh produce provokes consumers' interest in fruits and vegetables that they not necessarily need nor have planned to purchase. At the same time, marketing communication in media proclaim the merit of sustainable (green) consumption. Unfortunately it is not always clear whether marketers' efforts to enhance the idea of sustainable consumption is understood by consumers and whether it is contradicted and possibly negated by messages that simultaneously boost prolific and conspicuous lifestyles and consumption patterns in society.

According to various authors the poor and less developed nations will be severely impacted by the tragedies resulting from a changing climate (Maibach et al., 2008; Princen, 1999). In South Africa this is of great concern because the majority of SA citizens live in poverty (Leibbrandt, Woolard, Finn & Argent; 2010).



No empirical evidence could be found to explicate marketing communication's role in consumers' knowledge of environmental issues (in a South African context) and how it is translated in terms of consumers' fresh produce choices. The South African context is an emerging economy (Mankiw, 2014:417) that combines the economy and infrastructure of a first world country with the living standards of a third world country (Sullivan & Sheffrin, 2003). South Africa also has a distinct and challenging cultural backdrop. Diverse cultures and more than eleven spoken languages not only deter exposure but also interpretation of marketing messages and thus influence ultimate purchasing practices. Evidence of consumers' choice of a product category that is consumed frequently in fairly large quantities, such as fresh produce, could shed light on South African consumers' knowledge of this pressing concern and how it is dealt with in households on an everyday basis. Inevitably, diverse influences are relevant during consumers' consumption behaviour in different product categories. Therefore any investigation of the kind should focus on a specific product category (in this case fresh produce) and a specific context (in this case Tshwane, an urban area in South Africa that offers multiple avenues to purchase fresh produce) to reduce bias and to acknowledge the characteristics of a specific consumer market.

1.3 RESEARCH AIM AND OBJECTIVES

This study forms part of a larger study done to investigate South African consumers' ability to discursively reflect on the sustainability of their households' fresh produce consumption and waste practices amidst global concerns about climate change. The main aim of the larger study was to investigate possible reasons for consumers' excessive consumption and waste of fresh produce, which through demand, consumption and waste contribute to climate change. Insights from retail, driven by marketing communication in order to stay competitive, as well as the consumer market (households) were used to investigate households' purchasing and consumption behaviour of fresh produce. In support of the aim set in the larger study this particular study's principal aim planned to investigate and describe the influence of marketing communication on consumers' knowledge of sustainable issues and how it is reflected in their purchasing and consumption behaviour of fresh produce. This investigation was specifically planned for this study as it was not covered in the initial larger study and the results from this



study was therefore essential in supporting the findings presented in the primary / larger study.

In order to reach the objectives for the study, two phases were designed for the investigation, namely a quantitative investigation that formed part of a larger study, as well as a qualitative technique, i.e. focus group discussions, which also included the use of a projective technique. The focus group discussions were specifically planned for this study to explore the influence of marketing communication in consumers' current fresh produce consumption behaviour and to unravel consumers' underlying perceptions and explanations for their fresh produce consumption practices. A projective technique was used to identify participants' knowledge and understanding of green marketing and its possible effectiveness as well as their knowledge of climate change. Specific research objectives were therefore formulated for every phase of the investigation, namely:

Phase 1: The quantitative phase involved a questionnaire with specific research objectives, namely:

- 1.1 To investigate and describe consumers' use of marketing communication as an information source about climate change.
- 1.2 To investigate and describe consumers' consumption of fresh produce in terms of unnecessary wasteful consumption that might enhance climate change.
- 1.3 To explore the potential influence of consumers' status consciousness in terms of sustainable fresh produce consumption practices.

Phase 2: The qualitative phase involved focus group discussions that aimed:

- 2.1 To explore and explain the role of marketing communication as an information source used to encourage sustainable consumer behaviour.
- 2.2 To explore and explain consumers' knowledge as indicated by consumers' awareness and consciousness of sustainable fresh produce consumption practices.
- 2.3 To explore, describe and explain the influence of marketing communication in terms of consumers' status consciousness during fresh produce purchases.
- 2.4 To explore the potential of green marketing in terms of the mitigation of unsustainable fresh produce consumption practices.



1.4 THEORETICAL PERSPECTIVE

The social cognitive theory offered a suitable theoretic perspective for this study as it explains the complex psychological process that consumers use to shape and guide their behaviour. According to this theory, factors such as marketing communication, previous personal experiences, and social influences determine an individual's awareness (consciousness) and knowledge about specific social issues, allowing consumers to mimic or copy preferred behaviour. Albert Bandura, the father of the social cognitive theory, theorised that people have the ability to structure and adapt their behaviour (for example their consumption of fresh produce) based on the influences in their surrounding environment and that their surrounding environment has the ability to exert change on their own behaviour (Powell, Honey & Symbaluk, 2012:28; Shaffer, 2008:46). Therefore the social cognitive theory can best be used to describe how consumers process, store and retrieve data concerning people, things or concepts (for example sustainable consumption and status consumption) in order to interpret and make sense of the world around them (Bandura, 2001:2, 267).

The social cognitive theory is grounded on five central concepts, namely observational learning, outcome expectations, perceived self-efficacy, goal setting and self-regulation. These concepts will be discussed in detail in Chapter 3.

This study was concerned with consumers' use of marketing related information in media within a social context- in terms of their everyday fresh produce choices and consumption - to provide empirical evidence of consumers' reliance and use of marketing information as a source concerning environmental issues and sustainable consumption patterns.

1.5 RESEARCH DESIGN AND METHODOLOGY

An explanatory sequential mixed method design was used to gather data to achieve the aim and objectives of the study. The research made use of a quantitative investigation (Phase 1: Questionnaire, quantitative), a qualitative investigation that comprised of focus groups discussions and a projective technique (Phase 2). The study was cross-sectional in nature, i.e. primary data was collected from a specific population at a given point in time. Data that



investigated the objectives set out for Phase 1 were extracted from a comprehensive structured questionnaire focusing on critical issues regarding consumers' fresh produce waste management practices amidst times of climate change. The structured questionnaire formed part of a more extensive investigation titled "South African consumers' ability to discursively reflect on the sustainability of their households' fresh produce consumption and waste practices amidst global concerns about climate change" with the main aim to investigate possible reasons for consumers' excessive consumption and waste of fresh produce, which through demand, consumption and waste contribute to climate change. To ensure relevance, accuracy and validity of this study, only relevant sections in the primary questionnaire were identified for data collection. The relevant sections are discussed in detail in Chapter 4. During phase 2, the focus group discussions contributed a deeper insight concerning the impact of marketing media on consumers' knowledge and ultimate application of sustainable consumption practices, and the projective technique was used to identify participants' knowledge and understanding of green marketing and its possible effectiveness in terms of mitigating unsustainable fresh produce purchasing and consumption behaviour.

Phase 1:

A questionnaire was used to provide the researcher with quantitative data that explained and compared consumers' current fresh produce consumption patterns as well as their existing knowledge of climate change. The questionnaire also sought to investigate consumers' status consciousness in terms of their fresh produce consumption behaviour as literature dictates that status consciousness often influences consumers' willingness to conform to the principles of sustainability (Pratkanis, Breckler, & Greenwald, 2014:183, Assadourian, 2011; Roberts, 1998; Xu 2007).

The questionnaire consisted of close-ended, structured questions that made use of established as well as self-designed scales. The relevant sections as well as scales used are discussed in detail in Chapter 4.

The sample of respondents for phase 1 was drawn from the greater Tshwane area. Middle to upper income households were included, with target respondents being between 21 and 65 years of age. This sample was targeted because it is believed that this group has ample exposure to various marketing efforts and communication in media, and possesses the



financial means to adapt their buying behaviour in accordance with marketing campaigns that interest them (SAARF AMPS, 2012). Respondents were expected to either be in charge of their own households, or at least exert a notable influence on a household's fresh produce purchasing and consumption decisions. This age group also increased the probability of selecting consumers who are financially independent and who have access to both written as well as other types of marketing communication in media (SAARF AMPS, 2012). Both male and female respondents were targeted. According to the 2010-2011 report of the Department of Economic Development for the City of Tshwane, the economic contribution of males and females in the metropolitan area was exactly 50/50 (Stats SA, 2012). Therefore, the researcher tried to involve as many males as possible in the investigation although females were more eager and willing to participate. No pre-conditions were set regarding respondents' race or ethnicity.

A purposive sampling technique was used to recruit willing respondents who met the prerequisites in terms of age, income, area of residence, and charge of household purchasing: 700 questionnaires were distributed, of which 560 were returned for final data analysis. Following the data collection, the completed questionnaires were coded and the data captured. This was done with the assistance of a qualified statistician. The gathered data was then analysed using descriptive and inferential statistics.

Phase 2:

Two focus group discussions were conducted to gain a deeper insight and understanding regarding the influence of marketing media on consumers' knowledge and ultimate sustainable consumption of fresh produce. The first focus group discussion was divided into two individual sessions, labelled as A in Chapter 5, and the second focus group discussion, labelled as B in Chapter 5, consisted of only one session that covered all the objectives and topics covered by the first group's sessions. It also allowed exploring those elements and constructs that are accounted for in theory but were not included in the questionnaire due to space and time constraints. Possible participants for the focus group discussion were identified from the sample pool of participants of the consumer questionnaire. Ultimately sixteen participants representing the demographic profile of the consumer questionnaire were recruited. Each focus group included both males and females, of different age, income and population groups.



In order to ensure a neutral area for discussion, focus group discussions were conducted at the University of Pretoria in the facilities of the Department Consumer Science. The informal yet structured atmosphere of the restaurant area in the building allowed for proper eye contact and unrestrained interaction. Willing participants gathered at the venue per prior invitation. Each session was restricted to approximately one hour. The discussions were semi-structured and the researcher only facilitated the discussion by introducing themes that reflected the objectives set for the study. In order to document the opinions and ideas of all participants, effort was made to prompt and include all members in the group. A projective technique was also included in order to gather sensitive data that consumers would rarely share in open conversation (Donoghue, 2000; Anderson & Song, (s.a)).

All focus group discussions were audio recorded with the consent of participants, and a trained research assistant captured additional notes and observations. After the transcription of recordings content analysis was performed.

1.6 DATA ANALYSIS

1.6.1 Phase 1:

All returned questionnaires were thoroughly checked to ensure that they were filled out correctly and in full. Data obtained were then assigned numeric codes in order to group the responses to the questions. Data analysis was done with the assistance of a qualified statistician and under supervision of the supervisors, using descriptive statistics (frequencies, percentages, means, medians, and standard deviations). Analyses of variance (ANOVA), t-tests as well as applicable post hoc tests allowed an exploration and description of selected variables as well as their effects, relationships and patterns of involvement as per the objectives for the study (Wellman, Kruger & Mitchell, 2005).

This study forms part of a larger, more complex study, and therefore only made use of predetermined sections of an existing structured questionnaire that were deemed relevant.



(See Addendum 1 for the full questionnaire). Only the sections relevant to this investigation and particular questions are described below:

Section 1: Demographic information. Descriptive analysis (means, frequencies, ratios, and percentages) was used to analyse this data.

Section 2: Questions relating to possible drivers of consumers' general consumer behaviour as well as a scale measuring consumers' status consumption in terms of purchasing fresh produce. The questions used in this section were adapted from Kilsheimers' Status Consumption Scale (1993) as well as Richins and Dawson's Materialism Scale (1992). The respondents had to indicate their level of agreement to each question based on a 4-point Likert-type agreement scale ranging from strongly disagree to strongly agree. The section was divided into two parts for the statistical analysis. The first part of the section was analysed by means of descriptive statistics and the last part analysed in terms of ANOVAs and relevant post-hoc tests.

Section 3: Self-designed questions measuring consumers' general consumption behaviour were taken from Section 3. A 4-point Likert-type scale was used and all items were analysed in terms of ANOVAs and relevant post-hoc tests.

Section 4: Questions relating to consumers' knowledge as an indicator of their awareness and consciousness of climate change. The scales used in this section tested consumers' knowledge in terms of their use and wastage of fresh produce and were adapted from Antil and Bennet's Social responsible consumer behaviour scale (1979), as well as Stones, Barnes and Montgomery's Eco scale (1995). The scale used for questions 20.12 to 20.17 was self-designed. Respondents had to indicate their level of agreement based on a 3-point scale with 1 – true, 2 – false and 3 – uncertain. The data from this section was analysed by summing up the correct answers. The higher the scores, the better consumers' knowledge of climate change.



1.6.2 Phase 2:

For the focus groups, held in March 2013, the researcher audio recorded all of the discussions and then personally transcribed the tape of each of these discussions, paying attention not to change or correct participants' responses. Although this was a time consuming process, the richness of the discussions justified the effort. For research such as was undertaken in this study, Lofland and Lofland (1995:88) suggests that is not really necessary to transcribe every word, exclamation mark or pause that occurs in the discussion, i.e. a verbatim transcript of everything that was said during the focus group discussion is not needed. But because the researcher wanted the reader to engage and identify with the participants, verbatim transcriptions with the participants exact words, was used for the content analysis. Thus this study followed the general rule of determining the level of effort in transcribing a discussion based on a sense of what data would be useful in the data analysis.

The coding procedure involved reading through the transcribed discussions and as the researcher identified a word or sentence that illustrated a particular concept as identified in the study's conceptualisation, that specific word or sentence was highlighted and assigned a code. The researcher read through all three discussions assigning the same codes that applied to specific concepts. The identified codes were then categorised in terms of the objectives of this study.

The focus group discussions provided insightful data on consumers' current fresh produce purchasing and consumption patterns as well as on their current knowledge of climate and sustainability issues. The researcher used the focus group discussions to explore consumers' purchasing and consumption patterns as well as to explore the influence that marketing communication has on the purchasing behaviour of consumers in order to gain a more complete understanding of some of the theory documented in the literature review.

A projective technique formed part of the focus group discussions. Participants were asked to draw an advertisement that could be used to educate consumers on how to purchase and consume fresh produce more sustainably. The concept that the projective technique measured was participants' environmental knowledge, as well as the effectiveness of green marketing communication, which was also analysed with the use of conceptual and content analysis. Furthermore, possible strategies that could be implemented by marketers to



increase consumers' knowledge through an increase in their awareness were explored with the aim to ultimately encourage sustainability.

Data obtained from the focus group discussions as well as the projective technique were analysed together by means of content analysis.

1.7 ETHICS

Ethics is an important issue in research. The principles underscoring research and its ethics are universal and include topics such as honesty, respect, and consideration for the rights of all individuals (Wellman et al., 2005).

Ethics were therefore attended to during each stage of the research process, i.e. during the design of the measuring instruments, sampling, data collection and reporting of the results.

The University of Pretoria has a formal code of conduct regarding social research that must be complied with. The general ethical principles are, firstly, no harm should come to the research participants, and secondly, participants should take part out of their own free will based on informed consent (Wellman et al., 2005). The study was approved by the ethical committee of the Faculty of Natural and Agricultural Sciences of the University of Pretoria. Potential participants in the focus group discussions were informed of the purpose of the study, participated out of free will, and were allowed to withdraw if they wished to do so. All participants' anonymity was guaranteed and their privacy respected. Information gained from the participants for the study will remain confidential. A third party evaluated and approved all proposed research prior to action.

In terms of plagiarism, other researchers or writers' data or ideas have not been used without complete referencing. The use of a statistician and relevant applicable statistical programs guarded against the falsification of results or the misleading reporting of said results.



1.8 PRESENTATION AND STRUCTURE OF THE RESEARCH

The dissertation is structured in six chapters as outlined in Table 1.1.

Table 1.1: Outline of the dissertation

CHAPTER 1: THE STUDY IN PERSPECTIVE

This chapter provides the background of the study and introduces the research problem. It also briefly explains the research design, methodology, theoretical perspective and presents the structure of the study.

CHAPTER 2: LITERATURE REVIEW

This chapter presents the literature review, which addresses and delineates all the relevant constructs that guided the thoughts and reasoning for the study.

CHAPTER 3: THEORETICAL PERSPECTIVE, CONCEPTUAL FRAMEWORK AND RESEARCH OBJECTIVES

This chapter explains and justifies the theoretical perspective used within this study. It also provides and describes the conceptual framework and research objectives.

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

This chapter explains the research design and describes the research methodology and relevant data collection techniques that were used to gather relevant data to achieve the anticipated outcomes of the study. The sampling procedures, participant selection, and data analyses are presented in terms of the two phases of investigation.

CHAPTER 5: RESULTS AND DISCUSSION

This chapter presents the results as well as a discussion of the results in terms of the objectives for the study.

CHAPTER 6: CONCLUSION

This chapter presents the conclusions of the research in terms of the objectives for the study. Recommendations are based on the interpretation of the findings with specific attention to how marketing messages can be employed to promote knowledge of environmental issues. Shortcomings of the study are discussed and recommendations are made for future research.





CHAPTER 2

LITERATURE REVIEW

This chapter presents the literature review, which addresses and delineates all the relevant constructs that guided the thoughts and reasoning for the study.

2.1 THE ROLE OF MARKETING IN CONSUMER BEHAVIOUR

2.1.1 An historical overview

Modern marketing is the result of centuries of hard work and refinement. Pre-historically people made use of the bartering system, which was based on simply exchanging items that were not needed personally or products that were in abundance, in order to obtain something different that was needed. This is known as the simple trade era. Soon, people's supply methods grew more efficient, and the simple trade era made way for the production orientation era. During this time, the industrial revolution took place, characterised by mass production and consequently production-orientation selling. Most producers believed the "if you make it they will buy it" philosophy (White, 2010; Lampe & Gazdat, 1995). However, this era was short lived; soon consumers became confused and overwhelmed with the amount of products that flooded the market. The saturated consumer market once again led to a change in the marketing landscape. In order to sell their products, marketers realised that they had to gain insight into the psyche of consumers with the aim to produce products that fit the consumers' demand (Leonidou, Leonidou, Palihawadana & Hulltman, 2010; Peattie & Peattie, 2009; Bournemouth University, [s.a.]).

The fact that marketers now had to know their customers led to one of the most significant advances in marketing (Zaichkowsky, 1991). Brand managers were created, and their task was to build an identity for their product in order to make the product easily identifiable to the buying public. This progress marked the start of a whole new marketing philosophy where "winning" was synonymous with knowing your customer better than the competition (De Swaan Arons, 2011; Neagu, 2011; Peattie & Peattie, 2009). This led marketers to believe that



in order to achieve organisational goals and to satisfy the needs and wants of your target market, you had to be more effective than your competitors in integrating and coordinating marketing tools and activities (Kotler & Armstrong, 2013:43).

From the early 1990s, a new stage of marketing emerged – customer relationship marketing (CRM), with the focus on creating a long-term relationship between seller and buyer that benefits both the company and the consumer. For CRM to be successful it is said that the relationship between relevant parties needs to be based on trust and commitment, and both parties need to be invested in it. The idea behind this marketing strategy can be found in Kotler and Armstrong's writings (2013:43) – they theorised that it costs about five times more to create new customers than to keep an existing customer satisfied.

With the increase in global internet usage and development of social platforms, marketing evolved once again. The current marketing era makes use of real-time connections and social media platforms such as Twitter, Facebook, Pinterest, and others for brands and products to connect with their customers. What makes this new type of marketing so much different from the previous eras is that social marketing is used more for getting ideas across to consumers as opposed to purely selling something. Social media is increasingly used to sway the decisions of consumers through brand loyalty, which is in itself fostered through consumer socialisation, interaction with brands, and the opinions and ideas of peer groups (Kotler & Armstrong, 2013:42; Kumar & Christodoulopoulou, 2013).

Marketers have realised that consumers behave in a certain way based on a lifetime of conditioning and socialisation. Through careful design and application of the four Ps of marketing, marketers can influence consumers to think and feel a certain way about their products and brands (Kumar & Christodoulopoulou, 2013). Together with other external factors such as family, previous experience and peer groups, marketing can educate people on how to act as consumers, stimulating and directing consumer needs through manipulating the consumer decision-making process. In the process, consumers' habits and behaviour is shaped (Dangelico & Pantrandolfo, 2010; Lampe & Gazdat, 1995; Moschis & Churchill, 1978).



2.2 MARKETING AND THE CONSUMER DECISION MAKING PROCESS

Consumer decision-making is the cognitive process a consumer follows when selecting a course of action from amongst multiple, probably just as attractive, alternatives (Constanzo, 2013). This process is said to be a psychological construct in the sense that although we cannot physically see how a decision is made we can deduce that a decision has been made based on observable behaviour. Consumer behaviour models are models used by marketers to explain the process that consumers undergo, and is typically divided into five different stages: problem or need recognition, search for information, evaluation of alternatives, purchase decision, and post purchase behaviour. As part of *promotion* in the marketing mix, advertising serve as a major tool in ensuring the consumer is aware of the product and will include the brand in the evaluation of alternatives (Kumar & Raju, 2013; Mihart, 2012; Young, Hwang, McDonald & Oates, 2009).

Marketing's most important goal is undoubtedly to reach consumers at the exact moment that will influence their eventual purchasing decision. The use of the consumer decision-making model thus ensures that marketers keep in mind the complete buying process rather than just focusing on the eventual purchase decision (Kumar & Raju, 2013). For marketing to be effective, they should attempt to influence the consumer at each of the five different stages of the decision-making model. This is known as the hierarchy of effects model (Costanzo, 2013; Mihart, 2012; Young et al., 2009). Although the process of consumer decision making stays the same, the outcome of respective consumer decisions is often influenced by the consumer's level of involvement.

Some consumer decisions are classified as low involvement decisions, characterised by limited effort, a limited information search, and a small set of alternatives (Fennis, Adriaanse, Stroebe & Pol, 2011). In a traditional marketing environment, consumers make low involvement decisions quickly, relying most on point of sale marketing. If one considers Maslow's hierarchy of needs, these decisions will be ones relating to the lower segments of the needs pyramid, and includes purchases concerning food, security, and health (Van Kempen, Muradian, Sandoval & Castaneda, 2009). Typically, low involvement decisions involve purchase decisions made on a day-to-day basis such as the majority of food purchases (Hamlin, 2010), which are



regularly carried out with little conscious thought that these purchases are often referred to as habits (Barnett, 2013; Jackson, 2005).

Fresh produce consumption is a low involvement decision except when marketing encourages involvement i.e. depicts images of beautiful produce, fresh on the shelves, and then in a bowl on a kitchen counter. Images such as these convince consumers that fresh produce displayed in such a way would make their homes and lifes look more desirable as well as indicate that they care for their family, have extra money to spend and have good taste.

In order to increase consumers' support of sustainable fresh produce consumption, consumers' involvement with the products must be increased. High involvement products are characterised by improved motivation to gather, process, and retain information (Van Kempen et al., 2009). Consumers thus need to rationally deliberate information that they consciously gathered, interpreted, and selected in order to make their decision (Hamlin, 2010). Post purchase and post consumption, consumers once again have to deliberate to evaluate whether their behaviour and choice produced a positive result or not (Jackson, 2005). In other words, a low involvement decision must be converted into a higher involvement decision so that consumers can access information regarding sustainable fresh produce consumption behaviour (Jacoby & Sableman, 2007). A traditional view of the consumer decision making process is discussed below.

2.2.1 Problem recognition

The consumer decision-making process starts when consumers recognise a problem as a need or a desire. Problem recognition can also take place when a consumer is exposed to information regarding a product or service, or when circumstances suddenly change. In a world flooded with messages from various marketing media, marketing is known to not only create needs and wants in the minds of consumers, but to also actively encourage the conspicuous desire to fulfil these needs while positioning their product or service as a solution to the problem or need that the consumer might be experiencing (Constanzo, 2013; Kumar & Raju, 2013; Mihart, 2012; Young et al., 2009).



For fresh produce (categorised as a low involvement purchase decision (Kumar & Christodoulopoulou, 2013)) consumers might simply recognise the need, go to their retailer of choice and purchase the products. Fresh produce is normally relatively inexpensive and involves limited financial risk (Hamlin, 2010).

In order to change consumers' fresh produce consumption to be more sustainable, consumers' decision-making process needs to be adapted from a trivial low involvement decision to a high involvement decision. Only then will consumers be more willing to receive information regarding the product. Changing consumers' fresh produce purchase and consumption behaviour can be compared to the introduction of a new product. In order for the introduction to be successful, marketers need to follow the following five steps, namely awareness; interest; evaluation; trail; and adoption.

Awareness: In order for consumers to buy new products or in this case alter their current purchasing behaviour, they have to be aware of the existence of better alternatives (Hamlin, 2010). Marketing communication such as advertising, in-store visibility, and word of mouth are means by which the consumers are made aware of new and/or alternative options. For consumers to become more sustainable they need to be made aware of the consequences of their actions (climate change) and the possible solutions (buying more responsibly, not wasting, and disposing of waste sustainably) (Kumar & Christodoulopoulou, 2013). Thus it is important that marketing communication convey informative messages that could raise awareness regarding more sustainable options.

Interest: If the information on the new or alternative behaviour exists, the consumer might be interested enough to gather more information related to the behaviour (Chan, He & Wang, 2012). Marketing messages need to intrigue the consumer, i.e. sustainable consumption must be presented in such a way that consumers become interested in the topic, and thus would look for more information about being sustainable and adapting their fresh produce consumption behaviour (Kumar & Christodoulopoulou, 2013; Hamlin, 2010).

Evaluation: At this stage the consumer evaluates all the gathered information about the new or alternative options available (Hamlin, 2010). As part of the evaluation process, consumers identify whether the quality, benefits, and price of the product or behaviour is satisfactory.



Because sustainable products have the added benefit of protecting the environment, consumers often spend more time with this step compared to evaluating habitual products (Chan, He & Wang, 2012).

Trail: After the evaluation has been done, if the new or alternative options were found to be satisfactory, the consumer might purchase the product or adapt their current habits. Usually small changes are made at first (Hamlin, 2010), i.e. consumers might start buying fruit and vegetables more often, or in smaller quantities (Chan, He & Wang, 2012). If consumers are convinced about the information given to them by the marketing media (sustainable consumption can save the planet), and their evaluation of the alternative behaviour was favourable (e.g. imperfect fruit is not inferior to physically perfect produce) they might start to adapt some of their purchasing habits/behaviour.

Adoption: If the consumer is still satisfied with his/her choice after the trail of the new product or alternative behaviour, the consumer might adopt the behaviour for regular use (Hamlin, 2010). In the case of sustainable consumption, should the consumer still be convinced that his/her actions are making a difference, they might begin to make a lifestyle change in terms of their consumption behaviour (Chan, He & Wang, 2012).

2.2.2 Information search

During the next step, consumers investigate the different options that might satisfy their need or solve their problem as identified during the problem recognition phase (Hamlin, 2010). If marketers have succeeded in embedding their product into the mind of the consumer, the information search will be short. If no definite brand or service comes to mind, the consumer will start to search for helpful information that can assist in the making of their decision (Kumar & Raju, 2013). This information search can include a number of sources, including but not limited to the following: personal sources (family members and friends), commercial sources (advertising and public relation.), public sources (reference groups and peers) and experience sources (Constanzo, 2013; Mihart, 2012; Young et al., 2009). It is said that personal and commercial sources are most effective to inform consumers about possible sustainable practices since consumers model their own behaviour after other individuals they admire (Van Dam & Van Trijp, 2011).



Research has shown that when younger consumers decide which advertising messages to use, they ultimately pick the ones that they can identify with, or the ones that they can emulate and mimic (Saleem & Abideen, 2011). The Social Cognitive Theory states that consumers learn and adapt their behaviour based on observational learning (Bandura, 2001); thus these young consumers learn by copying their role models, allowing this to dictate what they buy and when they buy it. To further this idea, consumers frequently change their own behaviour to conform to the norms of their reference group (Saleem & Abideen, 2011). Opinion leaders, who influence what the rest of the group, do, act, and/or buy, communicate these behavioural norms to the rest of the group. From a consumerist point of view, this means the opinion leader of a reference group also dictates what the rest of the group will most likely purchase as well (Iyengar, Van Den Bulte, Eichert, West & Valente, 2011). An important or successful strategy that marketers can use to decrease the time consumers spend on an information search is by getting the opinion leader to approve of the product and then communicate their approval to the rest of the group (Constanzo, 2013; Kumar & Raju, 2013; Mihart, 2012; Young et al., 2009).

Purchasing fresh produce is often a low involvement choice, meaning that most consumers purchase the product as soon as they have recognised that they have a need. They do not go through an elaborate information search and evaluation of alternatives (Hamlin, 2010). However, purchasing fresh produce sustainably entails a higher involvement decision, meaning that consumers have to educate themselves by way of gaining appropriate information before making a final purchasing decision (Kumar & Christodoulopoulou, 2013). Marketers who advocate sustainable consumption of fresh produce need to emphasise certain benefits true to their product or alternative behaviour which consumers can then use as choice criteria to evaluate all other products and behaviours (Chan, He & Wang, 2012). When marketing organic products in particular often marketers emphasise the benefits and attributes (improved health for the consumer, less damage to the environment) thus enhancing the likelihood that these attributes will be used as choice criteria during the information search stage (Hamlin, 2010). If marketers can succeed in making consumers believe that they are achieving something positive when purchasing and/or adopting specific practices, consumers might be persuaded to change their buying behaviour (Saleem & Abideen, 2011). For decades marketers have been convincing consumers that they can "buy happiness, status, and stature", thus encouraging conspicuous, or excessive, consumption



(Constanzo, 2013; Kumar & Raju, 2013; Mazzocco, Rucker, Galinsky & Anderson, 2012; Mihart, 2012; Young et al., 2009). Unfortunately, current environmental changes, i.e. climate change, are warranting a revision of this traditional mode of marketing. Marketing should thus emphasise or focus on providing information that is in favour of more sustainable purchasing behaviour.

2.2.3 Evaluation of alternatives

During this step of the process consumers evaluate and compare the benefits and features of the various options that became of interest during the information search stage (Hamlin, 2010; Matsuno, 1997). Advertising is said to be very influential during this step of the consumer decision making process because advertising, a mass communication tool, can often influence consumers' attitude, feelings, and ultimate perception of a product or ultimate behaviour (Saleem & Abideen, 2011; Russo & Chaxel, 2010). This is done by the addition of intangible benefits such as status and/or achievement, i.e. consumers who feel that they are accomplishing something by using a certain product or applying a specific practice will more likely choose that product and/or commit to the particular behaviour (Kumar & Christodoulopoulou, 2013).

Important to note is that the evaluation of alternatives differs from consumer to consumer and is dependent on role models, past experience and perceived social class (Saleem & Abideen, 2011). For some consumers, price might be extremely important, while others might feel that health benefits are paramount. Social class has an important influence on consumers' value set; therefore, marketers need to be aware of the social class of their target market (Kumar & Christodoulopoulou, 2013). Generally, consumers from the upper income classes have higher standards for quality, service, and atmosphere (Assadourian, 2011; Xu, 2007; Roberts, 1998). Consumers from the upper-middle class are more ambitious and attach symbolic significance to material goods. These consumers are more prone to be encouraged by marketing efforts that conspicuously promote their consumption of material assets. This group is also most likely to be followers of popular trends (Constanzo, 2013; Kumar & Raju, 2013; Mihart, 2012; Tereyagogu & Veeraraghavan, 2010; Young et al., 2009).



Low involvement purchase decisions normally do not include an extensive information search stage. Consumers normally realise a need, travel to the retailer, and buy the product that will satisfy the need (Hamlin, 2010). Although the information search stage is often very limited and/or even omitted, the alternative offerings will still be evaluated before the purchase decision is made. This evaluation can be based on various factors such as price, visual appeal, locality (is the product imported or not), seasonality, and health benefits (Saleem & Abideen, 2011). In order for consumers to purchase fresh produce more sustainably, they must be educated about the inherent benefits of sustainable consumption practices (Van Dam & Van Trijp, 2011; Matsuno, 1997). For example, buying fresh produce that is slightly bruised does not affect the health benefits; buying local is better for the environment, economy, and society in general; buying seasonal fresh produce not only saves the planet but also has financial saving implications; buying sustainably produced fresh produce means that environmental degradation is minimised, leading to a reduction in climate change and overall pollution (Kumar & Christodoulopoulou, 2013).

With regard to marketing sustainable consumption practices, marketers should focus their advertising efforts on consumers' state of mind after doing something sustainable (Hamlin, 2010). Research has shown that consumers feel happier and better knowing that they are contributing to a more sustainable future (Chancellor & Lyubomirsk, 2011). Further studies have found that consumers who choose products purely for status or monetary reasons are less satisfied (Richins & Dawson, 1992), and more unhappy in the long run in their everyday lives (Belk, 1985), but they do experience a short lived emotional high attributed to peer appreciation (Van Dam & Van Trijp, 2011).

2.2.4 Purchase decision

After the evaluation of alternatives stage, consumers are confronted with the actual commitment or final purchase decision (Hamlin, 2010). Many factors can influence consumers ultimate decision to commit or purchase, i.e. the actual cost of the product compared to the disposable income of the consumer, the opinions of family and friends, and the policies of the marketer in terms of sales, after sales support, and customer service (Constanzo, 2013; Kumar & Raju, 2013; Mihart, 2012; Young et al., 2009). Hence, final commitment to purchase or adapt behaviour is proceeded by a vast amount of information processing in order to



ascertain if the chosen products or actions will meet their outcome expectations (Hamlin, 2010).

Fresh produce consumption is a low involvement consumption decision, characterised by fast, usually on-the-spot, product choice (Speece & Silayoi, 2004; Quester & Smart, 1998). Consumers will most likely base their decision on external characteristics such as colour, size, quantity, ripeness, and price (Koutsimanis, Getter, Behe, Harte & Almenar, 2012). Green marketing should be educating and encouraging consumers to also take the intrinsic qualities and attributes, such as locally grown and seasonal into account. By educating the consumer, marketing can succeed in changing fresh produce purchasing from a low involvement decision into a high involvement decision, increasing consumers' sustainable consumption (Van Dam & Van Trijp, 2011).

Marketers should take into account that research has shown that a lack of information, or knowledge, can cause inexperienced buyers to use price as an indicator of quality as opposed to other factors (Constanzo, 2013; Kumar & Raju, 2013; Mihart, 2012; Young et al., 2009). When marketing encourages low-income consumers to aspire to the consumption levels of "superior" consumers, such as we are seeing in South Africa (previously disadvantaged consumers emulating the Western ideal of possessing material goods in order to achieve status) (Mawson, 2011; Roberts & Struwig, 2011), these consumers might use price to justify their purchases, giving them the idea that they are buying stature or status. In this way, marketing is promoting conspicuous consumption, much to the degradation of the environment (Lee & Kotler, 2011:34).

2.2.5 Post-purchase evaluation

Once the consumer has made the decision to purchase or commit to the new found purchasing behaviour, most consumers continue to critically evaluate the chosen product or practices (Hamlin, 2010). This evaluation especially takes place when a customer is looking for reasons to justify a purchase decision or sustain new behaviour, e.g. sustainable buying or consumption behaviour (Saleem & Abideen, 2011). If the consumer experiences uncertainty or feels that the purchase or behaviour was a mistake, the consumer can suffer from buyer's remorse, or cognitive dissonance. This feeling of doubt can be attributed to consumers feeling



that they might have foregone another product or practice that had certain different attractive attributes or benefits (Constanzo, 2013; Kumar & Raju, 2013; Mihart, 2012; Young et al., 2009).

The more involved a consumer was with the purchase of a product, the larger the possibility that the buyer might experience cognitive dissonance, or buyer's remorse if dissatisfied with the product (Gilovich & Rosenzweig, 2012). Low involvement product purchases are not evaluated extensively post-purchase, as the risk associated with these habitual or everyday tasks are considered low (Speece & Silayoi, 2004; Quester & Smart, 1998). What makes fresh produce even more unique is the fact that the consumption is almost immediate, leaving little if any time to evaluate the product after purchase (Hamlin, 2010). Thus, fresh produce will most probably not be evaluated post purchase other than on the aspects of taste and satiety (Saleem & Abideen, 2011). On the other hand, purchases associated with status consumption undergo an intense post-purchase evaluation to ascertain whether or not the product was successful in contributing to the consumers' status or stature (Kumar & Christodoulopoulou, 2013). For sustainable fresh produce or consumption practices that are sustainable, consumers will most likely evaluate how they feel and how others see them after completion or purchasing (Chancellor & Lyubomirsk, 2011). Consumers will not support the green movement (sustainable consumption practices) if other consumers might see the movement as ludicrous, unsuccessful or even exploiting (Saleem & Abideen, 2011). This increases the risk of participating in green practices, and also increases the risk of post-purchase doubt (Saleem & Abideen, 2011).

Marketers need to minimise this post-purchase doubt in order to create convinced consumers who will commit to buying more sustainably and to eventually undergo a lifestyle change (Hamlin, 2010). This can only be done by the proliferation of information promoting the benefits of sustainable consumption behaviour (Saleem & Abideen, 2011). If marketers fail to decrease or eliminate the possibility of cognitive dissonance, very few consumers will attempt to change their consumption patterns to be more sustainable (Hamlin, 2010).



2.2.6 Hierarchy of effects model

The hierarchy of effects (HOE) model is used to explain the sequence of seven psychological stages a consumer experiences before purchasing or committing to a new product or behaviour. The HOE attempts to explain how marketing communication, especially advertising, affects consumers' purchase decisions and ultimate behaviour (Matsuno, 1997). The model focuses on consumer learning that takes place as the consumers processes information gathered from the world around them (Wijaya, 2011; Zaichkowsky, 1991). An example of such a model is given in Figure 2.1.

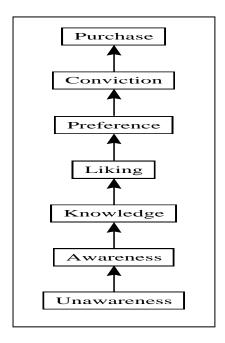


Figure 2.1: A general model of the hierarchy of effects (Wijaya, 2011)

The initial stage of the HOE model indicates that most consumers are unaware of their needs regarding new or alternative products or behaviour. Awareness is often triggered by external marketing stimuli such as advertising, public relations, and "word of mouth" (Wijaya, 2011). As the consumer is exposed to and processes more information, the consumer starts to develop specific knowledge about alternative products and/or behaviour. This knowledge is then used as a basis to form an opinion, which then leads to a preference of the new product or behaviour relative to other current products or behaviours (Zaichkowsky, 1991). In order for consumers to actually advance to the final commitment, i.e. the product purchase stage, the consumer needs to advance past the preference stage to the conviction stage (Wijaya,



2011). Not all consumers will be at the same stage, nor will all consumers move from one stage to the next in the same way or at the same speed (Matsuno, 1997).

This model makes the assumption that all people are cognitively driven, i.e. capable of processing information (Bhate, 2005), and that consumer purchasing follows from initial awareness through to final action (Saleem & Abideen, 2011; Matsuno, 1997). This is similar to the consumer decision making process – consumers move from need recognition (unaware state) to information search (awareness) during which they accumulate knowledge to ascertain whether or not they approve the new product or behaviour. During the product evaluation stage consumers determine which product or behaviour they prefer, and then based on that conviction a final purchase decision or commitment is made. The post purchase evaluation then reaffirms consumer's knowledge about and preference for the product or behaviour (Wijaya, 2011; Zaichkowsky, 1991).

Marketers thus aspire to ensure that their product is in the minds of consumers so that when consumers are faced with a problem-solving scenario, the said product will be the first that the consumer thinks of, unleashing the emotions and hopefully a definite drive towards purchasing or utilising the product (Kumar & Christodoulopoulou, 2013; Saleem & Abideen, 2011). Consumers' relevant knowledge about certain goods or services plays an important role in the problem solving process (Constanzo, 2013; Kumar & Raju, 2013; Mihart, 2012; Saleem & Abideen, 2011; Young et al., 2009).

In the context of this study, marketers aspiring to create sustainable consumers with regard to fresh produce consumption thus need to inform consumers about environmental issues as well as possible behavioural solutions (Saleem & Abideen, 2011; Wijaya, 2011). Fresh produce consumption, being a low involvement purchase decision, should ideally be changed through knowledge that leads to trail and liking, to a high involvement purchase decision to ensure consumers follow the HOE model (Bhate, 2005).



2.3 THE MARKETING MIX: THE FOUR PS OF MARKETING

Marketers manipulate the marketing mix, also known as the four Ps of marketing, in order to create and then guide consumers through the decision making process in favour of their particular product. Marketers do this by firstly creating a need through their product, then providing information about the product through promotion strategies, followed by ensuring that their product performs well during the evaluation of alternatives stage through the use of efficient distribution as well as pricing, and then offering after sales support in various forms to ensure consumers do not suffer from post purchase dissonance (Kotler & Armstrong, 2013:178; Kotler & Keller, 2011:172). Thus the four Ps (product, price, place (distribution), and promotion) refers to the resources that marketers make use of to promote a product (Kotler & Armstrong, 2013:34). Product refers to the raw materials and market research that goes into the manufacture of a product, and the specific benefits that consumers will buy (Kotler & Armstrong, 2013:251; Kotler & Keller, 2006:310). Price refers to the amount of profit contained in the sale of a product or service – high profit margins on low sales volumes or low profit margins on high sales volumes (Kotler & Armstrong, 2013:345). Place (distribution) is the process a product goes through, from inception to manufacturing, transportation, placement, market offering, and eventually sale of the product (Kotler & Armstrong, 2013:232; Zaichkowsky, 1991). Promotion involves the various tools that marketers can use to encourage consumers to buy their products (Kotler & Armstrong, 2013:429; Kotler & Keller, 2006:519). These tools include advertising (television, radio, printed, demonstrations), vouchers and coupons, in-store promotions and product demonstrations, or product premiums (Kotler, 2011; Peattie & Peattie, 2009; Lauterborn, 1990) and can also be referred to as marketing communication.

These four Ps have historically been associated with marketers' efforts to encourage the consumption of products and services (Kotler & Armstrong, 2013:34), even promoting excessive, or conspicuous, consumption, which is not compatible with the concept of sustainable consumption (Peattie & Peattie, 2009). With the dawn of green marketing, the marketing mix had to be adapted to reflect a marketing mix that represents sustainability—giving rise to the four Ps of "green marketing". This new marketing movement attempts to address the lack of fit between marketing as it is traditionally practiced and the environmental and social realities and threats that we are facing (Belz & Peattie, 2009; Peattie & Peattie,



2009). The following section will explain and elaborate on the traditional four Ps of marketing, as well as how they were adapted to reflect "green marketing".

2.3.1 Product

Product is the cornerstone of the marketing mix (Peattie, 2001). In broad terms, a product can be defined as anything, tangible (goods) or intangible (services), that could satisfy a consumer demand (needs and/or wants) (Kotler & Armstrong, 2013:251). In order to be profitable, a company should only sell what consumers specifically will buy (Kotler & Keller, 2006:310). Marketers should know in depth what their target consumers want or need or else they will not be able to persuade these consumers to buy their goods or services (Kotler & Armstrong, 2013:372; Lauterborn, 1990).

Every tangible product as well as intangible service is subject to a life cycle, usually progressing through a growth phase to a mature phase and eventually to a decline as sales decrease (Peattie & Peattie, 2009). When developing a new product and its marketing strategy, marketers need to do market research to establish how long the specific product's life cycle might be, what they can do to extend it and possible challenges that might arise (Kotler & Armstrong, 2013:284). Before any good or service can be successfully marketed, the marketer needs to have a clear and concise idea of what the product or service is, as well as the features that make it unique (Kotler & Keller, 2006:310). Therefore, marketers need to plan and consider how to position the product in the market place, how to strengthen the brand, and how to maximise the company's resources and profit (Kotler & Armstrong, 2013:65).

Tangible products are defined as anything that takes up physical space (Kotler & Armstrong, 2013:251; Kotler, 2011). Typical examples in terms of this study would be fresh produce (fresh fruits and vegetables).

When considering *product* from a green marketing perspective, one must realise that the whole point of green marketing is to present a product that is different compared to traditional products (Zaichkowsky, 1991). Green products do not only satisfy the basic needs of the consumer (core benefits of the product), but they offer more in terms of additional



benefits – these products have a lighter impact on the environment; they might have a social dimension, such as status; they might offer health benefits, such as the claims for organic produce. In short, green products contain more benefits than their regular counterparts, ultimately offering a bigger product (Belz & Peattie, 2009; Peattie & Peattie, 2009). Marketers must succeed in convincing consumers that every sustainable purchase of a green product supports the protection of the planet (Peattie, 2001), making each purchase significant to the consumer (increasing the level of involvement). This can be done by providing consumers with information to attract their attention - if consumers are interested in a product they do not calculate the cost of the time and effort that went into the procurement of the good or service (Zaichkowsky, 1991).

2.3.2 Place

Refers to providing a good or service at a place that is accessible and acceptable to the consumer, thus clarifying where a product or service will be sold, or offered to the market (Kotler & Armstrong, 2013:670). Marketing is all about putting the right product in the right place at the right price at the right time (Kotler, Michi & Pfoertsch, 2006). Therefore place also refers to the distribution of the product, and includes strategies such as intense distribution, selective distribution, exclusive distribution, and franchising (Kotler, 2011).

In terms of this study, consumers must be informed and educated about the relevance of distribution towards greenhouse gas emissions and by extension climate change (Schmidt, Ivanova & Schafer, 2013; Joshi & Mishra, 2011; Gore, 2006:28). *Place* from a green perspective also encompass the disposal of waste, emission levels and the consumption of natural resources such as fuel. However, creating a green distribution channel includes much more than improving the fuel efficiency of the means of transport or waste disposal of products (Peattie, 2001). Fresh produce that is transported over great distances (such as imported produce) has a bigger carbon footprint, which refers to the use of natural resources in order to get the product from point A to point B compared to Earth's capability to regenerate the used resources (WWF-Report, 2012). Sustainable consumption patterns thus dictate that *place* should be positioned conveniently for consumers and produce to meet, but should also consider limiting the carbon footprint.



With the growing availability of the Internet, place is becoming less relevant to the modern marketing mix, and therefore some marketers propose changing from *place* to *access* – taking into consideration web-based stores and other methods of selling goods and services via technologies (Ettenson, Conrado, & Knowles, 2013). The green distribution system can thus be seen as a channel by which consumers are informed about sustainable products or practices and companies (Eltayeb & Zailani, 2009).

2.3.3 Promotion

Promotion refers to the communication part of marketing in the form of advertising and selling (Kotler & Armstrong, 2013:429). Through promotion, marketers communicate the benefits of their product or service to potential buyers, as well as where they can find this product or service (Lauterborn, 1990). In short, promotion refers to all of the different communication methods a marketer can employ to inform potential consumers about their products and services (Kotler, Michi & Pfoertsch, 2006). Promotion also includes other activities and elements such as advertising, and public relations (Peattie & Peattie, 2009; Lauterborn, 1990).

Advertising, as part of the promotion element, encompass any communication that marketers pay directly for, regardless of the medium used (Zaichkowsky, 1991). Advertising includes commercials, radio and internet advertisements, printed media, and billboards (Kotler & Armstrong, 2013:460). Public relations are not directly paid for by the marketer or company, and include press releases, sponsorship deals, exhibitions, trade shows, and other promotional events (Kotler & Armstrong, 2013:429; Peattie & Peattie, 2009).

Although sustainability and environmental issues have been in the news extensively in the last decade, consumers' acceptance of sustainable practices are slow and short-lived (Marx-Pienaar & Erasmus, 2013; Boykoff & Goodman, 2009; Wilk, 2002; Glantz, 1992). It is estimated that globally between one third and half of all food produced for human consumption is wasted and that excessive consumption due to aggressive marketing or promotion strategies are to blame (Marx-Pienaar & Erasmus, 2013). Recent research has found that the figures for South Africa are not that much different (Marx-Pienaar & Erasmus, 2013; Oelofse & Nahman, 2012). Consumers must be educated on how to consume fresh produce more sustainably as



fresh produce waste not only impacts on climate change through greenhouse gas emissions, but also on food security in the way that safe, edible food is wasted because it is not physically perfect (WWF-Report, 2012). The challenge with sustainable fresh produce consumption is that it is considered a low involvement decision, and consumers often fail to pay attention to information or to deliberate the consequences of their behaviour during low-involvement purchasing (Zaichkowsky, 1991). Little change towards sustainable consumption can therefore be expected by simply improving or providing extra information (Wijaya, 2011). Advertising, as part of the *promotion* tools, can be a very effective method of informing and educating consumers (Zaichkowsky, 1991). Three aims of green promotion are:

To **inform** the consumer about the produce so that consumers can become aware of a new sustainable behaviour – how it works, what are its environmental advantages;

To **persuade** consumers to switch to a sustainable retailer or supplier or commit to more sustainable behaviour, maybe by having to change misconceptions about current produce, i.e. often consumers trust that current produce or purchasing and consumption behaviours are benign;

To **educate** consumers about where and how the produce should be purchased or current consumption behaviours should be altered.

