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MARKET AND SOCIO-PSYCHOLOGICAL FACTORS AFFECTING ORGANIC FOODPURCHASE DECISION AND POST-PURCHASEOUTCOMES IN SOUTH AFRICA

XITSHEMBHISO DIFFERENCE CHAUKE

1322966

Thesis

Submitted in fulfilment of the requirements

for the degree

PhD

In Marketing Management

in the

School of Economic and Business Sciences

at the

University of the Witwatersrand



Promoter: **Dr Helen Duh**

OCTOBER 2018

DECLARATION

I, Xitshembhiso Difference Chauke, declare that the contents of this thesis entitled *Market and socio-psychological factors affecting organic food purchase decision and other post purchase outcomes in South Africa*, submitted in fulfilment of the requirements for the degree PhD (Marketing Management) at the University of Witwatersrand, represent my own unaided work, except the quotations and citations, which have been duly acknowledged, and that the thesis has not previously been submitted for academic examination towards any qualification.

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ABSTRACT

Market and socio-psychological factors affecting organic food purchase decision and post-purchase outcomes in South Africa

Organic food consumption is an aspect of green consumption which is increasingly making inroads into consumers' consumption patterns across the globe, especiallyin Europe and North America. In South Africa, the growth is slow, both in supply and demand. Even though mainly sold in specialised markets, such as the Bryanston organic food market in Johannesburg, retail chains, such as Pick'n Pay, Shorprite-Checkers and Woolworths are getting into the organic food market, selling items, such as vegetables, herbs, grains and oil seeds, fruits and dairy products. The consumers are reportedly mainly medical patients, middle to upper income consumers, the "younger" consumer generation, who shop in the upmarket food stores and parents of younger children.

Research has been conducted to understand the drivers of organic food purchase by employing various models and theories across the globe. For example, Aertsens, Verbeke, Mondelaers and Van Huylenbroeck's (2009) untested model linked Schwartz' values theory and the theory of planned behaviour (TPB) to propose personal factors affecting organic food purchase intention and behaviour. Even though the study combined two theories to suggest drivers of organic food purchase intention and behaviour, mainly psychological drivers were suggested.

In addition to this limited focus, the study does not consider the resultant pleasure or satisfaction that consumers may get from purchasing and consuming a more natural and environmentally friendly food, which the Biophilia hypothesis theory suggests. More so, there are suggestions that external factors, such as marketing, economic, governmental and social factors can influence organic food purchase. The explanatory powers of some of these factors (e.g., social factors) have either not been empirically tested, or the studies of their impact are fragmented and lack integration. The fragmented studies in some cases provide contradictory findings.

Studies show that when consumers purchase green products and are satisfied with their decision, their overall image of the products improves and leads to positive outcomes, such as positive word of mouth communication, repurchase intentions and the willingness to pay a high price

associated with green products. Whether these will be the case for organic food in South Africa is one of the objectives of this study.To answer this question, and for better comprehension of the drivers of organic food purchase and post-purchase outcomes, ideas from the Biophilia Theory, Aertsens et al.'s (2009) adapted TPB and Yiridoe et al.'s (2005) model that suggests external drivers are integrated into a conceptual model in this study. This is to understand the impact of marketing, psychological and social factors on organic food purchase decision, satisfaction and three post-purchase outcomes (word of mouth communication, repurchase intentions and willingness to pay price premium).

A survey of 611 South African organic food consumers in the cultural and socio-economically rich and diverse Gauteng province of South Africa, the proposed conceptual model with fourteen hypotheses (H1 – H14) were quantitatively tested using Partial Least Square (PLS) structural equation modelling.The results revealed that market factors (i.e., price, distribution and communication), even though they made no significant impact, explained 04% of organic food purchase decision. With an explanatory power of 53%, the psychological factors (perception of product attributes, environmental attitude, behavioural beliefs, perceived value and overall image) were found to havestrong impact on the purchase decision. Out of these psychological factors, only environmental attitude did not make a significant impact. Social factors explained 16% of organic food purchase decision, with family influence making a significant impact. While the purchase decision explained 66% of organic food consumption satisfaction, the satisfaction in turn had an explanatory power of 74%, 63% and 62% of repurchase intention, word of mouth and willingness to pay a price premium respectively.

This study's tested conceptual model of organic food purchase decision, satisfaction and post-purchase outcomes in an economically and socio-culturally diverse country such as South Africa, makes important theoretical and practical contributions. For example, it provides a comprehensive conceptual model, which can be used to understand other green consumption behaviour, not only in South Africa, but in other countries. It also reveals that marketers are ineffective in promoting, distributing and pricing organic food products. Further studies should be conducted in other South African provinces and should consider product related, economic and governmental factors helping and hindering organic food purchase and consumption.