A well designed promotional campaign can succeed in informing consumers about sustainable consumption issues and can help to raise awareness and improve understanding (Peattie & Peattie, 2009).

For promotions to be effective, each promotional effort should have a clear and concise message that targets a specific market (Kotler & Armstrong, 2013:214; Peattie & Peattie, 2009; Zaichkowsky, 1991). Green marketing proclaims that instead of promoting goods or services (stimulating needs for new products), consumers should rather be educated to recognise how unsustainable their current lifestyles or consumer behaviour is and rather still a need to mitigate current choices in favour of more sustainable practices. Green marketers advocate the changing of *promotion* into education (Ettenson et al., 2013).



2.3.4 Price

Price refers to the ultimate amount of money a consumer will pay for a good or service, and is extremely important as the price determines the profitability of the company (Kotler, 2011). Often, the price of a good or service affects the demand and ultimate sale of the good or service, and therefore the price should be set to compliment the other elements of the marketing mix (Kotler & Armstrong, 2013:322; Lauterborn, 1990).

What makes pricing even more complicated is that marketers must take into account consumers' perceived value of the item or service as the price is only part of the total cost (Kotler & Armstrong, 2013:322). Other costs to consider would be time taken to obtain a good or service, cost of conscience in consuming a specific product and cost of guilt about a certain item or behaviour. These costs reflect the total cost of ownership (Kotler & Armstrong, 2013:673). Many other factors also affect the price or cost, including the price associated with changing from one behaviour to another, the cost of implementing a new product or service as well as the cost a consumer pays for not selecting a competitor's product or service (Kotler, 2011; Lauterborn, 1990).

When considering green products and services, pricing should not be approached in the same way as one would approach current conventional products and services' (Peattie & Peattie, 2009). Marketers are encouraged to take certain steps when determining the price of a green product or service, namely:

- 1. The green product or service must be compared to similar products or services, both green and conventional, in order to calculate an average for both the respective goods and services (Kotler & Armstrong, 2013:380).
- 2. Calculate the price the company needs to charge in order to profit financially to cover the total inputs (costs) i.e. calculate the break-even price (Kotler & Armstrong, 2013:380).
- 3. Compare the average price of the similar products or services with the company's product or service. Decide if the product should be launched below the average, above the average or at the same price (Kotler & Armstrong, 2013:380).
- 4. Keep in mind that green products and services' prices can be a little higher than conventional alternatives, as research has found that the target market is willing to pay extra for these goods or services (Kotler & Armstrong, 2013:380).



Because fresh produce is considered to be a low-involvement product, consumers do not put a lot of conscious thought into the purchasing process. Low-involvement products' pricing need to be simplistic and clear as the main deciding factor for these types of products is price (Hamlin, 2010). Although research has shown that most green consumers are willing to pay more for sustainable products (Hartmann & Apaoloza-Ibanez, 2011; Neagu, 2011), they will do so only if they perceive the product as containing extra value such as improved performance, visual appeal, social status, or emotional wellbeing (Kumar & Christodoulopoulou, 2013; Wheeler, Sharp & Nenycz-Thiel, 2013). Although in future, price might even be seen as an indicator of how socially or environmentally responsible a product is (Li & Tang, 2010). Currently consumers struggle to comprehend the price difference between conventional and more sustainable or green products. Because of this consumers are often hesitant to commit to more sustainable purchases or practices.

2.4 CONSPICUOUS CONSUMPTION DEFINED

The word "consumption" has its origins in the ancient Latin language. The term was derived from the verbs emere or empt, both literally meaning to take. When trade was born almost 6000 years ago, the accepted method of taking something was by bartering – and so the word evolved from to take into to take by purchasing, and then again into sumere or sumpt, to take under one's wing or to take in charge (Anderson & Challagalla, 1994). The evolution of the term shows how the action changed from merely taking to having control over the purchase. Sumere was then combined with con, meaning 'altogether' - to take all. Somewhere during this evolution of the word, consumption changed from a positive action into one that is associated with waste, destruction, and extravagance. Today, the word consumer is commonly associated with the depletion of our natural resources and the destruction of the environment (Kemp, Insch, Holdsworth & Knight, 2010; Anderson & Challagalla, 1994). The concept consumerism can be defined as the encouragement of consumers to buy and use as much as they can. Per alternative definition, consumerism was introduced by President John F. Kennedy (1962) in the form of the consumer bill of rights which refers a social movement with the objective to protect the consumer and guide industry's interaction with consumers (Van der Linde, 2011; Hilton, s.a.). This definition is however not relevant to this particular



study but it remains very important to distinguish between the two definitions of consumerism to avoid confusion in subsequent parts of the discussion of this study.

2.4.1 Consequences of conspicuous consumption of consumer goods

In the 1960s stakeholders such as retailers and marketers encouraged consumers' prolific lifestyles, convincing consumers that life fulfilment and satisfaction can only be found in this process of buying and consuming (Forde, 2011; Rex & Baumann, 2007). These retailers and marketers convinced consumers that the act of consumption offers ego-gratification, in the sense that it is an efficient way to accomplish physical goals (Gierl & Huettl, 2010; Trigg, 2001; Bagwell & Bernheim, 1996; Cronk, 1996; Page, 1992; Basmann et al., 1988; Hilton, [s.a.]). What consumers needed was changed to what they desired, and new desires quickly made way for newer desires, most of the time faster than what the initial desires could be satisfied. This marked the start of the age of consumerism (Kaplan, 2008) and led to the creation of an unsustainable consumer culture (Briceno & Stagl, 2006; Cronk, 1996).

Consumerism in the sense of excessive consumption and conspicuous consumption is also associated with status consumption. The encouragement of conspicuous consumption may result in a culture of unsustainable consumption where the resource needs of the current generation are not measured against the expected resource needs of future generations (Van Dam & Van Trijp, 2011). At the present consumption rate humans are consuming the earth's resources at an alarming rate, leaving behind a planet that may not be capable of sustaining future life (Hawcroft & Milfont, 2010; Briceno & Stagl, 2006; Sanne, 2002; Cronk, 1996).

2.4.2 Conspicuous consumption of fresh produce

Conspicuous consumption is one of the most important factors to consider when evaluating or determining consumer behaviour (Bagwell & Bernheim, 1996; Page, 1992). During the 1960s, marketers and other stakeholders encouraged consumers to spend money on excessive goods and services. Some would even argue that conspicuous consumption was the main driving force behind the industrial and consumerist boom that occurred in the late 1960s early 1970s (Trigg, 2001). Consumers did not realise that they were caught up in an endless circle – products and services that were once hard to come by, quickly became attainable to many because of improved technology or distribution. With technology growing at a



remarkable speed, status-seeking consumers were encouraged to complete this esteem-cycle more often than in the past; to such extents that even the poorest consumers are subject to the pressure and allure of unnecessary spending (Basmann et al., 1988).

Concerning fresh produce, in recent years consumers have been encouraged to increase their consumption levels in order to guard against diseases and deficiencies, i.e. as a nutritional benefit (WHO, 2014; Backeberg, 2014; Slavin & Lloyed, 2012, Vainio & Bianchini, 2003:47). Consumption of fresh produce began to be associated with wealth and status - only the rich could afford being healthy (Monsivais, Aggarwal & Drewnowski 2011). Marketers' further educated consumers to not only demand the best, but to also demand year-round variety and availability (Li &Tang, 2010). The conspicuous consumption of fresh produce was further encouraged by the promotion of exotic and previously unknown produce such as star fruit, dragon fruit, and persimmons (Koutsimanis et al., 2012). With the start of the green/sustainable movement, supporting marketers realised that consumers must now be educated rather to demand seasonal produce that was cultivated and harvested with as little impact on the environment as possible (Belz & Peattie, 2009). These educated consumers often demand green practice instead of products, i.e. minimum transportation of the produce, a decrease in the use of pesticides and other harmful chemicals and the safe disposal of waste (Kumar & Christodoulopoulou, 2013; Wheeler et al., 2013). Furthermore, they are educated to consume sustainably - buying only what they will use, buying only what is in season and as far as possible buying locally (Koutsimanis et al., 2012).

Some of the stereotypical demographics of a true green consumer can be generalised based on gender, age, educational level, and income (Hartmann & Apaoloza-Ibanez, 2011). This generalisation is based on the socialisation theory, which suggests that individuals from similar backgrounds who are exposed to similar external stimuli socialise the same (Jobber, 2010:78; Hawkins, Best & Coney, 1998:202). It is believed that young females with a relatively high education level and income are more likely to engage in green or sustainable consumer behaviour (Sharma, 2011; Van Kempen et al., 2009; Rex & Baumann, 2007; Tsakiridou, Boutsouki, Zotos & Mattas, 2006). Although there are indications that this description is no longer mutually exclusive (Sharma, 2011), previous studies such as Gilg, Barr and Ford (2005), Chai, Bradley, Lo and Reser (2014) and de Medeiros, Ribiero and Cortimiglia (2014)



interestingly enough indicate that income seems to still have an effect on the quantity of the green products bought.

2.5 UNIVERSAL CONCERNS ABOUT CLIMATE CHANGE

Over the last few decades, planet earth has been experiencing a noteworthy increase in its overall air and water temperature. This temperature rise has serious consequences, resulting in the decline and/or exhaustion of groundwater, minerals, agricultural land, and even life itself (Schmidt, Ivanova & Schafer, 2013; Joshi & Mishra, 2011; Gore, 2006:308). This degradation of nature is bound to continue unless we dramatically interrupt and challenge our current lifestyles (Schmidt, Ivanova & Schafer, 2013; Joshi & Mishra, 2011; Gore, 2006:308). One of the main contributing factors to this imbalance of nature is greenhouse gas, emitted by humankind in order to sustain our (much-admired) elaborate lifestyles of conspicuous consumption and materialism (Schmidt, Ivanova & Schafer, 2013; Joshi & Mishra, 2011; Gore, 2006:308; Princen, 1999; Hinchliffe, 1996). It is said that we are currently destructing the planet through a cycle of harmful processes that are now feeding on themselves, causing climate change and subsequent consequences to increase exponentially (Boykoff & Goodman, 2009; Wilk, 2002; Glantz, 1992) such as floods, extreme droughts, wild fires and landslides.

Current estimates indicate that 75% of the world's carbon emissions are emitted by developed, industrialised countries (Odhiambo, 2011). However, they are not the countries impacted most by the consequences of climate change (Dos Santos, 2011). The poor, less developed and less industrialised nations, together with tropical countries, minorities and indigenous groups are said to be the most vulnerable and will face the brunt of a changing climate (WWF-Report, 2012). The vulnerability of these countries lies in the fact that they have little to no capacity to manage the emergencies stemming from rising sea levels, unpredictable weather, and severe climate patterns (Schmidt, Ivanova & Schafer, 2013; Joshi & Mishra, 2011; Gore, 2006:308). Even in more developed countries, the poor will suffer the most from calamities leading from climate change. During the last decade monsoons displaced 14 million people in India, seven million in Bangladesh and three million in China; cyclones ravaged Indonesia, the Philippines, and Vietnam. Hurricanes devastated the Caribbean and Central America, killing more than 1,600 Mayan people in Guatemala.



Droughts have afflicted Africa, driving 14 million people from their homes (Schmidt, Ivanova & Schafer, 2013; Joshi & Mishra, 2011; Gore, 2006:308). After 150 years of human well-being progress, the world is now facing the challenge that the last few decades' progress on the eradication of poverty, malnutrition, illiteracy and infant mortality will be reversed (UNEP, 2008).

Environmental problems should be, and remain, the main concern for the entire world and all human beings (Sharma, 2011; Maibach et al., 2008). It is a fact that if consumers wish to maintain their high standard of living, they need to take ownership of current challenges and start protecting and nurturing the world's natural resources by consuming more responsibly and sustainably (Kemp et al., 2010; Gore, 2006:27).

2.5.1 Global attempts to encourage sustainable consumption

During the Oslo Roundtable Symposium on Sustainable Production and Consumption in 1994, the following definition of sustainable consumption was formulated: "the use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardise the needs of future generations" (IISD, 2012; Spaargaren & Mol, 2008; Gilg, Barr & Ford, 2005). Even though all consumers can be essential drivers for change not all consumers realise and understand the role consumption plays in the degradation of the planet (Tobler, Visschers & Siegrist, 2011). Consumers who do understand this are referred to as green consumers (Hartmann & Apaoloza-Ibanez, 2011) and they encourage, even demand, sustainable consumption (Peattie & Peattie, 2009). In some instances, they even form protest groups. This segment is deemed large enough to target commercially and currently this group is one of the fastest growing segments in the global market (Kim & Choi, 2005; Zimmer, Stafford & Stafford, 1994).

Most nations have realised that something must be done to protect the poor and most vulnerable against the force of climate change and that sustainable development plays an essential part and should be therefore be incorporated into business strategies and corporate policies (Sari & Soytas, 2009). Even though sustainable development in itself is not a political theory it is recognised that without political change sustainable development will not be



possible, thus it is deemed that for sustainable development to be successful, input from all parties industry, government and consumers are crucial (Odhiambo, 2011).

In South Africa, we are fortunate to have a constitution that protects people's rights to a clean and healthy environment (Constitution of the Republic of South Africa, 1996). The challenge however is that both local and international authorities struggle to raise consumer knowledge about climate change in order to instil a culture of sustainability (Dos Santos, 2011). It is often assumed that when individuals make poor choices it is most commonly due to a lack of information (Constanzo, 2013). Regulatory measures in the form of laws, directives and regulations, targeting international authorities, producers or retailers rather than consumers, e.g. ban on the use of CFCs in products and goods should be encouraged (Stuart, 2009:206; Sari & Soytas, 2009). Economic tools such as taxes and charges are also possibilities and are in some countries successfully implemented, with the financial stimulus being strong enough to influence the consumer during the decision-making process i.e. green taxes on vehicles are forcing consumers to re-assess their purchasing behaviour (European Commission, 2012).

2.5.2 South African consumers and sustainable consumption

According to a WWF Report (2012) South Africa, with its emerging economy, should consider climate change as a serious threat because of the country's high illiteracy and poverty figures (Dos Santos, 2011; Peattie & Peattie, 2009; Valkenburg & Cantor, 2001; Darley & Johnson, 1993). Recent figures indicate that a quarter of the South African population live on less than R 10.20 a day (Statistics South Africa, 2011). This is a critical area of concern because the poor, based on their subsistence livelihoods, will suffer the most under extreme weather conditions (World Bank, 2013; Peattie & Peattie, 2009; Valkenburg & Cantor, 2001). The matter is furthermore exacerbated by South Africa's fast growing black consumer group that have growing disposal incomes and discriminating tastes that tend to satisfy their aspirations and newly found social status through excessive consumption (Mawson, 2011; Roberts & Struwig, 2011).

The general knowledge relating to environmental issues in South Africa is steadily on the incline, but consumption patterns are still heavily dictated by convenience, habit, value for money and hedonism (Tobler et al., 2011). Current consumption patterns show that South



African consumers can be divided into two discerning groups. One group demands not only convenience, but also the best goods and services, and the other group demands responsible production practices and greener options. These groups vary extensively, especially in terms of their materialism, status consumption, consumer socialisation and consumer literacy levels, and must therefore be treated differently (Jacobs, 2010; Schiffman & Kanuk, 2010:323; Franchi & Swart, 2003; Laden, 2003). The biggest obstacles in the way of sustainable behaviour are language and educational differences. Research has shown that the black consumer groups tend to be less educated with regard to environmental issues and consequently less concerned about their contribution to its destruction (Vermeulen & Bienabe, 2010; Roberts & Struwig, 2008; Laden, 2003; Grier & Deshpande, 2001). From a South African context, this is a serious concern as the majority of the South African population fall into this category. Luckily, this lack of concern can be improved by education (Constanzo, 2013).

Unfortunately, this poses a conundrum for many marketers, as educating consumers about sustainability is seldom very profitable (Gadenne, Sharma, Kerr & Smith, 2011). Currently many marketers working in retail still base their strategies on profitability and not on environmental accountability (Hartmann & Apaoloza-Ibanez, 2011; Neagu, 2011; Maibach et al., 2008). It is for this reason that modern marketers are often accused of exploitation as they are continuously and consciously stimulating consumers' desires and wants, allowing the conspicuous purchasing cycle to continue (Dangelico & Pantrandolfo, 2010; Pujari, Wright & Peattie, 2003). In South Africa, the fresh produce segment mainly focuses their marketing efforts on the printed communication channels such as billboards, brochures and adverts in magazines. There are also institutions, with online websites, dedicated to the development and promotion of fresh produce to South Africans, such as FruitSA (FruitSA, 2014). All of these communications are dedicated to encourage consumers to not only buy more fresh produce, but to only demand perfect fresh produce such as the ones depicted in the printed media. This ultimately increases the demand for perfect produce to be stocked by retailers, and leads to excessive waste of produce that cannot be sold. Fortunately, the retail segment actively participating in green marketing is steadily growing. A number of International companies have been advocating sustainability for years, e.g. Body Shop and Earth Child, and a number of local companies have now also adopted the green movement. Pick and Pay and Woolworths have recently increased their fresh produce marketing campaigns focusing on



consumer education in terms of sustainability, e.g. which seafood products are on the SASSI list, reminders to recycle, and buying local and seasonal. Woolworths has even launched a "farming for the future" campaign that is focussed on encouraging farmers to build and maintain healthy soil, leading to healthy produce that needs less herbicides and fertilisers, as well as encourage consumers to buy seasonal (Woolworths Online, 2014).

2.6 CONSUMER SOCIALISATION DEFINED

Consumer socialisation is the process that a consumer undergoes by which he or she learns certain skills, knowledge, habits, and attitudes from their environment and other external sources of information (Valkenburg, 2000; John, 1999; Rose, 1999). This process in particular takes place during childhood and includes the transfer of basic values and modes of behaviour, especially consumer behaviour, consistent with the parents' culture, knowledge and personal experiences (Schiffman & Kanuk, 2010:323). Group interaction together with observational learning is necessary for both continuous consumer socialisation as well as psychological development of the individual into a literate consumer and a satisfied human being (Clark, Zboja & Goldsmith, 2007).

In the 1890s, Veblen theorised that individuals emulate the consumption patterns of individuals or groups in the social class above them (Boykoff & Goodman, 2009; Wilk, 2002; Veblen, 2005:28). The social norms and values that dictate this emulation is continuously evolving, changing as the economy and social structures evolve. If one takes into account that people learn and modify their behaviour based on what they observe, their experiences, as well as their own assessment of their abilities and chances of success, it is easy to understand Veblen's theory (Lertwannawit & Mandhachitara, 2012; Sivinathan & Petit, 2010; Frijters & Leigh, 2008; Busch, 2008; Veblen, 2005:22; Røpke, 2005). Veblen wrote that status and esteem is solely derived from the opinions and judgement of other members of society, and that one's own self-worth and opinion is shaped by society and other external influences (Boykoff & Goodman, 2009; Wilk, 2002; Veblen, 2005:22).

In order to gain a favourable position, one has to display wealth, and this can be accomplished in one of two ways. The first; taking part in extensive leisure activities and the second;



exorbitant spending on goods and services. What both of these methods have in common is the element of waste – waste of time, effort, money, or goods. Consumers spend money on material things in order to create the illusion that they are wealthy, or have status (Veblen, 2005:28; Trigg, 2001; Bagwell & Bernheim, 1996; Page, 1992; Basmann et al., 1988).

2.6.1 Marketing as a medium for consumer socialisation

Although external influences such as family, peers and other reference groups play an important role in the shaping and development of a child into a full-grown consumer (Schiffman & Kanuk, 2010:323), it does not mean that the power of marketing messages should be overlooked. Marketing in the form of advertising, promotions, and public campaigns, remains one of the most effective external behavioural learning and socialisation agents (Freytag & Philipsen, 2010:135). With these marketing tools, marketing professionals have to influence and guide consumers toward preferring and purchasing their represented company's product (Goodwin, Nelson, Ackerman & Weisskopf, 2008). In order to do their job efficiently, they have to expose consumers from birth onwards to marketing messages designed to successfully shape the consumers' idea of correct purchasing and consumption behaviour through the creation and stimulation of their desires to purchase and consume (Dangelico & Pantrandolfo, 2010). Ultimately this means that from an early age children are taught to recognise and act upon their desire to spend and consume, which marketing messages instilled in them from birth (Freytag & Philipsen, 2010:135). This impulse to consume is maintained and motivated by mass marketing messages, with marketers encouraging consumers through repeated exposure to simple advertising and other marketing stimuli to want more and more consumer goods. Soon these impulses to satisfy exaggerated and excessive consumption needs and desires become a habit on which consumers act without any conscious thought or doubt; these consumption habits eventually become part of the consumer's lifestyle (Hartmann & Apaoloza-Ibanez, 2011; Neagu, 2011; Maibach et al., 2008). The influence of these messages is very powerful as they can teach consumers who are frequently exposed to marketing messages how to be "good" consumers. In these successful marketing messages, consumers are shown what is "acceptable", "forgivable" and what is "advisable" (Freytag & Philipsen, 2010:135).



Although marketing has existed as a specialised profession for only a short time, it has become a force rivalling education and religion in shaping public values and aspirations (Dangelico & Pantrandolfo, 2010; Goodwin et al., 2008). Marketing and marketing messages are often justified by economists and marketers as being merely a source of information concerning products and services that are available in the marketplace; while it certainly plays that informative role, marketing messages do much more as merely inform consumers (Goodwin et al., 2008). Marketing messages can appeal to many different values and needs, both emotional and practical, and to a range of desires and fantasies (Goodwin et al., 2008). The multitude of marketing communications that consumers encounter daily carry their own separate messages; yet on a deeper level, they all share a common consumeristic concept most marketing communications are selling the delight of buying, endorsing the idea that purchasing things is, in itself, a satisfying activity (Dangelico & Pantrandolfo, 2010; Goodwin et al., 2008), thus enforcing and encouraging conspicuous and excessive consumption. Marketers who are submissive to the traditional marketing motivation, i.e. the boosting of the purchasing and consumption of their advertised goods and services in order to increase sales and ultimately profit, succeeds in enforcing a status driven and materialistic society (Hartmann & Apaoloza-Ibanez, 2011; Neagu, 2011; Maibach et al., 2008).

Marketing's role in consumer socialisation does not necessarily only have to be negative. Consumers can also be educated and informed by the same media, allowing consumers to gain knowledge of not only pressing issues but also of possible solutions as well (Freytag & Philipsen, 2010:135; Peattie & Peattie, 2009). If marketing messages and campaigns announce that acquiring material possessions is a way of gaining status, thus promoting consumerism (Gierl & Huettl, 2010), the consumer is taught that this is the way to live his/her life. To the same extent, if marketers use marketing messages to educate consumers on the benefits of living, purchasing and consuming sustainably, consumers will adopt a more sustainable lifestyle and consumption cycle (Dangelico & Pantrandolfo, 2010; Maibach et al., 2008).

Therefore it can be assumed that marketing messages and communication can be used to create more sustainable consumers as these media are capable of informing consumers about climate change and making them aware of the consequences of their current fresh produce consumption and waste behaviour. Marketing messages can specifically and directly attempt to educate consumers on how to purchase, consume, and manage waste of fresh produce in a



more sustainable and responsible manner (McGregor, 2005), thus influencing the consumer socialisation process in the home. Currently, fresh produce related consumer socialisation in the home does not necessarily focus on the issue of climate change, but rather emphasises the appreciation of top quality fresh produce. This is typical of a status conscious value system and materialistic consumption trends. Studies have shown that most consumers regard the purchasing, consumption, and waste of fresh produce in a very casual manner, often becoming habitual in nature (Marx-Pienaar & Erasmus, 2013).

2.6.2 Emergence of green marketing

In the 1960s American and European marketers identified a great new way of winning market share and gaining a competitive advantage in the market - tapping into consumers' distress over the current state of the planet and their new preference for greener products (Dangelico & Pantrandolfo, 2010; Joye, Willems, Brengman & Wold, 2010; Mostafa, 2009; Pujari et al., 2003; Sanne, 2002; Peattie, 2001; Blittner & Grubler, 1995; Zimmer et al., 1994). This presented a 'win-win' situation, with numerous external benefits for the company, including increased sales, improved customer relations, enhanced competitiveness, and improved corporate image (Pujari et al., 2003). This implied that marketing strategies had to be adapted in order to inform consumers about the company's new 'greener' products. To ensure the success of 'green marketing', the traditional marketing mix was modified to include green components in order to profit from consumers' growing environmental concern (Dangelico & Pantrandolfo, 2010; Pujari et al., 2003; Lampe & Gazdat, 1995). The ultimate end-goal of green marketing being thus to "remodel consumers' behaviour" in the direction of environmentally benign activities such as decreasing purchasing of imported produce, demanding produce to be transported for wider availability and wasting produce that is not physically perfect (Coad, Haan, & Woersdorfer, 2009; Alcott, 2008; Hoogland, De boer & Boersema, 2007), and should therefore not only be seen purely as a profit guarantee.

2.6.3 Utilising green marketing to raise knowledge about sustainability issues

As discussed earlier, the HOE model illustrates that knowledge is a necessary precondition for a person's behaviour, and is acknowledged as being essential for successful action or implementation in terms of informed, responsible consumption behaviour (Wijaya, 2011; Zaichkowsky, 1991). Further, the consumer decision making process also involves the



acquisition of information (Constanzo, 2013). Fresh produce consumption decisions are classified as low involvement decisions, but the inclusion of environmental concerns elevates these decisions to a high involvement decision (Bhate, 2005). High involvement decisions are characterised by an increase in interest and willingness to search for and retain information about a specific issue or topic (Van Kempen et al., 2009). Raising knowledge of the possible, and much needed, environmentally friendly changes in terms of current unsustainable practices and consumption behaviours thus seems to be the obvious first step to implementing permanent lifestyle alterations that favour the principles of sustainability in terms of fresh produce consumption (Barr, 2004).

Although the idea of raising consumer' knowledge in terms of sustainable consumption is novel, it is often exploited by companies and does not have the anticipated effect on the behaviour targeted as is the case with perceived 'greenwashing'. 'Greenwashing' occurs when marketing and PR (Public Relations) try to wrongly convince consumers that a product or company is sustainable or environmentally friendly (Schroeder & Robinson, 2010). Green consumers are very sensitive to deceptive advertising and will shun brands that they believe are guilty of this green deception. For any green campaign to be effective, it is thus important to determine the accuracy of all claims, how much consumers already know and what type of knowledge will be the most effective to promote the desired behaviour (Kumar & Christodoulopoulou, 2013; Neagu, 2011; Frick, Kaiser & Wilson, 2004).

Currently, advertising agencies across the world are employing environmental/green strategies even more than when the advertising industry discovered sex in the 1950s – today green has become the hottest colour (Kotler & Armstrong, 2013:380; Neagu, 2011; Maibach et al., 2008; Lampe & Gazdat, 1995). Some 'green retailers' found in South Africa include the Body Shop, Green Home, Earth Child, Tsonga, Woolworths and others.

An increase in green marketing is causing an exponential rise in the number of promotional and advertising material that the modern consumer is daily exposed to (Kumar & Christodoulopoulou, 2013; Wheeler et al., 2013). Today, consumers are being bombarded with so much information from so many different sources that they stand the chance of becoming very confused (Neagu, 2011). Some modern consumers might even experience 'eco-anxiety' caused by mounting fears about the earth's wellbeing as well as their own



failures in protecting the environment (Hamilton, 2010; Meneses, 2010). Both confusion and anxiety can convince these consumers to ignore green messages, choosing to live in ignorance rather than constant guilt and perplexity (De Swaan Arons, 2011; Howell, 2011; Greenberg, 2008).

2.7 SUMMARY

This chapter presents a literature review of the role that marketing plays in creating and directing consumer behaviour. In order to understand the power that marketing has over consumers, the history and development of marketing was firstly explored, from the simple barter or trade era to the current social marketing or relationship marketing era. The historical background of marketing makes it easier to understand the role of marketing in the consumer decision making process. From creating or recognising a need of the consumer, to providing information in order for the consumer to consider the marketer's product as part of the chosen (evoke) set to eventually influencing the purchase decision, as well as ensuring that the consumers' post-purchase evaluation remains favourable. To further explain the process that consumers undergo when deciding what to buy, the Hierarchy of Effects (HOE) model was also explained, mainly to expand on the influence of marketing on consumers' knowledge of, preference for and conviction of certain products. The influence that marketers have over their chosen market segment is derived from the manipulation of the 4Ps of marketing, i.e. in the strategy that marketers use to combine the price, distribution and promotion of their chosen product. Unfortunately, marketers who only focus on profit margins have succeeded in creating consumers who are insatiable, and who purchase and consume for the sake of acquiring status or esteem. This is defined as conspicuous consumption, and extends to fresh produce purchasing as well. The excessive purchasing and waste of fresh produce has dire consequences for the planet, including an increase in greenhouse gas in the atmosphere, which can contribute to climate change. Climate change is one of the hottest and most widely discussed global topics; as a result some marketers have realised that they are contributing to the problem and that they can form part of the solution. This led to the birth of green marketing, which aims to increase knowledge about sustainable consumption. The aim of these "green" or sustainable marketers is to influence consumers' socialisation process, i.e. consumers' learning of how to be consumers, how to purchase, what



to purchase, and when to purchase. This learning or socialisation occurs throughout consumers' lifetime, and is influenced by various role players, including but not limited to family members, social circles and marketing messages. In this manner, sustainable marketers can create or influence consumers to become more sustainable, especially with regard to their fresh produce purchase, consumption and waste behaviour. Sustainable consumption practices are relevant to households irrespective of where they live, as the problem of irresponsible consumption and waste is universal and affects the well-being of all future generations.







THEORETICAL PERSPECTIVE, CONCEPTUAL FRAMEWORK AND RESEARCH OBJECTIVES

This chapter explains and justifies the theoretical perspective used within this study. It also provides and describes the conceptual framework and research objectives.

3.1 JUSTIFICATION OF THE USE OF THE SOCIAL COGNITIVE THEORY

Developed by Albert Bandura (1977:1086) the social cognitive theory refers to a psychological model of behaviour, which emphasises that an individuals' behaviour is the result of a complex learning process, gained through observation, within a specific social context (Van Dam & van Trijp, 2011). Although one of the main assumptions of the social cognitive theory concerns the **triadic reciprocity** (referring to the interrelatedness and undeniable bidirectional influence between individuals and their social context) it is by no means a behaviouristic perspective (Powell et al. 2012:28; Shaffer, 2008:46). Rather, the social cognitive theory stresses that individuals have the ability to influence their own behaviour as well as the environment around them in a decisive manner (Bandura, 2001). This assumption conflicts with general behavioural theories because it argues that through forethought, self-reflection, and self-regulatory processes individuals are not only in charge but also able to direct their own behaviour substantially (Jackson, 2005). Hence, the social cognitive theory agrees that learning occurs in a social context gained through observation; but ultimate behaviour is still the result of an individuals' own personal cognitive functioning (Bandura, 2001).

The social cognitive theory is grounded on five central concepts, namely observational learning, outcome expectations, perceived self-efficacy, goal setting and self-regulation and will be discussed below:



3.1.1 Observational learning

Observational learning (also known as vicarious learning), being the primary premise/assumption within the social cognitive theory, refers to individuals' ability to learn by simply watching the behaviour of others and observing its consequences (Powell et al., 2012:28; Shaffer, 2008:46; Bandura, 2001). Important to note is that observational learning is highly dependent on the availability of 'models' and thus the 'who or what' that serve this role is defined broadly (van Dam & van Trijp, 2011). Research has proven that people learn from role models whose behaviour they wish to emulate (Krueger, 2010). Observational learning is furthermore reliant on four interrelated processes, which involve attention, retention, production, and motivation (Bandura, 2001). Attention refers to the individual's ability to learn by paying attention to the relevant behaviour. Retention involves the much-needed processes necessary for reducing and transforming the observed behaviour into a symbolic form, which will be stored for later use in the form of production. Production refers to the ability to recall stored information in order to repeat behaviour that has previously been observed. Lastly, motivation is invaluable in terms of an individuals' attempt to recreate or repeat relevant behaviour. Previous studies revealed that individuals might inhibit their engagement in behaviour based on the expected benefits or consequences, which serves as motivation (Bandura, 2001).

Applied in the context of this study **attention** can be gained by marketing which can be used to adapt and shape consumers' consumption patterns to be more sustainable through observational learning. This learning process will differ from consumer to consumer - a marketing message proclaiming the virtues of sustainable living must be able to grab the attention of consumers' from various backgrounds, providing relevant information about sustainable living or consumption that the consumer would want to retain (Neagu, 2011; Maibach et al., 2008). **Retention** occurs if the provided information could be recalled at a later stage, e.g. when the consumer is in the store with the aim of purchasing fresh vegetables the consumer will remember the sustainable living information that he/she was exposed to in the marketing message. This ultimately enables the consumer to use the information to **produce** a specific behaviour, i.e. influences the consumers ultimate purchase behaviour of fresh vegetables, e.g. as a result of the information given in the marketing message the consumer now knows to seek and purchase local seasonal fresh produce because it is more sustainable. Should the consumer be able to recall this information in future, the process of attention and



retention will lead to the consumer repeating behaviour that was observed in the marketing message (e.g. buying more sustainably, i.e. only what is needed and in quantities that will be used and not wasted, buying local and buying seasonal) (Hartmann & Apaoloza-Ibanez, 2011). The **motivation** for this change in behaviour will also differ between consumers. For some it might be the satisfaction of "doing a good deed" (helped the South African economy), or the feeling that by acting more sustainable they have contributed to saving the planet for future generations (van Dam & van Trijp, 2011). Motivation for other consumers can simply be the decrease in guilt that the consumer feels because of his/her lavish lifestyle, which green marketing has pointed out to be degrading to the environment (Neagu, 2011). Currently economic reward tends to motivate change in consumer behaviour to include more sustainable practices (van Dam & van Trijp, 2011). All of these motivations can be very powerful, albeit for different reasons (Chancellor & Lyubomirsky, 2011).

3.1.2 Outcome expectations

Critical in terms of ultimate behaviour, outcome expectations are important because they shape the decisions people make about what actions to take and which behaviours to suppress (Bandura, 2001). These expectations reflect individuals' beliefs about the possible consequences that could ensue if a particular behaviour is performed and are not only grounded on vicariously observation of others but also on own personal experiences (Krueger, 2010; Bandura, 2001). According to the social cognitive theory, the frequency of and commitment to specific actions should proportionally increase in terms of the expected outcome value. Subsequently, individuals will avoid behaviour associated with unfavourable outcomes (Jackson, 2005; Bandura, 2001).

Green marketing's aim should be to inform consumers of the virtues of sustainable living, i.e. to make the expected outcome rewarding and thus motivate consumers to act more sustainably (Neagu, 2011). These rewards, as with observational learning, will be different from consumer to consumer (Hartmann & Apaoloza-Ibanez, 2011). For some, saving money will be the main motivation as living more sustainable might in future have cost saving benefits. For others living greener might act as a status symbol, making these consumers trend setters. Another powerful motivation is the protection of consumers' bodies — living more sustainable cuts down on pollution, leading to cleaner air and water and ultimately a



better quality of life for all. A feeling of accomplishment might also motivate consumers, feeling as if they won a battle against the world and thus increasing their self-worth (van Dam & van Trijp, 2011). For the true green consumers, the fact that they are reversing climate change, reducing global warming and closing the hole in the ozone layer will be reward enough (Rachlinski, 2000). Should marketing succeed in conveying messages pertaining to sustainable behaviour consumers might be more willing to change their lifestyle and consumption habits to reflect the principles of sustainability (Haytko & Matulich, 2008). One of the objectives of this study is to investigate and describe the role that marketing plays not only on consumers' knowledge of sustainable practices, but ultimately on their acceptance of sustainable consumption practices, specifically in terms of fresh produce.

3.1.3 Perceived self-efficacy

Self-efficacy reflects the belief an individual has in terms of whether a particular task can be completed successfully (Bandura, 1997). Individuals that reflect a greater self-efficacy tend to be more confident in their abilities and ultimate success compared to those with lower self-efficacy. According to Pajares, (2003), higher levels of perceived self-efficacy are associated with greater choice, persistence, and effective strategy use. Consistent with the core assumption of the social cognitive theory, self-efficacy is the result of individuals' own/personal performances and past experiences, the observation of others and an individuals' on-going physiological state (Bandura, 1997). However, it is important to note that these sources of information do not influence self-efficacy directly but are weighed and filtered through a process known as **cognitive appraisal** (Bandura, 2001).

Cognitive appraisal can be defined as the personal interpretation of a situation. In other words, it is how an individual perceives or experience a situation, and can be used as an evaluative framework to make sense of events or the world in general. Appraisals are strong indicators of emotions as they refer to personal evaluations made by consumers of their environments (Yap & Tong, 2009).

Applied in the context of this study, marketing needs to inform and convince consumers that even one person's choice to be more sustainable will contribute towards limiting the effects of climate change (Haytko & Matulich, 2008). However, marketing needs to do this in such a



way that consumers are persuaded that their choices are making a positive difference. If consumers evaluate their choices and find that they are not as effective as they thought, they can become de-motivated to make other sustainable choices. They might even abandon any future attempts to be more sustainable (Maibach et al., 2008).

3.1.4 Goal setting

In terms of the social cognitive theory, the setting of goals as well as goals, per se, reflect cognitive representations of anticipated, desired, or favoured outcomes (Bandura, 2001). It furthermore explains that people not only learn but also use forethought to envision the future, identify outcomes, and generate possible action strategies (Jackson, 2005). Goals therefore are intricately related to outcome expectations and personal perceived self-efficacy. Finally, goals are critical in terms of self-regulation because they not only provide objectives that guide behaviour but also benchmark to assist in the evaluation of progress (Chancellor & Lyubomirsky, 2011).

In terms of this study, the principles of sustainable consumption as advocated by green marketers are examples of goal setting. Consumers therefore might make more sustainable choices today because they not only believe that the principles of sustainable consumption are important and meaningful, but also because these principles guide them toward a better future (Maibach et al., 2008). Marketing is useful in this regard as it can be used to help the consumer visualise future outcomes by providing information, helpful advice as well as other motivations (Haytko & Matulich, 2008).

3.1.5 Self-regulation

Self-regulation refers to an individuals' ability to manage or monitor personal learning behaviours, whether learning was acquired through observational learning or past experiences (Zimmerman & Schunk, 2011). According to the social cognitive theory, self-regulation is dependent on goal setting, in that individuals manage their actions through rational thought processes in order to reach particular outcomes (Schunk, 2012; Zimmerman, 2000). The social cognitive theory emphasised three sub-processes pertaining to self-regulation, namely self-observation, self-judgment and self-reaction (Bandura, 1991; Bandura, 1977) and are explained below:



3.1.5.1 Self-observation

Self-observation reflects ones' ability to monitor or keep track of personal behaviour and outcomes (Bandura, 2001). Only by retaining and recalling information can individuals successfully construct outcome expectations that are needed for self-observation (Krueger, 2010).

In order for consumers to monitor or keep track of their behaviour's outcome they must be aware of the thought process leading to the behaviour. In terms of this study, consumers' fresh produce consumption decisions must change into high involvement decisions (van Kempen et al., 2009). Low involvement decisions are mostly habitual and thus do not require the consumer to put a lot of thought into the process (Fennis et al., 2011). Consumers thus undergo self-observation when they are capable of analysing and measuring their own behaviour compared to their peers as well as to the lifestyle advocated in the marketing media (Haytko & Matulich, 2008).

3.1.5.2 Self-judgement

Self-judgement refers to the evaluative process that individuals use to determine whether their actions are effective and therefore will allow them to make progress toward their goals. During this process, self-efficacy also comes into play (Bandura, 2001).

Applied in the context of this study, consumers must possess the relevant knowledge about sustainable fresh produce consumption to enable them to evaluate the effectiveness of their actions (Pajares, 2003). Should the messages conveyed in the media, through marketing communication, be focused on sustainable consumption, consumers might undergo a process during which they evaluate their current actions to determine if they are as effective as they should be – i.e. are they living sustainably enough. Should their actions not be effective they might be hindered or kept from reaching their goals (Maibach et al., 2008). Once again, this step will only take place if the purchasing of fresh produce has been elevated from a low involvement decision to a high involvement decision (van Kempen et al., 2009). Should the consumer then feel that his or her action does not have the intended outcome or effectiveness, the consumer advances to the next step, self-reaction (Bandura, 2001).



3.1.5.3 Self-reaction

Self-reaction is an individual's response to the evaluation of modified behaviour (Bandura, 2001). In terms of this study, consumers will either be satisfied with their sustainable fresh produce consumption behaviour, i.e. they feel good about protecting nature; they experience cost savings; or they feel there has been an improvement in their health (van Dam & van Trijp, 2011; Hartmann & Apaoloza-Ibanez, 2011), and thus continue with the new learned behaviour. These consumers will further support and pay attention to marketing messages aimed at educating consumers about environmental issues such as climate change. Or consumers will feel disillusioned, i.e. feeling that their choices are not making an impact; one person cannot change the world; the cost implications are too high; or they experience no support from their family and friends (Kemp et al., 2010; Gore, 2006:27) and cease to continue with new improved sustainable practices. These consumers will further ignore or avoid marketing communication focused on educating consumers about sustainability and other environmental issues. In this case, the knowledge and behaviour learned is quickly forgotten (van Kempen et al., 2009).

The social cognitive theory is thus a theory of learning that addresses the ways in which external social related factors shape human behaviour through observation, learning, and mimicking (Powell et al., 2012:28; Shaffer, 2008:46; Pajares, 2003; Bandura, 2001). It can therefore be said that as an external factor, marketing communication is capable of both teaching consumers new forms of behaviour as well as motivating consumers to change their current practices through the alteration of people's knowledge systems (Neagu, 2011; Bandura, 2001).

3.2 CONCEPTUAL FRAMEWORK

The conceptual framework for this study is an adaptation of an established model (Bandura, 2001) which focuses on how consumers model, change, or adapt their behaviour according to external cues such as marketing communication, based on their own cognitive abilities. Thus in terms of this study, it can be said that marketing messages can be used to shape consumers' fresh produce consumption patterns through observational learning. Consumers' fresh produce consumption patterns can then be used as an indication of whether messages



that are conveyed in the media contribute to consumers' knowledge of climate change or whether their purchase and consumption decisions are provoked by status related concerns. Marketing communication can also be used to promote the consumption of certain status related products, such as perfect fruit and vegetables, by visually stimulating demand. By depicting impressively styled fresh produce in printed media such as on cover pages, brochures and accompanying articles describing how fruit and vegetables are beneficial to consume, as well as electronically in advertisements, marketing communication is unquestionably used to boost sales as well as the image of competing retailers. However, in recent years, the same media is also used to bring global concerns and related sustainability issues to the attention of consumers in order to encourage the optimisation of global and local resources, to encourage the use of locally produced goods and to discourage wasteful consumption (Wheeler et al., 2013). These conflicting messages (and cues) that are conveyed in media literally compete for consumers' attention and predominance in consumers' cognitive thought processes. Consumers' eventual behabiour can indicate their knowledge about environmental issues and their eventual behaviour (e.g. how they live, how and why they consume) and consumption patterns (what, how, where, why) in a specific product category (Bandura, 1977), namely fresh produce.

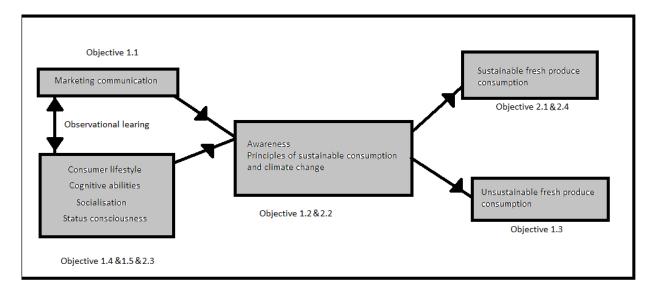


Figure 3.1: Conceptual framework (adapted from Bandura, 2001)

Consumers' purchase decisions and consumption behaviour is mostly modelled by mimicking external role models, which inter alia include messages in marketing communication and the behaviour of peer groups (Bandure, 1986). Their behaviour and consumption patterns are



shaped through a process of socialisation, which occurs and continues over time. Literature confirms that consumers' behaviour is mediated by personal factors including age and gender (Poortinga, Spence, Whitmarsh, Capstick & Pidgeon, 2011) and cognitive stimulation via information attention, retention, production, and motivation (Cowan, 1988). A consumer's knowledge of climate change as well as their possible affinity for status related consumption can therefore be shaped by marketing's efforts. It is hence possible that a consumer will adapt or change his/her purchasing behaviour in accordance with messages communicated through marketing media that reflect more sustainable consumption patterns. Alternatively, if the messages about environmental issues that are conveyed do not succeed in convincing a consumer to change or adapt their purchase- and consumption patterns their behaviour will not necessarily be adapted to become more sustainable. Marketing therefore has a major potential impact on consumers' knowledge of sustainability issues and on their eventual adoption of the principles of sustainable consumption (Wheeler et al., 2013).

3.3 AIM OF THE STUDY AND RESEARCH OBJECTIVES

The principal aim of this study was to investigate and describe the influence of marketing communication on consumers' knowledge of sustainable issues and how it is reflected in their purchasing and consumption behaviour of fresh produce, which contributes to environmental issues such as climate change.

In order to reach the objectives for the study, two phases were designed, namely a quantitative investigation and a qualitative exploration, i.e. focus group discussions that were specifically planned for this investigation which aimed to unravel consumers' underlying perceptions and explanations for their consumption practices. Specific research objectives were therefore formulated for every phase of the investigation, namely:

Phase 1: The quantitative phase involved a questionnaire with specific research objectives, namely:

1.1 To investigate and describe consumers' use of marketing communication as an information source about climate change.



- 1.2 To investigate and describe consumers' consumption of fresh produce in terms of unnecessary wasteful consumption that might enhance climate change.
- 1.3 To explore the potential influence of consumers' status consciousness in terms of sustainable fresh produce consumption practices.

Phase 2: The qualitative phase involved focus group discussions that aimed:

- 2.1 To explore and explain the role of marketing communication as an information source used to encourage sustainable consumer behaviour.
- 2.2 To explore and explain consumers' knowledge as indicated by consumers' awareness and consciousness of sustainable fresh produce consumption practices.
- 2.3 To explore, describe and explain the influence of marketing communication in terms of consumers' status consciousness during fresh produce purchases.
- 2.4 To explore the potential of green marketing in terms of the mitigation of unsustainable fresh produce consumption practices.

3.4 SUMMARY

This chapter introduced the social cognitive theory, as developed by Bandura (1977) that served as theoretic perspective for this study, by firstly discussing the five central concepts which the theory is based on. These concepts are observational learning or modelling, i.e. the way consumers shape their own behaviour based on the behaviour that they have seen from other consumers; outcome expectations, i.e. consumer behaviour is reinforced or deterred based on the social acceptability of their own behaviour; perceived self-efficacy, i.e. learning is an internal process and is individually determined; and goal setting, which is a process by which individuals regulate, observe, judge and react to their own behaviour. Based on these concepts and a thorough literature review, the study's conceptual framework is presented and explained with the aim of the study as well as specific objectives for the investigation.





CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

This chapter explains the research design and describes the research methodology and relevant data collection techniques that were used to gather relevant data to achieve the anticipated outcomes of the study. The sampling procedures, participant selection, and data analyses are presented in terms of the two phases of investigation.

4.1 RESEARCH DESIGN

The principal aim of this study was to investigate and describe the influence of marketing communication on consumers' knowledge of sustainable issues and how it is reflected in their purchasing and consumption behadviour of fresh produce, which contributes to environmental issues such as cliamte change. The study was empirical in nature as it addressed a world one problem (Babbie & Mouton, 2001:27; Moody, 2002). Empirical research involves the use of data that was gathered based on real experiences or observations, and is usually used in research and science to prove a theory or to conclude a study (Moody, 2002). An explanatory sequential mixed method approach was followed for the study. Empirical research usually dictates the use of exploratory research as little information is available concerning the situation or occurrence (Fouché & De Vos, 2005:106). Exploratory research empowers researchers to gain an adequate understanding of the occurrence in order to address the problem at hand, to address the selected occurrence as it aims to observe the occurrence or situation and then to explain what was observed. This study subsequently aimed to understand consumers' current fresh produce purchase and consumption behaviour, and to further explore consumers' knowledge of climate change and other environmental concerns. The use of descriptive research permitted the researcher to firstly describe consumers' knowledge of climate change, their current fresh produce purchase and consumption behaviour and the overall influence of marketing communication on both their knowledge and behaviour.



An explanatory sequential mixed method design was used, meaning that firstly quantitative data was collected, and then followed by the collection of qualitative data. This research design is usually used to support the findings of the quantitative data with the qualitative data analysis. For this specific study the qualitative data was more significant and conclusive than the quantitative data. The data was collected in close relation to each other. Gathered data was then analysed separately (Fischler, 2012; Welman et al., 2005:213) and the quantitative data was presented first, in order to sketch the background of the study and its objectives, followed by the qualitative data which is presented in text format, providing insight and a deeper understanding regarding the problem at hand.

The data collection was divided into two phases as part of the mixed method design.

Phase 1: The quantitative phase involved a questionnaire with specific research objectives, namely:

- 1.1 To investigate and describe consumers' use of marketing communication as an information source about climate change.
- 1.2 To investigate and describe consumers' consumption of fresh produce in terms of unnecessary wasteful consumption that might enhance climate change.
- 1.3 To explore the potential influence of consumers' status consciousness in terms of sustainable fresh produce consumption practices.

Phase 2: The qualitative phase involved focus group discussions that aimed:

- 2.1 To explore and explain the role of marketing communication as an information source used to encourage sustainable consumer behaviour.
- 2.2 To explore and explain consumers' knowledge as indicated by consumers' awareness and consciousness of sustainable fresh produce consumption practices.
- 2.3 To explore, describe and explain the influence of marketing communication in terms of consumers' status consciousness during fresh produce purchases.
- 2.4 To explore the potential of green marketing in terms of the mitigation of unsustainable fresh produce consumption practices.

The methodology employed is presented in terms of the two phases.



4.2 PHASE 1

4.2.1 Methodology

A structured consumer questionnaire was used to gather quantifiable data. Because this study was part of a larger investigation it entailed using relevant sections in the comprehensive questionnaire that would form the basis for this particular study. Selected sections were specifically chosen because it shed some light on consumers' usage of popular media or marketing sources; investigated current fresh produce purchasing and consumption behaviour; measured respondents' knowledge about climate change, and investigated their status consciousness concerning fresh produce purchasing and consumption. The questionnaire consisted of closed, structured questions, and was available in English. The language was simplified to facilitate respondents' understanding of the questions and scales. The questionnaire made use of both established as well as self-designed scales.

Pilot-testing of the questionnaire

The questionnaire was pilot-tested on 50 respondents. This testing was done to ensure the comprehensibility of the questions as well as to determine adequate time needed for the completion of the questionnaire. Respondents for the pilot-test were selected based on the same criteria that were ultimately used for the study's respondent selection.

The questionnaire took approximately 20 minutes to complete, which was a problem for some of the respondents. This resulted in a dropout rate of 28.6%.

Although the initial measuring instrument as implemented in the larger investigation included 7 sections that investigated consumers' knowledge and consumption patterns much more intensely, this study only required pertinent results drawn from sections 1, 2, 3 and 4. The following section will only elaborate on the relevant questions and scales that were selected to be part of this study (see Addendum A for the full questionnaire).

Section 1, captured consumers' demographic information.



Section 2, scales drawn from section 2 included questions relating to possible drivers of consumers' general consumer behaviour as well as a scale measuring consumers' status consumption in terms of purchasing fresh produce, which was adapted from Kilsheimers' Status Consumption Scale (1993) and Richins and Dawson's materialism scale (1992). This section drew data for objective 1.3.

Self-designed questions measuring consumers' general consumption behaviour were taken from **Section 3**. This section drew data for objective 1.2.

Section 4 included questions measuring consumers' knowledge of climate change. The scale used to measure consumers' knowledge of climate change was compiled from a selection of scale items drawn from Antil and Bennet's Social Responsible Consumer Behaviour Scale (1979), Stones, Barnes and Montgomery's Eco Scale (1995) as well as Dos Santos (2011). Six additional scale items were self-designed. This section drew data for objective 1.1.

4.2.1.1 The sample

The sample that was targeted included respondents that were 21 to 65 years of age, in middle to upper income households living within the greater Tshwane metropolitan. This was mainly done to include those individuals who not only had ample exposure to various marketing efforts and communication in media but who also had the potential to adapt their fresh produce buying and consumption practices. Respondents were either in charge of their own households, or at least exert a notable influence on their households' fresh produce purchasing and consumption decisions. This age group also increased the probability of selecting consumers who are financially independent and who have access to both written as well as other types of marketing communication in media (SAARF AMPS, 2012). Both male and female respondents were targeted. According to the 2010-2011 statistics obtained from the Department of Economic Development for the City of Tshwane, males and females equally contribute to the economy of the metropolitan region (Stats SA, 2012). No preconditions were set regarding respondents' race or ethnicity as the study had no intention to focus on differences among population groups.



4.2.1.2 Sampling method

Although respondents were targeted purposively across all geographic areas in Tshwane, respondents within each area were recruited by means of a purposive sampling technique. This method was implemented due to financial constraints. To ensure reliability, the following strategies were employed in order to decrease the possibility of bias (McDaniel & Gates, 2005):

- 1. Students from the Department of Consumer Science were used as field workers because they possessed the necessary background information regarding consumer behaviour as well as consumer research methods. The students were properly trained by the researcher to assist with the data collection. These fieldworkers were then allocated specific suburbs in Tshwane to minimise the risk of over-presenting certain suburbs versus other suburbs, to collect data.
- 2. Fieldworkers were well-briefed regarding the objectives set for the study and training also included instructions pertaining to the administration of the questionnaires as well as how to answer resulting queries and questions thoroughly and correctly.
- 3. Effort was made to recruit male respondents in an attempt to have an equal gender representation in the sample as is the case with the population of Tshwane (Stats SA, 2012). Data coding during the data collection process allowed the researcher to identify subsets of the sample that were under presented so that fieldworkers could be encouraged to recruit more of those respondents for the study.
- 4. A pre-condition for participation was age (21 to 65 years) and personal buying experience of a household's food purchases, specifically fresh produce, to minimise the risk of misrepresentation as a result of a lack of knowledge of the topic of investigation. The questionnaire included a screening question were respondents had to indicate whether they were the primary buyers of their household's groceries.



4.2.1.3 Sample size

Initially it was proposed to collect data from at least 500 respondents. Most studies make use of a sample size of 200 to 500 respondents, based on budget and time constraints (McDaniel & Gates, 2005). The distribution of the questionnaires took place between March and May of 2012. A total of 700 questionnaires were distributed, of which 560 were returned for final analysis. 35 trained field workers who were all students enrolled in a Consumer Science degree programme were instructed to employ a drop-down-collect-later procedure. All questionnaires had to be collected within 1 week. Respondents who failed to complete the questionnaire in time received one reminder after which no further pressure exerted.

4.2.2 DATA ANALYSIS

The structured questionnaire produced quantifiable data, which was captured with the help of the Department of Statistics, University of Pretoria. All questionnaires were checked to ensure that they were filled out correctly and in full, where after they were coded by the researchers. Coding is done to simplify the statistical analysis and ultimate graphic representation of data (McDaniels & Gates, 2004:321). Data analysis was done with the assistance of a qualified statistician and under supervision of the study leaders, using suitable statistical techniques that allowed an exploration and description of selected variables as well as their effects, relationships and patterns of involvement as per the objectives for the study (Welman et al., 2005:211). Data was firstly analysed and presented in terms of descriptive statistics in order to calculate means and modes used to explain the correlation between concepts (Babbie & Mouton, 2001:421). Analyses of variance (ANOVA), t-tests as well as applicable post hoc tests allowed an exploration and description of selected variables as well as their effects, relationships and patterns of involvement as per the objectives for the study (Wellman, Kruger & Mitchell, 2005).

Section 1: Descriptive analysis (means, frequencies, ratios, and percentages) was used to analyse the demographic information.

Section 2: The respondents had to indicate their level of agreement to each question based on a 4-point Likert-type Agreement scale ranging from Strongly disagree to Strongly agree. The section was divided into two parts for the statistical analysis. The first part of the section was



analysed by means of descriptive statistics and the last part analysed in terms of ANOVAs and relevant post-hoc tests.

Section 3: A 4-point Likert-type scale was used and all items were analysed in terms of ANOVAs and relevant post-hoc tests.

Section 4: Respondents had to indicate their level of agreement based on a 3-point scale with 1 - true, 2 - false and 3 - uncertain. The data from this section was analysed by summing up the correct answers. The higher the scores, the better consumers' knowledge of climate change.

4.2.3 QUALITY OF THE DATA

To minimise error during data collection (Phase 1: the structured consumer questionnaire), informed and trained field workers were employed to distribute the questionnaires. Furthermore, a cover letter explaining the aim of the study, the researcher's affiliation, and a guarantee of anonymity and confidentiality of the respondents accompanied each questionnaire. Although the questionnaire was lengthy, the questions were structured in such a way that they were easy to understand, interpret, and complete. Respondents were also warned about the time required to complete the questionnaire. Throughout the questionnaire, Cronbach Alphas were calculated to detect problematic responses before conclusions were drawn.

To further ensure the quality of the data obtained from phase 1, the following measures were taken:

Conceptualisation: theoretical validity

Scientific knowledge is built on a strong foundation of concepts (Mouton & Marais:181). If the concepts are not thoroughly planned and conceptualised, the research will fail, no matter how cautiously it is done (Mackenzie, 2003; Welman et al., 2005:172). Conceptualisation implies the clarification and analysis of the study's main concepts and also designates the relationship between concepts (Mouton & Marais, 1996:109).



In order to ensure theoretical validity, a well-planned literature study was done in order to identify the possible key concepts. To ensure that the tested concepts are not vague or too complex, the structured questionnaire was pre-tested.

Measurement validity

Validity is considered crucial, since it indicates the extent to which the research findings accurately represent the true scenario (Holliday, 2007; Babbie & Mouton, 2001). During the research's different stages, different dimensions of validity apply (Holliday, 2007; Welman et al., 2005:172; Babbie & Mouton, 2001:279). Several measures as discussed in the following section were taken into account in order to decrease error in the research.

1. Content validity

Content validity involves the logical evaluation of the identified content with the aim of determining whether the content represents all possible measurements in order to quantify a representative sample of the total population being investigated (Mackenzie, 2003; Anastasi & Urbina, 1997:114). It is classified as a non-statistical type of validity and is mostly concerned with the sampling suitability of the measuring instrument, i.e. the questionnaire. The measuring instrument should be representative of all the relevant concepts within the theory, and should not omit items or concepts (Welman et al., 2005:170; Mackenzie, 2003; Babbie & Mouton, 2001:278). To guarantee representation in the structured questionnaire, all key concepts and their noteworthy dimensions and indicators were identified, based on literature, and evaluated by experts in the field to ensure that tested items assess the indicated content. To ensure validity, Cronbach Alpha Coefficients were calculated.

2. Face validity

Face validity refers to the extent that a test is successful in measuring a specific denoted construct, e.g. whether the Richins and Dawson (1992) materialism scale successfully measure materialism. A test with low face validity does not seem to measure the construct it claims to be measuring (Mackenzie, 2003). Occasionally low face validity can actually serve to validate a test, i.e. when respondents have figured out the actual goal of the test and then give fake answers because they are shamed to answer truthfully (Welman et al., 2005:172).



3. Criterion validity

This refers to comparing the test scores of the current study or an extract from the questionnaire, with other measures or results which have already been confirmed to be valid (Welman et al., 2005:172). Existing data from previous studies or data collected during the same time period can be used to measure the study's data against (Dimitrov & Rumrill, 2003). This is referred to as concurrent validity evidence (Sackett, Lievens, & Landers, 2007; Babbie & Mouton, 2001:277). For this study, prompts relating to consumers' purchasing behaviour similar to questions asked in the structured questionnaire were used during the focus group discussion. The answers were then later comparatively interpreted in order to gain insight into consumers' purchasing behaviour and to detect problems (if any).

Data analysis: inferential validity

Inferential validity refers to whether or not logical inferences drawn during the completion of a research project is indeed valid (Mackenzie, 2003; Moshman & Franks, 1986). During the data analysis stage, a professional statistician assisted the researcher in order to ensure that the analysis of the data was done correctly. This ensures that the results obtained are valid. It is of great importance to emphasise that the primary goal of this study was to explore and describe the concepts and objectives as identified in the previous chapters, and never to generalise the findings to the whole population of South Africa.

Reliability

Reliability refers to the credibility of the research findings which refer to the precision of the test and the degree to which the measured variables are free from measurement errors (Westen & Rosenthal, 2003). Furthermore, it also implies that if the research test is repeated the same outcomes will be achieved (Welman et al. 2005:172; Mouton & Marais, 1996). The reliability of the research findings was enhanced through the use of a combination of two different data collection methods, a qualitative and a quantitative approach.



Sampling representativeness

Sampling representativeness implies that the sample should be a miniature copy of the population from which it is drawn (Westen & Rosenthal, 2003; Mouton & Marais:136). This is an explorative study and therefore the findings are not generalisable. To minimise error due to conveniently recruited respondents, a minimum of 500 respondents were used as a larger sample decreases the possibility of a sampling error (Babbie & Mouton, 2002:191). In addition, effort was made to recruit respondents and participants who were willing and able as it is believed that these consumers will provide truthful answers and responses. Effort was also made to recruit experienced consumers of different gender and age groups.

4.3 PHASE 2 (QUALITATIVE DATA COLLECTION)

4.3.1 Methodology

Focus group discussions are group interviews that are used to establish what participants' thoughts are about a specific issue (Greeff, 2005:299, Welman et al., 2005:201). A focus group is a powerful tool to investigate consumers' behaviour, as the technique allows the opportunity to observe participants' interaction on a topic in a very limited time (Welman et al., 2005:211; Babbie & Mouton, 2001:292) while it serves as a subtle way of getting acquainted with the participants and their backgrounds. It also allows the researcher to build trust, which increases the quality of the data. This technique is especially useful when an indepth understanding of the practices and behaviours of consumers are required.

Focus group discussions were conducted because this method of data collection allowed insight into the participants' exposure to marketing media; their commitment to sustainable consumption; and in-depth information in terms of their concern about environmental issues and the contribution or relevance of their current lifestyle and consumption to climate change. Focus group discussions thus provided the researcher with understanding regarding consumers' actual behaviour concerning their fresh produce consumption, status consciousness and exposure and attention to marketing communication as well as their willingness to change. The aim of this data collection technique was to gather explanatory information that was not necessarily gathered by means of the structured questionnaire. The focus group discussions supplied primary data and was the main data collection method



employed for this study, providing a broad range of data (Greeff, 2005:299; Welman et al., 2005:201) and supporting the findings obtained during phase 1.

Two focus group discussions were held in March 2013. However, note that the first focus group discussion (A) was divided into two sessions in order to accommodate all of the objectives and subsequent participant responses; (the objectives of Phase 2 were divided into two sets, with the first objectives discussed in the first group session and the second objectives discussed in the second session). The first objectives that were explored were Obj. 2.1 and 2.3, focussing on the consumption behaviour and practices of the participants concerning fresh produce including the demand of fresh produce from retailers, waste behaviour of participants concerning fresh produce, the knowledge of participants' concerning the marketing of fresh produce, and fresh produce's use as a status symbol. Their current fresh produce purchasing and consumption behaviour was discussed in terms of how sustainable it is. In the second session participants' knowledge of climate change was explored, as well as their willingness and inclination to change their behaviour to be more sustainable (Obj. 2.2 and 2.4). The second focus group discussion was held in only one session because the participants' answers naturally lead to the inclusion of discussions concerning climate change, sustainability and adapting more sustainable behaviours. Subsequent focus groups were not held because findings collected in the last focus group discussion indicated that data saturation had occurred. The discussion sessions were held at the University of Pretoria's main campus, in the Old Agricultural Sciences building. This represented a neutral environment ideal for the discussions (Welman et al., 2005:201), as it is informal while providing some structure to the group discussion. Willing participants gathered at the venue per appointment. The group was seated in such a way that proper eye contact could be made and that all of the participants could take part in the discussion (Refsgaard & Magnussen, 2009; O'Neill & Hulme, 2009; De Wulf & Odekerken-Schroder, 2003). The group members were introduced to each other and after a brief warming-up session the facilitator informed the group that the study was about marketing communication's influence on consumers' purchasing of fresh produce. The participants were encouraged to share their opinions and then discuss it amongst themselves, without interference from the facilitator (researcher). This reduces possible research bias. In the first session, no mention was made about climate change, as this topic was only raised in the following session. Questions and prompts used were introduced in a consecutive manner with the aim to build information from general to



topic specific. Questions were all open ended in order to encourage participants to discuss personal experiences (Garrison, Pierce, Monroe, Sasser, Shaffer & Blalock, 1999:430). During this session the group also discussed their general purchasing and consumption of fresh produce. Session two attempted to ascertain their level of knowledge of climate change. All the sessions were audio recorded with the use of a recorder, and detailed notes were also made by the researcher as well as an assistant. Data saturation was achieved during the second session of the first focus group discussion. No new answers or concepts emerged from the participants (Mason, 2010

The key concepts, as identified during conceptualisation and Phase 1 (Questionnaire) were introduced in order for participants to elaborate and provide their opinions on. These concepts were broached by way of open ended questions, and participants were allowed to answer and elaborate. The main probes were:

Consumers' purchasing and consumption behaviour of fresh produce

Households' waste practices

Purchasing demand stimuli

Consumers' status consciousness

Knowledge concerning sustainable practices

Green/sustainable marketing

Knowledge concerning climate change

Refer to Addendum B for a complete list of the questions used.

During the focus group discussion (as part of session 2), a projective technique was implemented to investigate participants' environmental knowledge concerning green marketing. A projective technique can be defined as an unstructured and indirect form of questioning that encourages participants to project their underlying feelings concerning an issue or question. Thus, because of the nature of projective techniques, participants could reveal true opinions more overtly whereas they otherwise might have been hesitant (Babbie & Mouton, 2001:238; Donoghue, 2000). The aim of the projective technique was to explore participants' environmental knowledge as well as exploring the possibility of using green marketing to mitigate unsustainable behaviour. The exercise involved the participants having to draw an advertisement with the specific goal to educate consumers on how to be



sustainable in terms of fresh produce purchase and consumption. After completion, each participant explained their drawings as well as their fears that stemmed from their knowledge after the discussion of their drawings. The drawings were used to shed light on how marketers should formulate their marketing messages in order to influence consumers. The drawings can be seen in Addendum D.

Before concluding all of the sessions, participants were asked if they had any final thoughts on the topic. Refreshments were available and each participant received a small gift as a token of appreciation for dedicating their time. The detailed transcribed focus group discussions are presented in Addendum B.

4.3.1.1 The sample

In order to achieve a true understanding of the influence of marketing on consumers' knowledge about climate change, their fresh produce purchases and consumption and their commitment to sustainable consumption, participants for the focus group discussion were selected from the sample pool already identified in Phase 1 (during phase 1 respondents were encouraged to provide their contact number should they be willing to participate in a further investigation of the topic in the form of a focus group discussion. This ensured that all participants met the requirements as set for age and purchasing responsibility. The focus groups consisted of homogenous groups (in terms of socio-economic characteristics) of individuals who were not acquainted with one another, who could discuss the chosen topic without tension, in order to document their opinions and ideas accurately.

4.3.1.2 Sampling method

Purposive sampling was used to identify specific individuals from the sample pool used in phase 1 to participate in the focus group discussions. The questionnaire respondents were asked to provide their cell phone numbers should they want to participate in the lucky draw, as explained on the cover letter accompanying the questionnaire. A randomly selected group of the respondents who provided their cell phone numbers were then contacted and asked if they would like to participate in the focus group discussions. The anonymity of respondents from phase 1 was ensured while providing an ample sample pool for phase 2. These individuals were chosen based on their gender and age, and were then split into two



geographical groups – Pretoria East and Pretoria North in order to ensure homogenous groups in terms of socio economic background (socialisation) and marketing exposure. The reason for this division was mainly to eliminate the possibility that participants might feel intimidated when they formed part of a group they could not associate with. Homogenous groups make it easier for the facilitator to create a comfortable atmosphere in which participants can talk freely (Welman et al., 2005:202).

4.3.1.3 Sample size of focus groups

Sixteen participants were invited telephonically by the researcher to participate. Focus group discussion A comprised of nine participants of which 3 were male and 6 female. Most the participants were from the Eastern suburbs of Pretoria. In terms of age, four were 20 to 30 years of age, three participants between the ages of 30 and 50 and two participants were over 50 years of age. Focus group discussion B's eight participants were mostly from the Northern suburbs of Pretoria, and there were 3 males and 5 females. Two of the participants were 20 to 30 years old; four were 30 to 50 years of age and two over the age of 50. There was no differentiation made with regard to income or ethnicity. The age groups represented the main age groups as identified in the quantitative data.

4.3.2 DATA ANALYSIS

The focus group discussions' transcripts were analysed with the use of content analysis. The transcripts were read through and notes on interesting, relevant or conflicting information were made. The objectives as set out for phase 2 were used to conceptualise the main categories and keywords. This was done by means of deductive category generation which is the process of identifying concepts, and then providing explicit definitions, examples and coding rules for each deductive category that determines under what circumstances a verbatim can be coded with a category (Berg & Lune, 2011:238; Mayring, 2000).



Table 4.1: Deductive category generation

Concept:	definition:	example:	coding rules:
Purchasing behaviour of fresh produce	The act of acquiring fruit and vegetables with the use of money*	"I buy fruits and vegetables from xxx, xxx, xxx, and xxx" (A6) "I buy once a week" (A1)	Must answer the basic questions of when do you buy, where do you buy, what do you buy, how often do you buy, how much do you buy, what do you buy (in which format).
Consumption of fresh produce	The act of ingesting or utilising fruit and vegetables*	"[he loves to eat bananas and grapes after his dinner]" (B11)	Must provide information regarding the utilisation of the fresh produce, i.e. do you eat the produce or does it go to waste.
Household waste practices	The way in which the household gets rid of unwanted or unusable fresh produce*	"We waste almost 30% of fresh produce because we buy in bulk" (B12) "it ends up in the rubbish bin" (B12)	Verbatim concerning why do consumers waste, what do they do with the waste, what do they waste, how do they purchase fresh produce to try and curb this waste.
Purchasing demand stimuli	The factors or incentives that encourages consumers to purchase a product*	"I buy according to a recipe" (A3) "In the queue they make you stand next to things that you keep on looking at and then they end up in your trolley" (A4)	Must answer the question why do you buy? Examples of purchasing demand stimuli includes point of sale merchandise, specials, basket deals (buy product A and get product B for free) and seasonal advertising.
Consumers' status consciousness	How aware consumers are of their material rank and their conviction that possessions can increase this rank*	"[big bowl of fruit means] they are rich" (A1)	Verbatim that discusses how certain material things can make a person appear to be rich, or to have money, i.e. having certain products displayed in your house. Also concerns specific buying behaviour – how consumers buy from certain retailers in the hope of seeming rich.
Knowledge of sustainable practices	Extent to which the consumer knows about practices that will ensure the protection and continuation of earth's natural resources*	"I drive a car [which contributes to climate change]" (A9) "buy less, buy what you are going to use, not more that you have less wastage" (A4)	Any verbatim concerning consumers' knowledge of how to buy, where to buy and how much to buy in order to save the resources of the planet.
Green marketing	Business Dictionary 2014 "Marketing products and services based on environmental factors or awareness relating to the entire process of the company's products, such as methods of processing, packaging and distribution".	"xxx have this huge 'farming sustainably for the future' campaign" (A18)	Consumers' discussions concerning retailers' advertising of more responsible marketing channels and communication, i.e. lowering food miles to lower your carbon footprint.
Knowledge of climate change	Relates to how much a consumer knows concerning the changing environment as a result of human intervention*	"I think we contribute [to climate change]" (A8) "most people are naïve about climate change" (B12) "I don't know anything about climate change"	Consumers' level of acquired information regarding the changes that are happening in the environment, such as causes of these changes, possible solutions, mitigating factors and examples of changes.



		(B16)	
Marketing	Business Dictionary 2014	"a good marketer sells" (B13)	Any media that encourages the purchasing of products, either print, verbal or
communication	"Coordinated promotional	"advertisements should make use of	visual.
	messages delivered through one or	emotions to sell" (A9)	
	more channels such as print, radio,		
	television, direct mail, and personal		
	selling".		

^{*}definitions supplied by the researcher



While transcribing, the researcher had to be extra careful to maintain the integrity of the discussions, i.e. not change any of the wording, language use, or grammar, as well as add as much context as possible. In the electronic format, the data was coded using different colours to distinguish between the different concepts that were identified in the literature study and which are listed above. The coded responses were then grouped according to the most relevant objective (Berg & Lune, 2011:238; Mayring, 2000). For complete transcripts of the focus group discussions, please see Addendum C.

In Chapter 5 (Results and discussion) selected extracts are presented to explain, motivate and substantiate the concepts and objectives. Participants were quoted verbatim in order to allow the reader to identify with the participants, enabling the reader to "hear" the respondent's voice. A unique identifier was given to each participant in order to denote the particular session (Moon & Cocklin, 2011).

Data obtained from the focus group discussions as well as the projective technique were analysed conjunctively.

The operationalization of the data of both phases is presented in Table 4.2.



Table 4.2: Operationalisation

OBJ.		Measuring instruments	Data analysis
Phase 1: Obj. 1.1	To investigate and describe consumers' utilisation of marketing communication in popular media as an information source about climate change.	Section 1 of questionnaire as well as 17 True or false questions were used to measure consumers' utilisation of marketing communication as an information source concerning climate change as well as their current knowledge pertaining to climate change. The scale items used were drawn from existing and tested scales (Antil & Bennet, 1979 [2 items], Stone, Barnes & Montgomery, 1995 [8 items] & Dos Santos, 2011 [1 item]) and the remaining six scale items were self-designed.	Descriptive statistics captured consumers' demographic information as well as which information sources are predominantly used. In order to determine the respondents' knowledge of climate change all of the correctly and complete answered questions were summed. Each respondent's final score was then given in terms of a percentage value. ANOVA, t-tests and other relevant post-hoc tests were done to determine the knowledge of various demographic groups.
Phase 1: Obj. 1.2	To investigate and describe consumers' consumption of fresh produce in terms of unnecessary wasteful consumption that might enhance climate change.	Self-designed questions were used to measure consumers' general consumption behaviour as well as possible drivers of consumers' current consumption behaviour.	A 4-point Likert-type scale of which 1 indicated Strongly disagree and 4 indicated Strongly agree, was used. T-tests and ANOVAs and the relevant post-hoc tests were used to determine significant differences.
Phase 1: Obj. 1.3	To explore the potential influence of consumers' status consciousness in terms of sustainable fresh produce consumption practices.	Questions 18.11 to 18.21 examined consumers' status consumption as well as materialistic tendencies concerning fresh produce. These questions were adapted from established scales by Kilsheimer's Status consumption scale (1993) and Richins and Dawson's Materialism scale (1992).	Responses were scored on a 4-point Likert-type scale. Descriptive statistics were used. Cronbach Alphas were calculated. T-tests and ANOVAs were used to determine significant differences among demographic groups.
Phase 2: Obj. 2.1	To explore and describe the relevance of marketing communication in popular media as an information source used to encourage sustainable consumer behaviour.	Focus group discussion	Content analysis Presentation of the findings in terms of a narrative that indicates prominent thoughts, ideas Identified concepts:
Phase 2: Obj. 2.2	To explore and describe consumers' knowledge as indicated by consumers' awareness and consciousness of sustainable fresh produce consumption practices.	Focus group discussion	Consumers' purchasing and consumption behaviour of fresh produce Households' waste practices Purchasing demand stimuli
Phase 2: Obj. 2.3	To investigate and describe the influence of marketing communication in terms of consumers' status consciousness during fresh produce purchases.	Focus group discussion	Consumers' status consciousness knowledge concerning sustainable practices Green/sustainable marketing Knowledge concerning environmental issues and climate
Phase 2: Obj. 2.4	To investigate the potential of green marketing in terms of the mitigation of unsustainable fresh produce consumption practices.	Projective technique	change



4.3.3 QUALITY OF THE DATA

Focus group discussions were planned in such a way that it suited all involved in terms of date, time, and place. These discussions took place in a neutral environment to encourage open and honest communication between participants. Each group consisted of at least eight participants, a number small enough to ensure time and space for each individual to participate, but big enough to minimise the possible perception of "victimisation" (Greenbaum, 2000). Care was taken to make certain that groups were homogenous in terms of socio-economic characteristics. This was done to ensure participants could relate to each other, thus enabling easy conversation (Refsgaard & Magnussen, 2009; O'Neill & Hulme, 2009; De Wulf & Odekerken-Schroder, 2003). All focus group discussions were audio recorded and detailed notes made by the researcher. These were transcribed for analysis. A projective technique was incorporated into the last discussion, during which participants' knowledge of climate change was measured. The technique was used to encourage open and honest communication from participants (Donoghue, 2000). Both the discussions and the projective technique was analysed and interpreted with the use of content analysis.

Qualitative data obtained for phase 2 of the research project had to be **credible**, **transferable**, **dependable**, and **conforming**. The following measures were taken to ensure the quality of the data:

Credibility

Credibility denotes whether the data is truthful. To ensure credibility, findings must be based on the study's context and participants as opposed to the researcher's biased ideas and theories (Welman et al. 2005:142). A study's credibility can be ensured by making use of various methods, such as data saturation, triangulation, recordings and accurate note taking and documentation of the whole process (Babbie & Mouton, 2001:277). In this study, credibility was ensured by triangulation through the use of three data collection methods, namely a structured consumer questionnaire, focus group discussion and a projective technique of which the latter were held to ensure data saturation. This assisted in minimising social response bias.



Transferability

Transferability refers to whether or not the findings can be transferred and applied in other contexts. Research transferability is achieved by giving a detailed and thorough description of the data and making use of purposive sampling, as was used in this study (Babbie & Mouton, 2001:277). A further method of achieving transferability includes using the conceptual framework and the literature as a guide (Mertens, 2014:417).

Dependability

Dependability denotes the degree to which the study's current results will be repeated should the study be repeated with similar participants in a similar environment and with a similar procedure (Babbie & Mouton, 2001:278), i.e. the researcher must know if the same data would be found in other contexts and if the findings would be repeatable should the study be replicated. This study made use of various data collection methods to create triangulation, which refers to the process of validating data by making use of different methods to gather the data. The subsequent data analysis was done based on the concepts that were developed from the literature and the objectives of the study (Welman et al., 2005:142).

Conformability

Conformability is achieved if the study is developed based on inquiry and not on the researcher's beliefs. This was done by keeping detailed records, making notes, and recording and transcribing the focus group discussions. These records were then used for data analysis. The conceptual framework and literature must also continually guide the process (Babbie & Mouton, 2001:278).



4.5 ETHICS

Ethics are important in the field of research, just as it is important in any other field that involves human activity. The principles underscoring research and its ethics are universal and include topics such as honesty, respect, and consideration for the rights of all individuals (Welman et al. 2005:201).

Ethics were of concern during each stage of the research process, e.g. when sampling was done, i.e. when participants were selected; during the data gathering phase by means of a questionnaire and focus group; when the results were released to the public and scientific community.

The University of Pretoria has a formal code of conduct regarding social research that must be complied with. The general ethical principles are, firstly, no harm should come to the research participants, and secondly, participants should take part out of their own free will based on informed consent (Welman et al., 2005:201). The structured consumer questionnaire was approved by the ethics committee of the Faculty of Natural and Agricultural Sciences of the University of Pretoria. Nobody was forced to complete questionnaires. Respondents' anonymity was guaranteed and their privacy respected. They were also allowed to withdraw when they wanted to do so. Potential participants in the focus group discussions were informed of the purpose of the study and participated out of free will. Information gained from the participants for the study will remain confidential. A third party evaluated and approved all proposed research prior to action.

In terms of plagiarism, other researchers or writers' data or ideas have not been used without complete referencing. The use of a statistician and relevant applicable statistical programs guard against the falsification of results or the misleading reporting of said results.



4.6 SUMMARY

This chapter outlines the research design and methodology that was followed to complete the study. This study's principle aim was to investigate the influence of marketing communication, specifically information conveyed in popular media, on South African consumers' fresh produce consumption practices and how it relates to climate change. The study was empirical in nature and an exploratory and descriptive approach was followed. The study consisted of a mixed method design involving the integration of qualitative and quantitative data collection and analysis procedures. It consisted of two phases, Phase 1 (Quantitative) which involved a structured questionnaire; and Phase 2 (Qualitative) which involved focus group discussions but which also included completion of a projective technique. The questionnaire consisted of closed, structured questions, and was available in English. The sample that was targeted included respondents that were 21 to 65 years of age, in middle to upper income households living within the greater Tshwane metropolitan. Although respondents were targeted purposively across all geographic areas in Tshwane, respondents within each area were recruited by means of a purposive sampling technique. Focus group participants were drawn from the sample pool from phase 1. In the operationalization table the measuring instruments used to measure each objective as well as the data analysis used to interpret the data is presented. For phase 1 (Quantitative data collection) data was firstly analysed and presented in terms of descriptive statistics in order to calculate means and modes used to explain the correlation between concepts (Babbie & Mouton, 2001:421). Analyses of variance (ANOVA), t-tests as well as applicable post hoc tests allowed an exploration and description of selected variables as well as their effects, relationships and patterns of involvement as per the objectives for the study. Phase 2's (Qualitative data collection) data was analysed by the researcher by means of content analysis. To further ensure the quality of the data obtained from phase 1 and 2, preventative measures were taken.





CHAPTER 5

RESULTS AND DISCUSSION

This chapter presents the results as well as a discussion of the results in terms of the objectives for the study.

5.1 INTRODUCTION

This chapter commences with an overview of the demographic profile of the sample. This is followed by a discussion of the results pertaining to Phase 1, the quantitative phase. Results will present insight on the possible marketing sources consulted by consumers about environmental information, consumers' knowledge of climate change, consumers' current fresh produce consumption and the possible influence that status consciousness has on the fresh produce consumption patterns of different demographical segments of the population. The chapter concludes with the findings of Phase 2, the qualitative phase, which was meant to be the prominent phase of this study and which addressed marketing communication's impact on sustainable consumer behaviour, consumers' knowledge of sustainable consumption, consumers' status consciousness, and the possibility of marketing communication modifying unsustainable consumption practices. Although the quantitative data was envisaged to only support the qualitative findings, the quantitative results provided detailed information and descriptions which substantiated the findings of Phase 2.

Although the results of the two phases are presented separately, where applicable, results from the focus group discussion are included to support or confirm the quantitative results as is required in a mixed method approach (Mouton & Marais:156).



5.2 DEMOGRAPHICS

The structured questionnaire requested respondents' gender, age, income, and education level. This enabled the division of the sample into subsets for the interpretation of the findings.

5.1.1 Gender distribution of sample

Even though it was attempted to recruit equal numbers of male and female respondents, the majority of the sample (N = 560) was female (75.36%; n = 422; male: 23.93%; n = 134). It can be assumed that because the study targeted consumers who are the households' main decision makers regarding grocery shopping, and because this role is traditionally still occupied mostly by women (Jin & Suh, 2005; Wyma, 2011), the majority of the sample was female. This assumption was confirmed in question 13.1, where 76.78% of the respondents (n = 430) stated that in their household they were the primary food and grocery purchasers. In a recent study done in the United States of America, which focussed specifically on consumers' fresh produce purchasing and consumption behaviour, it was found that females, better educated and older consumers are still the main purchasers in most households (Forste & Fox, 2012).

Because women are viewed as significant agents of change, often being the primary socialisation agent in their homes, especially in single parent households, a larger representation of females was actually positive (Haigh & Vallely, 2010) as women have the potential to motivate change from grassroots level. Women are theoretically able to reduce environmental degradation and the prevalence of climate change (Figueiredo & Perkins, 2013) through the socialisation of their households in terms of the principles of sustainability. It is therefore proposed that marketing communication aimed at improving consumers' knowledge of climate change and sustainability issues might therefore be more successful if it focuses on females. The challenge however is that globally; women are still being undervalued and ignored as positive drivers for change (Matthew, Barnett, McDonald & O'Brien, 2010).



5.1.2 Age distribution of the sample

A minimum age prerequisite for participation was 21 years. Respondents were asked in an open-ended question to reveal their exact age, which was then summarised into three age categories to simplify the statistical analysis. Table 5.1 presents the sample's age distribution.

Table 5.1: Age distribution of the sample (N = 560)

Age group	n	%
20 - <30 years	229	40.89
30 - ≤50 years	219	39.11
50+ years	104	18.57
Missing	8	1.43

Younger respondents (≤50 years) made up the largest group in the study, which was acceptable for this study as older consumers are inclined to be more conservative, with traditional values that prove challenging to overcome in order to change their behaviour (IMB, 2012). Research has found that younger consumers are in general less sceptical about environmental issues (Poortinga et al., 2011; Diamantopoulos, Schlegelmilch, Sinkovics & Bohlen, 2003), often exhibiting higher levels of environmental knowledge compared to older consumers (Arey, 2010; Diamantopoulos et al., 2003).

5.1.3 Marital status and average household size

The findings, as presented in Figure 5.1, disclose that the average household size was 3 to 4 members (n= 213; 38.04%), reflecting the principal household structure (i.e. 75%) of the Tshwane area, namely a nuclear household, consisting of a father, mother and up to two children (City of Tshwane, 2011). Studies have shown that household size has steadily been decreasing in developing and developed nations alike, with this trend especially influencing the socialisation of children in smaller households (Bradbury, Peterson & Liu, 2014). More intimate and closer families tend to influence each other's consumption patterns much



more than families with multiple siblings. In terms of creating sustainable consumption practice knowledge, smaller families are advantageous in the way that they can encourage each other to adopt more sustainable practices (Wire, 2009).

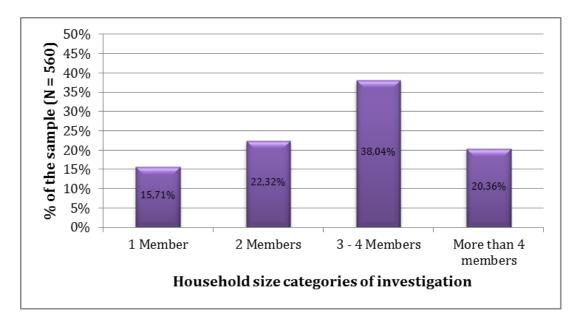


Figure 5.1: Household size (N = 560)

5.1.4 Level of education

Consumers with different education levels were recruited in order to enable a comparison between groups with a notable difference in formal education. Respondents were grouped into three main levels of education categories as indicated in Table 5.2

Table 5.2: Level of education of the sample (N = 560)

Categories of investigation	n	%
Lower than Grade 12	8	1.43
Grade 12	219	39.11
Grade 12 plus a diploma or a degree	330	59.93
Missing	3	0.54

The majority of the respondents possessed a grade 12 qualification plus a degree or diploma (n = 330; 59.93%), and the minority of respondents had an education level lower than grade



12 (n = 8; 1.43%). Higher educated consumers generally have better exposure to information sources and a subsequent increased potential to access information concerning sustainable purchasing and consumption. These consumers should furthermore be more capable to process and understand complex issues such as those governing climate change and other environmental issues. Hypothetically, higher education levels should motivate consumers to take responsibility of their contribution towards environmental degradation and climate change (Poortinga et al., 2011; Tobler et al., 2012).

5.1.5 Home language

South Africa has eleven official languages, and innumerable different dialects, making language one of the most intricate demographic variables as research has found that consumers' home language may have an impact on the consumer's capability to access and process information concerning environmental issues and sustainable practices (Sutton & Tobin, 2011). Findings indicated that the majority of the respondents were Afrikaans (n = 275; 49.11%), followed by respondents who speaks a European language (English, German, French and Greek) (n = 184; 32.85%). The African language group was the smallest, with only 11.43 % (n = 64) of the sample.

To measure the influence of home language on respondents' ability to comprehend information in marketing media respondents were also asked to specify whether they struggle to interpret information that is presented in English. Only seven respondents answered that they always struggle; 12.68% (n = 71) specified that they sometimes struggle, and 83.39% (n = 467) said that they never struggle to interpret and comprehend information given in English. This means that respondents generally did not struggle to comprehend information in the media that is given in English. Unfortunately these statistics might be different in the rest of South Africa: Stats SA (2012) found that merely 41.7% of the total South African population have passed grade 12, and of this segment only 9.6% are capable of understanding and communicating in English. A recent study has found that consumers who are more educated and who have a higher income are more likely to make use of product information given on products' labels when making a purchase decision. Conversely



it also means that poorer, less educated consumers might struggle to interpret the information given by marketers and thus might find it difficult to adopt more sustainable behaviour. In South Africa, the majority of the population has limited financial means and limited education, making this an area of great concern (Equal Education, 2011).

5.1.6 Average monthlyhousehold income

Researchers have found that the consumption of goods and products has direct consequences for the environment in terms of influencing and worsening climate change (Kerkhof, Nonhebel & Moll, 2009). Income data allows an investigation into consumers' purchasing and decision-making behaviour, which enabled further recommendations about how to communicate information appropriately in the media. The respondents' answers with regard to their average monthly household income was grouped into four income categories resembling the categories established by the South African Bureau of Market Research (BMR, 2012). These categories have also been employed by SAARF (2012) in the most recent South African living standard measurements (LSM).

Table 5.3: Monthly income distribution of the sample (N = 560)

Income descriptor according to	% of SA	Monthly household	n	% of
BMR* 2012	population	income categories in this		sample
		study		
Poor - Low emerging middle class	28.6	≤R10 000.00	168	30.00
Emerging middle class	22.4	>R10 000.00 - R25	111	19.82
		000.00		
Realised middle class	17.7	>R25 000.00 - R45	115	20.54
		000.00		
Upper middle class – Emerging	21.2	>R45 000.00	87	15.54
affluent				
Affluent	10.1	-	-	-
		Missing	79	14.11

^{*}BMR: South African Bureau of Market Research

Regrettably 14.11% (n = 79) respondents did not divulge their average household income, most probably because they were asked to disclose the amount in an open question, and doubted the confidentiality of the information although it was explicitly guaranteed in the



cover letter. Table 5.3 demonstrates that the majority of respondents' households fall in the middle to upper income brackets (R10 000 ZAR – R45 000 ZAR), which was considered suitable for this study as financial wealth is directly linked to purchasing power and consumption behaviour (Bolderdijk & Steg, 2014; Ludvigson, 2004). According to the City of Tshwane, the median income of people living in Tshwane is R14 500 ZAR (City of Tshwane, 2011) and the median income for South African households is projected to be R9 169 ZAR (SAARF, 2012; BMR, 2012). Therefore the sample provided the researcher with the opportunity to investigate the knowledge and behaviour of consumers who hypothetically can afford to consume conspicuously and who could theoretically change their consumption behaviour to reflect more sustainable practices. Zimmer et al. (1994) found a positive correlation between income and environmental sensitivity. The most supported reason for this is that individuals with higher income levels can bear the marginal increase in costs that are associated with buying sustainable products and produce.

5.1.7 Population representation of the sample

Respondents were asked to disclose the population group they belonged to according to the South African Population Equity Act (Labour Department, 2014). The respondents were grouped into two broad population categories. Only two broad categories were used because the aim of this explanatory study was not to investigate how the perceptions of different population groups differ, and therefore an in-depth investigation into the various groups was not necessary. The two groups were Whites and Others, the latter including African/Black, Asian and Coloured respondents. The sample was predominantly White (n = 435; 77.68%), with the Other group representing 22.32% of the sample (n = 125). The prevalence of Whites in the sample could be as a result of the sampling method used, but as previously mentioned it was not the researcher's intent to focus on specific population differences.

5.3 RESULTS: PHASE 1, QUANTITATIVE INVESTIGATION

The following results that were obtained from the questionnaire will now be discussed in terms of the objectives set for Phase 1: Quantitative investigation.



5.3.1 Consumers' use of marketing communication as an information source about issues pertaining to climate change (Objective 1.1)

Marketers use various methods and media to convey messages that promote consumer purchasing and consumption. These methods and media are chosen with careful contemplation as each targets a different market with regards to age groups, ethnicity, education, wealth, to list a few (Kotler, 2011). Figure 5.2 illustrates the sample's use of information sources about climate change and associated issues.

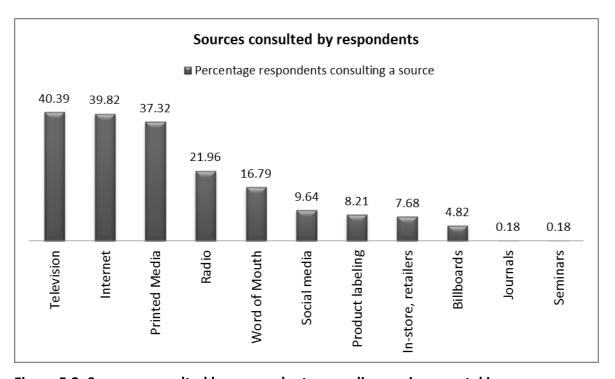


Figure 5.2: Sources consulted by respondents regarding environmental issues

The most popular media source used by respondents seems to be television: 40.36% of respondents (n = 226) specified that they rely on television as a primary source regarding environmental issues. Internet use as information source followed closely in second place with 39.82% of respondents (n = 223) using this medium. Printed media was in third place, used by 37.32% (n = 209). Radio was used by 21.96% (n = 123) of respondents, and Word-of-mouth was specified by 16.79% (n = 94) of the sample as their source of choice. Media sources that seemed not to be viewed as primary sources among respondents included social media (9.64%; n = 54), product labelling (8.21%; n = 46), retailers, in-store messages (7.68%; n = 43), and scientific sources such as journals and seminars (0.18%; n = 1).



Because television is a low effort information source, it could be used to reach even those consumers who are not actively looking for information and thereby equip them with knowledge concerning climate change and/or the principles of sustainability. Researchers, however, have indicated that as education levels increase consumers' reliance on television as an information source decreases (Broady, Chan & Caputi, 2010; Diamantopoulos et al., 2003) and this might be a problem amongst this particular group of respondents of whom the majority possess a grade 12 certificate plus a degree or diploma. In terms of the wider South African population the majority is still lower educated which increases the potential for education through television. Broady, Chan and Caputi (2010) found that the younger generations prefer using digital sources for information gathering which can be as a result of increased exposure to new technology, making these consumers more comfortable accessing digital information. The younger generations are also known to be more curious, resulting in these consumers being more willing and interested in searching for information, and using higher effort information sources such as the Internet with ease. Older consumers generally have an innate dislike of technology stemming from their inexperience and lack of exposure to technologies such as the Internet (Broady, Chan & Caputi, 2010). These generations also exhibit a distrust or scepticism towards environmental issues such as climate change (Diamantopoulos et al., 2003).

The study's findings coincide with the representation in the sample, which included older consumers. After television, printed media is the most popular information source which could be used to educate especially older consumers (Diamantopoulos et al., 2003). In this digital age, social media platforms seem to be replacing physical and personal interaction as a behavioural guide, especially under consumer segments driven by status. Social media provides a channel for these consumers to display their material possessions and other accomplishments to a wide audience (Zhao & Lindley, 2014). Radio's popularity as an information source can be indicative of the vast amount of consumers in Tshwane who commute to work and back. The limited use of word of mouth is interesting as personal interaction is one of the most effective socialisation methods through which consumers can gain information on how to act within the market place. The limited use of product labelling and retailers as information sources is of great concern since a 63.51% of respondents were of the opinion that retailers should take responsibility for educating the public and guiding



consumers to be more sustainable. It is true that most consumers do not always have access to sources such as scientific journals, and hence the low scoring of these sources is not surprising. However, even if access to these sources were better most consumers would struggle to understand it.

Currently, conventional marketers make use of all of the above sources to encourage consumers to purchase and consume their products or brands, thus increasing conspicuous consumption which is a concern when thinking about climate change. This creates a problem for sustainable marketers as the primary or popular sources that consumers will use to gather information about environmental issues or sustainable practices are the same sources employed by conventional marketers to increase unsustainable consumption in order to increase their brands' profitability. Sustainable marketers wishing to educate and inform consumers about climate change and sustainable consumption should therefore use the marketing medium that their target audience already has easy access to, to enable the transfer of knowledge. Furthermore, the message must be interesting and attention grabbing for it to stand out amongst the numerous conventional marketing messages and must be able to create interest (Kotler, 2011).