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LIST OF ACRONYMS AND ABBREVIATIONS

EPOPA -	Export Promotion of Organic Products from Africa
TPB-	Theory of Planned Behaviour
TRA-	Theory of Reasoned Action
EU-	European Union
ITC-	International Trade Centre
TIPS-	Trade and Industry Policy Strategies
SADC-	Southern African Development Community
JAS-	Japanese Agricultural Organic Standard
PLS-	Partial Least Square
LV-	Latent variable
AVE-	Average Variance Extracted
CR-	Composite Reliability
USDA-	The National Organic Standards Board of the US Department of Agriculture

CHAPTER 1

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 INTRODUCTION

Organic food is increasingly making inroads into consumers' consumption patterns across the globe. In 2014, the total global sales of organic food products amounting to approximately 80 billion US Dollars (Willer and Lernoud, 2016).This growth rate is prominent in developed economies like North America and Europe (90% of total organic food consumption), but a majority of the organic food producers, that is over 86%, are found to be in developing countries (Asif, Xuhui, Nasiri and Ayyub, 2018).Valued at about 26 billion euros in 2014, Europe has the largest and most sophisticated market for organic food and drink in the world, representing 54 percent of global revenues. In North America, the 2007 figures show that organic food and drinks was valued at $US 20 billion (Willer, Helga and Kilcher, 2013). In South Africa, the value of the organic food market in 2005 was R100 million and the importance of organic food is gaining recognition from various institutions, including consumers (Export Promotion of Organic Products from Africa – EPOPA, 2006).

For the understanding and sustenance of the growth of organic food market, researchers have been investigating the consumer behaviour factors driving the choice of organic food (Bravo, Cordts, Schulze and Spiller, 2013; Lee and Yun, 2015; Apaolaza, Hartmann, D'Souza and Lopez, 2018). Bravo's et al. (2013) review of the drivers show that the most important drivers are altruistic factors, such as environment concerns, fair trade and animal welfare. Individual factors such as health concerns, nutrition, food taste, food safety and freshness were also found to be important determinants. Other researchers attribute the increase in organic food sales to be due to high per capita income, more awareness on healthy food consumption benefits and a diverse population (Muhammad, Fathelrahman and Ullah, 2015).

While there is agreement on the importance of organic food, researchers are yet to agree on the factors driving the choice and consumption of organic food (Mhlophe, 2016). According to Squires, Juric and Cornwell (2001) and Bravo et al. (2013), the intensity of organic food consumption and the factors that drive the consumption, depends on the level of a country's

economic development, the sample size and type used, the type of organic food assessed and country characteristics. For example, in countries, which have novice organic food industry, such as South Africa, awareness of organic food and health concerns and lifestyle issues are suggested drivers of organic food consumption (Mhlophe, 2016). SA is a beginner in organic food market compared to most developing countries. The EPOPA (2006) report revealed that in South Africa, medical patients have been the main consumers of organic food for many years. They buy the products mainly from the Bryanston organic market. With retail chains, such as Pick'n Pay, Shorprite-Checkers and Woolworths getting into the organic food market, organic food products, such as vegetables, herbs, grains and oil seeds, fruits and dairy products are being widely distributed in the main South African cities of Cape Town, Johannesburg, Pretoria and Durban.

With the perception that organic food are luxury and highly priced products affordable to only middle to upper income consumers, the EPOPA (2006) report shows that some South African consumers end up buying higher-priced, non-organic products when there are some cheaper organic products. The non-organic products tend to sell faster than the organic version, because South African consumers may be unaware of the benefits and affordability of organic food(De Toni, Eberle, Larentis and Milan, 2017). The EPOPA (2006) report further shows that the majority of organic food consumers are more likely the "younger" generations, who shop in the upmarket food stores for some personal and social reasons. Other shoppers of organic food are consumers with medical conditions, such as cancer (Li and Xin, 2015). Parents of young children also shop for organic food, because they are increasingly becoming health conscious and aware of the health risks associated with non-organic food (De Toni et al. 2017). With these buying behaviours of organic food in South Africa, it will be important to look beyond the reported health factors driving organic food consumption in South Africa, and examine other possible market, psychological and social factors.

1.2 RESEARCH PROBLEM AND IDENTIFIED GAP

Interest in organically produced food is increasing throughout the world and global demand for organic products remains robust(Muhammad et al., 2015) to the point that demand is exceeding supply, especially in North America (Statistics and Emerging Trends,2009). As with every consumer behaviour, understanding the various reasons why consumers demand, purchase and are satisfied with organic food is complex. Extensive research has been therefore conducted,

models and theories proposed to understand factors driving organic food demand and consumption across the globe. For example, Li's (2013) model provides four factors of perceived value, image, price and quality that influences satisfaction with organic food in Lanzhou city, China. Lee, Hsu, Han and Kim's (2010) model focuses on value and quality attributes moderated by overall image in influencing word of mouth, willingness to pay high price and repurchase intentions in the United States. Gracia and Magistris' (2007) model of organic food product purchase behaviour focuses on product information, perception and attitude factors in Italy. In Thailand, Sangkumchaliang and Huang (2012) also examine how organic food perception and attitude affect purchase decision.