5.3.1.1 Consumers' knowledge of climate change

Knowledge can be defined as the awareness of an issue or construct, which is based on information that was received, processed and stored (Valkenburg, 2000). It is said that the two main methods that can be implemented to enhance knowledge about climate change are social interaction and observation during consumer socialisation between consumers and their family, friends and peers, and marketing communication, where marketers provide consumers with information regarding products and their uses (Valkenburg, 2000; John, 1999; Rose, 1999). Unfortunately, marketers generally aim to present information that would encourage consumers to purchase and consume, which is associated with conspicuous consumer behaviour, which is detrimental in terms of climate change. Traditional marketing does not encourage sustainability nor promote the principles of sustainability. Rather, marketers tend to encourage excessive consumption in order to increase profit margins (Gadenne, Sharma, Kerr & Smith, 2011). In terms of this study,



consumers' knowledge of climate change is regarded as a major contributing factor to consumers' fresh produce purchasing and consumption behaviour. This is supported by studies that have found that an increase in knowledge about environmental issues has a direct influence on consumers' attitude regarding sustainable practices (Dos Santos, 2011; Pieniak, Aertsens & Verbeke, 2010) and thus influences their buying and consumption behaviour.

As per the objectives of this study, the respondents' knowledge of environmental issues and climate change was measured through 17 True/False questions that were adapted from existing scales (Antil & Bennet, 1979: Social responsible consumption scale (two items); Stone, Barnes & Montgomery, 1995: Eco Scale (8 items); Dos Santos, 2011 (one item). Six additional questions were self-designed to reflect on the topic of investigation. Responses were summated; total means and percentages were calculated. The means of the knowledge test (Maximum = 100) were interpreted as follows: <50%: poor; 50 to <60%: average; 60 to <70%: above average; 70 - <80%: good; 80 - <90%: very good; >90%: excellent. Results of the knowledge test are presented in Table 5.4.



Table 5.4: Consumers' knowledge of climate change (N=560)

Knowledge	Item	%	%
		Correct	Incorrect
		**	**
Excellent:	An increase in the SA population will put further strain	91.19	8.81
M = >90%	on our natural resources		
	Saving electricity in our everyday living will contribute	90.20	9.80
	to saving the planet		
Very good:	Environmental pollution taking place in China does not	88.32	11.68
M = 80 -	have any impact on SA		
<90%	Pollution is currently one of the most critical problems	87.68	12.32
	in terms of the sustainability of SA's natural resources		
	All locally produced products are environmentally	81.70	18.30
	friendly		
	The economic growth of SA is not influenced by	80.54	19.46
	environmental problems		
Good:	The earth's resources are infinite and should be used	75.05	24.95
M = 70 -	to the fullest to increase the standard of living of all SA		
<80%	citizens		
	The amount of energy used by my household does not	74.90	25.10
	have a significant impact on the environment		
	Global warming is mostly caused by the sun radiating	72.58	27.42
	more heat		
	My current purchases decisions will have	72.38	27.62
	consequences for product availability of future		
	generations		
Above	The average citizen can do very little to reduce climate	69.98	30.02
average:	change		
M = 60 -	Pollution does not affect me personally to the same	68.16	31.84
<70%	extent that it affects fellow citizens in SA		
	The USA is the biggest producer of gasses that	67.10	32.90
	contribute to air pollution		
	Methane, which is largely responsible for the damage	66.90	33.10
	to the environment, is only emitted by industrial		
	equipment and cars which are powered by fossil fuels		
Poor: M =	Organic materials like grass, food scraps and compost	45.79	54.21
<50%	heaps do not emit greenhouse gasses that are harmful		
	to the environment		
	Climate change is a direct consequence of the hole in	26.04	73.96
	the ozone layer		
	Climate change is caused by the presence of	11.80	88.20
	greenhouse gasses in the air		
	Total for sample (N = 560)	68.84	31.16

^{** =} Mean maximum of 100; Shaded items are areas of concern



From the results presented in Table 5.4, it is clear that consumers' overall knowledge of climate change is above average. With regard to individual scale items, the findings revealed that respondents' knowledge was excellent in terms of their understanding of the strain that population growth has on South Africa's natural resources and that saving of electricity contributes to saving the planet. Their knowledge was very good about issues relating to pollution, and the possible impact that environmental problems could have on the South African economy. Respondents' knowledge was good concerning the infinity of the earth's natural resources, and of how their current household consumption and purchase behaviour compromise natural resources and stock volumes. Respondents' knowledge was above average concerning their understanding of who should be held responsible for climate change, who the major culprits are, how climate change impacts their personal lives, as well as common emitters (i.e. industrial equipment and cars) of greenhouse gasses.

Consumers' ignorance regarding climate change became evident in terms of the contribution of organic materials and compost heaps towards the emission of greenhouse gasses. The respondents seemed unaware that organic waste such as grass, food scraps and compost heaps contributes towards climate change, thus believing that organic waste are harmless. The findings also revealed that consumers do not understand the relevance of the hole in the ozone layer as well as the presence of greenhouse gasses and its influence on climate change. This indicates a lack of knowledge concerning more scientific information.

In order to seek significant differences within the sample in terms of age, level of education, and income, one-way analysis of variance (ANOVA) was done, and t—tests were performed to explore possible significant differences between the different gender and population groups. Were significant differences were evident, relevant post-hoc tests were done to specify the differences. The findings of these tests are presented in Table 5.5 in terms of the different demographic groups.



Table 5.5: Consumers' knowledge of climate change across demographic categories

Gender	n	Mean	SEM
Male	127	64.61	1.595
Female	406	63.26	0.878
Total	533	63.94	
p-value (t-test)	0.453		
Age	n	Mean	SEM
20 - <30	223	64.25	1.145
30 - <50	206	63.42	1.302
50+	100	62.48	1.788
Total	529	63.38	0.770
p-value (ANOVA)	0.911		
Education	n	Mean	SEM
Lower than Grade 12	8	58.82	2.486
Grade 12	214	61.63	1.278
Grade 12 plus a	312	64.86	.971
degree or a diploma			
Total	534	63.47	0.768
p-value (ANOVA)	0.092		
Income	n	Mean	SEM
R0 - R10000	172	60.70	1.344
>R10000 - R25000	103	59.85	1.767
>R25000 - R45000	111	68.73	1.611
>R45000	83	69.81	1.587
Total	469	64.02	0.809
p-value (ANOVA)	0.000*		
Population Group	n	Mean	SEM
Other	110	54.97	1.557
White	424	65.84	0.841
Total	534	60.41	
p-value (t-test)	0.000*	•	

^{*:} Means differ significantly ($p \le 0.05$); **SEM** = Standard error of the mean; **Bolded** p – values: significant differences

Gender differences: The results indicated that the males ($M_M = 64.61$) know almost the same as the females ($M_F = 63.26$). No significant difference (p = 0.453) could be confirmed between males' and females' knowledge of climate change although the environmental literature suggests that women are more likely to believe and admit that climate change is real, and men claim to have a better understanding of what the concept entails (McCright, 2010). This is attributed to gender characteristics conveyed through socialisation. Individuals



are taught to act according to their gender, suggesting that masculinity stresses impartiality, control and mastery, while femininity is associated with attachment, compassion and care (Cady, 2009). Females learn traits that might make it easier to care about the environment, while men are more prone to be interested in the factual information regarding issues such as climate change (Haigh & Vallely, 2010).

Age differences: No significant difference (p = 0.911) with regard to consumers' knowledge of climate change among the age groups could be confirmed by this study. Literature suggests that young consumers have increased access to environmental information sources such as the Internet and social media platforms where they could find information about environmental issues (Valkenburg, 2000). One would therefore assume that the younger generation would have a better understanding of environmental issues such as climate change as these issues are frequently stressed by certain communication sources and role models such as celebrities whom they might associate with. The messages that are conveyed through the above mentioned channels often target younger individuals because the youth is the future decision makers, placing them in the position of being able to change unsustainable consumption behaviour and ensuring a more sustainable planet.

Differences in terms of level of education: Statistically no significant differences could be confirmed among the different education level categories: means for the four groups ranged from M = 58.82 to M = 64.86, which was average. According to this study, participants' level of education is therefore not a useful predictor of a person's knowledge about climate change.

Income level differences: A recent study suggested that consumers could be motivated to pay more for sustainable products if consumers' knowledge about the consequences of unsustainable consumption was raised (Salazar, Oerlemans & Stroe-Biezen., 2012). In a South African context this would probably be difficult as a large percentage of the South African population can be classified as price sensitive (Clark & Worger, 2014:127).

Table 5.6 presents the findings of income level differences in terms of consumers' knowledge of climate change.



Table 5.6: Consumers' knowledge of climate change in terms of income level

Income	Income	Mean	Mean	SEM	p-value
	category		difference		
≤R10000	R10000 -	59.85	.853	2.121	1.000
(M = 60.70)	R25000				
	>R25000 -	68.73	-8.029*	2.073	0.001
	R45000				
	>R45000	69.81	-9.104*	2.276	0.000
>R10000 -	≤R10000	60.70	853	2.121	1.000
R25000	>R25000 -	68.73	-8.881*	2.330	0.001
(M = 59.85)	R45000				
	>R45000	69.81	-9.957*	2.512	0.001
>R25000 -	≤R10000	60.70	8.029*	2.073	0.001
R45000	>R10000 -	59.85	8.881*	2.330	0.001
(M = 68.73)	R25000				
	>R45000	69.81	-1.075	2.471	1.000
>R45000	≤R10000	60.70	9.104*	2.276	0.000
(M = 69.81)	>R10000 -	59.85	9.957*	2.512	0.001
	R25000				
	>R25000 -	68.73	1.075	2.471	1.000
	R45000				

^{*=} The mean difference is significant ($p \le 0.05$); **SEM** = Standard error of the mean; **Bolded** p

As illustrated in Table 5.6, significant differences among the four income groups (p = 0.000) were identified by means of ANOVA. A post-hoc Bonferroni test indicated that there was no significant difference between the two lower income groups (\leq R10000 and \geq R10000–R25000) but that these groups' knowledge was significantly lower than the knowledge of both the higher income level groups (\geq R25000-R45000 and R45 000+) (Table 5.5). Although the highest income group scored higher than all the other income categories, (M = 69.81) there is still room for improvement regarding their knowledge of climate change (M = <70%). The higher scores of the higher income groups could be attributed possibly to higher education levels and/or higher exposure to information sources.

Population group differences: Patchen (2006) cautions that when dealing with different population groups one must acknowledge that there will be differences in terms of the

values indicates significant differences



consumers' norms and values with respect to their recognition and concern about climate change.

Table 5.7 presents consumers' knowledge of climate change in terms of their population group.

Table 5.7: Consumers' knowledge of climate change in terms of population group

Population group	n	Mean*	SEM
Other	110	54.97	1.557
White	424	65.84	.841
Total	534	60.41	-
p-value (t-test)			0.000*

Bolded means indicate significant difference;*= the mean difference is significant ($p \le 0.05$);

SEM = Standard error of the mean

A significant difference was identified between the two population groups (i.e. Whites and Other than whites) by means of a t-test (p = 0.000). The Whites (M_W = 65.84) scored significantly higher than the Other population group (M_O = 54.97). In the context of the study this can indicate that consumer socialisation differs between different population groups. Prior to 1994, the majority of South Africans (Other than Whites) were disadvantaged in terms of a good upbringing, financial independence, material possessions and they were deprived of a proper formal education (Fiske & Ladd, 2004:xi). These groups' poor environmental knowledge can thus be attributed to limited education and exposure (consumer socialisation). Currently, the Black population segment is the fastest growing economic group (Ndanga, Louw & Van Rooyen, 2008), which is troublesome if one considers the study's Other group's current lack of knowledge concerning the principles of sustainability and climate change.

In summary, the above findings revealed that respondents' level of knowledge of climate change is above average and the demographic segments' knowledge was largely influenced by income and their population group. Marketers who wish to increase consumers' knowledge concerning climate change and sustainability should use specific marketing communication to target each of these specific groups. Identified areas of concern that



green marketers can focus on include consumers' lack of knowledge about the role that greenhouse gasses play in climate change; and the impact of organic waste on climate change. These are more complex scientific matters that need to be conveyed in a more comprehensible format in media that consumers actually consult, e.g. television.

5.3.2 Consumers' consumption of fresh produce in terms of unnecessary wasteful consumption that might enhance climate change (Objective 1.2)

Consumers' general consumption of fresh produce will firstly be discussed and then the possible drivers of consumers' unsustainable fresh produce purchasing behaviour will be discussed.

5.3.2.1 Consumers' general consumption of fresh produce

The threat of climate change is real, and the role that consumer consumption plays in accentuating this threat has also been proven (Gore, 2006). Current marketing strategies encourage a culture of consumption, seldomly advocating more responsible and sustainable consumption behaviour (Van Dam & Van Trijp, 2011). Consumers often experience an unrealistic sense of entitlement leading them to demand and also to buy only fresh produce that is of the highest quality. This demand for fresh produce that is of the highest quality reflect probable unsustainable consumption practices, which contribute significantly towards the unnecessary wastage of fresh produce with slight imperfections as they demand produce that is not deformed, bruised or in any other visual way inferior (Madevu, Louw & Ndanga, 2009; Yu & Nagurney, 2011; Marshak, 2011). Marketers play a major role in the creation of these unrealistic demands through the depiction of perfect and healthy fruits and vegetables in their marketing campaigns, be it printed, television or other media (Van Dam & Van Trijp, 2011).

Consumers' purchasing and consumption behaviour with regard to fresh produce is dictated by various external cues presented in marketing communication. These external cues were explored with the use of a self-designed twelve item scale. Scale items were grouped in terms of two prominent dimensions, namely purchasing cues in terms of physical



appearance and purchasing cues in terms of date-code usage. A four point Likert-type agreement scale was used to explore respondents' consumption-related behaviour. The findings are given in Table 5.8 and Table 5.9.



Table 5.8: Consumers' purchasing and consumption behaviour with regards to fresh produce

Table 5.8: Consun	ners' purc	chasing and con	sumptio	n behaviour	with re	gards to fres	h produ	ce							
	Purchasing cues in terms of physical appearance														
	The quality of FP is a		Stores should only		I regard slightly		I regard slightly		Bruised and deformed		One neglects ones		One neglects ones		
	true indication of its		stock good quality		bruised FP as poor		deforme	deformed FP as poor		FP is poor value for		guests when serving FP		family when serving FP	
	nutrition	al value	FP		quality	uality		<u> </u>		money		that is not perfect		ot perfect	
	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree	
GENDER	n=531 / 9	%	n=535/ 9	%	n=532 /	%	n=531 /	%	n=523 / %		·		n=531 / %		
Sample	67.8	32.2	96.3	3.7	62.2	37.8	46.7	53.3	72.8	27.2	49.3	50.7	46.0	54.0	
Male	66.4	33.6	94.6	5.4	60.6	39.4	44.5	55.5	57.9	42.1	49.2	50.8	45.3	54.7	
Female	68.2	31.8	96.8	3.2	62.7	37.3	47.4	52.6	77.6	22.4	49.4	50.6	46.2	53.8	
p-value		.699		.246		.672		.572		.000		.974		.868	
AGE	n= 527/ 9	%	n=531/ 9	%	n=528 /	%	n=527 /	%	n=558 /	%	n=529 / 9	%	n=527/ %	6	
Sample	67.9	32.1	96.2	3.8	61.9	38.1	58.0	53.3	72.8	27.2	48.6	54.4	45.2	54.8	
20 ≤30	65.0	35.0	97.8	2.2	57.0	43.0	45.9	54.1	71.7	28.3	42.6	57.4	38.7	61.3	
30 ≤50	69.9	30.1	93.7	6.3	64.4	35.6	49.8	50.2	73.4	26.6	50.7	49.3	51.0	49.0	
50+	70.4	29.6	98.0	2.0	68.0	32.0	42.0	58.0	74.2	25.8	57.4	42.6	47.5	52.5	
p-value		.470		.052		.109		.426		.872		.034		.035	
EDUCATION	n=467 / 9	%	n=536 /	%	n=533	/ %	n=532 /	%	n=524 /	%	n=534 /	%	n=532 / 9	%	
Sample	68.0	32.0	96.3	3.7	62.1	37.9	46.4	53.6	72.9	27.1	49.1	50.9	45.7	54.3	
Lower than Grade 12	87.5	12.5	100.0	0.0	62.5	37.5	62.5	37.5	87.5	12.5	87.5	12.5	87.5	12.5	
Grade 12	71.4	28.6	97.2	2.8	61.8	38.2	47.2	52.8	77.4	22.6	49.1	50.9	44.1	55.9	
Grade 12 plus a Degree or	65.4	34.7	95.5	4.5	62.3	37.7	45.5	54.5	69.5	30.5	48.1	51.9	45.7	54.3	
Diploma															
p-value		.168		.526		.993		.612		.090		.088		.054	
INCOME	n=467 / 9		n=471 /	%	n=468	/ %	n=467 /	<u>/</u> %	n=461 /	<u> %</u>	n=470 /		n=468 / 9	%	
Sample	67.0				60.0	40.0	45.2	54.8	71.6	28.4	47.9	52.1	44.9	55.1	
R0 - R10000	73.7	26.3	97.1	2.9	61.2	38.8	51.8	48.2	77.4	22.6	50.0	50.0	46.2	53.8	
>R10000 - R25000	75.0	25.0			63.5	36.5	45.6	54.8	75.5	24.5	50.0	50.0	50.0	50.0	
>R25000 - R45000	55.5	44.5	95.5	4.5	56.8	43.2	33.3	66.7	64.8	35.2	45.9	54.1	42.7	57.3	
>R45000	58.5	41.5	91.6	8.4	57.8	42.2	47.6	52.4	63.9	36.1	43.4	56.6	38.6	61.4	
p-value		.001		.185		.737		.024		.038		.720		.428	
POPULATION	n=532 / % n=536 / %		n=533 /	' %	n=532 / %		n=524 / %		n=534 / %		n=533 / %				
Sample	68.0	32.0			62.3	37.7	46.6	53.4	73.1	26.9	49.3		57.8	54.0	
Other	83.8	16.2	98.2	1.8	67.3	32.7	67.3	32.7	82.2	17.8	50.9	49.1	60.6	39.4	
White	63.9	36.1	95.8	4.2	61.0	39.0	41.2	58.8	70.7	29.3	48.8	51.2	42.2	57.8	
p-value		.000		.228		.226		.000		.017		.696		.001	

Bolded p – values indicate significant differences (p = <0.05)



Table 5.9: Consumers' purchasing and date-coding behaviour with regards to fresh produce

	Taking note of the sell-by I do not buy FP of which the		I select FP	from the back of	At home	I discard FP	At home I discard FP				
	date when	buying FP is	sell by date has expired		refrigerator shelves and displays to		that is past its sell by		that is past its use-by		
	important		because it is inferior quality		ensure that I get the best quality		date		date		
	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree	
GENDER	n = 558 / %		n = 534 / %	n = 534 / %		n = 533 / %		n = 534 / %		n = 522 / %	
Sample	91.9	8.1	78.7	21.3	71.9	28.1	37.8	62.2	60.0	40.0	
Male	85.9	14.1	78.1	21.8	67.2	32.8	43.8	56.3	65.6	34.4	
Female	93.8	6.2	78.8	21.2	73.3	26.7	36.0	64.0	58.3	41.7	
p-value		.004		.868		.178		.113		.139	
AGE	n = 558/ %		n = 530 / %		n = 558 / %		n = 530 / 9	n = 530 / %		n = 529 / %	
Sample	91.9	8.1	78.9	21.1	72.0	28.0	37.5	62.5	59.7	40.3	
20 ≤30	91.9	8.1	81.2	18.8	73.1	26.9	35.4	64.6	63.2	36.8	
30 ≤50	90.2	9.8	76.7	23.3	72.2	27.8	40.3	59.7	62.1	37.9	
50+	95.1	4.9	78.2	21.8	69.3	30.7	36.6	63.4	47.0	53.0	
p-value		.341	.519		.779		.570		.015		
EDUCATION	n = 535 / %		n = 535 / %		n = 534 / %		n = 535 / %		n = 534 / %		
Sample	92.0	8.0	78.9	21.1	72.1	27.9	37.8	62.2	42.8	40.3	
Lower than Grade 12	87.5	12.5	87.5	12.5	75.0	25.0	50.0	50.0	62.5	37.5	
Grade 12	93.0	7.0	79.9	20.1	75.6	24.4	39.4	60.6	63.4	36.6	
Grade 12 plus a Degree	91.4	8.6	78.0	22.0	69.6	30.4	36.3	63.7	57.2	42.8	
or Diploma											
p-value		.716		.722		.324		.592		.359	
INCOME	n = 470 / %		n = 558 / %		n = 558 / %		n = 470 / %		n = 469 / %		
Sample	92.1	7.9	77.7	22.3	71.9	28.1	37.0	63.0	58.8	41.2	
R0 - R10000	94.8	5.2	85.5	14.5	78.9	21.1	43.3	56.7	64.3	35.7	
>R10000 - R25000	91.4	8.6	76.9	23.1	67.3	32.7	37.1	62.9	62.9	37.1	
>R25000 - R45000	91.8	8.2	72.1	27.9	70.3	29.7	27.0	73.0	49.5	50.5	
>R45000	88.0	12.0	69.9	30.1	65.1	34.9	37.7	62.7	54.9	45.1	
p-value		.292		.012		.062		.054		.063	
POPULATION	n = 535 / %		n = 558 / %		n = 534 / %		n = 535 / %		n = 534 / %		
Sample	92.1	7.9	79.3	20.7	72.1	27.9	38.1	61.9	60.3	39.7	
Other	96.4	3.6	90.1	9.9	70.9	29.1	59.1	40.9	73.9	26.1	
White	91.0	9.0	76.4	23.6	72.4	27.6	32.7	67.3	56.7	43.3	
p-value		.062		.002		.755		.000		.001	

Bolded p – values indicate significant differences (p = <0.05)



The results, as presented in Table 5.8 and Table 5.9, indicate that up to 68% of respondents across all demographic categories agreed that the quality in terms of the physical appearance of fresh produce is an indication of the produce's nutritional value. Up to 96.3% of the respondents agreed that retail stores should only stock fresh produce of good quality and that slightly bruised or deformed fresh produce is not good quality. Furthermore, the respondents were of the opinion that buying slightly bruised or deformed fresh produce does not offer value for money (72.8% of the sample). Almost half of the respondents furthermore agreed that one neglects guests and/or family members when serving fresh produce that is not perfect.

The findings in terms of consumers' interpretation of date codes as purchasing and consumption cues revealed that more than 90% of respondents across the demographic categories regarded produce's sell-by dates as important. Almost 80% of the respondents confirmed that they do not purchase fresh produce if the sell-by dates have passed because such produce is regarded as inferior. More than 70% of the respondents admitted to selecting fresh produce from the back of the shelves or refrigerators in order to ensure that they get the best quality, irrespective of whether they were planning to consume the produce soon. Although less than 40% admitted to throwing away produce that have exceeded their sell-by dates, almost 60% indicated that they discard produce of which the use-by date have passed. Although this practice is understandable, it is nevertheless wasteful as those rejected produce is normally still fit for human consumption.

The above results indicate that consumers' purchasing behaviour is directly influenced by the quality of fresh produce, and that this quality perception is based on the physical appearance of the produce as well as the date-codes displayed on the produce. The fact that consumers select the fresh produce from the back of the shelves or refrigerators indicate an understanding of the FIFO merchandising principle (first in-first out, resulting in the freshest or newest produce being placed at the back of the display). This indicates that consumers may have a sense of entitlement and are unaware, or do not consider, the consequences of their behaviour. Fresh produce that fail to meet consumers' quality expectations are often left on the shelves and later on discarded without considering the consequences.



In a South African context, consumers' purchasing behaviour with regard to fresh produce seems to be a more complex problem. Consumers' knowledge about sustainable purchasing practices must be increased in order to decrease or limit unnecessary waste of fresh produce that ultimately aggravates climate change. Important topics to consider include the irrationality of rejecting produce based on physical imperfections and/ or expiry dates. Furthermore, consumers' knowledge about climate change must be increased in order to create awareness about the environmental consequences of poor purchase planning, irrational produce selection and self-entitlement.

In order to determine significant differences within demographic categories, Pearson's Chi-Square tests were done. The following sections will reflect on the results.

Gender differences in consumers' purchasing cues in terms of physical appearance and date code usage, and subsequent fresh produce wastage: Table 5.8 indicates a significant difference between males and females with regard to the way that they perceive bruised and deformed produce (p = 0.000). Overall, females (77.6 % compared to 57.9% of males) were more prone to reject bruised and deformed produce as poor value for money. A significant difference is also noted (p = 0.004) in terms of the importance that is placed on the sell-by dates of produce, as 93.8% of females compared to 85.9% of males admitted that sell-by dates were an important indicator of fresh produce purchases. This finding is concerning since the literature suggests that females are the most important socialising agents in terms of sustainable consumption behaviour (McCright, 2010; Grønhøj, 2006).

Age differences in consumers' purchasing cues in terms of physical appearance and date code usage, and subsequent fresh produce wastage: Significant differences among the different age groups in three scale items can be seen in Table 5.8 (p = 0.034; p = 0.035; p = 0.015 respectively). These results indicate that in terms of purchasing cues based on the physical appearance of fresh produce, the two older age groups (compared to the younger consumers) are significantly more inclined to associate the use of slightly imperfect produce as a form of neglecting ones family and/ or friends. An interesting finding was that 57.4% of the oldest age group (50+ years) indicated that it is a sign of neglect to serve imperfect fresh produce to guests, but only 47.5% of the same age group agreed that this is also true when



serving imperfect fresh produce to family members. This may indicate status consciousness as these consumers admitted a need to make a good impression on others.

In terms of the importance of date codes as an indicator of purchasing and consumption, significant differences (p = 0.015) were found between the two younger age groups and the oldest age group: 63.2% of the youngest age group ($20 \le 30$ years) and 62.1% of the 30 to 50 (years) age group admitted to discarding fresh produce that has reached its use-by date, compared to 47% of the oldest age group (50+ years). Although this is more sustainable than discarding produce that has reached its sell-by date, it is still not an environmentally friendly practice. All consumers, with emphasis on the younger consumers, must therefore be educated on the correct use and interpretation of date codes as well as the proper evaluation of fresh produce before simply throwing it away.

The previous objective's results found that older consumers lack knowledge about climate change; however their purchase and consumption practices reveals some environmentally sustainable behaviour. This means that even though these consumers lack the necessary knowledge to explain their actions, their behaviour is more sustainable because through socialisation they learned how to purchase and consume more prudently and sparingly. Their behaviour thus does not necessarily reflect true concern for the planet, but rather learned (observed) behaviour.

Level of education differences in consumers' purchasing cues in terms of physical appearance and date code usage, and subsequent fresh produce wastage: Consumers' level of education does not seem to predict significant differences in consumers' use of purchasing cues and date codes. Although not statistically significant considering the calculated means across all scale items, it is worth noting that 87.5% of the respondents in the lowest education level group admitted that they regard it as a form of neglect to serve imperfect produce to guests and/ or family, compared to less than 50% in the two higher education level groups, as can be seen in Table 5.8 and Table 5.9.



Income level differences in consumers' purchasing cues in terms of physical appearance and date code usage, and subsequent fresh produce wastage: In four of the twelve scale items significant differences were confirmed among the income groups, of which three items related to the physical appearance of fresh produce (p-values varying between p = 0.001 to p = 0.038), and one item related to date code usage (p = 0.012). In terms of the physical appearance of fresh produce, the results revealed that significantly more respondents (70%) in the >R10000-R25000 income category (lower middle income) agreed that produce quality is a true indication of its nutritional value compared to 55% and 58.5% in the two higher income categories (>R25000 – R45000; >R45000). With regard to slight deformities in fresh produce, 51.8% of the lowest income group indicated that it signals poor quality compared to 33.3% of the upper (>R25000 – R45000) income group. The same trend was evident in terms of the slightly bruised and deformed produce.

With regard to consumers' usage of date-codes, in particular sell-by dates, findings revealed that significantly more respondents in the lowest income group (85.5%) agreed that they do not buy fresh produce of which the sell-by date has expired because this produce is perceived as being of inferior quality. These findings therefore reveal that the lower income groups are more concerned about the quality of fresh produce, possibly because their disposable income is lower and therefore they have to consider getting value for money. This concern could lead to unnecessary wastage. This emphasises the importance of educating and encouraging all consumers to adopt more sustainable fresh produce practices in order to reduce the amount of food that is wasted in South Africa.

Population group differences in consumers' purchasing cues in terms of physical appearance and date code usage, and subsequent fresh produce wastage: Across all of the items, the population group Other than Whites was more likely to use produce's physical appearance as purchasing indicators. Significant differences between the two population groups (i.e. the mean for the population group Other than Whites was significantly higher than the mean for the White population group) were found in seven of the twelve scale items of which four items related to the physical appearance of fresh produce (p - values varying between p = 0.000 to p = 0.017), and three items related to consumers' use of datecodes (p-values varying between p = 0.000 to p = 0.000 to p = 0.002). The results in Table 5.8 indicate



that significantly more of the Other population group (83.8%) compared to Whites (63.9%) agreed that produce's quality is an indication of its nutritional value. Likewise, significantly more of the Other population group compared to Whites agreed that deformed produce is not only an indication of poor quality but also of poor value for money: 67.3% of the Other population group agreed that deformed produce indicate poor quality, and 82.2% indicated that purchasing deformed produce is not recommended as it is poor value for money. Of the White population group, only 41.2% agreed that deformed produce indicated poor quality, although 70.7% agreed that purchasing deformed produce is poor value for money. Although these figures are significantly lower than that of the Other population group, the findings are still alarming as it suggest that much can be done to educate all consumers about the nutritional value and quality of fresh produce. Compared to Whites, significantly more respondents in the Other population group (60.6%) agreed that it is inappropriate to serve fresh produce that is not perfect to family members.

Further findings revealed that the Other population group is significantly more prone to discard fresh produce that have passed their sell-by dates; 90.1% of the Other population group compared to 76.9% of their White counterparts indicated that they do not purchase fresh produce of which the sell-by date has expired because these produce are of inferior quality. Similar results were found for the scale item *discarding fresh produce with expired date codes*. The findings in Table 5.9 therefore indicate that respondents in the Other population group were concerned with the physical appearance and date-codes as quality indicators for fresh produce. The unrealistic expectations about the quality of fresh produce, as created by marketers (Van Dam & Van Trijp, 2011) often results in unsustainable consumption practices and unnecessary wastage. The fact that the Black population group (which constituted a majority segment of the study's Other population group) is one of the fastest growing consumer segments in South Africa means that if all Black consumers were to demonstrate unsustainable behaviour as was revealed in the Other group in Table 5.8 and Table 5.9, unnecessary and unsustainable wastage of fresh produce should be addressed as a prominent concern.



5.3.2.2 Possible drivers of consumers' unsustainable fresh produce purchasing behaviour

Current consumers' fresh produce purchasing and consumption practices could be viewed as unsustainable behaviour that has dire consequences for the environment. Over purchasing coupled with slow consumption often lead to unnecessary waste of fresh produce in households. In order to understand consumers' purchasing and consumption of fresh produce, and specifically the role that marketing communication plays in consumers' purchasing practices, respondents had to respond to a few questions to identify drivers or motivators of unacceptable purchasing practices. The findings are presented in Figure 5.3.

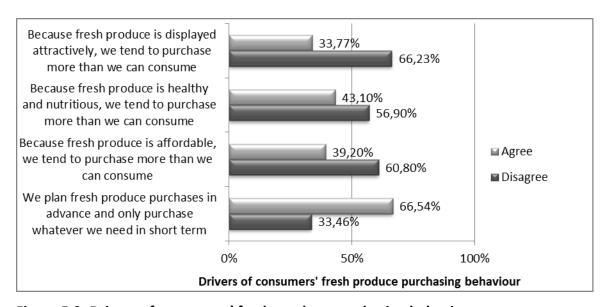


Figure 5.3: Drivers of consumers' fresh produce purchasing behaviour

Figure 5.3 shows that 66.54% (n = 372) of the respondents indicated that they plan their fresh produce purchases in advance and only purchase what they need in the short term. This can indicate that consumers' purchase behaviour is sensible and that the majority of respondents guard against the over purchasing of fresh produce. However, 39.20% (n = 219) of the respondents declared that they tend to over purchase when produce is affordable and 33.77% (n = 184) acknowledged that attractive displays in the store lure them into over purchasing. The biggest concern is that almost half of the sample (n = 268; 43.10%) indicated that they tend to purchase more fresh produce than what they need because they believe fresh produce is healthy. In South Africa, a healthy eating campaign advocating the 'Five-a-Day' consumption of fruits and vegetables has been promoted in recent years.



Concern about nutrition and healthy eating may therefore unfortunately also encourage excessive purchasing. Should this be the case, it has to be challenged to address this issue responsibly and sustainably (Marx-Pienaar & Erasmus, 2013).

5.3.3 The potential influence of consumers' status consciousness (Objective1.3)

Status is defined as the level of an individual's social position relative to other individuals considering the same dimension, e.g. level of education and financial wealth (Nelissen & Meijers, 2011). Status consciousness is instilled at a young age (Pratkanis et al., 2014:183). Children play "mine is the best" games even before school and it seems they never stop competing with their friends and peers in terms of material possessions (Frijters & Leigh, 2008). Although not always a conscious act, this is the example that is set by parents, friends, family and marketing media and is fostered in the child through socialisation (Valkenburg, 2000; John, 1999; Rose, 1999). Consumers who are status conscious are primarily concerned with what their relevant reference group will consider as the best, or find to be the most status enhancing (Gasana, 2009). Marketing plays a role in creating these considerations by means of how certain products or brands are portrayed in marketing compared to other similar products or brands (Kotler, 2011). Marketers stimulate consumers' interest in their products, encouraging consumers to buy more than what they need. Status seeking consumers are prone to spend a bigger portion of their income on conspicuous products that will be admired by others (Veblen, 1994, as quoted by Sivanathan & Pettit, 2010). Excessive consumption has a negative impact on the environment and is one of the major drivers of climate change; therefore consumers' status consciousness has a negative effect on climate change.

In order to measure and explain the possible influence that status consciousness has on consumers' fresh produce purchasing and consumption behaviour, respondents were asked to respond to a combination of eleven questions. Four of these questions were adapted from Kilsheimers' status consumption scale (1993), four status items were adapted from Richins and Dawsons' (1992) materialism scale and three questions were self-designed. The questions had to be adapted in order to reflect the subject of the study, i.e. instead of



merely exploring the general status consciousness of consumers, respondents were asked to reflect on their fresh produce purchase behaviour specifically. A four point Likert-type agreement scale was used. For the results, a higher mean score was interpreted as an indication that respondents' fresh produce purchasing was fuelled by their status consciousness and that they therefore were more likely to purchase fresh produce in abundance and even irresponsibly. Means were interpreted as follows: Mean = >3: extremely status conscious; means = >2.5 - <3: status conscious; means = >1.5 - <2.5: somewhat status conscious; means = < 1.5: low status consciousness. Cronbach Alphas (presented in Table 5.5) for the individual items varied between 0.79 and 0.84, confirming the internal consistency of consumers' responses and indicating that the measuring instrument can be considered reliable. These findings are presented in Table 5.10.



Table 5.10: Fresh produce consumption reflecting status consciousness

Items	Cronbac h Alpha	Mean*	% Agreed
We place a lot of emphasis on the type of fresh produce when making a purchase decision	.82	2.82	75.61
We work very hard and therefore deserve that only the best fruit and vegetables are made available in the stores that we visit	.81	2.76	67.10
We try to purchase only the most basic or simplest types of fresh produce**	.84	2.63	59.96
We would pay more for fresh produce that has a superior appearance	.82	2.59	61.08
We admire people who display fresh produce attractively in their kitchens	.81	2.36	49.66
The type and quality of fresh produce that we purchase signifies how well we are doing in life	.80	2.06	29.05
We believe that an attractive bowl brimming with top quality fruit is an essential part of our kitchen and will impress our family	.79	1.99	26.17
We believe that an attractive bowl brimming with top quality fruit is an essential part of our kitchen and will impress our friends	.79	1.94	21.23
We are always on the lookout for exotic and imported fresh produce because we believe it is of superior quality	.81	1.78	15.80
Fresh produce that is imported is more attractive to us because it is admired by people	.80	1.65	11.36
We prefer to purchase imported products because they tend to have more status	.80	1.63	11.40
Overall mean	-	2.20	

^{* =} Mean maximum = 4; ** Reverse coded items; Shaded items distinguish different levels of status consciousness (high and low)

Findings in Table 5.10 are presented in descending order according to the means of the individual items. An overall mean of 2.20 indicate that respondents could be viewed as somewhat status conscious with regard to the purchasing of fresh produce. In terms of the individual scale items, areas of concern included the fact that the majority of respondents (75.61%; M = 2.82) agreed that the type of fresh produce purchased is important to them. This indicate that these consumers have little proclivity to choose a substitute product if they already have a specific product in mind, and might therefore purchase the preferred product even if it is imported or expensive. Most respondents (67.10%; M = 2.76) felt that



they deserved only the best fresh produce as a reward for their hard work, while a remarkable percentage (61.08%; M = 2.59) confirmed that they would pay more for fresh produce which is visually appealing. Further relevance of the appeal of attractive fresh produce was confirmed by the fact that almost half (49.66%) of the sample admitted that they admired people who displayed fresh produce attractively in their kitchens. The literature suggests that consumers in higher socio economic status groups tend to exhibit higher levels of fresh produce consumption compared to those in lower socio economic groups (Lindstrom, Hanson, Wirfalt & Ostergren, 2001). It thus indicates that fresh produce can be used to intentionally gain the admiration of others. When choosing fresh produce as a means of acquiring status, consumers show little if any concern for environmental issues. These consumers would therefore also be tempted by clever marketing campaigns.

Almost 30% of the respondents admitted that they display top quality fresh produce as a visual indication of how well they are doing in life. These consumers also display fresh produce to impress friends and family, using a basic commodity such as fresh produce as a status symbol.

The products are evaluated not only based on price, but also on their visual appeal, packaging, and origin. Imported produce is often purchased because consumers feel that they are entitled to have access to fresh produce irrespective of the season or climate: 11.36% of respondents admitted to buying imported produce because other consumers will admire it, while 11.40% believe that imported produce indicates status. Although these percentages were not high, it still indicates inconsiderate behaviour that deserves attention in order to change behaviour.

In summary, the findings revealed that certain fresh produce purchase and consumption practices of consumers suggest status conscious consumption. For example, consumers felt that they are entitled to superior fresh produce that are visually appealing as a reward for their hard work, which they then like to display to impress others. Overall, however, the means for the status consumption scale did not reveal strong status consciousness regarding this product category. Status consciousness is therefore not the main driver of



consumers' excessive consumption of fresh produce, although it does exert some influence during the consumer decision making process.

5.4 RESULTS: PHASE 2, QUALITATIVE DISCUSSION

This section presents the findings of the focus group discussions as well as the projective technique, which present the qualitative investigation.

5.4.1 Introduction

Phase 2, the qualitative phase served to improve the understanding of critical concepts and constructs, such as climate change and sustainable practices. To commence the qualitative phase, focus group discussions were first conducted as this data collection method allowed insight into two main aspects namely consumers' opinions, concerns and knowledge of climate change; as well as consumers' current fresh produce consumption practices and their knowledge of sustainable consumption practices. A projective technique was used during the final stage of the focus group discussions to gain further insight into consumers' knowledge, and comprehension of marketing strategies and how it could be used to influence fresh produce consumption. The combination of these two data collection techniques did not only support each other, but also enhanced the credibility of the findings of phase 1 (Quantitative: consumer questionnaire).

Analysis of the qualitative phase of the study began with the transcription of the focus group discussions by the researcher immediately after it had taken place. Extra care was taken not to alter or correct the language/words that participants used. Conceptual and content analysis was then done by the researcher on the transcriptions as well as on the sketches made by participants during the projective technique, which involved clarifying key constructs and identifying how these constructs linked with existing theory. This was an essential part of the analysis (Mouton, 2002:109), and was done personally, by the primary researcher, by hand. Different colours were used to identify and code the relevant constructs within the transcribed text. After coding, the codes were categorized according



to themes that coincided with applicable theory in order to conclude with narratives (Berg & Lune, 2011; Mayring, 2000). However, where applicable findings from phase 1 (Quantitative: Consumer questionnaire) were incorporated to support the qualitative themes that were identified. These themes are presented as subheadings in the following sections. The discussion is supported by verbatim quotes from the focus group discussions, with the quotations being labelled according to the group session (A and B) and participant's number (1 to 18) to simplify identification. In all focus group discussions, number 17 refers to the facilitator. The complete transcripts are available in Addendum D.

5.4.2 The relevance of marketing communication as an information source used to encourage sustainable consumer behaviour (Objective 2.1)

Marketing communication can be defined as the coordinated promotional messages delivered by information channels such as print, radio, television, direct mail and personal selling (Business Dictionary, 2014; Kotler, 2011). Marketing, in its various forms, is one of the best methods to convey information, build awareness, and create knowledgeable consumers and can thus be used to reinforce, or even create, consumer values and behaviour, as long as the information source is deemed powerful, attractive and credible (Neagu, 2011). Marketing as such is neither good nor bad, but should rather be seen as a tool that can be used by marketers to either guide consumers' consumption behaviour towards sustainable behaviour or to promote consumeristic lifestyles with related purchasing and consumption practices (Peattie & Peattie, 2009).

Many marketing strategies create expectations that consumers feel they have to fulfil in order to be "acceptable" among their peers (Valkenburg, 2000). It is said that consumers' exposure to consumption-related media content instigates consumerist values which is often unsustainable and which contributes to climate change due to all the problems associated with excessive consumption. Findings from the quantitative investigation (Phase 1, consumer questionnaire) revealed that although consumers' knowledge of climate change seems above average, much can still be done to promote sustainable consumption. Exposing consumers to appropriate media content can enhance sustainable food purchasing and consumption practices by increasing consumers' knowledge through increased



awareness (Peattie & Peattie, 2009). Without the relevant knowledge, the consumer decision-making process cannot be adapted as consumers act in accordance with the knowledge that they possess (Smith & Paladino, 2010). Marketing communication presents consumers with facts and ideas, which, if retained, will increase consumers' knowledge about a specific topic or issue. It is therefore of utmost importance that marketing information is designed to attract and stimulate consumers' interest.

To test the relevancy of marketing communication as an information source that can be used to increase consumers' knowledge of sustainable consumption, consumers' current knowledge of climate change was firstly assessed, followed by an investigation into consumers' awareness of current information sources promoting sustainable consumption knowledge.

5.4.2.1 Consumers' knowledge of climate change

From the quantitative findings it was clearly indicated that consumers' knowledge of climate change is above average. The focus group discussions' findings however revealed different results. In the focus group discussions, participants were asked to discuss their understanding of climate change. It was concerning that the majority of participants revealed very little knowledge regarding the topic. Most participants had no idea of what causes climate change, or how climate change will affect the whole population. This was reflected in comments such as:

"I know nothing about [climate change] global warming, nobody is attempting to inform me, and I am definitely not going to spend my one or two free hours a day researching [climate change] global warming" (B16)

"I am rather informed about other things, but know nothing about [climate change] global warming" (C4)

[What is climate change?] "Earth gasses that make a hole in a vacuum" (C4)



In phase 1 (Quantitative: Consumer questionnaire) it was found that consumers' knowledge regarding the hole in the ozone layer was extremely poor. Only 26.04% of respondents answered the question correctly. This finding is supported by the focus group discussions' findings:

"I heard, that the ozone layer is 'shrinking' – it is not as big as it was. So it looks as if it is healing itself in some way" (A3)

"[Do you think the hole in the ozone has something to do with global warming?] Yes, if that hole gets bigger, temperature will rise to extreme heights" (A3)

"Aerosols and deodorants that we use, that release gasses [that] contribute to climate change" (A6)

Recent studies support this finding, with researchers concluding that a large percentage of consumers erroneously think that the hole in the ozone layer, caused by the use of aerosol cans (CFCs), contribute to climate change, leading these consumers to incorrectly believing that simply banning the use of these gasses will stop climate change (Ungar, 2000). Consumers' poor knowledge with regards to the ozone layer has an effect on their knowledge of climate change, and if not addressed will result in these consumers not realising the need to adapt more sustainable consumption practices.

Based on comments such as those above, it is evident that consumers lack the necessary knowledge about environmental issues and climate change that is needed to encourage them to adopt more sustainable behaviour. This therefore supports the findings in phase 1 (Quantitative: consumer questionnaire) which revealed that consumers' current fresh produce consumption patterns are unsustainable due to several reasons such as self-entitlement (reward); affordability of fresh produce; attractive displays; consumer demands; and external purchasing stimuli which has to be considered.

Possible reasons for consumers' limited knowledge regarding climate change and their ability to apply it in terms of their fresh produce purchasing and consumption practices



were identified and discussed in the following themes that emerged during the focus group discussions, namely consumers' lack of interest in climate change and the perceived invisibility of climate change:

• Consumers' lack of interest in climate change: During the focus group discussions, participants were specifically probed on their feelings about climate change. Most participants admitted to not caring about the impact or consequences of climate change, the most vocal participants were all from the age group of 40 and above. These participants confessed that even if there was an article or information about sustainable and environmental issues they would not read it unless the heading and topic interests them:

"If it interests you, you will find out more, but if it doesn't interest you, you won't" (B12)

"Who is going to convince me to care about [climate change] global warming?" (B16)

"I am not interested in finding out what [climate change] global warming is about" (B16)

The older participants specifically had little if any idea what climate change involves, or what the causes or solutions might be, and also displayed a profound lack of interest in finding out. The data from the questionnaire (Phase 1) provided the same findings. The older age groups' results were the worst as they failed to answer significant questions correctly. Previous studies haveattributed this to the fact that older consumers might perceive the proposed environmental solutions as requiring changes in their traditional values, habits, and behaviours, thus threatening their existing social order (Dunlap, van Liere, Mertig & Jones, 2000) or as a result of a lack of exposure to relevant environmental sources.

Marketing could therefore firstly focus on creating interest amongst consumers about the global issues and convince older consumers that sustainable consumption will not change



their way of life drastically. Thereafter marketing messages can focus on informing and educating consumers on how to be more sustainable.

• Relevancy of today – perceived invisibility of climate change: Consumers' lack of knowledge about environmental issues can make them feel uninvolved and unattached to issue. Consumers might also feel that climate change is irrelevant to their daily lives if they have no idea what the consequences might be for them (Shove & Warde, 2003). This is reflected in comments such as:

"[people say] currently it does not have an impact on me" (C12)

"It does not have an impact on me now, and I cannot think that in 10 years' time I will feel different" (C4)

"People don't care, they look at now" (C9)

"How much can we really do?" (B10)

Recent studies have found that consumers ignore the urgency of environmental activists' messages because of the invisibility of climate change causes, distant theoretical impacts, lack of immediacy and direct experience of the consequences, lack of gratification for taking mitigative actions, disbelief in human's global influence, complexity of the terms and concepts, inadequate signals indicating the need for change, perceptual limits and self-interest (Moser, 2010).

The main aim of sustainable marketing is to educate and inform consumers about environmental issues and problems such as climate change as well as consumption's contribution to the problem (Shove & Warde, 2003). Consumers might not always be aware of the complicity of their behaviour and the impact this has on the environment, and therefore unknowingly perform actions that increase or decrease their sustainability. This is why it remains vitally important for marketing to increase consumers' knowledge of climate



change in order to educate consumers about the actual impact of their behaviour on the environment (Shove & Warde, 2003; Gatersleben, Steg & Vlek, 2002).

Unfortunately, consumers seem slow to adopt a more sustainable food lifestyle, possibly because of a lack of relevant information, and because the adoption process seem too complex. These barriers are discouraging consumers who are willing to commit to a more sustainable lifestyle (Berk & Fovell, 1999; Singh, 2009).

5.4.2.2 Popular sources used by marketers

Even though marketing communication can be successfully implemented to educate consumers about sustainable consumption behaviour, marketers face the challenge of creating a message that can be conveyed through popular information sources that retain consumers' interest (Peattie & Peattie, 2009). Using incorrect sources to communicate messages to a specific target market would otherwise be a futile exercise (Maibach et al., 2008).

Firstly, the source should be accessible to the target audience. During the focus group discussions, participants were asked to provide examples of some of the information sources they frequently consult for information concerning sustainable consumption. Most participants overtly explained that although they have not to date specifically sourced information regarding sustainable practices or purchase behaviour, they have noticed some information in the following sources:

Product packaging and labels: the written and/or graphic communication found on products' packaging and/or label that gives information regarding the product's origin, ingredients, uses, manufacturers, price, and date-code information (Kotler, 2011).

"I will definitely check the price first, and you can even read on the label – they will say it is imported" (A8)

"They have a sticker that says imported and even from where" (A6)



"Stickers on the packaging" (A1)

Television: A very effective method of transmitting information to a wide and varied audience and the primary means by which information is delivered to the public in almost every country (Diggs-Brown, 2011:48; Marc, 2000).

"I saw this on television" (A5)

Internet: an International network of private, public, academic, business and government networks providing a variety of information and communication resources and services, with a wide reach and, especially under the younger generation, high trust value (Hilbert & Lopez, 2011; Comer, 2006:64).

"Google global warming" (B16)

And some also mentioned that **word of mouth from family and friends** was helpful: Word of mouth can be defined as the passing of information from person to person by oral communication; Because of the personal nature of the communications, it is believed that the shared information is more credible (Kietzmann & Canhoto, 2013).

"All my friends are having it [something trendy]" (A9) observation, then modelling behaviour based on observation

Although the sources identified during the focus group discussions were mostly associated with the product's packaging and labelling, results that indicate the possible effectiveness of in-store marketing, television, the Internet, and word of mouth sources supported findings identified in phase 1 (Quantitative: Consumer questionnaire). Findings in phase 1 indicated that in terms of specific demographic groups older respondents mostly relied on television and printed media for information regarding climate change, whereas the younger generation mostly used digital sources such as the Internet and social media platforms. The results also confirmed other studies' findings from Prinsloo, Van der Merwe, Bosman and Erasmus (2012) which stated that higher income and more educated consumers are more likely to use product information on product labelling in order to direct their purchase and



usage behaviour. Thus the source used must be audience specific and therefore need to take into account the market segment's age, gender, income level, level of education, and home language (Diamantopoulos et al., 2003).

Currently, sustainability is seen as a trend, also referred to as the "green trend" and without adequate information consumers will keep on associating the movement with something that only celebrities do, and not something that they themselves and their households can also do (Kearney, 2014). Trends can be defined as short-lived whims that dictate how consumers should behave or react in a specific time frame (Business Dictionary, 2014). Although trends have the capability to sway a large group of people, it does not have the power to influence all consumers and alter their lifestyles in a permanent manner. Some individuals are fervently against trends, advocating that just because the masses are doing something does not make it correct. If further information is not given, a trend will remain just a trend. But, if more information is given with the aim of educating consumers, the movement gains credibility and value. The focus group participants agreed with this notion by stating:

"Maybe it is just a trend, how must I know it's got something to do with [climate change]" (C4)

"Exactly, they need to supply the correct information" (C9)

"Yes, then it is not just a trend, there is a reason behind it, a reason why" (C4)

As can be seen from the previous sections, marketing communication is a relevant information source that can be used to encourage consumers to adopt more sustainable behaviour. Marketing communication can be used to expose consumers to ideas and concepts that, if believed and retained, might convince consumers to increase their knowledge regarding a specific topic or idea such as sustainable consumption behaviour. Unfortunately, marketing can only encourage consumers to adopt more sustainable consumption practices if marketers can succeed in convincing consumers that the sustainable movement is not just a trend that will quickly pass by, especially since there are



costs involved in changing consumption behaviour. This can only be achieved through the increase of consumers' knowledge of climate change and sustainable consumption practices.

5.4.3 Consumers' knowledge of sustainable fresh produce consumption practices (Objective 2.2)

Exploring consumers' current knowledge as indicated by their awareness and consciousness in terms of sustainable fresh produce consumption practices entailed exploring and describing their current fresh produce practices in terms of their knowledge regarding the principles of sustainable consumption.

5.4.3.1 Consumers' current fresh produce consumption practices: a general overview

Consumers' current fresh produce consumption practices could serve as an indication of the extent of consumer knowledge regarding sustainable fresh produce consumption practices, and therefore was explored.

The following themes were identified as indicators and descriptors of consumers' purchasing and consumption patterns, namely, drivers of consumer consumption; the frequencies of consumption; format of fresh produce purchases; seasonality; and retailers.

Drivers of consumer consumption: Consumers' fresh produce purchasing is stimulated by marketing as well as various other factors. Firstly, a need for the produce might exist. This need can be as a result of a campaign advocating the increased consumption of fresh produce for improved health as was indicated in findings presented in phase 1 (Quantitative: Consumer questionnaire). The focus group discussions identified more factors, i.e. a need might arise from a dish that the consumer wishes to prepare leading to the need for certain ingredients (A3), because of an external source, such as the consumer's children, encouraging the purchase (A8), or as a result of the attractive display and variety that tempts and entices the consumer (A2). In the focus group discussions, the participants stated the following as reasons for their purchasing behaviour:

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"I buy according to a recipe" (A3)

"Children play a very big role [in purchasing]" (A8)

"We buy more when there is a bigger variety" (A2)

[Promotions encourage purchasing] "If there is a bargain, you will buy" (A5)

"The display is enticing" (B12)

Even though consumers learn how to consume goods through exposure to various external sources, e.g. family members, peers, and culture, most of the focus discussion participants were of the opinion that marketers are the main influence in terms of consumers' consumption behaviour. According to the participants, it is marketing that has succeeded in creating consumers who demand the best, who demand availability through the year regardless of seasonality, and who demand full shelves ("they [retailers] must have a large variety" (C3)). Although socialisation in the household during consumers' upbringing and examples "groom" them to want specific things in specific ways, marketing has succeeded in affirming these lessons —

[Marketing is part of] "The reason we buy too much" (A4)

[Why do you want those things?] "Because it is advertised" (C4)

"They [marketers] advertise to us [consumers], creating needs that make us desire things" (C4)

Frequency of consumption: How frequent consumers visit retailers in order to buy fresh produce was identified as an area of concern and investigated to ascertain whether consumers buy in large (bulk) quantities or more for day-to-day use. In terms of sustainable practices, consumers who only buy once or twice a week are cutting back on their fuel consumption, but they are also increasing the likelihood of wasting fresh produce due to



over estimation and slow consumption ("we use about 30% of what we buy, and waste about 70%" A6). The majority of the participants purchased fresh produce either weekly, or twice weekly. Participants justified this by saying the following:

"If I buy too much I end up throwing it away because it doesn't keep" (B12)

"It is easy to buy and throw away, to not think, to not plan ahead" (A4)

Unfortunately, any fuel that is saved because of the less frequent shopping trips is negated by the increased waste of fresh produce. Consumers rarely take into account the speed at which fresh produce deteriorate; paired with impossibly high standards, staggering quantities of fresh produce is wasted as a result of over purchasing, under consumption and rejection based on minute imperfections.

Format of fresh produce purchases: Consumers' impact on the environment is directly influenced by the amount of waste each individual creates (Gore, 2009). In order to lower this impact, environmentalists encourage consumers to rather buy products and produce that has less packaging – less materials that will be thrown away, to land on a landfill (van Birgelen, Semeijn & Keicher, 2008). From the focus group participants' responses it can be ascertained that participants prefer loose fruit and vegetables because they can then choose their "perfect" product from the display, ensuring that they get the best quality in terms of external characteristics. The rejected fresh produce eventually ends up as waste, increasing the level of greenhouse gas in the atmosphere which is emitted when organic material decomposes. In terms of the packaging, energy and various natural resources are used to produce packaging that is mostly discarded after a single use, ending up in landfills where it contributes to the waste problem (Department of Environmental Affairs, 2012). Packaged fresh produce seem to be the less popular choice amongst loose or pre-packaged produce, but evidently not because of sustainability reasons:

"I buy loose [produce] because then I can choose which one I want" (A8)

"[I buy loose produce] because then I can choose what I want" (B12)



"I enjoy having a choice" (B11)

"I want the prettiest one, the biggest one, without bruises [so I chose my own]" (B16)

Seasonality: Consumers demand year-around availability, as was evident in the focus group discussions, while blaming marketing for creating this demand which results in sustainable consumption messages not being effective. When consumers buy fresh produce that is supposed to be out of season in South Africa, it means that the specific fruit or vegetable was either grown in a heated greenhouse, or imported from another country. Although this practice increases the convenience of shopping, the processes used emit greenhouse gasses, which are detrimental to the environment (Wales, 2009). One participant stated that:

"I want them [fresh produce] [even out of season]" (C3)

Socialisation researchers can argue that consumers demand this because retailers have, throughout the years, provided products in exactly this manner, thus teaching consumers that this is "the way it should be" (Kumar & Christodoulopoulou, 2013; Kotler, 2011). These consumers then taught their children, who taught the next generation, and so forth. Through consumer socialisation, retailers might have created conspicuous consumers, who still have the same demands. Marketers have products to sell, and in so doing inadvertently approve of consumers' demands; also encouraging conspicuous consumption (Dangelico & Pantrandolfo, 2010; Lampe & Gazdat, 1995; Moschis & Churchill, 1978).

Retailer: Four prominent retailers were identified with one retailer being identified as the most popular. Reasons for participants' patronage or loyalty included:

"For me xxx is a one stop shop. Fresh produce, meat.... All fresh" (B10)

"Xxx is the place where I can stop and get everything" (B12)



"It is the closest retailer for me" (B12)

"Xxx is the closest, easiest and I get whatever I need" (B15)

The reason for the participants' frequenting their preferred retailer is the convenience of being able to buy their fresh produce together with their other food and non-consumables, at a reasonable price and of satisfactory quality. It is evident that convenience plays a prominent role in the fresh produce purchasing choices of today's consumers and it can even be argued that convenience itself determines where, when, why, what, and how consumers purchase fresh produce (Wales, 2009). What was interesting to note is that not one participant mentioned anything about the sustainability profile of any of the retailers, and therefore did not base their preference on the perception that one retailer is more sustainable than the next retailer.

5.4.3.2 Reasons for unsustainable fresh produce consumption practices

From the previous section it is evident that most fresh produce consumption could still be deemed unsustainable. Themes that emerged from the findings that reflect on current consumption practices and that could therefore explain this unsustainable behaviour included:

Consumers are unaware of the consequences of fresh produce waste: The excessive quantities that consumers demand lead to increased levels of food waste, directly attributed to irresponsible and unsustainable produce purchasing and consumption. According to recent studies, households are wasting an immense amount of fresh produce every year (Gustavsson, 2011), because consumers often buy more than what they need. This excessive purchasing has been blamed on retailers' use of marketing tools (promotions and discounts, product bundling, and coupons, to name a few), as a result of visually stimulating displays, or due to a lack of environmental knowledge which would enable consumers to understand the issue of climate change as well as how to consume more sustainably (Marx-Pienaar & Erasmus, 2013). Because consumers buy more than what they can use, a lot of fresh produce goes to waste. From the focus group discussions it became



evident that in the more affluent areas of Pretoria East such as Mooikloof, Waterkloof, Silverlakes, Lynnwood, and Brooklyn, this waste can be as high as 70% of the original purchase. This percentage is staggering, especially if one takes into consideration that most participants do not feel any responsibility towards climate change because they do not feel that their waste contributes to environmental degradation. Participants overtly explained that they are seldom aware of the consequences and to some degree ignore it:

"There is information out there..... But how much can we do?" B10

"I think most people are very naive about global warming [climate change]" B12

"Currently it has no direct impact on me" B12

"the little bit that I can do doesn't even have an impact" B12

"it [climate change] does not affect me" B16

"I think it is dangerous in countries such as China where there is factories and stuff" A7

Surprised: "so I am contributing as well?" A9

Consumers feel self-entitled to quality produce: As was discussed in the results and discussion of phase 1 (54% of the sample were of the opinion that one neglects ones family when serving less than perfect fresh produce and 67.10% of the sample agreed that they work very hard and therefore deserve only the best fruit and vegetables), consumers often experience an idealistic right to demand perfect fresh produce of high quality. This demand, which is unattainable, contributes significantly towards pointless fresh produce waste as products that are deemed unfit or not good enough is rejected by the consumer and ends up on landfills, and the consumers usually do not feel guilt or remorse for rejecting what they deem to be less than perfect produce (Madevu, Louw & Ndanga, 2009; Yu & Nagurney,



2011; Marshak, 2011). From the focus group discussions it could be gathered that most consumers feel entitled to the highest quality fresh produce because they feel that they have earned the honour through their hard work:

"I am not interested in hearing how much my demand contributes towards the retailers wastage or climate change, I work very hard and feel entitled to blemish free bananas" (A3)

"You are welcome to explain to me what climate change entails but once I'm in the store and I feel like buying something, even if I don't need it or like you say it is unsustainable I will still buy it because in the end I want it" (A3)

Status driven consumers are overly aware of the opinions and perceptions that others have about them, increasing the status consumer's demand for quality fresh produce as a way of exhibiting their status ("people will think 'oh that looks nice' (A3). As was already discussed in phase 1, 11.40% of the sample agreed that purchasing imported produce gives them status and 29.05% of the sample agreed that the quality of fresh produce signifies how well they are doing in life. Thus, these consumers believe that spending money in such a way that your peers are aware of it is an effective way to acquire and confirm status. The act of purchasing perfect fresh produce as a reward ostensibly increases a consumers' status through the perception of their peers.

In the focus group discussions, one participant remarked that "everything is about status.... That is why we buy branded clothing" (B12). From the approving nods that was observed, as well as the above discussions, it can be assumed that marketing has succeeded in creating consumers who demand and expect the best, who associate price with quality, who use the purchasing of consumer goods to indicate their status and who have no consideration for the waste that they create as a result of these unsustainable practices.

"If it looks nice I will buy it" (A4)

"[Fresh produce] needs to be attractive" (A8)



"Where I shop depends on [who will eat the fresh produce]... if it is for my children I will go to retailer xxx, but if it is for a special occasion I will go to retailer yyy" (A8)

Consumers' habit of buying high quality fresh produce, normally at a higher price, as a way of acquiring status is concerning since it delays the process of encouraging consumers to be more sustainable when purchasing fresh produce (Tsiros & Heilman, 2005; Marshak, 2011).

Consumers' emphasis on physical appearance as an indicator of fresh produce quality: Fresh produce is frequently discarded by consumers as a result of slight imperfections such as bruising or over-ripeness (Stuart, 2009:6). This was confirmed in the focus group discussions, where participants mentioned that they throw away fresh produce when "it smells bad" (A1), "when it is wilted" (A8), or "when it has gone soft" (A1). Frequently none of these reasons would leave the produce inedible or damaging to the consumers' health. The rejection is simply based on the sensory appeal of the produce. To further support this notion, participants interpreted the waste of fresh produce as an economical loss, and not in the sense that this waste contributes negatively on the environment.

"Years ago, the whole environment was different. Food was cheap; people didn't worry to waste food" (A3)

"It is much easier to buy and then throw away" (C4)

Quality is a subjective evaluating factor, meaning that consumers all judge quality differently based on their consumer socialisation. Examples of this were evident from the following:

"[I will not buy produce] that has marks on it, that is soft... that has bruises, something that is overripe" (B11)

"[the chosen produce must also have the] best colour" (B12)

Most consumers have unattainable expectations with regard to the visual appearance of fresh produce, resulting in the rejection of less than perfect fruit and vegetables. From



phase 1 it became clear that 72.8% of the sample agreed that bruised and defomed fresh produce is poor value for money and that they therefore will not buy the produce. The rejected produce is then wasted, which directly impacts the level of greenhouse gas and influences climate change (Schmidt et al., 2013; Joshi & Mishra, 2011; Gore, 2006:163). This wasteful behaviour is continued at household level (Wilkins, 2008). Some consumers might find it acceptable to throw away fruit that is slightly bruised or with minor deformities, while others prefer to cut out the damaged part and use the edible rest. This was confirmed in the focus group discussions when participants were asked what they would do if a small part of an apple was bruised, one responded "I throw it out", while another participant stated that "you cut it out". One participant voiced the opinion often held by most consumers:

"There is this misconception that if you eat it you will get sick" (A1)

One participant proclaimed to cutting out the deformity because that was the example given by the participant's parents and grandparent:

"Depending on how it looks. I will cut it open to see how it looks and then I will decide. Maybe just cut the ugly spot out" (A3)

In this case, a sustainable practice was transferred from one generation to the next through consumer socialisation.

Consumers' health and safety concerns regarding usage of older fresh produce: Most consumers refuse to use produce that is dated past their sell-by or use-by dates. In phase 1, 91.9% of the sample agreed that the sell-by date is important when purchasing fresh produce. This misguided belief is based on the misconception that expiration dates such as the sell-by or use-by dates that can be found on most edible products are indicators of how safe the food is for consumption (NRDC, 2013). In actual fact, these dates are not related to food safety but rather to food quality in terms of appearance, smell and taste. Expired foods will not necessarily make people sick (NRDC, 2013). Because the current dating system together with uneducated and uninformed consumers is responsible for tons of edible food being wasted annually it is deemed flawed (NRDC, 2013). In phase 1, 60% of the sample



agreed that they discard fresh produce that is past its expiry date. From the focus group discussions it became evident that consumers associate these dates with the safety of the produce, and would discard the produce without any remorse – rather the consumer would congratulate him-/herself on their wise decision to not eat the produce:

[To come back to the waste, will you throw things away because it's past its sell-by date? Why do we do that?] "I think there is this misconception that if you eat it you will get sick" (A1)

"Xxx lowers the price of their products that have reached their sell by dates [implying reduced price for reduced quality]" (A1)

Marketing displays: Studies have shown that a large percentage of purchase decisions are made directly in store (Speece & Silayoi, 2004; Quester & Smart, 1998), and that these decisions can vastly be influenced by marketing displays (Silveira & Marreiros, 2014). Findings from the focus group discussions revealed that most participants felt that the display was very important and that attractive displays of produce always entice them to purchase:

"[I will buy the product] if the packaging (display) is good.... It is all about how it is displayed" (B12)

"You won't buy from people if the shelves are empty.... if it is stocked and looks beautiful then you will buy" (A8)

"They must give you a reason to buy it, and then you will buy it... It [the display] has to look good" (A4)

"It [display] must catch your eye — it has to be attractive... it is all in the presentation" (B12)



Consumers who are unaware or uneducated concerning sustainable practices and responsible fresh produce purchasing, who are enticed to purchase the attractively displayed produce, will unwittingly contribute to high levels of fresh produce waste, and increased levels of greenhouse gasses' emissions.

Convenience: Convenience has a major influence on the food choices of today's consumers. For most consumers, convenience and value are tightly linked, with convenience meaning more than merely location and value more than just price (Wales, 2009). Consumers want the little time they have left to spend in their everyday fast-paced lives to be used effectively and efficiently, with most consumers demanding this convenience regardless of the impact it has on the environment. Convenience can be divided into 5 dimensions, namely location, speed of service, assortment or availability, price and environment (Berry, Seiders & Grewal, 2002), as was also found in this study, based on the focus group participants' answers:

"For me it is a one stop shop. Fresh produce, meat.... All fresh" (B10)

"The place where I can stop and get everything" (B12)

"It is the closest retailer for me" (B12)

"The closest, easiest and I get whatever I need" (B15)

Convenience does not just imply ease of access or having all of your desired products under one roof, it also includes factors such as package size, variety of specific produce, having stock at all times, and ensuring freshness (Wales, 2009). Participants admitted that they would rather pay more for the exact package size they want than buying too much that might end up wasting —

"Buying in smaller quantities, but unfortunately that goes with a price premium" (B12)



Further findings showed that younger respondents from the upper socio-economic group lack knowledge concerning sustainable practices despite possessing the needed climate change information. This group understands the threat of climate change and related environmental issues, but struggle to exhibit this knowledge in their daily purchase and consumption behaviour (Poortinga et al., 2011). One of the reasons these younger consumers with higher disposable incomes might not support sustainable practices is their fast paced life resulting in time constraints, which demands convenience (Wales, 2009). This lifestyle of convenience encourages conspicuous consumption (Berry et al., 2002). Sustainable fresh produce purchasing is classified as a high involvement decision, requiring time and effort on the part of the consumer to make a purchase decision, making sustainable behaviour appear less alluring to those consumers who can afford to pay for convenience and who can also afford some waste, but who do not possess the time needed to make the decision (Wales, 2009). Excessive purchasing and waste is further stimulated by the low prices of fresh produce, creating a perceived low financial risk for consumers (Hamlin, 2010). Although these findings are concerning, it remains easier to change the behaviour of consumers who possess some knowledge concerning climate change as it might take less effort to have them understand the consequences of their choices and thus adopt more sustainable practices (Saleem & Abideen, 2011). Consumers who possess the relevant information will be able to adapt their behaviour based on the expected outcome, the goals they have identified for themselves, as well as their own perception of what they can contribute (self-efficacy).

5.4.3.3 Summary of participants' knowledge and skills pertaining to sustainable consumption

Consumers' knowledge and skills concerning sustainable consumption must be developed in order to persuade consumers to change their fresh produce purchasing and consumption behaviour to be more sustainable. Consumer education is critical in this regard; it can be defined as a process of developing and enhancing skills and knowledge to make informed and well-reasoned choices that take societal values and objectives into account (Kagawa, & Selby, 2010). Consumer education can help develop critical thinking and increase knowledge, thereby enabling consumers to become more pro-active. It is also an important



vehicle for building the confidence that consumers need to operate in increasingly complex markets.

In healthy economies demand stimulates supply, and it is on this premise that sustainable fresh produce consumption is effective as it involves the reduction of unnecessary production because demand is lessened from the consumers' side (Brécard, Hlaimi, Lucas, Perraudeau, & Salladarré, 2009). Consumer education results in them not demanding goods in excess as they are informed of the consequences that their consumption has on the climate, and as a result of a decrease in the quantity of fresh produce consumers purchase, fresh produce waste is reduced from both a supply and a demand perspective (Kagawa, & Selby, 2010). This waste reduction leads to a decrease in greenhouse gasses' levels because less organic material is left to decompose, emitting Methane and Carbon Dioxide. Furthermore, consumers no longer demands imported or out of season produce as they are educated on identifying and using seasonal, local produce (Swim, Clayton & Howard, 2011).

Areas of concern that were identified as impediments in terms of sustainable consumption or the awareness thereof included consumers' lack of knowledge and the lack of consumer skills in terms of sustainable consumption. This was also the findings of phase 1; 45.79% of consumers answered correctly that organic materials emit greenhouse gasses when decomposing, and 73.96% of the sample answered that climate change is a consequence of the hole in the ozone layer. The influence of consumers' lack of awareness in terms of knowledge and skills concerning sustainable purchasing and consumption of fresh produce will be discussed at the end of the section.

Consumers' lack of knowledge about the contribution of organic waste towards climate change: The focus group participants seemed unaware that organic waste contributes towards climate change. Participants held the belief that organic waste could have no harmful effect on the environment; this became evident in comments such as:

"[aerosols and deodorants that we use] that release gasses, contribute to climate change...I cannot see that fruit and vegetables can have the same effect, it's all natural is it not?" (A4)



[why is it bad] if it will be turned into coal in a hundred years?" (A6)

[climate change is] caused by Carbon dioxide and carbon monoxide from fossil fuels burning [and not from organic waste]" (A7)

Consumers' lack of knowledge concerning the disposal of fresh produce waste: The focus group discussions' findings revealed that consumers lack the knowledge concerning the correct disposal of fresh produce waste. Most participants admitted that they do not have compost heaps, nor do they attempt to discard their fresh produce waste in any other manner except throwing it in their rubbish bin, which is not viewed as an effort towards sustainable consumption practices:

"In my household we sometimes waste up to 30% of the fresh produce that we buy because we buy in bulk but we don't eat it fast enough. [The 30% of fresh produce that you waste, how do you dispose of it?] It goes to the rubbish bin" (B12), (B11)

"[everything that we waste goes into dustbins as] we have dustbins at the back" (A1)

Some participants were also of opinion that instead of attempting to purchase and waste less they would simply recycle, which absolves them from any feelings of guilt about their probable contribution towards climate change:

"I have two bins; we split our rubbish into wet waste and dry waste and recycle" (A8)

"If you don't recycle you will have climate change" (A7)

Consumers' lack of knowledge concerning greenhouse gasses from fresh produce's contribution to the effects of climate change: Greenhouse gases are gases found in the Earth's atmosphere that absorbs and emits radiation within the thermal infrared range (Karl & Trenberth, 2003). The primary greenhouse gases found in the Earth's atmosphere are water vapour, carbon dioxide, methane, nitrous oxide, and ozone (Le Treut, Somerville, Cubasch, Ding, Mauritzen, Mokssit, Peterson & Prather, 2007). This is of relevance as



consumers generally do not realise that when fresh produce decomposes, the produce emits methane, one of the greenhouse gases (Stuart, 2009:6; Nahman & Oelofse, 2012), and an increase in these gases in the atmosphere has a direct influence on the effects of climate change (Gore, 2009).

During the focus group discussions, it became evident that most participants were informed regarding greenhouse gasses role in the effects of climate change; however, some lacked the knowledge pertaining to the sources that emit greenhouse gasses. Some participants even admitted to not believing that South Africa contributes to the problem, rather that other countries are viewed as the main contributors in terms of greenhouse gas emissions. The following comment reflects participants' ignorance in terms of their own contribution, with most participants distancing themselves from the problem at hand.

"I think it is dangerous in countries such as China where there is factories and stuff. More advanced countries. Industrialised countries, they have to control it. In Africa, there is nothing that really contributes" (A7)

Most participants associated greenhouse gasses with car emissions and aerosol sprays, and as previously discussed, not with fresh produce decomposition:

"[What would you do to decrease greenhouse gas levels?] Drive less, drive slower, and more carefully" (A3)

"Use roll on, and not spray" (A4)

Furthermore, participants also had no knowledge concerning the impact that importing fresh produce has on climate change:

"Why does [importing fresh produce] matter? Either we buy it here and throw it away or eat it or they buy it there and waste it there?" (A4)



The lack of relevant and correct information regarding greenhouse gas leads to consumers not realising the impact or consequences of their personal actions, which leads to consumers not being motivated or encouraged to change their current consumption behaviour to be more sustainable. Although marketing's main aim is to drive consumption, and to encourage consumers to demand more, marketing alone cannot be blamed for climate change. Consumers must also be held accountable for the role that they play in the cycle.

Consumers' lack of skills in terms of sustainable consumption: Consumer knowledge, in terms of awareness and consciousness, of sustainable consumption is inadequate if the relevant consumers do not possess the needed skills to apply their knowledge to their everyday lives (Hoque, 2014). Skills encouraging sustainable consumption would be practices such as only purchasing fresh produce that is grown locally and in season, purchasing fresh produce that has minimal packaging as well as minimal processing (such as convenience, pre-cut or frozen produce), purchasing fresh produce in manageable amounts (only buying what your household can consume before the produce is deemed unfit for consumption), not using date codes as an indication of the quality of fresh produce and managing the waste of fresh produce in a sustainable manner. Examples of participants lacking the necessary skills can be ascertained from comments such as:

"If there are only loose avos, you buy [them] loose. If there are 3 or 4 in a packet, you buy the packet" (A3)

"I would rather buy too much [in a packet], because I hate it when things can roll around or if they can get dirty" (A6)

"[Don't you work out your recipes seasonally?] No, I only make what I like" (A4)

"I don't think the average person knows when things are in or out of season" (A1)

"I am one of those consumers. I never know when things are out or in [season]" (A9)



"[If there is a small hole (imperfection) in a tomato, what do you do?] I throw it out" (A9)

"I buy imported produce" (B11)

"I buy fresh produce when it looks good, even if I know I am not going to eat it" (B11)

These comments emphasise that consumer education should be double barrelled – one side should focus on educating and informing consumers and the other side should focus on teaching consumers' practical activities or behaviour that would lead to these consumers being more sustainable (Muster, 2011). Unfortunately, most participants were of the opinion that retailers and marketers should change their strategies and that this change will lead to consumers' becoming more sustainable, instead of admitting that consumers themselves need to adopt more sustainable practices and skills:

"Marketing makes you want to buy things that you do not even need" (B12)

"[Fresh produce waste is the fault of retailers] or their stupid store managers who could not correctly decide how much produce will be needed to keep their clients happy" (A6)

From the focus group discussions it was concluded that current consumer awareness in terms of knowledge and skills of sustainable fresh produce consumption practices are very low, with the main reason being consumers lack the background information regarding climate change, and therefore either were not aware of the consequences of their fresh produce waste or did not understand the true impact that their waste ultimately has on the environment. This results in consumers not recognising the seriousness of changing their consumption behaviour to be more sustainable. Research done in the past found that in order for consumers to adapt more sustainable consumption behaviours, accurate knowledge about the causes and effects of climate change is essential (Pieniak, Aertsens & Verbeke, 2010).



Some participants were of the opinion that retailers (therefore the marketers who drive their marketing strategies) should be held accountable firstly for encouraging this excessive purchasing of fresh produce and secondly should be responsible for increasing consumers' knowledge and skills concerning sustainable consumption practices:

"the consumer must not be taught to demand the right things in the right quantities, the producer and marketer must be taught to supply and market the right things in the right quantities" (B12)

"They [retailers] should give us information so that we can make that decision" (A6)

"They [retailers] have more knowledge" (A8)

Although a lack of knowledge is one of the main reasons for consumers' unsustainable consumption practices (Barr, 2004 & Frick et al., 2004), during the focus group discussions, participants identified another barrier to sustainable consumption. These consumers noted that they tend to buy things that they are familiar with and feel confident using, thus emphasising socialisation as an indicator of buying habits. A few participants admitted to buying the same way as their parents did:

"I saw my parents and grandparents do it" (A3)

"I suppose [my children] will do the same" (A3)

"That is how my mother did it" (B11)

"Our children learn from our examples" (C4) because "action speaks louder than words" (C5)

"They will do the same because they saw it was the way that we did it" (A3)

"My parents do that" (A2)



Ebreo et al. (2009:113) found that consumers are not likely to change their shopping behaviour if it is inconvenient or unfamiliar. This means that if buying in an environmentally friendly manner is perceived to be difficult, the likelihood of consumers changing their shopping habits becomes very unlikely. One participant summed this up very nicely:

"People don't want to think" (9A)

5.4.4 The influence of marketing communication in terms of status consumption during fresh produce purchases (Objective 2.3)

Status consumption is the process whereby consumers purchase goods and services with the aim of acquiring stature or esteem (Forde, 2011; Rex & Baumann, 2007), i.e. they are relying on their capability to purchase materialistic goods to impress their family, friends or peers. Consumers' status consumption is dictated by their status consciousness, and is relevant to consumer research as the concept is closely related to excessive consumption (Jacobs, 2010; Frijter & Leigh, 2008). Furthermore, these definitions emphasise the fact that status consumption is a very personal and relative term, meaning that consumers' desire for material possessions can change with social conditions and other demographic factors such as age (Richins & Dawson, 1990: 170). Previous research has shown that spending is directly linked to consumers' status inclinations (Frijters & Leigh, 2008).

Phase 1 (Quantitative: Consumer questionnaire)'s results revealed that certain fresh produce purchase and consumption behaviour of consumers are suggestive of status conscious consumption practices. 61.08% of the sample agreed to be willing to pay more for fresh produce that has a superior appearance as fresh produce impress their friends (21.23%). 11.36% agreed that fresh produce that is imported is more attractive to them as these produce tend to have more status (11.40%). Findings gained through the focus group discussions confirmed the previous phase's findings. The popular reasons that were identified as themes contributing to consumers' increased status consciousness include consumers' needs in terms of social appeal/social acceptance, conspicuousness, and luxury and will now be discussed:



Consumers' needs in terms of social appeal/social acceptance: Some consumers are more prone to believe that the goods and products they purchase can increase their social acceptance through status. These consumers are usually more focussed on forming social relationships, in order to compare and compete in terms of status levels (Richins & Dawson, 1990: 170).

During the focus group discussions, the younger participants (20 to 30 years of age) all hinted that whether or not consumers actually have the financial means, consumers do certain things to create the idea that they have money or status:

"When you buy from xxxx it [implies] you are from a higher income group" (A9)

"[I buy certain fresh produce when important people are coming over because it creates] the image of you being perfect" (A9)

"A bowl of fresh fruit [creates] the image of you being healthy and perfect" (A9)

"[having a full bowl of fruit on display means that] they are rich, [they use it just as a decoration]" (A1)

"You pay for quality [you pay more] and that creates the idea that you have status" (A9)

Marketing and the media strategies employed by marketers promote a Western culture of excessive consumption (Jacobs, 2010) where status and esteem is directly equated to material possessions (Erasmus in Mpinganjira & Dos Santos, 2013). More and more South African consumers aspire to this Western ideal of a consumption driven lifestyle (Tobler et al., 2011; Rex & Baumann, 2007). This is to be expected in a society that is changing, especially under the black consumers — as these consumers elevate themselves from their previously disadvantaged background; their spending patterns also evolve (Jacobs, 2010) to accommodate higher disposable incomes and access to information sources. These



consumers demand an increased supply of goods and evidently contribute to the continued degradation of earth (Van Dam & Van Trijp, 2011).

Consumers' conspicuous consumption behaviour: Conspicuous consumption can be defined as the conviction that extravagant and flamboyant spending will satisfy a person's cravings for esteem and the admiration of others (Trigg, 2001; Bagwell & Bernheim, 1996; Page, 1992; Basmann et al., 1988) and is thus usually driven by status. Status driven consumers attempt to live a certain lifestyle characterised by excessive spending and consumption of high quality and high price consumer goods (Forde, 2011; Rex & Baumann, 2007). Material possessions and other consumables are used conspicuously as lifestyle indicators in terms of the consumer's financial status and education level, amongst others. When asked about fresh produce, specifically what the participants' opinions were of people who display a bowl of fresh fruit in their homes, the participants almost unanimously agreed that those consumers do it purely to convey that they have financial means, and not to consume the produce. This suggests that the participants believe those consumers are behaving irresponsible and conspicuous, buying things that they do not need or want, or are planning to use, merely for the sake of having it and displaying it to others.

"They are rich [that is why they can afford it]" (A1)

[Those people who have a nice full fruit bowl] must have money to keep the fruit outside. The rest of us who plans on eating the fruit keep it in the fridge so that it lasts longer" (A6)

"Fruit is not cheap.... Shows [they] can afford it" (A4)

"[What type of fresh produce they buy] tells you something about their lifestyle" (A9)

"People who shop [fruit and vegetables] there are professional people... they are wealthier and career driven.... They are smart people.... And have good taste" (A6)



Marketing is categorised as a powerful socialising agent, i.e. can be used to teach consumers how to be acceptable members of society (Valkenburg, 2000; John, 1999; Rose, 1999). The lifestyle or consumption behaviour that is portrayed in marketing messages is usually emulated by consumers striving to improve themselves or their life. Unfortunately, conventional marketing is profit driven, resulting in the bulk of marketing messages encouraging conspicuous or excessive consumption. As consumers normally base their values on the information they receive via marketing, the lifestyle most often imitated is characterised by conspicuous consumption, excessive waste and a need for status.

Consumers' demand for luxury: From a consumer perspective, the act of consumption is rarely seen as a detrimental or bad thing. Consumers tend to be of the opinion that they work hard for their money and thus deserve to spend it in any way they see fit. In terms of fresh produce, consumers demand perfection arguing that only the best is good enough for their hard earned money. During the focus group discussions, participants confirmed that purchasing fresh produce can be a sign of luxury and therefore the offered produce must be perfect.

"When I buy fresh produce I only select the best, I will not take something that is bruised or have marks or is packed in a broken packet... let's take - over ripe tomatoes [for example] I will not buy it because I deserve better" (B15)

"I enjoy buying imported produce, it might be more expensive, but if I feel like having it and I can afford it, I will buy it, why can't I?" (A4).

From these answers the assumption can be made that fresh produce is seen as a luxury item that is only affordable to the wealthy, and that if a consumer wants to imitate the rich displaying fresh produce is very effective. Status conscious consumers might therefore buy fresh produce in quantities to display and not to consume, and therefore they contribute to excessive fresh produce waste.

Based on the above identified themes, in order to succeed, marketing must change consumers' perception of luxury. The ideal is to create a new culture whereby consumers will associate sustainable behaviour with luxury, thus sustainable fresh produce



consumption behaviour will be used as a means of acquiring stature or esteem. In summary, consumers' prolonged exposure to consumption-related media content has contributed to the establishment of a consumerist value-driven society (Maibach et al., 2008) whereby consumers make use of fresh produce purchasing and consumption as a means of suggesting status, and allow their self-worth to be invested in what they own.

5.4.5 The possibility of green marketing in terms of mitigating unsustainable fresh produce consumption practices (Objective 2.4)

To investigate the possibility of green marketing in terms of mitigating unsustainable fresh produce consumption practices, a projective technique was utilised to measure participants' environmental knowledge, as well as the possible effectiveness of green marketing communication. This technique entailed prompting participants to design possible marketing communication in the form of a poster with the specific goal to educate consumers on how to be sustainable in terms of fresh produce purchasing and consumption practices. See addendum D for examples of the illustrations.

During the projective technique, all participants illustrated either sun rays hitting a surface or being reflected from a surface of the planet such as a dam or body of water. The illustrations focused exclusively on either rubbish heaps or a radiant sun, indicating that consumers lack further information regarding the causes or the consequences of climate change or the possible solutions to reducing climate change, confirming participants' claims that they have not been exposed to marketing messages that provide consumers with information regarding climate change, its causes, effects or consequences.

Participants were further of opinion that the messages that will be the most effective in encouraging consumers to change their consumption behaviour include information about the health benefits of seasonal and local produce ("it is healthy" (A9)) as well as informing consumers on product usage ("how to use products in different ways" [that are more sustainable] (A9)). Both of these messages have the potential to be successful based on the growing health trend and the "local is lekker" campaign that encourages consumers to support local suppliers and providers in order to build South Africa's economy. If retail does



it as a result of pressure from government or legislation consumers will be forced to take the issue seriously and to realise that it is not just another trend.

Coding of the illustrations revealed the following themes in terms of possible strategies that could be implemented by marketers to communicate more sustainable consumption practices to consumers:

Use of marketing to increase consumers' knowledge about climate change: In all of the focus group discussions, participants said that they were not aware of any marketing messages that encourage sustainable consumption. They have not seen any advertisements that promote sustainable practices or that educate the consumer on the dangers of climate change or any other environmental concern. However, they all said that they were bombarded daily with marketing messages that encourage consumption ("we are bombarded with products" (A8)).

Today, consumers in general are being showered with so much information from so many different sources that they stand the chance of becoming very confused. Some consumers might even experience "eco-anxiety", anxiety caused by mounting fears about the earth's wellbeing as well as their own failures in protecting the environment. Both confusion and anxiety can convince these consumers to ignore green messages, choosing to live in ignorance rather than constant guilt and perplexity (Greenberg, 2008; De Swaan Arons, 2011). Therefore, it is possible that marketing messages promoting sustainable consumption do exist, but that the participants block these messages out because they suffer from "eco-anxiety".

Use of marketing to increase consumers' knowledge about reducing fresh produce waste: According to the Department of Environmental Affairs (2012) South Africans generate about 3 million tons of organic waste per annum, and this number is increasing every year. This emphasise that consumers' must be educated on the consequences of their unsustainable behaviour and encouraged to behave more sustainably.



The marketing that retailers employ are usually based in-store, which once again limits the information gaining process to the purchase decision phase of the consumer decision making process. In order to increase the effectiveness of the information, two things must happen. Firstly, sustainable fresh produce purchasing must be elevated to a high involvement purchase decision, resulting in consumers actively searching for information concerning where to buy the most sustainable fresh produce and how to purchase sustainably in order to reduce waste. Secondly, the messages conveyed by retailers' marketers must be distributed using sources other than in-store promotion, i.e. consumers must be able to access information regarding sustainable fresh produce and sustainable fresh produce consumption without having to enter the store.

Phase 1 and 2's objectives' indicated that consumers have poor knowledge concerning possible methods of reducing fresh produce waste in order to decrease climate change. The posters drawn for the projective technique portrayed a rudimentary understanding of the cause of climate change – most participants drew stick figures looking unhappy or angry amidst a landfill versus stick figures looking happy amidst containers that they described to be recycled waste, or a sun that is unhappy as a result of heaps of rubbish. This can indicate that consumers are aware of the impact of their fresh produce waste, but that they lack the necessary information on how to curb the waste which is a major contributing factor in terms of climate change. Nobody drew something relating to buying local, seasonal produce in smaller quantities, or anything concerning not demanding full shelves of perfect produce. Marketing can thus be used effectively to firstly educate consumers on more responsible purchasing and secondly on the impact of their illogical demands for perfect produce and subsequent rejection of imperfect produce, in order to reduce fresh produce waste.

Use of marketing to increase consumers' knowledge about actual sustainable practices:

Marketing can educate consumers about how to plan, select, use, and dispose of fresh produce in such a manner that their behaviour would suggest sustainable practices. The practices that were identified by the participants as being sustainable were recycling (placing waste into containers), and driving a bicycle instead of a motor vehicle. Once again this indicated an elementary understanding of the sustainable practices that consumers need to adopt in order to decrease climate change. Marketers can focus on informing



consumers on how to purchase more sustainably, i.e. buying local, seasonal produce in smaller quantities, not rejecting fresh produce based on slight imperfections, as well as how to dispose of unwanted or rejected fresh produce more sustainably.

Analysis of the illustrations revealed a strong focus on consumers' concern about the consequences of climate change that will be tangible to them personally, and that consumers need to be made aware of the negative consequences that are invisible to them such as food scarcity and drought as well as more practical methods of decreasing fresh produce waste and adopting more sustainable practices. Examples included participants' emphasis on stick figures looking angry because of rotting fresh produce waste, earth crying as a result of a scorching sun, stick figures looking happy while recycling, driving a bicycle or containing their waste correctly.

The results of phase 2 support the findings of phase 1, that current consumer lifestyles do not exhibit sustainable practices or behaviour (Spaargaren, 2003). One of the reasons identified for this lack of sustainable behaviour is the persuasive influence that marketing has on consumers' purchasing and consumption behaviour. Marketing messages provide consumers not only with an ideal to strive to but also with role models to imitate, a very effective concept to encourage consumer learning (the social cognitive theory states that consumers learn most effectively through observational modelling (Bandura, 2001)). As participants rightly remarked: "we need role models" (C4, C5), because "monkey see, monkey do" (C4). Fortunately, consumers can be influenced and encouraged to consume more sustainably by the same media that encourages excessive consumption.





CHAPTER 6

CONCLUSION

This chapter presents the conclusions of the research in terms of the objectives for the study. Recommendations are based on the interpretation of the findings with specific attention to how marketing messages can be employed to promote knowledge of environmental issues. Shortcomings of the study are discussed and recommendations are made for future research.

6.1 INTRODUCTION

Little doubt exists about the existence of climate change as well as its' consequences on the natural environment, and by extension on the survival of mankind (Hawcroft & Milfont, 2010; Briceno & Stagl, 2006; Sanne, 2002; Cronk, 1996). Various research projects have irrevocably found that climate change is largely caused by consumers' irresponsible and excessive consumption, mostly urged on by marketers whose main aim is to sell their products profitably (Kotler, 2011; Trigg, 2001; Bagwell & Bernheim, 1996; Page, 1992; Basmann et al., 1988). Marketers are now urged to change their marketing strategies in such a way that their marketing messages encourage consumers to change their current purchasing and behavioural patterns to be more sustainable (Schmidt, Ivanova & Schafer, 2013; Joshi & Mishra, 2011; Gore, 2006:27).

In the past, a vast number of research studies were done that focused on environmentally friendly products (Kanga, Stein, Heo & Lee, 2012; Brécard, Hlaimi, Lucas, Perraudeau & Salladarré, 2009; Webb, Mohr & Harris, 2008; Gossling, Kunkel, Acher, Heck, Birkemeyer, Frose, Naber & Schliermann, 2008), especially within the context of more developed First World countries, but few of these studies have approached sustainable practices from consumers' fresh produce consumption behaviour, or within a South African context. Although the same questionnaire was used for a more extensive research project, the reasoning of this particular study was done within the social cognitive theory with emphasis



placed on marketing communication's influence on consumers' consumption of fresh produce and their knowledge of the consequences of their consumption behaviour in terms of climate change and sustainable consumption. Because fresh produce consumption behaviour and in particular sustainable fresh produce consumption is primarily a reflection of consumers' knowledge gained through socialisation, this study required an investigation in terms of consumers' knowledge as indicated by their awareness and consciousness regarding the sustainability of their current fresh produce consumption practices, issues regarding climate change, as well as the relevancy of marketing communication as a possible strategy to mitigate unsustainable behaviour or to promote the principles of sustainable fresh produce consumption. A mixed method approach was used to collect the data during two distinct phases that included three data collection techniques. The research objectives were formulated from the literature review conducted in Chapter 2. The conceptual framework was set as reference point for the discussion. The following sections will reflect and conclude on the respective objectives set for the two phases, which can be found on p. 5 of Chapter 1.

6.2 THE QUANTITATIVE INVESTIGATION: THE TSHWANE FRESH PRODUCE CONSUMER

The following sections will give the conclusion of each individual objective as determined for this study.

6.2.1 Consumers' use of marketing communication as an information source about issues pertaining to climate change (Objective 1.1)

Different media can be used by marketers to get their message to the consumers. How effective each medium is depends largely on the demographic characteristics of the chosen target market as was seen in this study. In descending order the primary sources consulted for information regarding climate change and environmental issues were television, then the Internet, printed media, radio, word of mouth, social media, product labelling, in-store or retailers, billboards, scientific journals and lastly seminars. The summed percentages of the last six sources were 30.71%, meaning that the bottom six sources were chosen by less



than a third of the sample, while more than 40% of the entire sample indicated that television was their main source. The last two sources' (scientific journals and seminars) received such low scores that they were deemed irrelevant. In terms of specific demographic groups results revealed that younger consumers are more prone to consult technological sources such as the Internet and social media platforms, and older consumers still rely on sources such as television and printed media for information or communication regarding climate change or sustainability practices. This means that marketers wishing to educate and inform consumers about climate change and sustainable practices should use the marketing medium e.g. television, printed media, scientific journals, and radio, that their target audience is most comfortable with in order to enable the effective transfer of knowledge.

The social cognitive theory states that behaviour is based on an internal, complex learning process whereby individuals have the power to influence their own behaviour by being exposed to information, absorbing the information, sifting through it and making sense of it, storing the information and then knowing when to use the relevant information (Bandura, 2001). Individuals must thus be able to ascertain when they are in the correct situation or context for the specific behaviour. This ability to identify the correct situation is usually learned through consumer socialisation, which is a process during which consumers learn how to be consumers by observing socialising agents such as their family, peers and communication messages from marketing media. In order for consumers to absorb information the information must come from a source that the consumer can firstly access, secondly understand (comprehend) and thirdly refer back to if the information is forgotten or further clarification is needed. Marketing managers wishing to use marketing messages to inform consumers on the consequences of unsustainable behaviour versus the benefits of sustainable behaviour must make use of sources that the target consumer will be exposed to. According to the findings, that means using television and printed media to target older consumers (50 years and above) and making use of digital sources (Internet and social media platforms) to target and inform younger consumer groups (40 years and younger).

As a result of the ineffective messages and limited information sources used by marketing, consumers do not have enough opportunities to gain usable knowledge concerning



sustainability and other environmental issues such as climate change. This became evident when respondents' knowledge of climate change was measured. Results revealed that respondents exhibited an above average level of knowledge of climate change, but that there still exists room for further clarification. Identified areas of concern included their lack of knowledge regarding the role that greenhouse gasses play in climate change; ignorance about the effect of the hole in the ozone layer and its subsequent contribution to climate change; and the impact of organic waste on climate change.

No significant differences could be confirmed in terms of the different genders, age groups or level of education groups, but significant differences were identified among the income groups and the population groups. The two higher income groups' (>R 25000 – R 45000 and >R 45000) high knowledge can be attributed to higher education levels or increased exposure to relevant information sources. The significant differences identified between the knowledge of the two population groups indicated that Whites (65.84%) were more aware of climate change compared to the Other category (54.97%). This can be indicative of how consumer socialisation differs between different population groups as well as the historical disadvantage of the majority of South Africans (Other than Whites) as a result of Apartheid's forced deprivation in terms of material possessions, formal education and financial independence (Battersby-Lennard, 2009; Yamauchi, 2005; Franchi & Swart, 2003).

The goal of the first objective was to investigate consumers' utilisation of marketing communication in popular media as an information source about issues pertaining to climate change. From all of the above it can be concluded that even though consumers have primary sources such as television, radio, the Internet and printed media, that they use to gain knowledge concerning climate change and environmental issues, consumers are not informed adequately to change their behaviour to become more sustainable. The social cognitive theory's assumption of observational learning supports the following solution – providing consumers from different demographic segments different marketing messages using different sources in order to increase the probability of consumers being exposed to, paying attention to, retaining, producing and using the information as motivation to ultimately change their behaviour.



6.2.2 Consumers' consumption of fresh produce in terms of unnecessary wasteful consumption that might enhance climate change (Objective 1.2)

This objective was to investigate consumers' current consumption behaviour concerning fresh produce in terms of unnecessary waste.

In terms of consumers' fresh produce purchasing and consumption behaviour, the study found that consumers exhibit very little knowledge regarding their consumption and waste behaviour's contribution towards climate change. The majority of respondents indicated that they select fresh produce based on the physical appearance of the produce as well as the date-codes displayed on the produce, without considering what will happen to the fresh produce rejected by them. Fresh produce that fail to meet consumers' quality expectations are often left on the shelves and then discarded by the retailer without further concern. This confirms the findings of objective 1.1 that consumers have an inadequate knowledge about issues relating to climate change.

In terms of possible drivers of unsustainable fresh produce consumption behaviour, respondents stated that they plan their fresh produce purchases, negated by the admittance that they do not make use of shopping lists. The respondents furthermore indicated that they are easily tempted by visually appealing in-store displays, a marketing promotion tool employed as part of the marketing strategy, which directly encourages impulse buying. Impulse purchases explicate the amount that consumers waste fresh produce. Other identified explanations for respondents' over purchasing and waste of fresh produce were: bulk purchasing, and buying more than what was needed because fresh produce is believed to be nutritious and healthy. Consumers' purchasing and consumption of fresh produce has been shaped not only by examples set by their family and friends (choosing produce from the back of the display, buying only what is deemed perfect), but also through the messages communicated by the marketing media (fresh produce is healthy so consumers should buy large quantities). This is indicative of consumer socialisation and consumer learning, and the impact of these sources further reveal potential actions that can be taken in order to encourage sustainable behaviours concerning consumers' purchasing and consumption behaviours. Examples of such actions would be marketing media



informing consumers that produce does not lose nutritional value if slight imperfections are present, consumers encourage each other to buy in minimal quantities in order to curb fresh produce waste, marketers refraining from using enticing displays to encourage impulse buying of fresh produce and consumers teaching their children to always make use of detailed shopping lists.

The social cognitive theory states that consumers who are interested in a topic or issue will retain information when exposed to it, and then use this information to motivate their behaviour through outcome expectations. This is done by individuals using the information to visualise their expected or desired outcome. This outcome can serve as a reinforcement or punishment, thus motivating behaviour. In terms of this study it is proposed that consumers who are subjected to information from marketing sources will use or apply the information to understand that they are contributing to something good by changing their consumption behaviour and thus contribute to the negation of climate change. Similarly, consumers who use the information to be educated on the consequences of climate change and the impact of their consumption patterns on climate change might use the information as motivation for a change in behaviour, believing that if they do not change they will be punished by an increase in environmental issues.

6.2.3 The potential influence of consumers' status consciousness (Objective 1.3)

Nelissen and Meijers (2011) define status as an individual's social position compared to other individuals, based on the same factors. Some of these factors include education, wealth, and material possessions. Consumers who attach importance to status continuously assess their behaviour compared to their relevant reference group and are prone to conspicuous consumption (Veblen, 2005; Trigg, 2001). Status has been acknowledged as an impractical value that furthers environmental degradation and climate change by encouraging excessive consumption. This study investigated the influence of status consciousness on consumers' purchasing and consumption behaviour of fresh produce. From the results it can be concluded that young, less educated consumers from lower income groups are more prone to be status conscious. From a South African perspective this



is of great concern as the majority of the South African population is characterised as young, with limited education and financial resources. Sustainable consumption practices is defined by more responsible and prudent spending, which can be perceived by consumers as a limitation if these consumers are motivated to improve their lifestyles and gain the veneration of others by acquiring material possessions.

This predicament agrees with the social cognitive theory which states that the most effective method of influencing consumer behaviour is by stimulating consumers to mimic appealing behaviour (observational modelling or learning) through goal setting. This assumption of the social cognitive theory states that people not only learn but also use planning to envision the future, identify outcomes, and generate possible action strategies (Jackson, 2005) to accomplish the set goals. Goals therefore are intricately related to outcome expectations and personal perceived self-efficacy. Based on this assumption, consumers might become status driven if the higher classes of society to which the consumer aspire display this behaviour. This creates an internal struggle for consumers, who on the one hand want to consume sustainably based on general knowledge of environmental issues and climate change, but on the other hand want to ensure their social position in society based on their status level. The only conceivable solution that might be successful would be a "trickle down" approach characterised by consumers from the higher socio economic groups being educated to change their purchasing and consumption practices to become more sustainable, and in so doing create a new norm or goal which can be copied or endeavoured by the lower socio economic groups. Theoretically it should be easier to inform and persuade consumers from the higher socio economic groups as these consumers usually have better access to information sources.

6.3 THE QUALITATIVE INVESTIGATION: FOCUS GROUP DISCUSSIONS AND PROJECTIVE TECHNIQUE

This section will conclude on the objectives of Phase 2: Qualitative data and will also conclude on the findings of the projective technique.



6.3.1 The relevance of marketing communication as an information source used to encourage sustainable consumer behaviour (Objective 2.1)

Sustainable marketing's main aim is to educate consumers concerning environmental issues and concerns such as climate change, with emphasis on increasing consumers' knowledge because consumers might not always be aware of the impact that their consumption behaviour has on the environment. Therefore consumers might unknowingly perform actions that are unsustainable (Shove & Warde, 2003; Gatersleben, Steg & Vlek, 2002). In order for marketing to increase consumers' knowledge, as indicated by their knowledge regarding climate change, marketers must first ascertain the current level of knowledge that consumers in general possess. Objective 2.1 of Phase 2 (Focus group discussions) focussed on firstly gaining insight into consumers' current climate change knowledge and secondly aimed to identify popular sources of information used by consumers to assist them in terms of mitigating unsustainable consumption behaviour.

In terms of knowledge pertaining to climate change, the focus group discussions' findings revealed results contradicting the quantitative findings. Most focus group participants had neither an idea of what climate change is, what causes climate change, nor exactly how climate change will affect the whole population. In phase 1 (Quantitative: Consumer questionnaire) the findings indicated that most consumers had an above average level of environmental knowledge concerning climate change. The reason for these different findings could be attributed to the format in which the data was collected. During the structured consumer questionnaire, respondents only had to indicate whether a statement was true, false or uncertain. There was no further clarification or more detail needed. In the focus group discussions (Phase 2), participants were asked to specifically explain what they knew or understood. By asking exact questions, it became evident that participants' knowledge was inadequate, and that they lack the necessary knowledge about environmental issues such as climate change that is needed to encourage them to adopt more sustainable behaviour. Themes that were identified during the focus group discussions as possible reasons for consumers' low knowledge concerning climate change included a lack of interest in climate change based on consumers believing that climate change is not relevant to their daily lives because of the invisibility of climate change impacts.



With regard to the popular sources used by marketers to inform consumers on climate change, most participants explained that although they have not to date specifically sourced information regarding sustainable practices or purchase behaviour, they have noticed some information on product labels and packaging, broadcasted on the television, or on the Internet. Another source that seemed to have the potential to be effective in providing information regarding sustainable practices was word of mouth from family and friends. The fact that word of mouth could be an important information source can indicate the relevance of the social cognitive theory with regard to this study. The social cognitive theory emphasises that individuals' behaviour is the result of a complex learning process, gained through observation and social interaction (Van Dam & van Trijp, 2011). Although the sources of information identified during the focus group discussions were mostly associated with the product's packaging and labelling, results indicate the likely effectiveness of instore marketing, television, the Internet, and word of mouth sources which supported findings identified in phase 1 (Quantitative: Consumer questionnaire).

In order to be effective, marketing communication that is used in marketing strategies for increasing consumers' climate change knowledge must not only make use of observational learning as was already discussed, but must also encourage self-regulation. This assumption of the social cognitive theory refers to an individuals' ability to manage or monitor personal learning behaviours, whether learning was acquired through observational learning or past experiences (Zimmerman & Schunk, 2011). Consumers who have come to the realisation, as a result of increased education and information from marketing communication, that their actions have a direct influence on the impact of climate change might ascertain that by adapting their consumption behaviour to be more sustainable they are decreasing the effects of climate change. In such a way the information given is managed and utilised. Should the consumers then evaluate or monitor their modified behaviour, the consumers will either be satisfied with their sustainable fresh produce consumption behaviour, i.e. they feel good about protecting nature; they experience cost savings; or they feel there has been an improvement in their health (van Dam & van Trijp, 2011; Hartmann & Apaoloza-Ibanez, 2011), and thus continue with the new learned behaviour or feel that they are not succeeding and thus stop the perceived unsuccessful behaviours.



To conclude, consumers' lack of knowledge concerning environmental issues and climate change is impeding on consumers' ability to adopt more sustainable behaviours. Marketing communication can be used effectively to educate consumers through the adaptation and monitoring of new sustainable behaviours, if the source used is audience specific, taking into account the market segment's age, gender, income level, level of education, and home language (Diamantopoulos et al., 2003).

6.3.2 Consumers' knowledge of sustainable fresh produce consumption practices (Objective 2.2)

Exploring consumers' current knowledge in terms of sustainable fresh produce consumption practices entailed describing consumers' current fresh produce practices and evaluating their knowledge regarding the principles of sustainable consumption.

Various external factors are effective in stimulating consumers' fresh produce purchasing and consumption behaviour. According to the focus group discussion participants, marketers are the main force behind consumers' consumption behaviour, even though consumers learn how to consume through other sources such as family members, peers, and culture. The focus group discussion participants were of the opinion that although upbringing and family examples "groom" consumers to want specific things, marketing affirms these lessons when retailers, through their marketing, advertise and provide products in exactly this manner. The result is that marketing teaches consumers that this is "the way that it should be" (Kumar & Christodoulopoulou, 2013; Kotler, 2011), resulting in unsustainable consumption behaviour.

What became evident from the focus group discussions was that consumers demand excessive quantities, large variety and year-around availability. Consumers' further demand only the best produce, of the highest quality, without any physical imperfections. All of these demands reflect on unsustainable fresh produce purchasing and consumption practices. Some consumers felt that their purchasing and consumption behaviour was more sustainable as they only bought fresh produce once or twice a week. In terms of sustainable practices, these consumers are cutting back on their fuel consumption, but they are also



increasing the likelihood of wasting fresh produce due to over estimation and slow consumption.

During the focus group discussions, the following themes emerged as reasons for consumers' current unsustainable fresh produce consumption behaviour, namely consumers' unawareness of the consequences of fresh produce waste, consumers' feeling of entitlement with regards to quality fresh produce, their rejection of unattractive produce, health and safety concerns with regards to the use of older fresh produce, marketing displays, and convenience. All of these themes revolve around marketing and the messages that marketing communication broadcasts, specifically with regard to encouraging consumers that they have the right to demand only the best as reward for their hard work.

The findings showed that younger participants from the upper socio economic group lacked the skills concerning sustainable practices despite possessing the needed climate change information. Areas of concern that were identified included consumers' lack of knowledge about the contribution of organic waste towards climate change, the disposal of fresh produce waste and the role of greenhouse gasses in intensifying the effects of climate change, as well as their ignorance concerning the cause of the hole in the ozone layer and its contribution towards climate change.

As was already concluded in Obj. 2.1, consumers lack the needed information regarding climate change, resulting in consumers finding it difficult to understand the seriousness of changing their consumption behaviour to be more sustainable. In order to change the behaviour of consumers it remains vitally important to educate the consumers. According to the principles of the social cognitive theory, consumers who possess the relevant information will be able to adapt their behaviour based on the expected outcome, the goals that they have identified for themselves, as well as their own perception of what they can contribute (self-efficacy).



6.3.3 Marketing's influence on consumers' status consciousness (Objective 2.3)

Status consumption can be defined as the process whereby consumers purchase goods and services with the aim of acquiring stature or esteem (Forde, 2011; Rex & Baumann, 2007). The focus group discussions found that certain fresh produce purchasing and consumption behaviour is suggestive of status conscious consumption practices, as was also indicated in Phase 1's (Quantitative: Consumer questionnaire) findings. Status driven consumers are overly aware of the opinions and perceptions that others have concerning them, thus increasing their demand for quality fresh produce to use as a way of exhibiting their status. This demand contributes significantly towards increased levels of fresh produce waste as produce that are not acceptable to consumers are rejected and thus end up on landfills.

Popular reasons that were identified as contributing to consumers' status consciousness included consumers' needs in terms of social appeal or social acceptance, conspicuousness, and luxury. A recurring reason for consumers to engage in unsustainable purchasing and consumption behaviour was self-entitlement through reward — consumers were of the opinion that they work hard for their money and therefore deserve to spend it in any way they want. Marketing therefore must change consumers' perception of status by establishing a new culture whereby consumers will associate sustainable behaviour and practices with status.

In terms of the social cognitive theory, outcome expectations can be utilised to sway consumers towards more sustainable practices. In order to combat consumers' using fresh produce purchasing and consumption as a means of acquiring status, marketing's aim should be to inform consumers of the virtues of sustainable living, i.e. to make the expected outcome rewarding and thus motivate consumers to act more sustainably (Neagu, 2011). If marketing communication can succeed in convincing consumers that living more sustainably can act as a status symbol, making these consumers trend setters, the status consumers might be willing to change their consumption behaviour.



6.3.4 The possibility of green marketing in terms of mitigating unsustainable fresh produce consumption practices (Objective 2.4)

During the focus group discussions, a projective technique was used to measure participants' environmental knowledge, as well as the possible effectiveness of green marketing communication. This is a very effective method of obtaining data as participants could reveal true opinions more overtly whereas they otherwise might have been hesitant (Donoghue, 2000). Coding of the resulting illustrations revealed the following strategies that could be implemented by marketers to communicate more sustainable consumption practices to consumers such as in-store signage with short, educational facts concerning the contribution of fresh produce waste to climate change; posters informing consumers on alternative uses for products in order to increase seasonal consumption and decrease waste; retailers encouraging consumers to plan their purchases much in the same way that they encourage consumers to buy re-usable shopping bags as opposed to buying plastic grocery bags; use of marketing displays to inform consumers that slight imperfections do not alter the nutritional content or even taste of fresh produce. Marketing communication can be used to provide consumers with role models and lifestyles to emulate (observational learning), which is, according to the social cognitive theory, one of the most effective methods of socialisation. Socialisation can be a major obstacle to overcome in order to convince consumers to change their fresh produce practices to reflect more sustainable behaviour. Consumers tend to buy products that they are familiar with and feel confident using, and most often consumers buy the same way as their parents did. In order to change this, consumers must be re-socialised in order to make sustainable practices the norm instead of the exception, and then these consumers will teach, or socialise, their friends and family members to also be more sustainable.

6.4 THE RESEARCH IN RETROSPECT

At the end of any investigation, the research must be evaluated objectively in order to ascertain whether all the objectives have been adequately addressed.



The measures that were taken to ensure reliability and validity were discussed in Chapter 4, and the reliability of the study was further improved by the use of a valid and well established theoretical perspective. Different methods of data collection was utilised as part of a mixed method research approach (structured consumer questionnaire, focus group discussions and a projective technique). These methods complimented each other and thus served as a means of cross validation to further ensure the reliability and trustworthiness of the study (Mouton & Marais:156). To insure reliability of respondents' answers, the use of a cover letter with the structured consumer questionnaire served to emphasise the purpose of the study, the researcher's association with the University of Pretoria as well as the guarantee of anonymity and confidentiality of the respondents (Mouton & Marais:149; 157). The focus group participants participated out of their own free will, which also enhanced the reliability of the responses and subsequent findings.

Achievement of the objectives set out for this research study

The researcher is confident that all of the identified objectives have been addresses satisfactorily, and it was possible to make relevant conclusions based on the generated data. Neither of the data collection methods produced any unforeseen problems.

6.5 LIMITATIONS OF THE STUDY

As a result of the sampling method used (convenient yet randomly selected consumers) the results of the study are sample specific and can thus not be generalised to a greater population. Respondents were 20 years of age and older, in middle to upper income households living within the greater Tshwane metropolitan, and expected to either be in charge of their own households, or at least exert a notable influence on a household's fresh produce purchasing and consumption decisions. The majority of the sample was female; this can be attributed to the fact that in dual households, the person most likely to be responsible for the food purchases is female. This resulted in a predominantly female sample. Although not truly a limitation, this did emphasise that future research might focus more on the growing market segment of male grocery purchasers.



The length of the consumer questionnaire caused a low and slow response rate, attributed to the time needed to complete the questionnaire. Some of the concepts, such as status, measured by the questionnaire could be perceived as being sensitive in nature, thus resulting in social response bias. This type of cognitive bias can affect the results of a statistical survey if respondents answer questions the way they think they should be answered instead of reflecting own true beliefs or opinions. This became clear when the questionnaires responses in terms of irresponsible consumption behaviour were compared to comments made during the focus group discussions. It can be assumed that during the focus group discussions, participants were more prepared to explain and defend their purchasing and consumption behaviour.

6.6 SUGGESTIONS FOR FURTHER RESEARCH

Based on the experience gained during this study, the researcher suggests the following as areas for future research:

- A qualitative study to explore the influence of the family structure on fresh produce consumption and waste.
- To explore the reasoning behind green marketing campaigns as well as their effectiveness on cosmopolitan consumers.
- To compare the acceptability of older produce usage between different South African demographic groups.
- To investigate the impact of the Western ideal on the sustainability of developing nations.

6.7 CONCLUDING REMARKS

Climate change is real, and without a drastic change in consumer behaviour, the consequences are dire. Consumer behaviour is shaped by a complex process known as socialisation, and one of the most effective socialisation agents is marketing. Marketing communication has been used for decades as a way of encouraging consumers to spend



excessive amounts of money on products that they do not necessarily need, but conversely can also be used to educate consumers on how to consume more sustainably. Consumers must firstly be educated and made aware of the influence that their consumption has on the environment, and how this contributes to the worsening of climate change.

Marketing communication can be an effective method of educating consumers about sustainable practices, but the process is challenged with obstacles such as different cultures, languages, education levels and income. Especially in South Africa these challenges are pronounced, with these obstacles decreasing consumers' access to information, which influences consumers' willingness to commit to change.





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LIST OF ADDENDA

ADDENDUM A- QUESTIONNAIRE



Department of Consumer Science

Questionnaire: South African Consumers' fresh produce consumption

Introduction and Notification

Dear Participant,

This study forms part of a research project for a Doctoral (PhD) Degree. The aim of this questionnaire is to gain some understanding of households' fresh produce consumption and environmental awareness. Through this research project we would like to identify problem areas and to subsequently provide guidelines so that both retailers and consumers would know how they could become involved in supporting this worthy cause. Thank you for taking the time to share your perspectives and views in this regard.

Your decision to complete and return this questionnaire will be interpreted as confirmation that you have agreed to participate. Please note that your participation is voluntary and does in no way release the researchers or involved institutions from their legal and professional responsibilities. All information will be treated as highly confidential and the identity of respondents need not be disclosed and will remain anonymous. If you choose to participate in the lucky draw, your telephone or cell number must please be entered separately without any further identification.

If you have any further questions concerning matters related to this research, please feel free to contact: Nadene Marx- Pienaar at (012) 420 5988 during office hours.

Please take note that when referring to FRESH PRODUCE in this questionnaire I am referring to FRUIT AND VEGETABLES only.

Kind regards,

Nadene Marx-Pienaar

Prof. Alet C Erasmus

Study leader



	1	Questionno	iire numbe	er		
SECTION 1: DEN	OGRAPHIC INFORM	MATION		For o	office	
				use (only	
What is your gender?					1	
, ,			Ma	le 1	١ ,	/2
			Fema	le 2		
What was your age (in years) at y	our most recent birt	hday?				/ 3
What is your highest level of edu c	cation?			_ 		
		Lower tha	an Grade 1	.2 1	V41	
			Grade 1	.2 2		
	Grade 12	plus a Degree	or Diplom	a 3		
Please indicate your area of resid	ence within the grea	ter Tshwane				
Metropolitan area						
	Suburb: More	eletta park – P	retoria Ea	st	\	V 5
How many members are there in	your current househ	old? (Total				
number of people living					\	V 6
together)			$-\Box$			
What is your approximate total m	nonthly household ir	ncome			П۱	/7
rounded up to the nearest			R50,000			
R1000?						
1			l	1		



	you belong?				
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	Asian	2			
	Coloured	3			
	White	4			
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			J		
9	What is your preferred home language? Please specify: _English			V	9
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	Do you struggle to interpret or understand advertisements and product	Never	time	Alwavs	
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		1	2	3	
					0
1	Please indicate your marital status	Ì			
1					
ŀ	Single without children / Divorced / Widowed	1	٧	/11	
f	Single with children	2			
f	Couple / Married (without children)	3			
	Couple / Married (with children)	4			

Please turn to page 3 to complete question 12



Please indicate the primary source that you consult for information	1 /		I	For	offic	e use	
knowledge regarding environmental issues.					only	y	
Television	1	ī			V1	2.1	
Printed media e.g. Newspapers / Magazines	2	[]			_		
Radio	3	3					
Word of mouth from family, friends or co-workers		ī					
In-store, retailers	5	5					
Product labelling		5					
Internet	7	7					
Social Media e.g. Facebook or Twitter	. -	3					
Billboards	وا	7					
Other please specify:	1	0		Π	V1	2.2	
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SECTION 2					1		
Please provide the following information regarding your <i>general</i> please	our	chc	isin	g	_		
behaviour by marking the correct or most applicable answer with	an	'X'	in	the			
box provided.							
Who is responsible for your household's grocery shopping and							
how frequently do they do it (Please mark every applicable		ρr	per	per			
answer with an X)	_	Махітит опсе пе					
	eve	m or	m or	an tv	daily		
	Almost never	rimii	Maximum once	More than twice	Almost daily		
	Alm	Max	Max	Mor	Alm		
Example:	1	2	3	4	5		
Neighbour	x						
Yourself	1	2	3	4	5	V13.	
						1	



Checkers Checke	Other (please specify): How frequently do you visit the following retailers?	1	2	3	4	5	V13.
Other (please specify): 1 2 3 4 5 V13 4 How frequently do you visit the following retailers? Please mark every applicable answer with an X (You may choose more than option) Checkers 1 2 3 4 5 V14 Pick n Pay 1 2 3 4 5 V14 Spar 1 2 3 4 5 V14 Food lovers' market/ Fruit and Veg City from the following retailers? Farmers Market 1 2 3 4 5 V14 Flow often do you purchase fruit and vegetables (fresh produce) from the following retailers?	Other (please specify): How frequently do you visit the following retailers?						3
Other (please specify):	How frequently do you visit the following retailers?	1	2	3	4	5	
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Spar Spar 1 2 3 4 5 V14 3 1 2 3 4 5 V14 4 4 5 V14 5 Teachers Market Fruit and Veg City Farmers Market 1 2 3 4 5 V14 5 5 Teachers Market 5 How often do you purchase fruit and vegetables (fresh produce) from the following retailers?	Pick n Pay	1	2	3	4	5	V14
Woolworths Food lovers' market/ Fruit and Veg City Farmers Market Farmers Market 1 2 3 4 5 V14 5 How often do you purchase fruit and vegetables (fresh produce) from the following retailers?							2
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Food lovers' market/ Fruit and Veg City Farmers Market 1 2 3 4 5 V14 5 How often do you purchase fruit and vegetables (fresh produce) from the following retailers?							3
Food lovers' market/ Fruit and Veg City Farmers Market 1 2 3 4 5 V14 5 How often do you purchase fruit and vegetables (fresh produce) from the following retailers?	Woolworths	1	2	3	4	5	V14
Farmers Market 1 2 3 4 5 V14 6 How often do you purchase fruit and vegetables (fresh produce) from the following retailers?							4
Farmers Market 1 2 3 4 5 V14 5 How often do you purchase fruit and vegetables (fresh produce) from the following retailers?	Food lovers' market/ Fruit and Veg City	1	2	3	4	5	V14
How often do you purchase fruit and vegetables (fresh produce) from the following retailers?							5
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from the following retailers?							6
from the following retailers?	How often do you purchase fruit and vegetables (fresh produce)				يا		
Please mark the applicable answers with an X (You may choose) per	ber			
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Checkers	1	2	3	4	5	V15.
						1
Pick n Pay	1	2	3	4	5	V15.
						2
Spar	1	2	3	4	5	V15.
						3
Woolworths	1	2	3	4	5	V15.
						4
Food lovers' market/ Fruit and Veg City	1	2	3	4	5	V15.
						5
Farmers Market	1	2	3	4	5	V15.
						6

How would you describe the quality of the fruit and vegetables (fresh produce) sold by the following retailers?	Very	Poor	Average	Good	Excellent	
Checkers	1		3	4		V16. 1
Pick n Pay	1	2	3	4	5	V16. 2
Spar	1	2	З	4	5	V16. 3
Woolworths	1	2	3	4	5	V16. 4
Food lovers' market/ Fruit and Veg City	1	2	3	4	5	V16. 5
Farmers Market	1	2	3	4	5	V16. 6



How would you describe the following retailers in terms of evidence that they are paying attention to environmental issues?	Very Poor	Poor	Average	Good	Excellent	
Checkers	1			4		V17.
						1
Pick n Pay	1	2	3	4	5	V17.
						2
Spar	1	2	3	4	5	V17.
						3
Woolworths	1	2	3	4	5	V17.
						4
Fruit and Veg City	1	2	3	4	5	V17.
						5
Farmers Market	1	2	3	4	5	V17.
						6

How do the following statements reflect the general fresh produce buying and consumption practices of your household? Please mark the applicable answer with an X	Strongly	Disagree	0000	Strongly	
1 We purchase a substantial amount of fresh produce in individual units (e.g. loose fruit).	1	. 2	3	1	V18. 1
2 We purchase a substantial amount of fresh produce in bulk e.g. 500g punnets/packets/bags.	1	. 2	3	4	V18. 2
3 We purchase a substantial amount of fresh produce in a preserved format (e.g. frozen, dried or canned).	1	. 2	3	4	V18. 3
4 We plan fresh produce purchases in advance and only purchase whatever we need in the short term.	1	. 2	3	4	V18. 4
5 Because fresh produce is affordable, we tend to purchase more than we can consume.	1	. 2	3	4	V18. 5
6 Because fresh produce is healthy/ nutritious we tend to purchase	1	. 2	3	4	V18.



more than we can consume. Please turn to page 5 to complete question 18 V18 Continued..... Strongly Agree How do the following statements reflect the general fresh produce buying and consumption practices of your household? Please mark Strongly the applicable answer with an X Because fresh produce is displayed attractively in stores we tend V18.7 to purchase more than we can consume. 1 3 V18.8 8 In our household, fresh produce is wasted and thrown away due to slower consumption of the quantities of fresh produce that we generally purchase. 9 In our household, fresh produce is wasted and **composted** due to 2 3 V18.9 slower consumption of the quantities of fresh produce purchased. 10 In our household, fresh produce is wasted and then placed in V18.1 1 trees for birds to eat due to slower consumption of the quantities purchased. V18.1 11 We are always on the lookout for exotic and imported fresh 1 produce because we believe it is of superior quality. 12 We prefer to purchase imported products because they tend to 1 2 3 V18.1 have more status. 1 2 3 V18.1 13 We would pay more for fresh produce that has a superior 4 appearance. 14 Fresh produce that is imported is more attractive to us because it 3 V18.1 1 2 is admired by the people I know. 15 We admire people who display fresh produce attractively in their 1 2 3 V18.1 kitchens. 16 We place a lot of emphasis on the type of fresh produce when 1 2 3 V18.1 making a purchase decision. 6 17 The type and quality of fresh produce that we purchase signifies 1 2 3 V18.1



	how well we are doing in life.					7
18	We try to purchase only the most basic or simplest types of fresh	1	2	3	4	V18.1
	produce.					8
19	We believe that an attractive bowl brimming with top quality	1	2	3	4	V18.1
	fruit is an essential part of our kitchen and will impress our					9
	friends.					
20	We believe that an attractive bowl brimming with top quality	1	2	3	4	V18.2
	fruit is an essential part of our kitchen and will impress our					0
	family.					
21	We work very hard and therefore deserve that only the best fruit	1	2	3	4	V18.2
	and vegetables are made available in the stores that we visit.					1

	SECTION 3					
	How do the following statements reflect the general thoughts or beliefs about fresh produce in your household? Please mark the applicable answer with an X	Strongly	Disagree	Agree	Strongly	
1	The quality of fresh produce is a true indication of its nutritional value.	1	2	3	4	V19.1
2	Stores should only stock good quality fresh produce.	1	2	3	4	V19.2
3	I regard slightly bruised fresh produce as poor quality.	1	2	3	4	V19.3
4	I regard slightly deformed fresh produce as poor quality.	1	2	3	4	V19.4
5	Bruised or deformed fresh produce is poor value for money.	1	2	3	4	V19.5
6	I'm of the opinion that one neglects one's guests when serving fresh produce that are not perfect.	1	2	3	4	V19.6
7	I'm of the opinion that one neglects one's family when serving fresh produce that is not perfect.	1	2	3	4	V19.7
8	It is important to take note of the sell-by date when purchasing fresh produce.	1	2	3	4	V19.8
9	I do not buy fresh produce of which the sell-by date has expired	1	2	3	4	V19.9



	because it is of inferior quality.					
10	I tend to select produce from the back of refrigerators' shelves	1	2	3	4	V19.10
	and displays to ensure that I get the best quality produce.					

Please turn to page 6 to complete question 19

	V 19 continued					
tho	w do the following statements reflect your household's general oughts or beliefs about fresh produce? Please mark the applicable swer with an X	Strongly Disagree	Disagree	Agree	Strongly Agree	
11	At home I discard produce that is past its sell-by date.	1	2	3	4	V19.
						11
12	At home I discard produce that is past its use-by date.	1	2	3	4	V19.
						12
13	Stores should make an effort to import fresh produce in accordance	1	2	3	4	V19.
	with consumers' needs.					13
14	South African retailers should only sell fresh produce that is	1	2	3	4	V19.
	produced locally.					14
15	Purchasing imported produce has consequences that contribute to	1	2	3	4	V19.
	climate change.					15
16	Purchasing imported produce is negative for the economy of South	1	2	3	4	V19.
	Africa.					16
17	Purchasing loose fruit without extra packaging signifies	1	2	3	4	V19.
	environmentally friendly behaviour.					17
18	Purchasing pre-cut / pre-prepared fresh produce is recommended	1	2	3	4	V19.
	because it reduces waste in general.					18
19	The amount of excessive (surplus) fresh produce at retailers is	1	2	3	4	V19.
	significant.					19
20	The surplus fresh produce at retailers is put to good use by	1	2	3	4	V19.
	distributing it to charity organisations.					20



					_	
21	The surplus fresh produce at retailers goes to landfills.	1	2	3	4	V19.
						21
22	The surplus fresh produce at retailers is converted into useful	1	2	3	4	V19.
	compost.					22
23	The surplus fresh produce at retailers is incinerated.	1	2	3	4	V19.
						23
24	Fresh produce waste is not harmful to the environment.	1	2	3	4	V19.
						24
25	Fresh produce wastage is a concern in my household.	1	2	3	4	V19.
						25
26	Fresh produce wastage is a neglected topic in our country.	1	2	3	4	V19.
						26
27	We as consumers need to tolerate lower stock volumes in stores	1	2	3	4	V19.
	to limit fresh produce waste.					27
28	We as consumers need to tolerate a smaller variety of fresh	1	2	3	4	V19.
	produce in stores to demonstrate that we care about our					28
	environment.					
29	We as consumers need to tolerate fresh produce of a slightly	1	2	3	4	V19.
	lower quality to demonstrate that we care about the environment.					29
30	We as consumers should not demand imported fresh produce in	1	2	3	4	V19.
	order to demonstrate that we care about the environment.					30
31	Retailers could make more effort to keep consumers informed	1	2	3	4	V19.
	about the environmental consequences of their purchases.					31
32	Consumers need to purchase locally produced fresh produce	1	2	3	4	V19.
	rather than imported fresh produce.					32
33	If one is really concerned about the environment, one should buy	1	2	3	4	V19.
	locally produced fresh produce irrespective of the price					33
34	Growing a personal vegetable garden indicates that someone is	1	2	3	4	V19.
	concerned about the environment.					34
35	All consumers who have their own compost heaps are	1	2	3	4	V19.



	environmentally conscious.					35
36	Limiting my household's fresh produce waste can make a	1	2	3	4	V19.
	noteworthy difference in saving our planet.					36

Please turn to page 7 to complete question 20



	SECTION 4						
V2	How does each of the following statements reflect your						
0	household's general thoughts or beliefs about the issue of			_			
	climate change?			ırtair			
	Please mark the applicable answer with an X	True	False	Uncertain			
1	Pollution is currently one of the most critical problems in terms of	1	2	3	V20.		
	the sustainability of South Africa's natural resources.				1		
2	Pollution does not affect me personally to the same extent that it	1	2	3	V20.		
	affects fellow citizens in South Africa.				2		
3	The USA is the biggest producer of gasses that contribute to air	1	2	3	V20.		
	pollution.				3		
4	An increase in the South African population will put further strain	1	2	3	V20.		
	on our natural resources.				4		
5	The economic growth of South Africa is not influenced by	1	2	3	V20.		
	environmental problems.				5		
6	The earth's resources are infinite and should be used to the fullest	1	2	3	V20.		
	to increase the standard of living of all South African citizens.				6		
7	The amount of energy used by my household does not have a	1	2	3	V20.		
	significant impact on the environment.				7		
8	The average citizen can do very little to reduce climate change.	1	2	3	V20.		
					8		
9	My current purchase decisions will have consequences for	1	2	3	V20.		
	product availability of future generations.				9		
10	Environmental pollution taking place in China does not have any	1	2	3	V20.		
	impact on South Africa.				10		
11	Global warming is mostly caused by the sun radiating (giving out)	1	2	3	V20.		
	more heat.				11		
12	Climate change is caused by the presence of greenhouse gasses in	1	2	3	V20.		
	the air.				12		



13	Climate change is a direct consequence of the hole in the ozone	1	2	3	V20.
	layer.				13
14	Methane, which is largely responsible for the damage to the	1	2	3	V20.
	environment, is only emitted by industrial equipment and cars				14
	which are powered by fossil fuels.				
15	Organic materials like grass and compost heaps do not emit	1	2	3	V20.
	green-house gasses that are harmful to the environment.				15
16	Saving electricity in our everyday living will contribute to saving	1	2	3	V20.
	our planet.				16
17	All locally produced products are environmentally friendly.	1	2	3	V20.
					17

	SECTION 5					
	How the following statements reflect your general thoughts or beliefs? Please mark the applicable answer with an X	Strongly	Disagree	Agree	Strongly	
1	I admire people who own expensive homes, cars and clothes.	1	2	3	4	V21. 1
2	Some of the most important achievements in life include acquiring material possessions.	1	2	3	4	V21. 2
3	I do not place much emphasis on the amount of material objects that people own as a sign of their success.	1	2	3	4	V21. 3
4	The things I own say a lot about how well I am doing in life.	1	2	3	4	V21. 4
5	I like to own things that impress people.	1	2	3	4	V21. 5
6	I do not pay much attention to the material objects other people own.	1	2	3	4	V21. 6
7	I usually only buy things I need.	1	2	3	4	V21. 7



8	I try to keep my life simple as far as possessions are concerned.	1	2	3	4	V21.
						8
9	The possessions I own are not that important to me.	1	2	3	4	V21.
						9
10	I enjoy spending money on things that are not necessary /	1	2	3	4	V21.
	practical.					10
11	Buying things gives me a lot of pleasure.	1	2	3	4	V21.
						11
12	I like lots of luxury in my life.	1	2	3	4	V21.
						12

Please turn to page 8 to complete question 21



V2	V 21 continued					1
	How the following statements reflect your general thoughts or beliefs? Please mark the applicable answer with an X	Strongly Disagree	Disagree	Agree	Strongly Agree	
13	I put less emphasis on material things than most people I know.	1	2	3	4	V21.
						13
14	I have all the things I really need to enjoy life.	1	2	3	4	V21.
						14
15	My life would be better if I owned certain things that I do not	1	2	3	4	V21.
	already have.					15
16	I would not be any happier if I owned nicer things.	1	2	3	4	V21.
						16
17	It slightly bothers me that I cannot afford to buy all the things I	1	2	3	4	V21.
	would like to.					17
18	I feel driven to shop, even when I do not have the time or the	1	2	3	4	V21.
	money.					18
19	I receive little or no pleasure from shopping.	1	2	3	4	V21.
						19
20	I hate to go shopping.	1	2	3	4	V21.
						20
21	I go on buying binges / shopping sprees.	1	2	3	4	V21.
						21
22	I feel "high" when I go on a buying binge / shopping spree.	1	2	3	4	V21.
						22
23	I buy things even when I do not need anything.	1	2	3	4	V21.
						23
24	I go on a buying binge / shopping spree when I am upset,	1	2	3	4	V21.
	disappointed, depressed or angry.					24



25	I worry about my spending habits but nevertheless still go out,	1	2	3	4	V21.
	shop and spend money.					25
26	I feel anxious after I have gone on a buying binge.	1	2	3	4	V21.
						26
7	I buy things even though I cannot afford them.	1	2	3	4	27
8	I feel guilty or ashamed after I go on a buying binge.	1	2	3	4	28
9	I buy things that I do not need or will not use.	1	2	3	4	29
0	I sometimes feel compelled to go shopping.	1	2	3	4	30
1	I am interested in new products with status.	1	2	3	4	31
2	I would buy a product just because it has status.	1	2	3	4	32
3	I would pay more for a product if it has status.	1	2	3	4	33
4	The status of a product is irrelevant to me.	1	2	3	4	34
5	A product is more valuable to me if it has some snob appeal.	1	2	3	4	35

	SECTION 6					
V	How do the following statements reflect your general thoughts or					
22	beliefs?	ylgı	gree	е	ylgı	
	Please mark the applicable answers with an X	Strongly	Disagree	Agree	Strongly	
1	I often feel a sense of "oneness" with the natural world around me.	1	2	3	4	V22.
						1
2	I think of the natural world as a community to which I belong.	1	2	3	4	V22.
						2
3	I recognize and appreciate the intelligence of other living	1	2	3	4	V22.
	organisms.					3
4	I often feel disconnected from nature.	1	2	3	4	V22.
						4
5	When I think of my life, I imagine myself to be part of a larger	1	2	3	4	V22.
	cyclical process of living.					5
6	I often feel that I have a kinship/ connection with plants and	1	2	3	4	V22.



	animals.					6
7	I feel as though I belong to the Earth as equally as it belongs to me.	1	2	3	4	V22. 7
8	I have a deep understanding of how my actions affect the natural world.	1	2	3	4	V22. 8
9	I often feel part of the web of life.	1	2	3	4	V22. 9
10	I feel that all inhabitants of Earth, human and non-human, share a common life force.	1	2	3	4	V22. 10
11	Like a tree can be part of a forest, I feel rooted within the broader natural world.	1	2	3	4	V22. 11
	When I think of my place on Earth, I think of myself as being at the top of the hierarchy that exists in nature.	1	2	3	4	V22. 12

Please turn to page 9 to complete question 22



	V22 continued					1
be	How do the following statements reflect your general thoughts or beliefs? Please mark the applicable answers with an X		Disagree	Agree	Strongly Agree	
13	I often feel like I am only a small part of the natural world around	Strongly Disagree	2	3	4	V22.
	me, and that I am no more important than the grass, birds or other animals.					13
14	My personal welfare does not depend on the welfare of the natural	1	2	3	4	V22.
	world.					14
15	I enjoy not having to worry about others.	1	2	3	4	V22.
						15
16	I enjoy being able to own an item before most of my friends are	1	2	3	4	V22.
	able to buy it.					16
17	I enjoy knowing that others are somewhat envious of me.	1	2	3	4	V22.
						17
18	I retrieve a great deal of satisfaction out of caring for others.	1	2	3	4	V22.
						18
19	I enjoy giving assistance to the poor and under-privileged.	1	2	3	4	V22.
						19
20	I would enjoy being able to spot and exploit the weaknesses of	1	2	3	4	V22.
	others.					20
21	I would prefer to be free of any social obligations.	1	2	3	4	V22.
						21
22	I would like to have the ability to blame others for their mistakes.	1	2	3	4	V22.
						22
23	I do not like to be influenced by others.	1	2	3	4	V22.
						23
24	Defending my rights is very important to me.	1	2	3	4	V22.



						24
25	I do not like to be considerate to the needs and feelings of others.	1	2	3	4	V22.
						25
26	I do not like to be fair to people who do things which I consider to	1	2	3	4	V22.
	be wrong.					26
27	I would not like to compete with others for various rewards.	1	2	3	4	V22.
						27

	SECTION 7					
	How do the following statements reflect the general thoughts or beliefs about socially responsible behaviour in your household? Please mark the applicable answers with an X	Strongly	Disagree	Agree	Strongly	
1	Every person should either keep consistent, or reduce their consumption of products so that our resources will last longer.	1	2	3	4	V23. 1
2	Government should either keep consistent, or reduce their consumption of products so that our resources will last longer.	1	2	3	4	V23. 2
3	Industry should either keep consistent, or reduce their consumption of products so that our resources will last longer.	1	2	3	4	V23. 3
4	The benefits of modern consumer products are more important than the pollution that results from their production.	1	2	3	4	V23. 4
5	In my opinion we are not doing enough to save scarce natural resources from being depleted.	1	2	3	4	V23. 5
6	Consumers should be forced to pay higher prices for products that pollute the environment.	1	2	3	4	V23. 6
7	Non-returnable bottles and cans for soft drinks and beer should be banned by law.	1	2	3	4	V23. 7
8	I would be willing to sign a petition or demonstrate for an environmental cause.	1	2	3	4	V23. 8
9	I have often thought that if we could just get by with a little less there would be more left for future generations.	1	2	3	4	V23. 9



10	The government should subsidise research on technology for	1	2	3	4	V23.
10			_	3	-	
	recycling waste products.					10
11	The whole pollution issue has never upset me too much since I feel	1	2	3	4	V23.
	it is somewhat over-rated.					11
12	I would be willing to donate a week's pay to an organisation to help	1	2	3	4	V23.
	improve the environment.					12
13	Products that use or pollute the environment during their	1	2	3	4	V23.
	manufacturing should be heavily taxed by government.					13
14	I think that a person should urge his / her friends to discontinue the	1	2	3	4	V23.
	use of products that pollute or harm the environment.					14
15	The government should provide each citizen with a list of	1	2	3	4	V23.
	organisations and retailers that could assist consumers in					15
	contributing to the sustainability of the world's resources.					
	V23 continued					
		-			1	
		ree			۵.	
Но	ow do the following statements reflect the general thoughts or	isagree			\gree	
	ow do the following statements reflect the general thoughts or liefs about socially responsible behaviour in your household?	gly Disagree	ree	á	gly Agree	
be		trongly Disagree)isagree	Agree	trongly Agree	
be Ple	liefs about socially responsible behaviour in your household?	ы Strongly Disagree	∾ Disagree	w Agree	Strongly Agree	V23.
be Ple	liefs about socially responsible behaviour in your household?		_			V23. 16
be Ple 16	liefs about socially responsible behaviour in your household? ease mark the applicable answers with an X Our public schools should require all learners to take a course		_			
be Ple 16	liefs about socially responsible behaviour in your household? ease mark the applicable answers with an X Our public schools should require all learners to take a course dealing with environmental and conservation issues.	1	2	3	4	16
be Ple 16	liefs about socially responsible behaviour in your household? ease mark the applicable answers with an X Our public schools should require all learners to take a course dealing with environmental and conservation issues. I would be willing to stop buying products from companies that are	1	2	3	4	16 V23.
16 17	liefs about socially responsible behaviour in your household? ease mark the applicable answers with an X Our public schools should require all learners to take a course dealing with environmental and conservation issues. I would be willing to stop buying products from companies that are guilty of polluting the environment even though it might be	1	2	3	4	16 V23.
16 17	liefs about socially responsible behaviour in your household? ease mark the applicable answers with an X Our public schools should require all learners to take a course dealing with environmental and conservation issues. I would be willing to stop buying products from companies that are guilty of polluting the environment even though it might be inconvenient for me.	1	2	3	4	16 V23. 17
16 17	liefs about socially responsible behaviour in your household? ease mark the applicable answers with an X Our public schools should require all learners to take a course dealing with environmental and conservation issues. I would be willing to stop buying products from companies that are guilty of polluting the environment even though it might be inconvenient for me. I would be willing to make personal sacrifices for the sake of slowing	1	2	3	4	16 V23. 17 V23.
16 17 18	liefs about socially responsible behaviour in your household? ease mark the applicable answers with an X Our public schools should require all learners to take a course dealing with environmental and conservation issues. I would be willing to stop buying products from companies that are guilty of polluting the environment even though it might be inconvenient for me. I would be willing to make personal sacrifices for the sake of slowing down pollution even though the immediate results may not seem	1	2	3	4	16 V23. 17 V23.
16 17 18	liefs about socially responsible behaviour in your household? ease mark the applicable answers with an X Our public schools should require all learners to take a course dealing with environmental and conservation issues. I would be willing to stop buying products from companies that are guilty of polluting the environment even though it might be inconvenient for me. I would be willing to make personal sacrifices for the sake of slowing down pollution even though the immediate results may not seem significant.	1	2 2	3 3	4	16 V23. 17 V23. 18
16 17 18	liefs about socially responsible behaviour in your household? ease mark the applicable answers with an X Our public schools should require all learners to take a course dealing with environmental and conservation issues. I would be willing to stop buying products from companies that are guilty of polluting the environment even though it might be inconvenient for me. I would be willing to make personal sacrifices for the sake of slowing down pollution even though the immediate results may not seem significant.	1	2 2	3 3	4	16 V23. 17 V23. 18
16 17 18	liefs about socially responsible behaviour in your household? ease mark the applicable answers with an X Our public schools should require all learners to take a course dealing with environmental and conservation issues. I would be willing to stop buying products from companies that are guilty of polluting the environment even though it might be inconvenient for me. I would be willing to make personal sacrifices for the sake of slowing down pollution even though the immediate results may not seem significant. I would prefer to contribute to a community project financially.	1 1 1	2 2 2	3 3 3	4	16 V23. 17 V23. 18 V23.



I am willing to pay tax on all my fresh produce purchases.	1	2	3	4	V23
					21
/2 Please provide, in one short sentence, any idea that you feel could	•				
4 be implemented to reduce the unsustainable consumption and					
wastage of fresh produce.	•				
					V24
	_				1 V24
					2
	-				V24
					3
	-				V2
					4
2 Please provide us (briefly) with some examples of how your					
5 household is already partaking in activities that suggest that you					
care about the environment. If you DO NOT provide any examples,					
I would assume that you are not yet making serious effort to do					
so.	_				
					V25
	-				V25
					2
	-				V25
					3
	•				V25
					4
Thank you for participating in this important projec	ct!				



ADDENDUM B – FOCUS GROUP DISCUSSIONS' PROMPTS

Prompts used to guide consumer discussions

- 1. Where do you buy your fresh fruits and vegetables?
- 2. Why do you prefer buying from those retailers?
- 3. How often do you buy fresh fruits and vegetables?
- 4. The fresh produce that you buy, how is it packaged?
- 5. Do you ever buy imported/exotic/out of season fruits and vegetables?
- 6. Please explain what you understand about climate change and feel free to state your opinion whether you consider it as an issue?
- 7. Who should be held accountable?
- 8. Do you feel responsible?
- 9. Does fresh produce waste contribute and how does it contribute towards climate change?
- As part of the prompts, the facilitator also showed the participants pictures and asked them to comment.
- Please take a look at the following illustration and tell me what you think the general consumer will understand from it
- What can the general consumer learn from it?
 - ii. How would you improve it so that consumers will be able to understand the poster as well as be educated by it?
- Please make me an informal poster aimed at educating general consumers on how to behave more sustainably i.t.o. the purchase and consumption of fresh produce



ADDENDUM C – FOCUS GROUP DISCUSSIONS' TRANSCRIPTS

Focus group A, session 1

17: Let us start with where do you normally buy? Which retailer?1: xxx

4: xxx

6: xxx

9: xxx

17: xxx, why xxx? Why xxx?

9: xxx se gehalte is baie nice, baie beter.

3: My wife says I have to (buy from xxx). Maar xxx se kwaliteit is beter.

9: They (xxx) have bigger fruits, and bigger cucumbers, everything is bigger – bigger is better. More convenient.

17: bigger is better

8: xxx se gehalte het baie verbeter. xxx is duurder. Maar as jy na kwaliteit soek is xxx sin baie beter

1: I think you shop wherever is most convenient.

1: xxx

17: anyone else shop at xxx?

3: yes

8: ves

6: Yes

9: Yes

4: yes

6: wat ek ook wil se is, it also depends what you need where you buy. I buy fruits and vegetables from xxx, from xxx, xxx and xxx. I don't have a dislike or a (preference) because if I need something that I know is for a special occasion, I will go to xxx. If I... it also depends on the date of the month, I will go to xxx. If I have to buy for the children, like fruit, I will go to xxx or xxx. Therefore, there is not a dislike or like, it depends on what I need and where I am at that moment. And if I see something and it connects me with something I buy it.

17: how often do you buy?

9: daily

5: every 3 days

1: weekly

7: weekly

6: elke 3 dae

8: daagliks

4: weekliks

3: een maal 'n week

17: so do you buy when you see something is done, it is finished?

3: (I buy according to a) recipe.

17: so you buy when she (wife) says you are going to make this tonight

3: ja...

1: at xxx they have that special where you buy the sweet potatoes and the carrots etc. My mother does that once a month. And then she will go out in the week for the small extra things for her dishes. It depends on quantities



17: so you buy your staples every week and then bits and pieces in between.

8: well with 3 children in the house I promise you it is daily.

17: when you buy, do you buy loose fruit or do you buy pre-packaged fruit? And vegetables?

4: it depends on the quality, and the price, and the need.

3: if there is only loose avos, you buy it loose. If there is 3 or 4 in a packet, you buy the packet.

8: it depends on the price

1: yeah

6: ek koop eerder te veel, want ek haat dit as die goed rond le en rond val, en vuil is.

4: Hulle is geneig om te kneus

8: en sommige vugte is net beskikbaar in verpakking, so kom ons vat aarbeie – ek sal byvoorbeeld net by xxx koop want aarbeie by xxx hou net langer en hul appearance is net langer en hulle is in 'n verpakking. So dan koop ek xxx aarbeie. As ek by xxx is en ek wil tamaties koop dan koop ek los tamaties want ek kan kies watse tamatie wil ek he. Ja ek wil hom uit pick.

1: I find living on my own, cooking for myself, I buy loose from xxx, it just makes more sense.

17: do you ever buy imported fruits and vegetables, or things that are out of season?

4: depends on the recipe

17: so we are going into winter now, that's a time that we don't really have a lot of fruits and vegetables, here, which grows naturally in this season. Do you want to have all these fruits and vegetables the whole year?

5: Partykeer ja. Veral met kinders. Goed soos aarbeie, berries, piesangs, dis goed wat die

17: so jy wil dit altyd he.

4: as jy cater wil jy dit altyd he

17: but don't you work out your recipes seasonally?

4: no, I only make what I like

17: which retailers do you think keeps these fruits and vegetables the whole year?

All: xxx

xxx begin ook om dit te doen

Ja

And also, quality. Is the quality the same the whole year round?

8: yes

3: yes, but you pay a price

17: do you mind paying for the quality?

6: xxx is ook deesdae groot

1: JA xxx is coming up

5: xxx of xxx

Xxx

6: nee nie xxx nie, xxx

Xxx

17: So you don't mind paying a bit more for good quality

8: you sometimes get stuff from xxx that you won't get from xxx and also xxx

4: maar Gordon Ramsay hou van xxx

17: I'm going to show you another picture





18: why don't you mind paying extra for quality?

4: because it is good quality

5: dis duur koop. As jy swak kwaliteit koop moet jy helfde van die goed uitsny en dan kry jy net so 'n stukkie om te eet

9: you can taste it

18: what is quality?

5: goed wat nie verlep is nie, wat nie gekneus is nie

8: wat nie gemuf is nie

6: ek voel verneuk en uitgebuit as ek 'n vrot appel of 'n vrot tamatie of iets in daai pakkie kry 18: wat van iets soos 'n komkommer wat nie lelik lyk buite nie, hy het nie kolle of iets op nie, maar hy is dalk krom (nie reguit nie)? Is dit swak kwaliteit?

4: nee dit hang af waarvoor jy dit wil gebruik. As jy wil slaai maak is 'n kromme reg, as jy wil repe skil kort jy 'n reguit ene. So dit gaan vir wat die behoefte is

18: ja

17: why is the woman in the photo smiling?





6: SY het 'n bargain gespot

3: she is getting paid

1: she is getting what she wants

17: hoekom dink jy daar is 'n bargain?

6: ek sal se die goed se kwaliteit is seker mooi, dit lyk gesond

17: hoekom lyk dit gesond?

4: dit is buite seisoen en toe kry sy dit skielik

9: die kleur lyk gelukkig

3: as dit mooi kleurvol is dan lyk dit goed. Die kleur trek 'n mens

4: the colour makes you happy

17: when you walk into a shop that looks like this, will you buy?





All: definitely

1: I think it is very overwhelming because there is so many nice things around you and you wish you could buy all of them but then you have to think "what do you need"

7: you can choose

9: it looks organic

8: is ons nie maar so dat wanneer daar min is dan is ons kieskeurig maar wanneer daar baie is

9: dan wil jy alles he

I: I think we buy more when there is actually that big a variety

8: you won't buy from people if the shelves are empty

7: yes

8: if it is stocked and looks beautiful, then you will buy

1: yes

5: as die winkel netjies is en alles lyk nice

9: as jy nie vliee sien nie, soos wat ek partykeer by xxx sien nie

18: what immediately infuriates you when you walk into a produce section?

1: no stock; Empty shelves

4: dirty floors

8: it irritates me when you walk in and the carrot leaves are hanging

1: and everything is over each other

3: it is plain vrot

4: and if it is hot in there. It doesn't matter what it looks like, if is hot in there I just walk out

1: when everything hangs and droops because it is too hot



- 17: in which shop do you think the smiling woman is in?
- 3: xxx
- 6: xxx
- 1: I think xxx
- 8: dit is xxx se tipe lyn, waar dit so uitgestal is dat jy so kan kyk
- 4: dit lyk vir my soos 'n oorsese foto
- 17: Because she is smiling?
- 4: no, because of the layout
- 8: daai mandjie, die massa hoeveelhede
- 9: you are spoilt for choice
- 17: let's get back to what you buy at home. How much of what you buy do you use and how much goes to waste?
- 1: like I only buy what I can use in a few days
- 5: ek mors nie
- 6: 30% gebruik, 70% mors
- 5: al moet ek dit nou vir die honed gee, ek mors nie
- 3: I am the vacuum cleaner in our house
- 17: so niks gaan asblik toe nie?
- 3: ons koop genoeg en ons eet dit op
- 8: I have children who will sort it out
- 17: maak enige iemand kompos?
- 6: ja, en ek sit dit in 'n sak langs die asblik vir die bedelaars wat daar verby loop
- 17: julle kompos, waarvoor gebruik julle dit?
- 6: vir die blommetjies
- 5: vir die tuin
- 17: what do you define as waste? Why would you throw something away?
- 1: when it smells bad; when it is off
- 3: wanneer dit af is
- 17: What does off mean?
- 8: verlep
- 1: when it has gone soft
- 8: ja, wanneer die vel so lekker verrimpeld is
- 17: what about if you get a tomato and there is, you can see a little worm or something went in, but only on the side. Now there is a small hole do you throw that away?
- 1: yes
- 9: I throw it out
- 4: you cut it out and use the tomato for stews
- 6: nee, jy weet mos nie hoe diep het daai wurmpie ingegrou het nie
- 17: jy kan sien, daar is 'n gat!
- 9: jy weet nie of dit eiers gele het nie
- 17: What if the tomato fell or it is bruised, just now?
- All: then you use it
- 3: definitely use it
- 1: I think the texture matters because I know like potatoes and carrots are so much harder so you can grate it off but with softer things you don't know how deep it goes so you want to throw it all away
- 17: the stuff that you throw into the bin, where do you think that goes to?



8: I have two bins, we recycle

3: yes, wet waste and dry waste

17: so you recycle?

8: ja, even my glass

17: that is good, so you split everything?

1: we have dustbins at the back

17: and at the end of the week, how big is that bag of wet waste? Is it a small bag, like a xxx bag, is it a black bag?

8: half of a bin

17: that is usually about 30l, so that is 15l of waste

8: yes, things like potato skins, tomatoes. Ja, dit is hierdie groot bins wat ek 2 keer 'n week gaan uitgooi

17: that waste then goes to landfills, big rubbish heaps. How do you feel about that? What do you think happens to the waste that lays there?

6: dit gaan steenkool maak oor 'n 100 jaar van nou af.

17: I think we have covered this already, but I would like to recap. This is another one of those very beautiful shops that you said you want to shop in. Spoilt for choice, you just want to pack your trolley and spend all your money on apples and oranges. This same retailer, at the back, this is how it looks (big pile of fruit, looks edible but now wasted). Most of this produce can still be sold, but it was taken off the shelves because....?

1: of the sell by date

17: are you contributing to this problem (refers to pile of wasted fruit)

8: yes

17: why?

8: because, ons is vol fiemies

4: ons voel mos watse avokadopeer is sag en dan druk ons almal

8: ja en dan druk almal hulle

17: are we all responsible for a part of this (pile of waste)? How can we fix this? How can we stop this from happening?

1: I think they should give people a choice there. Because I know xxx they donate some of their food to old age homes and that. I think if we know the sell by date has been reached but we can still see that it is ok they should give the consumer the choice to maybe buy it at a discounted price because we might still feel that it is ok. But now that decision has been made for us and I think that is because we don't know what happens to the food. We just want fresh fresh and that might still be considered fresh

17: are you saying that they donate some of the waste to old age homes etc.?

8: waste in a different sense

17: ja, things that are past their sell by date, not produce that looks like that (pile of waste). But is that really fair? We are wasting produce to give it to somebody where we could have given them something else instead of wasting

6: wat van as jy as 'n retail winkel of 'n boer kom, ek meen as jy by xxx instep en jy vat daai rypgemaakte avos – dit is perfectly ripe. Nou stap jy daar in en jy sien hierdie avow at se it is perfectly ripened so dan weet jy jy kan hom koop en hy is reg

5: dan koop jy hom

6: ek weet nie. nous tap jy by xxx in en hier is hierdie vreeslike krat vol tamaties. Dit lyk nice en mooi, nou kom jy by die huis en jy sien in die middel is daar een wat gesquash is. So as ek weet daai tamaties is se nou maar 'n week terug gepluk en sy lewe vanaf hy gepluk is is



arguments onthalwe moet vir 'n maand hou of vir 2 weke hou of wat ookal die geval is, dan weet jy en behoort die retailer te weet dat as hy daai tamatie op die rak sit dan, is daar nie sell by dates op die tamatie pakkie nie. so met die gevolg as ek weet hierdie mango is voglens die stickertjie wat daarop is behoort hy teen daai tyd reg te wees dan gaan ek outomaties nie aan die ding squeeze om te voel of hy ryp is of reg is nie. ek dink dan kan die ding verpak wees en ek kan hom so kyk en sien op die pakkie word daar vir my inligting gegee wat maak dat ek nie bydrae tot dat die goed verrot en daar opeinding nie

17: so die onus is op die retailer? The responsibility lies with the retailer – they should educate the consumer to make the best possible decision?

6: they should give us information so that we can make that decision

17: so they need to equip you to make the best decision

1: ja

17: ok but still, then after a week that date has past and now they still have to throw it away. What if they have perfect avos, but avos are not in season. Those avos have been imported from Portugal

8: expensive

17: will you buy them?

8, 1, 9: no

4: if the recipe that I want to make now needs them

3: if I want them

8: ok but that is where – you are only 2 persons in the home, so for 2 persons to buy avos is fine, you can buy 2 avos. I have a family of 6 people so I can't buy 2 avos, I have to buy 5 avos. So it is expensive – I won't do it

17: so you won't buy imported or out of season produce because of the price?

1: unless you really really want it

4: if I get to eat it alone, then yes

1: one of the things, I am thinking from my Mother's perspective, she doesn't know when things are in or out of season, I don't think the average person does. If it is there and they want it they will take it and I think that is the other problem because we will just think it is inflation. Oh the price has gone up, it is one of those things. We don't think it is out of season or it is in season, for us it is just one of those things that keep on happening

9: I am one of those consumers. I never know when things are out or in

8: I will definitely check the price first, and you can even read on the label – they will say it is imported

17: they do that often now, especially in xxx. They have a sticker that says imported and even from where. But things that are imported contribute to GEC, or Global Warming. How do you feel about that? Is it a large problem?

8: definitely

17: everything that we buy, contributes to that. Everything that we waste contributes to that. So we should all take responsibility for us adding to the environment or the damage that we are doing to the environment. But someone needs to educate us, someone needs to tell us that you are doing this and that wrong. Who?

1: the retailers

8: they have more knowledge about where they bought it, why are they putting it on the shelves, why do they want to sell it out of season. They are the main persons who want to provide to the customers so they are the best



17: what about these large billboards that say eat healthy, buy fruits and vegetables. Eat your 5 a day! any ads on the TV, or promotions like the buy 3 and get a packet for free

18: let us not make the assumption that we are contributing to global warming. I think it is something that we must discuss. Do you think that we contribute, you as the personal consumer?

6: as ek na daai foto kyk dan se die eerste ding vir my dis 'n stupid winkelbestuurder wat nie reg kon besluit het hoeveel produkte om aan te koop om die verbruiker gelukkig te hou nie. as ek 'n besigheid bestuur gaan ek weet dit is die hoeveelheid lemoene

9: just in time

6: wat ek nodig het vir die area waarin ek woon en bedien. So as ek 'n 100 l melk per dag verkoop gaan ek verseker nie 'n 1000 l koop nie want anders gaan ek bydrae na global warming. Want dit is wat daar gebeur

4: en regtig, moes hulle gegaan het en alles so deurmekaar gooi. Nou is dit net varkkos. Nou maak hulle fruit punch. Ek stem met jou saam, dat hulle, die retailer of aankoper, moet beter beplan

6: ja

4: maar dit kan ook verder gaan – die bemarker ook. Jy moet sorg dat as jy nou wel 1000 l aangekoop het dat jy dit so bemark dat al 1000 l verkoop word en nie op waste gaan nie. so dit is nie net die aankoper nie, dis 'n sirkel, daar is klomp mense wat verantwoordelik is daarvoor

6: ek dink die ander ding wat ook daar 'n rol speel, dis nou se nou maar somer vrugte - as daai goed teen ordentlike pryse verkoop was dan was hulle alles uit gewees. Nou loop jy by hierdie mango verby en die ding kos jou 8 10.00 dan dink jy agge nee wat, dan los jy hom maar en die ding word dan vrot. So hulle kon al daai mangoes verkoop het vir R5.00 en hulle het nie met daai probleem gesit nie en daar was tenminste mense wat bietjie mangoes geeet het.

17: so nog steeds die retailer se verantwoordelikheid. Wat van promosies wat hulle hardloop – buy 3 of this and get a bag of potatoes for free

8: it doesn't work for me

17: why not?

5: want meeste van die tyd se hulle koop 2 se nou maar strawberries en kry die 3e een verniet en dan is dit te veel en dan gaan dit af

8: ja ek wil nie met so 'n sak uie sit nie

5: dit gaan nie opgeeet word nie

17: so you are saying that you do not fall for those promotions

3: behalwe as jy choc koop, koop 2 en kry 1 verniet

17: if you have a large family, would you then buy the promotion?

1: ja

17: when you know that you are going to use it

3: ek het nie so baie plek nie

8: but I am not going to eat a bag of onions like that

9: it depends which product it is

17: so if it is something nice or luxurious, something that you don't normally get, will you then fall for a promotion?

4: if it is figs I will

6: if I can preserve it

17: so if you can extend the shelf life?



5: usually the buy 2 get one free is goedjies wat begin af gaan en dan probeer hulle dit – dit het presies met my gebeur Des maand. Ek het by die 8 500 se vrugte vir myself gekoop en 2 bakkies blueberries het ek opgeeet en die 3e een het ek weggegooi. Jy moet seker nie alles in een dag opeet nie

17: maar julle het ook nou net genoem dat as goed gaan afgaan, verkoop dit dan teen 'n verlaagde prys sodat dit tenminste verkoop kan word.

4: nee nee nee, ons het

3: nee, van die begin af, verkoop die goed goedkoper

4: ja sodat jy nooit nodig het om te kom tot op 'n punt waar jy moet se oops ek sit met voorraad so kom ons maak dit gou buy 2 get the 3rd one free nie

6: jy sien, waar die probleem in kom daar is dat as jy bietjie verder gaan kyk na daai aspek, ek meen ek het 'n klient wat onder andere in so 'n situasie is – hulle lewer 'n vars produk aan hierdie tipe retail handelaar en hy sit nou se nou maar sy mangos op die rak en as daai goed af gaan is dit nou net doodeenvoudig sorry – dis nie die retailers se verlies nie, dit is uiteindelik die ou wie dit gelewer het se verlies

4: so hulle gee dit basies op consignment

6: yes

17: maar wie bestel daai mangos – besluit die boer dat hy soveel gaan voorsien?

6: soos hierdie spesifieke persoon by skil groentes, hierdie verpakte kla gesnyde groentes, patats en wortels en uie en goeters. So met die gevolg, wat nou gebeur is, sy moet dit op die rake sit en sy kom een maal 'n week of een maal 'n dag of wat ookal verby en kom kyk wat is af en haal dit af en dit is haar verlies

8: presies, dis nie die retailer se verlies nie

6: so met die gevolg, die retailer sit dit teen 'n spesifieke prys daar, hy wil sy geld maak. So ek dink as daar so bietjie meer rondom die prys, ek meen partykeer is daar boere wat sit met produkte wat nie verkoop word nie

8: as gevolg van die hoe pryse

6: die hoe pryse en as al daai goed eerder uitverkoop dan is daar regtig waar dalk 'n situasie van kinders wat meer gesonder eet – vrugte en groente, as die pryse rondom dit beter is

17: jy het net nou iets genoem van bemarking. As die bemarking reg gedoen word kan dit jou oortuig om

9: beslis

17: when the marketing is done right, it can convince you to buy something. Do you agree with that?

4: ja

5: ek stem saam

17: so if the marketing can be used to make you buy something that you don't need, can the reverse also be ture? Marketing can be used to educate you to buy something that you do need

4: they must give you a reason to buy it, then you will buy it.

17: like what reason?

3: it's healthy

9: specific health benefits. Not just its healthy – something like it's going to help with your evesight, etc.

17: then we move back to educate the consumer. Give the consumer the information they need to make the best possible decision.

4: you must change their choices.



8: kinders het ook 'n vreeslike invloed op wat jy koop

18: the gentleman over there mentioned that retailers should invest in a better supply and demand system. now, what I have noticed and experienced is that retailers do invest in these systems, sometimes they run out of produce. They do not necessarily run completely out, there might be one or two packs of... bananas left on the shelf when I go to shop after work. But now I just want a bag of bananas, but now the shelves are empty and I don't like that. Consumers do not like that. Do you think we are just insatiable, because on the one side you want them to do supply and demand studies, but then we are going to start running out of produce. But we want brimming shelves to please us.

4: put something else on that shelf – there were bananas, now that there are no bananas put apples there. Just make sure that there is another option, another choice.

18: so you don't mind running out of your specific product, you just want full shelf space 4: then you need to make a plan. It has to still look good

18: you don't mind two packs of peas or two packs of bananas, they must just be displayed prettily?

4: yes

9: I think that now day, there is so much competition. There will be a store close by that might have bananas and if you ask some of the staff in the store where is the bananas and they can actually give you a date that their bananas will be back. Then I will most probably return, but most of the time I find that the staff never know. So as long as they can tell me ok tomorrow we will have new ones then I will wait.

8: what also happens when you ask them do you have some bananas in stock, yes we do just at the back, we will quickly go fetch it. Then they didn't pack it at like 3 o'clock. So there is bananas, just at the back of the store. So then they come with a trolley full of bananas, so that is management between the store and the floor that didn't work. So yes that also happens. But to go back to the advertising, children play a very big role in advertising

17: in what way?

8: they will influence me

5: I saw this on TV.....

9: all my friends are having that at school

1: Those which they see they also want to be part of the experience

8: like my children, like fruit salad to school.

17: and what about in the shop? if you walk in the shop, through the aisle

5: they take what they want

8: definitely

17: what do they want and why do they want it?

8: everyone has their own taste and ideas

17: so do you think it is based on preference or do you think it's the way that it is displayed?

9: if it looks nice they want it

8: both

1: also preference. You get allot of kids, who no matter what you do you can't get them to eat something. So if they like it they like it. If they don't, they won't touch it

8: and it can be a trend at school

1: yes

17: fruit a trend?

8: yes, if you are a teenager and one has a fruit salad then a week later everybody is eating fruit salad.



- 1: I remember the dried fruit guava rolls was a trend when I was in primary school
- 8: like clothes, like fruit
- 4: dis ook mense wat verskil. Jy kry jou creative tipe mens wie instap en dit lyk so mooi, dis so 'n mooi prentjie, en dan sal jy koop omdat dit so mooi is. Ek is so. Ek stap in 'n winkel in en dit is vir my mooi, en dan pak ek in. ek kyk nie na die prys nie. en ander koop nou weer anders
- 8: like I won't buy fruit salad that is already made, I will rather buy the fruit and make it at home
- 17: why not buy it ready-made?
- 8: it's something about fresh made at home
- 5: jy maak dit presies soos jy daarvan hou
- 3: and the price of those bowls
- 1: yes those little bowls
- 3: the price is ridiculous
- 18: do you guys ever buy pre=packed or pre-cut produce?
- 1: only vegetables
- 5: koolslaai
- 9: spinasie. Because I don't know how to cook spinach so I buy the packet that I can put in the microwave and heat it up
- 6: groente, nie vrugte nie
- 17: why vegetables?
- 4: because I am too lazy and it's hard to cut carrots etc.
- 1: cutting butternut is a mission
- 4: if somebody else can do it for me then why not
- 17: what about the price?
- 6: dis ok
- 5: ag dis 'n bietjie meer maar tenminste as jy pre-pack goed gaan koop is dit kla geskil so jy betaal net vir dit wat jy gaan gebruik. As jy dit nou nog moet gaan skil by die huis, time is money.
- 3: Ja, who will buy a pumpkin today?
- All: nobody
- 9: I will pay the higher price for the time you save
- All: yes
- 3: normally the lady of the house comes home late, and so there is no time for all of the preparation. They buy it ready and it is fast
- 5: wie wil nou nog boontjies kerf
- 17: and if you have a large family and they only sell small packages will you then buy a few to make enough?
- 4: ja
- 1: I think also the packaging is important. e.g. at xxx you just snip of the corner and place it in the microwave and even quicker to make. But if you first need to peel it etc.
- 8: so everytime we contribute to that (points to picture of fresh produce waste)
- 18: do you think convenience produce, or pre-packed food, contributes to wastage?
- 5: want daar is nie goed wat jy kan weggooi nie. Jy gebruik wat jy nodig het, jy haal net uit wat jy nodig het, die ander gaan terug, so al wat jy eintlik weggooi is maar die sakkie
- 6: geen skille



5: want als is klaar gesny en geskil

8: I think we contribute because at the first step - when you buy you are part of the chain. At the first step, where it is prepared for you to buy, you form part of the chain

4: you will always be part of the chain, no matter where

8: actually we are lazy

4: if you are lazy or not, somebody will cut it. So either the retailer, or someone else

3: selfde skil gaan daar beland (point to pile of fresh produce waste), of jy dit gesny het of iemand anders

6: maar die punt is wie het beheer oor daai waste. As ek die company is wie daai goed afskil en ek sit met al daai skille en ek kan dit verkoop aan iemand met varke, of vir kompos of wat ookal dan is dit actually beter as kunsmatige kunsmis of daai pellets wat hulle vir daai varke voer

17: so you are actually thinking that you are doing someone a favour by buying prepackaged things

6: as hulle dit reg hanteer

9: can't they use the wastage for like other products, like bio-products? Om dit uit te droog of sap daarvan te maak? Ek weet niks van kos af nie...

17: so no waste, use everything up?

8: you can

17: how many people do that?

8: the retailers do that

8: I think it is coming back, I can just mention I lived on a farm for a few years and I saw how you can use e.g. orange peel dried for flavour, you have your own wastage compost, so yes you can really use everything. If everybody does that, I think you can really contribute

5: ek gooi my skille in daai blikke wat jy onder oopmaak vir die wurm sap. Dis kompos wat jy van bo-af vol maak

9: met erdwurms?

5: en dan gooi jy jou goed bo-in en onder het hy 'n deurtjie wat jy oopmaak en daai kompos is dan al reg. So al ons skille en eierdoppe gaan daarin

9: marketing can also help with that. As hulle jou leer, informasie gee hoe om sulke goed te doen. Ek weet niks van kos af nie, so as hulle jou wys hoe om affordably (ek weet nie hoeveel kos 'n worm farm nie, maar kan dink dis nogal duur) maar as hulle jou leer hoe jy dit kan doen of hoe jy produkte op 'n ander manier kan gebruik as jy dit nie opgebruik het nie dan kan ons dit dalk doen

17: so marketing should educate you once again

8: the younger generation is learning about that in school. They have their own project in school for recycling and they are heavy involved with it and interested in it as well. And yes, they are the ones who come home and tell you about it.

17: recycling is becoming a very hot thing

8: yes

17: everyone is doing it. Will you do it because your neighbours are doing it?

4: no

2: because of laziness

4: I do not keep up with the Jones'

17: so you will not do something that someone else is doing.

5: ek sal dit net doen as ek daarby kan baat vind of as dit dinge makliker maak. Maar om dit net te doen om hulle te wys, nee



- 17: so it's about practicality?
- 8: it's about my space and not theirs
- 4: as daar 'n goeie redes is sal ek dit doen, maar nie omdat hulle dit doen nie
- 17: to come back to the waste, will you throw things away because it doesn't look nice? Why do we do that? Because they don't look nice to you?
- 1: I think there is this misconception that if you eat it you will get sick
- 8: the taste
- 3: depending on how it looks. I will cut it open to see how it looks and then I will decide. Maybe just cut the ugly spot out.
- 17: if you walk into a house and there is this beautiful big bowl of fruit on the table, what do you think about that family?
- 3: yummy
- 1: they are rich
- 4: Yes, because they can afford a big bowl of fruit! Fruit is not so cheap
- 1: for me it's just a decoration. I won't know if I can eat it
- 6: as dit daar staan moet hulle geld he, ons almal bere ons goed in die ysksas sodat dit nie afgaan nie. as hulle daai vrugte vir 'n dag daar laat staan gaan die muggies vanaand daar rond vlieg.
- 4: hulle eet dit dalk. Ek het nou gese hulle is tienteeneen ryk, maar dalk is hulle net gesonde mense
- 9: it tells you something about their lifestyle that they want to live healthy
- 4: goeie eetgewoontes
- 17: doesn't say anything about an image that they want to portray, not necessarily about their health?
- 4: hang af hoeveel mense stap in jou huis in
- 8: I will put it there for my children to encourage them to eat more fruit
- 17: because when you see something you want it. That is why when we walk into a full retail shop we buy more.
- 4: temptation
- 18: you mentioned that when you get an apple with a bruise, you will cut it open. Will your wife do the same?
- 3: yes, she will do the same. Actually, she use to not do this, but
- 4: he educated her
- 3: yes, and now she will cut it open and see what it looks like inside and throw away the inedible pieces.
- 18: and your children?
- 3: I can't say, they have been out of the house for a long time. But I suppose they will do the same because they saw it was the way that we did it. So that was their example
- 18: so it is actually a socialisation thing
- 3: I suppose so. I saw my parents and grandparents do it. The time that they were young, it was depression time etc. so they ate everything and I think it rolled over to the next generation etc.
- 4: goes back to education
- 18: I have noticed this in retail. A shelf can be prettily displayed, especially with these pillow packs of e.g. lettuce, the pre-packed lettuce bags. The consumer will never take from the front, why?
- 4: because everybody touched it



3: it is a perception that everybody touched it

18: do you think it is only the touch or is it of poorer quality?

5: as die nuwe goed inkom gaan dit agter en die ouer goed voor, so ek gaan vir die agterste goed

9: FIFO (first in first out)

18: even if it looks exactly the same?

8: ya

18: and you are going to use that product tonight, you are going to make salad tonight? You want the one at the back?

9: yes.

5: and the first one, everybody has touched it. It is bruised

8: the same with bread, everybody squeeze it. Old in front and new at the back. So I take from the back.

17: and if everything is packed fresh and at once?

4: as ek dit gesien het sal ek van voor vat

1: yes if I see it being packed.

4: if it is still in the trolley I will take it from the trolley

17: if you buy, e.g. lettuce and they have a 400g bag for 8 8.00 and an 800g bag for 8 10.00 will you buy the 400g or the 800g bag?

1: buy the 800g bag

All: bigger

17: if you are making salad for 2 people, which one then?

All: bigger one

3: make more salad.

1: of course, I am paying 8 2.00 for double the size

17: is it value for money? That bag might be in your fridge and go off and then you throw it away?

6: invite more people over to use your produce before it goes of

17: how many people do that? Most people buy....

9: I don't do that

17: do you always buy only what you need unless it is a very good deal – value for money

5: as jy 'n bargain kry, wat regtig goed is, dan gaan jy hom koop

17: what constitutes a bargain?

5: strawberries. lets wat jy nie baie kry nie

9: as dit nie iets is soos appels of pere. Iets wat jy nie in die algemeen kry nie

3: soos 'n kiwi vrug. If you like salad, and then you see a kiwi at a reasonable price you will buy it to add to your fruit salad

17: so if you see something that looks good at a reasonable price you will buy

8: even If you didn't plan on buying

3: if it is a luxury item

4: if it looks nice I will buy it

8: why is xxx so famous?

4: because they know how to present their fruit

9: the difference

4: that makes the difference

8: it needs to be attractive. Like the special of xxx buy a meal for 4 people for under 8 150.00. That works very well.



- 3: we have done that in the past
- 17: that special is attractive because it is convenient; it takes the planning out of a meal
- 1: yes it does take the planning out of mealtimes
- 4: especially for people who can't cook or can't work out a menu. Certain specials work for them. I will never make use of that special because I hate it when someone tells me what to do.
- 3: people will think "oh that looks nice" and take it
- 4: but I will still walk around and add things to the special
- 8: daai rakkie is redelik leeg so teen 5h
- 4: want mense kan nie dink nie
- 9: hulle will nie dink nie.
- 4: jy moet namens mense dink, dit is hulle wat die outfit van die mannekyn af koop.
- 17: what do you think about the placement of that shelf? It is always at the front of the shop
- 8: it is the last thing that you see
- 4: in the queue they make you stand next to things that you keep on looking at and looking at and then they end up in your trolley.
- 17: xxx does that. Where the cashiers are there is a big fridge with a lot of convenient products, things that you don't normally buy but standing there you might. Do you?
- 9: sometimes
- 3: not really
- 9: if I stand in the queue for very long, I will look around and start to get hungry so I take it to eat so long...
- 5: as mens nie eet nie en jy gaan dan shop
- 3: jy moet altyd eers eet
- 6: daai hol kol op jou maag. As jy byvoorbeeld gaan kyk na daai convenient etes, daar is baie mense, eintlik meeste mense, wie by xxx koop wie nie kan kos maak nie
- 9: en hulle kan dit bekostig
- 6: dis maklik, dit is 'n pakkie in die mikrogolf oond, iets wat in die oond gedruk word, met ander woorde dit is 'n geval van ek moet die familie kos gee en dit is 'n maklike opsie. Jy gaan dit nie by xxx of xxx kry nie so die ouens wie by xxx koop is dalk meer jou professionele mense, meer gegoede mense wat meer gefokus is op hul beroep as hul huishouding. Die huisvrou wat meer bargain buys moet koop, die ma wie graag gesonde kos op die tafel wil sit, met vars groente en goed, gaan koop dalk by die huisvrou mark of die boeremark. Waar sy 'n vars sak goed koop en sy kerf dit op en blansjeer die groente en preserveer die res
- 17: when you say "I shop at xxx" what impression do you get of that person?
- 6: smart
- 3: they try to be smart but they don't get it right, because all of us buy at xxx at some stage
- 9: it says you are from the higher income group
- 6: daar word altyd in die geselskap baie conveniently 'n aanmerking gemaak oor "ai wat sal ek doen as daar nie 'n xxx was nie" net sodat almal verstaan dat ek eintlik smart is en goeie smaak het want ek koop by die smart winkel. Maar eintlik is ek stupid
- 8: maar eintlik is daar baie ander winkels en baie mense wie daar shop so jy is nie so smart nie
- 4: dis is net 'n persepsie dat as jy by xxx koop dan het jy geld
- 9: you pay for quality and then you create an idea that you have status
- 8: there are some of xxx products that are also packed for other retailers, e.g. xxx, xxx



17: do you think that consumers need to know that xxx suppliers also supply to other retailers?

1: I think they should know this. xxx lowers the price of their products that have reached their sell by dates and if you know that is the same thing that you can get at xxx, it is just a different name, then why would you go look for a xxx? The lines are always long, sometimes the packs are so small. But you can go to xxx and find the size and variety that you want

4: don't take the romance out of it. Don't tell people it comes from the same supplier

6: so it comes from the same supplier. Ek het al met iemand gesels wie by 'n plek werk waar die hoender vandaan kom wat so verpak word. Die standard waarop die xxx produk verpak word en hanteer word is anders as die ander. So met ander woorde daai pakkie wat jy by xxx gaan kry wat nie mooi toegedraaai is nie is oraait, ek sal hom koop, maar by xxx moet hy reg toegedraai wees en verseel wees.

5: maar steeds dink mense jy is smarter as jy by xxx koop

3: soms is hulle nie eers soveel duurder nie

8: nee ek koop nie sommer daar nie

6: die vrugte en groente in xxx en in die ander winkels is baie naby aan dieselfde maar nou begin hulle jou lok met daai goed en die goed wat over priced is is bv hul gebak en hulle preplated kosse, bv. Lasagnes. Ek meen dit is ridiculous wat jy daarvoor betaal. Hulle vleis

8: is belaglik duur

6: dis is belaglik

4: koop julle eerder by xxx waar Gordon Ramsay koop?

8: dan gaan ek eerder xxx toe wie spesialiseer in vleis en als is heerlik

17: anybody ever visit the xxx? To buy what

6: ek sal groente gaan koop wat jy kan verwerk en vries

8: jy ry vir 'n spesifieke doel soontoe

6: ek het 'n voedselverwerker wat ek die groente sal deur druk en vries. Ek sal 'n groot boks boontjies koop en dit verwerk

17: why would you buy in bulk?

6: omdat ek dit sal vries. As jy kyk na die goed wat bederf, ek sal baie keer eerder gevriesde groente koop want as ek vandag groente wil he

3: maak ek die pak oop, en maak

6: dit is baie keer nie so duur soos die werklike vars produk wat in elk geval 90% kans het om in die asblik te beland. Ek moet regtig lus wees om kos te maak voordat ek al daai goed sal gaan koop so daai dag knip ek die sakkie oop en kook met gevriesde groente

17: what about price – money – if you buy in bulk do you save?

8: definitely

1: you save

17: if you buy a big box of beans, you cut half then get tired and throw the rest away – still saving?

8: you are stupid

2: you wasted your own money

5: who does that?

3: jy gee dit eerder weg, laat jou vriende dit self gaan skil

17: do you know people who buy together, two or three households? Not really?

2: my parents do that. And my dad has his own garden and people share around



1: in City Deep, Johannesburg, there is a huge fresh market and the only time my parents will go there is if they cater for a funeral. Only when they cater for a large group of people will they buy in large quantities

17: is it also about the saving?

4: sometimes buying in smaller amounts it works out cheaper than buying in bulk. So you need to know your prices

3: it is also about perception. People think that if you buy the big one it will be cheaper than the small one and it is not always the case

5: as jy 'n slim huisvrou is wie gereeld gaan koop dan ken jy die pryse

3: ja hulle sal weet

9: hulle ken hul pryse

5: hulle kan die beste deal kry

17: and if they market that big box of tomatoes as a bargain, that poster says deal of the month – will you buy it?

4: they just want to get rid of it

8: a bargain is not a bargain if you can't use it

4: it is only a marketing tool. If you don't know your prices and if you do not compare prices you will fall for it

3: ek wil terug kom na een ding: the photograph of all the nice fruit in the aisle, I won't buy there because the passage is too narrow. Really

9: ja

4: I agree

9: xxx – there is so many people, it is congested, I hate going there

3: it looks nice there, but put 20 or 25 people there

4: and I do not queue, I walk out

17: when do you buy your groceries?

9: weekly

4: whenever I need it

3: as needed

17: do you pick a date that you know it will be quite

2: xxx has specials on Tue and xxx has specials on Wed

1: at home, month end is the big stuff and the smaller stuff as needed

18: how many of you have vegetable gardens?

4: I don't have a garden

7: we have a rather big one

3: he is an example to all of us

8: a very small one

18: why do you have a garden and what do you have in it?

7: there is like a tomato thing,

4: come and make me a garden

3: me too

8: we have chillies, plain vegetables garden, traditional garden

4: I would love to have a vegetable garden

8: and herbs, we have lots of herbs

1: my dad has a farm and he has livestock so he did vegetables – maize for the goats to eat, and we had spinach, chillies, he tried lettuce but it didn't work out, and tomatoes, and green pepper. Initially they wanted to sell to wholesalers, but it's nice because when we need



something we don't need to run to the shops. You go to the garden and its fresh, and it is so easy. People do not realise how easy it is to have a garden

17: so it is more convenient.

1: and you can trust the product

2: and the feeling of growing your own things is great

1: but now we are producing too much, so now we waste

6: ons almal gebruik te veel of koop te veel en weet jy voordat goed by jou afgaan – ons ry verby straatkinders by die robotte ens, hoekom begin mens nie eerder om jou vrugte wat jy sien begin verlep vir hulle te gee nie in plaas van vir hulle geld gee

17: en tenmiste waste jy nie

4: ons doen dit, kos wat oorbly word afgegee by plakkers langs die pad

5: baie mense doen dit

6: iets wat meer awareness moet kry is daar is mense wie bereid is om te werk vir geld en die mense wie nie bereid is om te werk nie kan dan kos kry en nie geld nie. deur vir hulle die "waste" te gee kry hulle kos en dan kan hulle gaan werk

17: so you use your waste to be socially responsible

18: jy se mense koop te veel. Hoekom koop mense te veel?

6: want ek dink dit gaan oor die onvoorsiening. Ek gaan in die winkel in en dink ek gaan seker slaai wil maak so ek koop blaarslaai, tamatie en komkommer en nou kom ek by die huis en dis nou te laat en dan maak jy nie kos nie. oormore het iemand jou genooi vir ete en die dag daarna het die slaai begin verlep.

4: en hy koop op groot maat, hy hou nie van los goed nie

18: dink julle bemarking speel 'n rol in ons wat te veel koop?

4: JA

9: ja

17: Hoekom?

9: stimulasie

8: ons word gelooi met produkte en dit bly in jou kop vassteek so as jy die volgende dag in die winkel kom dan sien jy dit en koop jy dit

4: ek dink bemarking gaan na 2 kante toe. Dis wat ons net nou oorgepraat het – dis die rede dat jy te veel koop maar dis ook die rede dat jy reg eet.

7: the thing with the waste that you want to give to other people (as in the picture of the fresh produce laying outside the retailer). If they throw the stuff at the back like in the picture, if it is full of rats and stuff then nobody would want to eat that. So if they can then start to sort between the "vrot" stuff and the less "vrot" stuff then maybe they can use it. If the stuff is still fresh, they can give it to people

4: xxx does that. The out-of-date products are offered to the staff and when they won't buy it then it's really "vrot"

17: so if you know that a retailer will take whatever is left on the shelf and give it to a charity does that make you feel better about wasting or not buying the products? Does that justify the waste?

4: yes. At least somebody else will make use of the products

18: do you think all retailers give to charity?

5: ek weet xxx vat van hul goed wat nie baie af is nie en verkoop dit aan hul personeel maar teen 'n verminderede tarief. Nie als gaan na charities toe nie, dis meer xxx

18: but what happens to the really bad waste?

5: ek dink hulle gee dit vir die varke



- 3: ja vir die varke
- 18: how much do you think retailers waste? 50% or what?
- 5: ek het al by xxx in hul store gaan werk en daar is nogal baie waste, nie net groente nie.
- 3: jare terug, the whole environment was different. Food was cheap, people didn't worry to waste food.
- 17: do you think we should worry about wasting food because it is not cheap anymore?
- 1: you need to get what you can while you still can
- 8: everything is expensive, even for the retailer
- 6: ek wonder of daar ander is wat ook so dink: ons almal wil tog gesond leef. And at the end of the day, I am going to buy a lot of fresh produce. Ek stock my yskas met als wat reg is en nou voel ek goed my huis is vol gesonde kos, en ek gaan nou gesond eet. Maar nou kom ek by die huis, moeg en dis 'n hengse mission om als voor te berei. So 2 min noodles en kaassmeer wen, want dis net soveel makliker. Ek het nou 'n week terug gese ek gaan probeer gesond eet, en dis helse harde werk! Dit vat baie tyd om iets gesond voor te berei om saam te vat werk toe. So nou sis jy jou gewete met dit wat jy in jou yskas het en in die werklikheid is dit 'n geval van 'n gesondheidsbewuswording
- 8: dit kom terug na die punt van hoe ons koop. Jy koop gemaklik sodat jy dit makliker maak om gesond te wees.
- 18: when you have important people coming over for a meal, will you then put in more effort and give them something better, something prettier? Why do you do that?
- 4: it must always be that way, not only for important people
- 9: the image of you being healthy and perfect.
- 5: jy sit maar jou beste voetjie voor. Jy doen dan mos so bietjie ekstra moeite
- 17: that is what shops do -
- 4: and they trick you with that
- 3: people who like preparing food will buy different to people who do not like preparing food
- 9: and also education. If you do not know how to prepare food you will buy the convenience products.

Focus group B

- 17: waar koop julle oor die algemeen? By watse winkels
- 11: Ek koop oor die algemeen by xxx
- 10: xxx
- 17: kom ons begin by xxx hoekom by xxx?
- 11: want dis vir my baie gemaklik. By die tyd wat ek hier uitstap is dit vir my gemaklik, en vinnig. Ek kry alles daar, van gaar hoenders tot vars vrugte en groente en dis gesny so dit maak dit vir my baie gemakliker
- 12: dis oordat sy lui is
- 17: Waar koop jy (Henry)?
- 12: die naaste winkel waar ek kan stop.
- 17: ok maar is dit nie maar ook lui nie?
- 12: ek koop maar by xxx, xxx, en dan hoofsaaklik xxx.
- 17: hoekom by xxx?
- 12: dis die gemaklikste die plek waar ek kan stop en alles kry



- 17: so 'n one stop shop. Ok en jy (Arista)?
- 10: xxx is vir my soos 'n one stop shop. Vars groente, vars vrugte, en daar is vleis, protein, alles vars
- 17: so jy kan 'n hele maaltyd daar gaan koop?
- 10: ja
- 15: xxx die naaste, gemaklikste en ek kry als wat ek nodig het.
- 17: en prys gewys?
- 11: xxx is vir my duurder, maar ek hou nogal van hulle kosse. Ek moet vir jou eerlik waar se, dis reg, ek is nie 'n lui huisvrou nie, alles moet net vinniger gaan want ek het 'n baie besige man. Alles moet in sy skedule pas en hy het altyd vergaderings.
- 17: so dit pas by die pas van jou huishouding in?
- 11: dit pas absoluut by my huishouding in
- 17: kwaliteitsgewys wie het die beste kwaliteit
- 13: daar is nie meer iets soos kwaliteit nie
- 17: hoekom se jy so?
- 13: daar is net nie alles is up to shit
- 17: waar koop jy?
- 13: selfde ek sal by 'n xxx of 'n xxx of so koop, dis maar die selfde ding. Ek koop nou nie baie nie, maar die kwaliteit van die produkte is glad nie goed nie, en dis die selfde orals.
- 17: so jy se daar is geen verskil tussen xxx se kwaliteit en xxx?
- 13: nee daar is nie, blaarslaai kom uit die grond uit. Jy bemes dit, jy besmet dit. Orals dieselfde
- 16: besmet? Soos in sleg vir die aarde?
- 11: alles is sleg vir die aarde en alles is slegte kwaliteit
- 12: alles wat jy koop xxx se kwaliteit is normaal weg beter. Oordat ek baie met die verskaffers werk wie xxx se vrugte doen, groentes doen, as jy op die plase kom sien jy hulle kies xxx se vrugte en groente eerste uit, dan word uitvoer produkte gekies uit dieselfde batch en dan die res. So dit hang af van waarop jy spesifiek... ek het nou die dag spesifiek gekyk, op die plase het hulle 'n spesifieke stoor wat net xxx se goed stoor, hulle mag geen van hul ander goed daarin sit nie. so jy betaal wel vir die kwaliteit, maar wat jy regtig voor betaal is die gemak daarvan. Want hulle verkoop byvoorbeeld 8 in 'n pakkie of 10 in 'n pakkie net genoeg vir 2 of 3 mense dat dit nie vrot voordat jy dit kan gebruik nie en daarvoor betaal jy. So dis al waaroor dit gaan
- 17: op die plase, die vrugte wat nie gekies word vir enige retailers nie, so die vrugte wat oorbly, waarna toe gaan dit?
- 12: dit gaan gewoonlik vir versappings.
- 17: so dit word gebruik?
- 12: dit word normaal weg, 90% van die tyd, gebruik, weereens as jy vat lemoene, *Lethaba* boerderye in Tzaneen, hulle doen baie versappings. So al die vrugte met 'n merkie op, hael het dit getref of iets. Daai goed word versap, goed soos mangos ens. Al sulke vrugte wat seergekry het gaan vir versappings.
- 17: weet jy wat doen hulle met die afval produk?
- 12: daar is boere wat dit kom haal, dit gaan gewoonlik....
- 11: vark voer
- 17: so dis 'n goeie voorbeeld dat niks gemors word nie
- 12: ja die hele siklus word voltooi. In Delmas is daar mense wat ook vrugte versap. Hulle doen versappings en verpak vrugte– hulle doen omtrent 120 ton afval elke dag, wat hulle



gooi in 'n hop en die boer stop daar en maak vol. Hulle gee dit verniet weg, want die boere kry die voer en die afval word verniet weggevat. Die siklus bly maar belangrik.

17: dis 'n wen-wen situasie. Die res van julle, hoe gereeld koop julle vars produkte?

- 15: soos nodig
- 10: soos nodig, want as ek te veel koop moet ek dit weg gooi want dit word vrot
- 11: ek koop so 2 keer n week
- 10: ek koop eenmaal 'n week
- 11: Vernon is mal oor druiwe, so as ek die oggende vir hom sy broodjies insit dan sit ek druiwe in, en piesangs en hy eet nou in die aande, na sy kos, weet jy hy eet net. Ons bederf ons mans verskriklik. My man hou nie van prepacked food nie, niks daarvan nie. dis nie genoeg nie, porsies is te klein.
- 17: so convenience in daai opsig werk nie vir julle nie.
- 11: nee, hy soek 'n lekker bord kos
- 17: die produkte wat julle aankoop, hoe is dit gewoonlik verpak?
- 11: dis in 'n verpakking
- 10: ek soek my eie een uit
- 16: ek wil die mooiste ene kies, die grootste, sonder enige kneusplekke
- 10: dis die ding, jy kan sien die onderstes is nie ryper as die boonste nie. Selfs mushrooms kan jy voel of hulle vars is of nie.
- 16: so jy druk aan die mushrooms en die volgende ou wat daar kom kry pap mushrooms
- 10: dis sy probleem.
- 11: hoe toets jy 'n avo presies die selfde. Dan by die tyd wat ek by hom aankom is hy lekker vol kneusplekke
- 10: dan is hy lekker sag. By die tyd wat hy (12) kla is met hom kan 15 hom vat want dan is hy lekker sag
- 17: as jy jou produkte uitkies op die rak, wastes vat jy nie?
- 11: ek sal nie iets vat wat 'n merk aan het nie, 'n duikie, pap vrugte ek hou niks van pap vrugte nie. geen kneusplekke, of pap tamaties, oor-ryp tamaties nie. niks wat oorryp is nie
- 12: en ook die wat die mooiste kleur het
- 11: ja
- 17: en wat van vrugte wat jy koop om by die huis ryp te maak?
- 12: nee
- 11: ek het dit nog nie gesien nie
- 10: party keer van die avos, by xxx, moet jy self gaan ryp maak. Sit in die kas en more is hy reg.
- 16: dan moet jy weet dat jy dit later gaan gebruik
- 11: by die tyd wat die avo ryp is het jy al daarvan vergeet en dan stink jou kas
- 10: jy sit dit in 'n kas wat jy oopmaak
- 14: Sit dit saam met piesangs, dan word dit vinniger ryp. In 'n kas saam met piesangs, dit versnel die rypwording
- 12: en as jy wil he dit moet stadiger gebeur sit dit in die yskas, dit stop die rypwording
- 17: koop julle ooit ingevoerde produkte:
- 13: nie as 'n reel nie
- 16: ja
- 12: nou en dan
- 11: ek koop, ja
- 12: by uitsondering



11: as ek lus is vir iets en jy kry dit nie hier nie maar dit word ingevoer dan doen ek dit – ek koop dit

17: wat van die feit dat dit duurder is as seisonale produkte

11: as jy dit het, kan jy dit koop – as jy dit kan beskostig dan hoekom nie

16: en as jy baie lus is daarvoor dan het jy ewe skielik die geld

11: ja

16: ek se mos daar is sekere goed wat as ek dit wil he en jy kry dit nooit nie en ek kry dit nou dan gaan ek dit koop

11: ongeag, ek is presies dieselfde

17: foto van vrou, kyk na agtergrond. Se my hoekom is sy gelukkig? Hoekom glimlag sy so breed



14: dis 'n xxx ad

17: dis nie 'n xxx ad nie, maar hoekom dink jy so?

14: nee ek weet nie

11: ek sal se soos sy glimlag, dit wat sy kies is vir haar vars en wat sy wou gehad het. Daai lyk na suurlemoene

12: die verpakking (display) is goed

16: en sy is dalk bly sy kry wat sy gesoek het. Jippie sy het suurlemoene gekry en daar is 'n verskeidenheid

11: presies

12: vir my weer, as ek kyk na so 'n foto, gaan dit alles oor hoe dit verpak is (displayed)

10: ek dink ook so

12: ek kan self kies wat ek wil he



- 16: ja
- 15: hulle los die keuse vir my ek hou daarvan om 'n keuse te he
- 12: dit lyk aantreklik
- 17: dit gaan jou aanspoor om te koop?
- 11: absoluut.
- 12: dis altyd wat jou oog trek dit moet antreklik lyk. As kos hond sleg is maar dit lyk mooi gaan jy gaan vir dit
- 17: en as jy instap en jy wou nie suurlemoene gehad het nie, maar jy sien die rak lyk so, sal jy suurlemoene koop?
- 11: ek gaan 4 of 6 koop, ek is ongelukkig so, al sit ek hulle in 'n vaas met water, dit lyk mooi. Al eet ek hulle nie, ek doen dit steeds
- 17: so koop julle ooit goed omdat dit daar is promosie van koop 3 kry 4e een verniet. Koop julle sulke "bargains"
- 11: my pa doen dit gereeld (+- 70 jaar oud)
- 10: ek doen dit soms met goed soos nectarines en kiwi fruit en sulke goed. Maar nie 'n piesang nie
- 17: maar hoe besluit jy vir watse "bargain" jy gaan val en watse een jy nie voor gaan val nie?
- 10: weet jy baie keer is dit 2 vir 3, se nectarines, dan stap ek dalk by xxx in en dis 'n helfde goedkoper, maar dis dalk nie so vars nie. So vars by xxx sal altyd gekoppel wees, vars produkte en xxx sal altyd gekoppel wees soos xxx.
- 17: so jy het verskillende faktore wat 'n rol speel in die evaluasie prys
- 11: ek het al ingestap en dan het hulle iets soos papinos vir 3 vir R20 en dan lyk hulle baie mooi
- 16: maar partykeer is daai special net daar omdat hulle ontslae moet raak van goed
- 11: ek wou dit ook gese het
- 12: soms gebeur dit dat die aanbod te groot is en die aanvraag te klein en dan gee hulle vir jou daai. Jy kan sien spesifiek met druiwe voor seisoen kos daai drywe jou R40/kg, in seisoen R30/kg en in die hoog seisoen koop jy dit vir R15/kg. Dis dieselfde dryf...
- 17: supply and demand
- 12: presies. Eksklusiewe produkte, dis wat ek dit noem, vrugte soos kiwi wat nie almal sommer eet nie, dis nie 'n lokale vrug nie so nou weet jy jy betaal R10 'n vrug en dan skielik bied hulle dit aan 3 vir R10 en dan koop jy
- 16: partykeer is dit nie eers 'n special nie, hulle vang jou net om te koop. As jy net gaan uitwerk, deel dit deur 3 3 vir R20 dan kyk jy as jy dit losgekoop het is dit dalk dieselfde prys
- 11: presies. Ek stem saam
- 13: so ek val nie vir 'n special nie
- 11: ek ook nie
- 17: watse rol dink julle speel bemarking in hierdie koop siklus
- 13: ek dink 'n plek met 'n goeie bemarker kan 'n plek maak of breek
- 12: presies
- 13: 'n goeie bemarker het nie specials nodig nie, 'n goeie bemarker het nie vrot goed nie want hy koop reg aan, hy bemark die goed sodat dit reg is en verkoop
- 12: en veral as jy kyk na huishoudelike produkte dit is alles in die presentation. Dit is wat ek glo. Ek self is in bemarking en verkope. Dit is alles in hoe jy 'n ding aan 'n ou voorsit, jy kan 'n ding aan 'n ou verkoop wie dit nie eers nodig het nie as jy dit reg voor sit. Jy hoef hom nie enige nonsense te voer of daaroor te praat nie, dis net die aantreklikheid daarvan, en skielik wil hy koop



- 13: jy dink dan nie eers prys nie
- 12: ja, jy stap daaruit en dan dink jy haai hoekom het ek dit gekoop? Jy weet nie, dit gaan net oor hoe dit bemark is
- 17: van die varsprodukte wat julle aankoop, hoeveel van dit word gemors? Eindig op in die asblik
- 12: in ons huishouding sal ek se soms tot 30% want jy koop in groot maat en jy eet dit nie in groot maat kla nie en dan le dit in die rak en vrot
- 17: maar hoekom koop julle in groot maat aan?
- 12: oordat dit daar was. Dis hoekom ek se vir my is die ideal om te kan koop soos by xxx in kleiner hoeveelhede maar ongelukkig betaal jy 'n premie daarvoor
- 13: maar dan mors jy nie so dan is dit nie regtig duurder nie
- 12: dis hoekom ek se dit is 'n mindset wat jy moet verander. Ek koop nou bietjie duurder maar ek koop wat ek gaan gebruik. As ek die ander een koop betaal ek minder maar ek gooi weg, so goedkoop koop word duur want ek kon dit nie gebruik het nie
- 17: die goed wat nou gemors word, daai 30%, waarna toe gaan dit?
- 12: asblik
- 11: asblik
- 17: so julle het nie 'n kompos hoop nie? Of julle gee dit vir die voeltjies of so iets?
- 12: nee glad nie, dit eindig net op die ashoop op
- 17: wat weet julle van global warming af?
- 10: nie veel nie
- 17: hoekom nie? oordat dit nie in tydskrifte ens bespreek word nie?
- 10: daar is informasie daar wat se jy moet goed skei in die huis, die plastiek en allerhande ander goed, maar hoeveel kan ons doen?
- 15: mense is lui
- 11: ons is te hastig
- 12: ek wil nie vir jou probeer verduidelik wat Global warming is nie, maar ek dink meeste mense is baie naief oor global warming.
- 15: ja
- 12: want dit het huidiglik nie 'n direkte impak op hulle nie
- 17: dink julle nie meeste mense het hierdie houding van "dis nie my probleem nie" of "wat kan ek nou eintlik doen"?
- 12: ja. Ek dink die grootste probleem kom in wanneer jy se die bietjie wat jy kan doen het in elkgeval nie 'n impak nie
- 15: maar as almal net hul bietjies wil doen
- 12: want dit is hoekom ek se, mense het meer geneigdheid om te kyk of dit nou 'n impak het, dan gaan ek nou reageer. Maar as daai impak oor 20 of 30 jaar eers daar gaan wees dan redeneer hy man dit is nie nou 'n probleem nie. maar hy besef nie dat alles bou op na 'n groter probleem nie. dis soos om nie lewensversekering uit te vat wanneer jy begin werk nie. jy kan nie begin worry daaroor op 40 nie, dan is dit te laat.
- 10: dis waar!
- 12: nou wil jy voorsiening maak maar dit is te laat, jy kan nooit dit opmaak nie. en dit is vir my dieselfde met global warming. As jy regtig gaan sit en kyk na wat alles gebeur in die wereld moet global warming vir jou sin maak. Maar almal dink die bietjie wat hul kan doen maak nie saak nie. soos hulle sal se ek ry nie so baie nie, ek het net een kar, ek gebruik nie dit of dat nie, ek het nie beeste wat gasse afgee nie, ek brand nie goed nie. maar tog is daar



altyd iets kleins wat jy doen of produkte wat jy gebruik wat as jy gaan kyk hoe dit vervaardig word – as jy dit terugwerk – sal baie mense hul oë oopskrik

17: dink jy iemand moet verantwoordelikheid neem om die verbruiker op te voed?

16: ja!

11: definitief

16: ek weet niks van global warming af nie, niemand lig my daaroor in nie en ek gaan definitief nie vanaand as ek 'n uur af het gou global warming gaan google sodat ek meer daarvan kan weet nie. so ek weet niks van global warming af nie

11: nee nee

13: maar dit raak jou

16: nee dit doen nie

12: as dit jou belangstelling is sal jy meer uitvind maar as jy nie belangstel nie gaan jy nie

17: wie dink julle moet die verantwoordelikheid neem vir hierdie opvoeding?

10: jy self

16: die vervaardiger

11: die vervaardiger

12: enige ou van die verbruiker af reg deur na die vervaardiger want daai ou kan dit nie vervaardig as ek dit nie gaan gebruik nie. op die ou einde as hy dit vervaardig en niemand gebruik dit nie gaan hy ophou

17: so eintlik is dit dan die verbruiker wat die regte "demand" moet gee sodat die vervaardiger die regte goed moet doen

10: nee glad nie

12: my opinie is dat jy self moet weet wat om te gebruik en dan deur die regte goed te gebruik en te vervaardig sal jy op die ou einde groot bydra tot die stop van global warming 16: maar iemand gaan eers vir ons daarop attent moet maak dat al swat ons doen 'n impak het. En wie gaan dit doen? Ek weet nie. wie gaan my oortuig o moor global warming te begin worry?

12: dit is so. Ons almal weet van global warming, ons weet net nie wat dit is nie maar ons het ook nog nooit die moeite gaan doen om uit te vind waaroor dit gaan nie.

16: ek het nie, ek is nie geinteriseerd om dit te doen nie

17: as bemarking jou kan aanspoor om te koop, dink julle bemarking kan ook gebruik word om jou te motiveer om slegs te koop wat nodig is?

12: absoluut. Maar dit gaan ook alles oor persepsies wat mense het. Mense Koppel duur goed met kwalliteit goed.

16: status

12: alles gaan oor status

17: so julle se nou duur word gekoppel aan kwaliteit – is dit hoekom xxx kwaliteit is?

16: oordat dit duurder is – betaal jy vir die kwaliteit of betaal jy vir die naam? Omdat dit xxx is.

12: ek dink tot 'n mate is dit so, dis hoekom ons branded klere koop.

16: want jy dink dit gaan langer hou – dis 'n persepsie

11: maar kyk nou na xxx, kyk hoe skielik het hulle opgekom

16: want Gordon Ramsay koop by xxx

11: xxx het hul hele beeld verander, so dat mense wie glad nie daar wou koop nie nou doen.

12: bemarking wat goed gedoen is



Focus group A, Session 2

17: recap of last week's session as well as explore more concepts that we touched on last week. Please tell me what is your general understanding of global warming

7: caused by Carbon dioxide and carbon monoxide from fossil fuels burning

4: al die aerosol blikkies en deodorants wat ons spyt, alles wat gasse uitlaat

3: any waste contributes to global warming in one or another way

5: dis wat ek ook wou se

17: fresh produce waste as well

9: doesn't that rot away?

5: as goed vrot dan stel dit gasse vry. As jy 'n groot – asgate – as jy daar gaan loop, dis warm onder jou voete. Die gasse wat vrygelaat word maak als warm – global warming?

17: do you know what global warming is?

4: aardgasse wat in een of ander vacuum 'n gat in maak

9: gat in die osoonlaag

All: daarsy

17: is it dangerous?

3: yes, if that hole gets bigger, temperature will rise to extreme heights

5: osoonlaag beskerm mense teen negatiewe strale van die son, UVA en UVB stralle – ek dink UVA is die veilige een en UVB die slegte een. So sonder die osoonlaag kan die strale nie gefilter word nie – velkanker

7: I think it is dangerous in countries such as China where there is factories and stuff. More advanced countries. Industrialised countries they have to control it. In Africa, there is nothing that really contributes

17: so in SA we should not have a problem because we are not really adding to the problem?

7: I am not saying that we are not adding to the problem right now in a big way. I think we should not make the mistakes that other countries made.

17: what about the little bit that we are contributing here in SA – don't you think that is making the situation worse?

7: that is part of industries – you are going to get part of it.

18: don't you think that what they are doing is having an impact on us?

7: yeah, I think....

5: and vice versa

4: ons ou bietjie add on

5: all die bietjies add net on

3: we are still contributing to the average, or even bringing the average down. But it is still higher than what it is supposed to be – there is not supposed to be an average, it should be zero.

18: who do you think is the biggest contributors to climate change, globally?

3: china, japan, America

5: china

18: America

9: Europe

4: ek het gedog dit is Afrika met al ons baie vure

3: I don't know

4: ek het dit nie as 'n grap bedoel nie



- 3: how many fires in Africa and how many factories and power stations producing all of these gasses
- 5: dit is waar
- 4: maar van die fabrieke filter dam hul goed wat hulle uitblaas en so aan. ;n vuur is 'n vuur dit brand en ons sit goed daarop en dit brand. Dit word nie gefilter nie, dit is 'n....
- 3: minder brand, minder braaivleis
- 4: ek is ernstig
- 18: jy is heeltemal reg itv die fossil fuels hout wat gebrand het
- 4: in afrika word meeste kosse en goed word gemaak op 'n oop vuur
- 3: we must be carefull because the earth and the whole universe is an ecosystem that needs to stay in place. Old stuff must rot and disappear, and new things must grow. So a fire.... if a bush fire starts somewhere, isn't that part of the ecosystem? There is a reason for things to die
- 18: the circle of life
- 3: the whole ecosystem is a circle of life I think
- 4: ja maar as jy dit nou uit verband uit ruk
- 3: ja and that is why al the factories are bad
- 17: so now global warming is an issue dink julle dit is 'n issue?
- 5: ja ek dink so
- 17: dit interfere nou met die cycle of life. Who should be held accountable for this?
- 3: people
- 5: mense
- 17: do you feel responsible for this?
- 9: ja, I drive a car
- 3: mmm
- 9: so I am contributing as well
- 4: die eindverbruiker moet seker maar, ons het laas hieroor gepraat, geeducate word, ingelig word om dit wat hy kry op so 'n wyse aan te wend dat dit daai goed kan minimaliseer. Ek weet te min van global warming af om my opinie te lig, maar my logieka se vir my
- 17: do you think that industry is also responsible the large factories, etc. but who allows the industries to do what they do?
- 3: demand
- 5: supply and demand
- 9: the government should also regulate that, the number of factories, the amount of gasses, etc.
- 4: give them penalties at least then they can make money and not just spend it
- 5: die gebruiker ook as daar nie 'n aanvraag was vir spesifieke goed nie sou dit nie nodig gewees het om gemaak te word nie
- 17: who do you think cuases that demand? The consumer?
- 3: iin
- 17: why do I want those things?
- 4: want dit word aan jou geadverteer en bemark, die vraag word geskep sodat jy dit wil he
- 5: dis 'n need
- 17: who creates those needs?
- 9: marketing, businesses
- 5: advertisers



- 4: voor uitgang create dit ook
- 5: mense se lewens standaarde lig
- 4: beter, groter, vinniger
- 3: even when there is no advertisement for a car, you still want to buy a car
- 17: but why do you need the car?
- 7: public transport also releases greenhouse gasses
- 3: comfort, convenience that is why you need a car
- 17: waste how much do you waste in your household, general as well as fresh produce waste. How much of that waste do you think contributes to global warming?
- 3: what is your footprint your CO2 footprint. If you take away everything, what is left, what is in your place. So everything that you consume in your life, that is a lot.
- 17: so everuthing that you waste is adding to this problem. Who is responsible for this waste why do we waste?
- 4: ons het nog nooit swaar genoeg gekry nie
- 5: jy is waarskynlik reg
- 4: so nou spaar ons nie, dis makliker om te koop en weg te gooi, nie te dink nie, nie te beplan nie.
- 18: almal doen dit, so hy gee nie om wat gebeur nie so hoekom moet ek
- 4: ek dink daar is nie genoeg awareness nie. ek dink ek is redelik ingelig oor goed, maar weet niks van global warming af nie. as jy nou vir my vra oor die footprint, dink ek dit het iets met 'n dier te doen. Wat weet jy daarvan? Dis nie in my belangstellings veld nie, so ek gaan nie eers daaroor oplees nie. oningeligtheid
- 18: how do you think climate change will have on you and your household toady and in the future?
- 3: apparently, in the last few years, the average temp of most countries have risen, because of global warming. And we can go so far as to say that the north pole is starting to melt, it melts so many cm/m per day or per year, so the ocean will rise, kusdorpe
- 5: word oorstroom. Die gletsers smelt
- 4: maar weereens dit raak my nie nou nie. en ek kan nie dink date k oor 10 jaar iets anders gaan doen nie
- 3: what we must do is secure our children and grandchildren a future. That is what it is all about
- 4: ja maar dan moet jy daarvan wee tom iets daaromtrent te doen
- 3: ja
- 4: hoe kan jy iemand waarsku of iemand leer van iets wat jy self nie van wet nie. wat jy self nie begrip van het nie. so ek voel almal moet ingelig word
- 9: climate change is going to influence everything, especially if you think about food supply. Certain fruit grow in the winter, so if it gets hotter those fruits will either be of a lesser quality or will cease to exist. And if I think about wine, the grapes need a certain temp and wind, and if it gets too hot then the grapes will go down. Certain trees and grass won't grow, I think the entire life cycle of animals, of people, of plants, of everuthing, will change
- 3: I think we must all adapt a certain lifestyle, whether you know about global warming or not, if you are not in a room, switch of the light. Not only do you save on your energy bill, but in the end you also save on global warming.
- 5: ja nogal
- 3: waste as little as possible, it is just a way of living, a lifestyle that we must all adapt to
- 4: lifestyle change



- 3: ja. And as I have said, whether you know about the ozone layer or not, you don't need to know anything about it. Just save everything you use.
- 9: people don't care. They look at now and don't think about a 100 years from now
- 3: unfortunately, the poor and the very rich is careless. It is us in the middel here that actually tries to do something. I might be wrong
- 17: why are they careless?
- 3: the poor is normally uneducated in those type of areas, any person, from china to here. And the rich, they don't care. They can just buy a new one. They can afford to be careless. And the poor cannot afford to care
- 7: I think if industries are making a lot of money there is no reason for them to change. Humans always wait for a crisis to happen before we act. So that is the problem, instead of acting right now, like putting recycle bins all over campus. As long as it doesn't change anything right now we won't change, only when things get bad will we decide to act.
- 17: and when things get bad, do you think there will be enough time to turn this around?
- 7: I seriously doubt that
- 3: I heard, that the ozone layer is "crimping" it is not as big as it was. So it looks as if it is healing itself in some way.
- 18: where is the ozone layer?
- 3: not far away....
- 18: is it above Europe or?
- 3: no, it is around the whole earth, it covers the earth
- 5: soos 'n kombersie
- 18: where is the hole?
- 3: I don't know
- 5: hulle se hy is bokant die noord pool die pool streke
- 4: regtig? Bokant die pool streke, waar dit die koudste is?
- 5: ja ek dink so, daar waar die lug die dunste is, want kyk hulle is maar eintlik hoog en hoe kouer dit is hoe dunner raak jou lig dit is 'n feit. En dit is nie van slimgeit nie, dis algemene kennis. Ek is nie slim nie.
- 17: footprint what is that? He said it is something that we leave behind how do we increase the footprint?
- 3: by extra waste.
- 17: how would you decrease your footprint?
- 3: waste less. Anything your car, drive less, drive slower, and more carefully
- 4: use roll on, and not spray
- 17: what about the produce that you buy? Should you buy differently?
- 4: buy less, buy what you are going to use, not more so that you have less wastage
- 17: what about imported produce?
- 4: why does that matter? Either we buy it here and throw it away or eat it or they buy it there and waste it there? Is it because of the fuel used to get it here?
- 3: I don't know
- 17: so do you think importing fruit and veg increases your footprint?
- 4: ek dink nogal so
- 17: does it contribute to global warming?
- 3: must be
- 5: ja dit moet. Hoekom gebruik ons nie ons eie boere se goed nie? nou vermors hulle goed want ons eie mense koop dit nie want ons koop ingevoerde goed



17: if you walk into a retail shop and there is a limited variety of produce, what do you think about that shop?

3: not very happy. That is the problem – I only want a pineapple and an avo, but if that is the only 2 things they have on the shelf I don't like the place. I only want 2 things, but they must have a large variety. Everything must look nice, you demand everything even though you only want this

17: but then you complain about imported produce?

5: it is a mindset

18: back in the day, if it was winter we had oranges and nartjies, and if it was summer you could not purchase it. And if I think back, we did not want nartjies in summer. There was no need (demand) for it. So how do we get the consumer to go back to those times?

4: well if it is not there they cannot buy it

3: everything

4: if they cannot buy it for a few years they will stop buying, get used to it and not want it – if it is not there they cannot buy it

9: stop marketing it out of season

3: the new trend to create/manufacture electric cars – there are some people who reckons that it takes more energy to manufacture the electricity for that car than what a normal car uses in petrol

4: so for global warming it is going to be better to buy a petrol car than an electric car

3: that is more or less what they say. Because there are huge power stations that will be needed to supply the power for the cars to run. Of course while it is running it is fine, but to charge it....

17: do you think that the normal consumer have this knowledge

3: no, they think ah electrical car – I won't pay for petrol, but they will pay for electricity

17: do you think, the normal consumer, when they leave a room and switch of the light, does he do that because of global warming or because of money savings

3: money saving. But the end result is a decrease in global warming. But at this stage he switches off to save electricity

17: do you think that is because they do not know what global warming is, because there is a lack of education?

9: yes

7: but with the electric cars, you also get biofuel cars that release oxygen when the fuel burns, which reverses the effects of global warming. Also biodiesel – they take old cooking oil from restaurants and pour it into this cylinder thing and it gives you biodiesel

3: but you see, if there is now a million of those cars, they must set up extra restaurants to supply the extra oil

17: do you think we are leading unsustainable lives

7: yes, because we waste

4: we don't care because we don't know

17: so waste makes us unsustainable. Do you feel bad about leading unsustainable lives?

4: now I do, when I think about my children and grandchildren... suddenly it bothers me – what is going to happen with my children

3: I care about it

5: ek wonder of dit nie 'n ding is wat kom met die ouderdom nie want ek het nie gewonder nie maar toe ek 40 slaan, begin allerhande goed my pla – is dit dalk wysheid

18: I wonder if it is an age or gender thing



3: I think it is -20 years ago there wasn't even an idea about the ozone layer - nobody knew about it. After that people started

4: now they are starting to know about it. Maar oor die gender ding – n ma is 'n carer, so jy wonder wat met jou kinders gaan gebeur, maar 'n pa is 'n voorsiener. Hy het n baie definitiewe rol – pa moet voorsien en ma worry wat gaan gebeur, hoe gaan hulle lewe...

9: if I look at myself, I think it bothers me, but in terms of fresh produce I do not know if I will start buying differently because of this worry

17: why not?

9: I don't know, I think when you are in the shop you don't think about it. You just want your avos, so you buy them. So I don't think in the shop, when you are there, and you recognise that need, you are not going to think about the ozone layer

17: and if they put up a big board that warns you about your contribution to global warming?

9: I think rather they should take away the fruits etc. that are out of season, not sell them at all, and increase the marketing for the fruit and veg that are in season. Show what you can make with them, because sometimes you only know how to use an avo, but if they show you how to use something that is in season, what you can do with it, then you might rather buy that

17: if they take away the out of season produce, do you think the consumer will complain?

3: ja! They will

4: at first

9: but if all the stores do this

4: so how can you take this away without them complaining?

9: if all the stores don't have it, marketers should tell them (consumer) why they don't stock it anymore

5: jy moet dit net vervang met iets – stel die verbruiker voor aan groente en vrugte wat in seisoen is en vertel ons wat ons daarmee kan doen. Jy kan nie net goed weg vat en niks in die plek daarvan sit nie. dan gaan jy moeilike kliente kry

17: so we are back at "educate the consumer"

4: ja, onthou die mens is 'n aanpasbare wese – jy pas aan by dit wat jy het, so as jy nie meer lemoene gaan kry in die somer nie gaan mense dalk vir 2 of 3 jaar moan maar daarna is jy gewoond daaraan dat jy nie lemoene kry in die somer nie

3: I don't know – we never eat oranges in the summer, we don't even buy it. I haven't even seen it on the shelves

4: that is because we are older. Because we are used to have it only in the winter time.

3: but in our WW there are no oranges in the summer time...

18: but what about your other citrus fruits, like limes and lemons?

3: lemons – but isn't lemon an all year thing?

4: no

18: no

17: do you know that white onions are out of season now?

All: no

17: Do you buy fruits and veg that are out of season, and then complain that the fruit or veg is not of good quality?

4: if it is there, we will buy it. Then it is not as nice as we remember in the summer, and then we complain. Yeah. But if it is not there....

3: but I want them



17: so you buy them?

3: like, 2 weeks ago my wife wanted to buy nartjies – I said no, those are the first boxes so don't buy

4: yeah they aren't nice yet

3: so we will wait another month before we buy nartjies. Then they will be sweet. The first boxes are never lekker

17: what do you think is going to happen to those first boxes?

3: waste

17: do you feel responsible?

3: no, I don't feel responsible.

4: no, the stupid consumers will buy the first boxes so that is less waste

5: baie mans begin hierdie dinge te weet, veral mans wat alleen hul kinders groot maak

17: do you think that you are teaching your children the right way – are you teaching them not to waste, to care about the environment and to think about the future?

5: ek dink ons kinders leer deur voorbeelde, ons eie voorbeelde. Aksie praat harder as woorde

3: dade praat harder as woorde

17: and the people around you?

5: ek dink dit steek nogal aan, jy moet net harder aanhou

18: did you learn anything at school about climate change?

7: not really

18: what did they teach you?

7: basic things, like don't litter, if you waste you continue with the cycle, if you don't recycle you will have climate change

18: did they teach you what climate change is? Because you are talking about a cycle, what is that cycle? It is correct, but how does it work

3: can't remember

7: if you take a car, and drive it, it releases Carbon dioxide, which stays in the air and when the sun hits the Carbon dioxide it insulates it – it keeps everything warm. So earth doesn't cool down quickly enough and that causes global warming

18: so it's got nothing to do with the hole in the ozone layer?

3: now I learned something new!

4: wow, me too. Can I repeat that as fact?

18: yes you can, that is correct.

4: ok, thank you. Next time somebody asks me that I can answer them

17: do you know what meat free Monday is?

3: I don't want to know....

5: hoekom sal jy jou vleis wil los?

17: it is good for you and for the environment. Why or how is it good for the environment?

5: dis wat ek ook wil weet

3: because you braai the meat? Or use electricity?

17: nothing to do with the cooking

4: don't know, please tell us

5: ek moet rooi vleis eet anders word ek siek want ek is anemies

4: do you (S) know?

S: I didn't know there was such a thing



- 17: this is something that is marketed both nationally and internationally; it is a huge trend at the moment. Celebrities endorse it, it is big
- 4: but why? Ek dog dit is om die diere te beskerm?
- 3: less animals die
- 17: we want the media to educate us on global warming, but you don't know what meat free Monday is how can they educate us on global warming if you can't pick up on a big trend such as meat free Monday?
- 9: maybe they don't use the media that we use?
- 4: maybe it is just a trend, how must I know it's got something to do with global warming
- 18: exactly, they need to supply the correct information
- 4: yes, then it is not just a trend, there is a reason behind it, a reason why we need a meat free Monday
- 17: explanation of meat free Monday
- 4: maar as ons die diere op eet dan verlaag ons mos die hoeveelheid metaan wat vrygestel word?
- 18: and what you (5) said about the heat that you feel when you walk around a landfill or compost heap or even your dustbin, that is methane.
- 5: ok...
- 17: so when you waste your fresh produce, and it decomposes, it also releases methane
- 18: you understand how climate change work now? It's got nothing to do with the hole in the ozone layer. It is not greenhouse gasses that cause climate change, because we need GHG in the atmosphere to keep us warm. These gasses capture the sunrays. But now we are producing an excess of these gasses, and we are producing an excess of CO2, so now the sunrays come in through the ozone layer, whether there is a hole or not, and these gas molecules capture the heat and keep it inside. There is supposed to be a small amount of these molecules that grab the sun's heat, and the rest of the sunrays are bounced back either from white spaces or the oceans etc. But now there is so many of these molecules that the rays are all grabbed and none is bounced back. So we have created a blanket that keeps the heat inside, and this heat melts the white spaces so no more white space to bounce the rays back
- 5: wow, kan jy dit vir my uit tik en stuur?
- 17: do you know feel more responsible towards the environment?
- 4: ja, for now. Tomorrow when I am in the shops I have forgotten and then I buy again. So we need to create a habit....
- 18: you (S) mentioned that Africa's emissions are not a problem, so what would you say if I told you that in 2010 SA, keep in mind we don't have the population figures or socioeconomic profile of the Americas, but our emissions rate was equal to the USA.
- 7: we have backward technology. If you look at companies such as Eskom, they are only starting now to build wind turbines. So maybe it is not so much the consumer as what we are forced to choose from. If industry is polluting and they are forcing you to buy what they are making... if the government steps in and lay down rules. It is not so much the consumer
- 18: if you look at SA's population, what do you think will happen when our previously disadvantaged population starts to live on the same consumption level is that a good thing?
- 7: economically yes, but we need to do it the right way. You can't just... the planet is like a car if you don't service it it will break. So you need to do things the right way
- 4: dit is sad dat ons eintlik die slegste is



- 3: what do we do that is so wrong?
- 4: ons is seker so oningelig. Ek wil se dat omtrent 80% van ons nasie is oningelig
- 3: but do you really think that the Americans are so much more informed? I can't think so
- 5: ek dink nogal so, kyk maar na hul manier van bemarking
- 3: I can't think that they are more informed than us?
- 4: ons is maar 'n 3e Wereld land. Hulle is 1e wereld. Hulle het net meer toegang tot inligting en kan almal maklik bereik. Ek dink ons is net nog t ever agter
- 5: jy is reg
- 4: ons is net nog nie almal ingelig nie. En ek dink dit is deel van die previously disadvantaged hulle is nooit geeducate nie, nou is hulle deel van die sisteem, almal is in die selfde sisteem, maar 'n handjie vol het nog altyd 'n opvoeding gehad, die res het nooit dit gehad nie. Hulle weet nie eers wat is die meeste van die goed waarvan ons praat nie.
- 5: ek hoor wat jy se, ja. Maak sin
- 4: dit is sad, maar waar
- 5: so educate them
- 17: what does an environmentally conscious person look like?
- 5: iemand wie reg eet, gesond lewe, reg aantrek. Hulle gaan nie plastiek bottels en goed weg gooi nie, hulle sal dit recycle. Hulle sal nie beesleer dra nie. Hulle gaan vegans wees
- 4: ek dink daar is 2 mense wie dit sal wees 2 mense wie dit sal toepas. Die ou wat wil wys hy kan, die show off, of iemand wie regtig 'n commit wil maak. Iemand wie regtig na aan die natuur sal leef. Die persoon sal in 'n groen huis leef
- 5: wat is 'n groen huis?
- 4: die bakstene word op 'n sekere manier gemaak, hulle het solar panels... moet my nie vra nie, ek het mos gese ek weet nie. Het nog nooit in die goed belang gestel nie so ek weet niks nie.
- 3: buy paint and paint the house green
- 4: so daar is mense wat regtig besluit tons gaan groen lewe en 'n commitment maak en dan is daar mense wie se ons sal julle wys
- 3: soos celebrities
- 4: ja, soos die Nutsman, wat nou vir almal wys en nou kan almal se "oh ons is ook so" en nou kan ander mense hulle volg
- 5: 'n trend
- 4: ja, people living up to the Jones
- 9: they will only buy in certain shops and buy certain products. Because they can, like for instance they will only buy fruit that is in season, so they will buy differently.
- 18: their demand and needs will change
- 3: another question I want to know will it cost more or less to live such a life?
- 4: ek dink om te begin, ja. As jy jou hele huis en lewensstyl en huishouding moet verander om so te lewe, groen te lewe, hoeveel dink jy gaan dit kos.
- 3: not necessarily groen
- 4: net environmentally friendly?
- 3: just buy the right stuff, to change your lifestyle. Not necessarily buy different, just adjust here and there. Will it cost more or less?
- 7: more. If you look at organic products, they are more expensive than normal stuff.
- 17: do you think organic is sustainable, green?
- 7: that is what they lead us to believe
- 5: ek dink so



- 17: if you buy organic are you being responsible towards the earth, are you stopping global warming?
- 5: ja
- 3: I think so
- 17: why?
- 5: in die eerste plek gebruik hulle nie so baie gifstowwe nie
- 3: chemicals
- 5: ja, chemicals word uitgesny en dit veroorsaak ook aardverwarming
- 3: they are toxic to the ground
- 5: ek dink dit is 'n hele bose kringloop en net daai een ding sny hulle al kla uit
- 17: so if you buy organic....
- 3: it will be more expensive. But on the other hand, if you save on electricity you might balance it out again
- 5: ek dink om initially oor te skakel van 'n gewone leefstyl af na 'n environmentally green lifestyle, as jy nou byvoorbeeld al jou gewone gloeilampies moet vervang met energie besparende goed, sal dit seker aan die begin duurder wees. Maar as jy vol hou dink ek nie dit sal jou veel duurder kos as jou gewone leefstyl sou nie, in teen deel ek dink dit kan jou geld spaar. Want jy gaan gesonder wees, jy gaan regtig begin gesonder wees. Want baie mense het leefstyl siektes agv hul manier van leef te veel drink, rook, verkeerd eet.
- 17: so why don't we change?
- 5: ek dink ons doen nogal
- 18: if you think about your mom at your age, and you take yourself, who do you think is the more environmentally responsible or sustainable?
- 7: mom
- 18: why?
- 4: daar was nie al die goed wat ons vandag het nie
- 3: I think we are more, today, now, we are more conscious than our parents
- 18: not necessarily conscious, only responsible, more sustainable
- 5: my ma
- 4: die ouer geslagte. Hulle het nie al hierdie goeters gehad nie. Hulle het op 'n plaas gebly, en hul groente geplant, getrek wat hul wou eet. Gaargemaak wat hulle vandag nodig gehad het, en more weer. Hulle het niks gemors nie
- 18: het nie elke 2e dag 'n nuwe selfoon nodig gehad nie
- 4: hulle het nie al hierdie tegnologiese goed gehad nie. Hulle het 1 kar gehad wat hulle gery het totdat dit stukkend was en dan het hulle dit met draad vasgemaak. Of hulle het ossewaens gehad wat nie eers petrol nodig gehad het nie.
- 3: the fact that there is now global warming says it all, because in the past it wasn't there
- 5: al die vooruitgang
- 4: ja dit het gekom, en opgebou en nou sit ons met die probleem. As ons nog so gelewe het soos in daai tyd sou dit nie gebeur het nie
- 5: en niemand sou geworry het nie
- 4: dit sou nie 'n issue gewees het nie want dit sou dalk nie gebeur het nie. Daar was nie sulke groot fabrieke gewees nie, die behoeftes was baie minder as wat dit nou is.
- 3: there were also a lot less people on earth
- 4: dit ook
- 5: over population



4: daai tyd, jy het 1 paar skoene gekoop en hulle het dit opgedra. Jy het 'n werkspaar en 'n kerkpaar gehad en dit is wat jy gedra het

3: ja nou moet die dames 'n paar he vir elke outfit

4: en om die skoene te vervaardig benodig jy 'n fabriek wat gasse en goed vrystel. So die behoeftes het net soveel meer geword en alles het meer geword

18: selfs met die kos – vir elke nuwe produk wat ons wil he moet ons 'n woud afkap om 'n land te gooi

4: presies. En ons kan nie net 1 soort lemoen he nie, ons moet nou 'n nuwe lemoen uitvind. Ons moet nou die een by daai een sit en nou is daar 'n nuwe plantasie nodig wat ons moet aanplant, nuwe fabrieke wat nou hierdie nuwe lemoen moet kan was en verpak ens. En nou moet hulle 'n lemoen en 'n apple vermeng

18: jy is reg

9: change change change

4: ja, en dit veroorsaak meer en meer en meer goed wat in die lug in op gaan.

17: you keep on saying our needs have changed – but who create those needs?

4: die mense wie die goed uitvind! En wat dit vir ons gee. Nuwe selfone en dan se hulle dis beter as wat ons nou het so dan wil almal nuwes he in plaas van wat hul nou het. Iemand is besig om heeldag 'n wortel voor ons oe te dangle. Die mens wil he en he en he. Meer en beter, lekkerder, vinniger, ens.

17: and what makes my needs different in the city than the needs of those people who live in the "platteland"/township?

4: niks nie

9: accessibility, if you are on a farm you won't have the need for KFC because there is no KFC nearby

3: here you have options

4: but they create their own options.

3: competition

18: why competitiveness

3: people compete with each other – you can't have better than me

5: dis waar

3: now I also want what you have. What one person does the next will also do?

18: is that not sad how marketing has brainwashed us into little individuals who only think about ourselves. I don't care about the next person as long as I have the best

5: but then we can use marketing in the same way to change people's minds about global warming

18: but will they be able to use marketing to change people to go back to being a "citizen of society"?

5: as jy dit reg doen, hoekom nie? As jy mense kan breinspoel om goeters te gebruik dan kan jy hulle seker brainwash om nie goed te gebruik nie?

4: maar dan gaan ons nou weer werkskepping verminder want nou gaan jy net sekere goed kan maak waar nou word daar goed uitgevind sodat nog mense werk kan kry en nog goed gebou kan word. Nou skielik verminder ons van 20 produkte na 10 produkte, so 10 produkte wat wegval, met als wat daarmee saam gaan – die vervaardiging, die bemarking, die advertensie, al daai goed moet nou wegval. So mense gaan dit nie doen nie. Elke ou wil werk he en lewe

18: die regering sal dit nie maak nie

4: so wat gaan dit stop? Ek kan nie dink nie....



- 3: I think there is awareness around the world, because everybody knows about global warming. 10 years ago there wasn't even such a word. So people are aware. Whether they are actually practising the good stuff, I think will still come. More and more people tend to live better
- 4: but will everybody start doing it when it is too late?
- 18: as consumers we have certain worries, so now we want to change. You (4) mentioned that if we want to change we need to take away production of certain products. That will not only have an impact on me as a person but also on the country as a whole, bringing down our economy. Countries compete with each other, so they drive consumption. Do you think countries will disadvantage themselves, or allow citizens to do so?
- 4: no, because they need the money
- 5: economy
- 4: bose kringloop, ek weet nie hoe dit gestop gaan word nie
- 3: in the end it stops with the consumer. If we don't demand that extra things (better anything) must be there, it will eventually stop.
- 18: do you feel that the consumer do have the power?
- 3: ja. Stakings. If people stand together and they "staak" something can happen, things can end even if it is only for a moment or a week. So if we as consumers, worldwide.... but how do you do that? How do you force that:
- 4: that is a nice dream. 'n droom wat ek nie kan sien gaan werklikheid word nie
- 7: but there is too little education if you look at a country like India where there is a billion people, a lot of those people are uneducated. Even people in Europe. If marketers need to leave one country they will only go to another country and to the same thing there. So I think they should rather, because other things are not done in the consumers' eyes. They do a lot of nonsense that we are not aware of.
- 3: once again, who is the head of that company they want to make money. It is a person, a human being, who wants to make money. If one country is not interested, he will sell it to the next because he wants to make more money. Human nature.
- 4: and everybody wants to make money, no matter if they make more holes in the ozone layer
- 3: so if nobody needs whatever he is making in his factory...
- 4: ek dink daar moet 'n klomp Mandelas of Obamas (ambassadors) reg oor die wereld wees. As Obama se vrou sekere skoene dra, dan wil almal dit dra die hele wereld.
- 5: daar is 'n key persoon nodig
- 4: as Mandela se mens moet so maak, dan weet die hele wereld. Die enigste manier wat so iets gaan werk is deur voorbeeld kry een groot ou om dit te doen en begin om te volg. As die groot persoon dit doen, nie lank nie dan sal die hele wereld dit doen
- 5: iv is reg
- 4: en ek dink dit is die enigste manier wat mense deur voorbeeld, deur te dink "ek wil ook soos daai een wees" dan kan hulle 'n gewoonte kweek
- 5: rolmodelle
- 4: ja, dit kort groot rolmodelle. Ek dink nie mense sal sommer stop nie, want ek is eerllik as ek se wanneer ek hier sit en praat raak ek ook bang. Ek dink oor my kinders en dit maak my bang. Maar as ek hier uitstap, so what. Ek worry nou wat gaan van my kinders word, maar ek worry nou daaroor. Dan stap ek hier uit en ry verby McD en dink ek is lus daarvoor en ek stop! Dan het ek nou net vergeet ek het gese ons moet ophou om so te leef



- 3: it is a bad circle. Global warming the whole globe is warmer. So people put aircon in their houses, and that accelerate the whole process
- 4: bose kringloop en ek weet nie hoe om dit te stop nie. Behalwe as Obama die voorbeeld wil stel dan doen almal dit. Monkey see, monkey do.
- 17: projective technique. Draw a poster that can be used to educate the consumer they need to be able to look at the poster and understand what global warming is and how I am contributing to it. How my fresh produce waste is contributing to the problem. Can use words or a picture, just what you want. Something that you will see and understand what my impact on the earth is
- 18: can also be something that can aid consumers to be more sustainable
- 17: educate them on making the right choices
- 18: yeah, maybe waste less
- 3: we are all different
- 17: have any of you seen the recycling bins in xxx?
- All: yes
- 18: have you seen any sustainable products, not necessarily organic, in retailers?
- 4: gloeilampe
- 18: food products?
- 4: wat, soos piesangs sonder skille?
- 17: what about fish? SASSI?
- 4: ek het al daarvan gehoor! Dit gaan mos oor seisoene of hoeveel van daai vis oor is. So eet eerder waarvan die see nog vol is as die wat all minder word
- 18: of gekweek word. Sal jy dit eet?
- 4: ek hou nogal nie van onnatuurlike goed nie. Maar as iets lekker is dan gee ek nie eintlik om wat dit is nie battery hoender of werf hoender, maak nie saak nie.
- 17: most restaurants refuse to take off fish from their menus that are on the orange list. Will you eat it?
- 3, 4, 5: ja
- 7: restaurants should be more responsible
- 18: will you tell the waiter?
- 7: not really, but I won't eat it.
- 17: some restaurants are advertising that their fish are all sustainable is that a marketing thing or do you think they really care about the environment?
- 5: just marketing
- 3: ek dink nie dit sal my beinvloed nie. Ek wil net lekker eet, maak nie saak wat dit is nie.
- 5: maar jy kry mense wie spesiaal daai restaurant sal ondersteun juis vir die rede
- 18: sal jy moeite doen om kundig te raak oor die SASSI lys?
- 3: ek het nie voorheen geweet hiervan nie. Nou sal ek dalk 2 keer dink of kyk want nou is ek ingelig
- 4: so nou as jy inn restaurant kom en daar is Galljoen op die menu sal jy dalk dink ek moet dit nie eet nie want daar is nie baie oor nie
- 3: maar aan die ander kant, die vis is reeds dood...
- 18: die mense kom van Japan af ens en stroop ons Galjoen
- 18: jy kan die restaurant gaan aangee. As jy 'n galjoen vang, sal jy dit terug gee?
- 4: daar is nie meer vis in die see nie, so maak nie saak wat jy vang nie jy sal dit nie teruggooi nie want jy vang nie meer vis nie. Daarom moet daar met alle visse seisoene en reels wees, as jy sekere goed vang moet jy kan beboet word. As jy buite seisoen vang moet jy gestraf



word. En niemand weet of die ou langs jou op die strand eintlik 'n polisieman is nie. Dan sal mense ophou om dit buite seisoen te verkoop

- 3: to make a law is one thing, to enforce it is another
- 18: is vrees 'n motiverings faktor vir mense om kennis op te tel? Of is dit genoeg om net 'n sticker op te plak? Moet ons mense bang maak?
- 9: een of ander emosie moet wakker gemaak word, anders sal jy nie aksie neem nie. Sonder emosie sal jy niks doen nie.
- 4: of die vrees moet baie erg wees om jou te stop, as hulle dit kan motiveer. Daar moet 'n goeie rede wees hoekom jy die vrees moet voel
- 9: advertensies wat emosie gebruik, soos vrees, werk. As jy vir mense kan wys presies wat kan gebeur, dan kan mense dit picture
- 17: there where adverts that used fear, and they had to be pulled because people complained.
- 18: on the other side, xxx have this huge farming sustainably for the future campaign. If you walk into a xxx what do you see? Big billboards showing people smiling, with green pastures and farm workers with their hands in the ground. This is now supposed to enlighten people does it work?
- 4: no, it makes me want to buy more.
- 5: vrees werk goed want vrees is jou sterkste emosie
- 4: maar dan mooet dit reg aangewend word. As die vrees nie 'n werklike impak het, dat jy dit kan voel nie, dan werk dit nie.



ADDENDUM D – PROJECTIVE TECHNIQUE

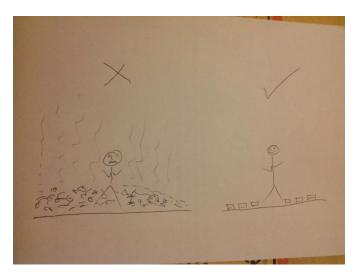


Figure D.1: Participant's poster for the projective technique



Figure D.2: Participant's poster for the projective technique





Figure D.3: Participant's poster for the projective technique



Figure D.4: Participant's poster for the projective technique



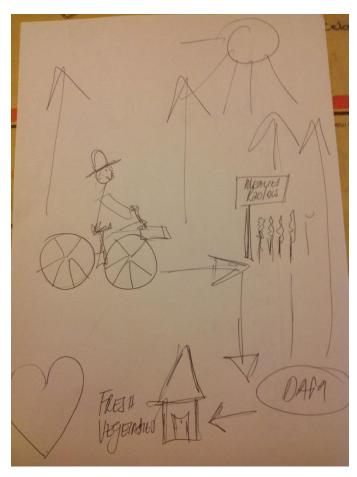


Figure D.5: Participant's poster for the projective technique



ADDENDUM E – GLOSSARY

- Marketing: The management process through which goods and services move from concept to the customer. It includes the coordination of four elements called the 4 P's of marketing:
- 1. identification, selection and development of a product,
- 2. determination of its price,
- 3. selection of a distribution channel to reach the customer's place, and
- development and implementation of a promotional strategy.
 (Businessdictionary, 2014).
- Marketing communication: can be described as all the messages and media a firm and its marketers use to communicate with the target market (Businessdictionary, 2014).
- Popular media: Widely used and widespread communication channels through which news, entertainment, education, data, or promotional messages are spread (Businessdictionary, 2014).
- Marketing media: Communication channels through which promotional messages are disseminated, including newspapers, magazines, television, radio, billboards, direct mail, telephone, and the internet (Businessdictionary, 2014).
- Sustainable consumption: The use of products and services in such a way that it will
 have a minimal impact on the environment to allow future generations to also be
 able to meet their needs (Businessdictionary, 2014).
- Climate change: A change in global climate patterns attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels (Businessdictionary, 2014).
- Green marketing: Marketing products and services presumed to be environmentally preferable to others, based on environmental factors or awareness (Businessdictionary, 2014).
- Green consumer: A consumer who is aware of environmental issues and responsibilities, and is supportive of environmental causes to the extent of switching loyalty from one product or supplier to another, even if it involves higher cost (Businessdictionary, 2014).



- Green promotion: A specific type of advertising that is centered on the promotion of factors having to do with the environment (Businessdictionary, 2014).
- Green practices: Actions of consumers that are environmentally friendly lead to
 ecologically responsible decisions and lifestyles, which can help protect the
 environment and sustain its natural resources for current and future generations
 (Businessdictionary, 2014).