While the above-mentioned models provide important explanations on why consumers' demand and purchase organic products, their facts are fragmented and lack an integration of all organic food consumption determinants or a model. The fragmented models in some cases provide contradictory findings (Bravo et al., 2013; Karatu and Mat 2014).For better comprehension, Yiridoe, Bonti-Ankomah and Martin (2005) recommend the consolidation of the diverse factors that are empirically found as drivers of organic food purchase and consumption.

As in the study of consumer behaviour, some researchers have consolidated the factors into personal/psychological, health-related, market, environmental, social and demographic factors that drive organic food purchase decision and consumption. The consolidation of some of these are guided by some theories and models. For example, Aertsens, Verbeke, Mondelaers and Huylenbroeck (2009) linked Schwartz' values theory and the theory of planned behaviour (TPB) to understand personal factors affecting organic food purchase intention and behaviour. Aertsens et al.'s (2009) literature review revealed that when marketers appeal to values, such as "security", "hedonism", "universalism", "benevolence", "stimulation", "self-direction" and "conformity", the consumer will have a favourable attitude towards organic food consumption. In addition to this positive attitude, a personal norm, subjective norm and perceived behavioural control can also impact on the purchase of organic food.

Even though Aertsens et al. (2009) combined two theories to suggest drivers of organic food purchase intention and behaviour, their suggested factors are mainly psychological drivers. Aertsens et al. (2009) did not also consider the resultant pleasure or satisfaction consumers may

get from purchasing and consuming a more natural and environmentally friendly food. This aspect is captured by the Biophilia hypothesis theory, which is used to understand the hedonic value of consumer pleasurable and emotional enticement associated with nature when purchasing green products. Wilson (1984) referred to the Biophilia Hypothesis Theory as an innate tendency to focus on life and lifelike processes, meaning that we gain the mostsatisfaction from processes that mimic the nature of life on many levels, be they cognitive or emotional. In addition to focusing on personal/psychological factors that drive organic food purchase, Aertsens et al. (2009) did not consider the resultant satisfaction and external factors and did not empirically test their model. They, however, indicated that their suggested psychological factors can be impacted by social, economic, market, cultural and technological macro-environmental factors.

Considering the importance of macro-environmental factors, as well as personal/psychological factors, Yiridoe et al. (2005) integrated and proposed a model which delineates the product-related, psychological, economic, socio-demographic and exogenous/marketing factors, which can possibly affect consumers' attitude, preference and organic product purchase decision. However, like Aertsens et al. (2009), they too did not empirically test their proposed model.

Zhu, Li, Geng and Qi (2013) also considered the internal (environmental value and personal value), external (promotion/diffusion and government efforts) and contextual (special needs and convenient channel) factors affecting green food consumption intention and behaviour. Even though they empirically tested their model with Chinese consumers and found that market factors, such as promotion and convenient channel of distribution affect organic food purchase intention and behaviour, they did not examine the impact of social factors and whether the purchase decision provided satisfaction. In fact, in most of the models of organic food purchase and consumption, the impact of social factors, an important consumer behaviour driver, especially among young consumers, has been ignored. In South Africa, for example, the EPOPA (2006) report revealed that the young generation of consumers shop for organic food in upmarket suburbs. This may be probably for social reasons, especially as there is the view that consumption is fundamentally embedded in social relations (Connolly and Prothero, 2008).

Green consumers have families, partners, children, fellow workers, neighbours. Their decision to purchase green or organic products may be influenced by relationships with these people. It has

been suggested, therefore, that social influence plays an important role in consumers' decision on buying organic food products (Ohman, 2011).Wahid, Rahbar and Tan (2011:39) state that "social influence is a proxy of subjective norm". In other words, social influence has the same meaning with subjective norm. In addition, DeLamater and Myers (2010) state that social influence is the changes of a person's attitude and behaviour which is influenced by another person's action such as persuading and threatening.

Whether driven by personal/psychological, market or social factors, studies have shown that, as with any other products, when consumers purchase green products and are satisfied with their decision, their overall image of the products improves, which may lead to positive outcomes such as customer loyalty, positive word of mouth communication, and repurchase intentions. Some consumers develop the willingness to pay the high price associated with green products (Lee et al., 2010). Surveying hotel customers in the US for example, Lee et al. (2010) found that the customers' satisfaction with the overall image of green hotels positively affected their willingness to pay a price premium, to share word-of-mouth and to revisit green hotels. Whether this will be the case for organic food in South Africa is one of the objectives of this study.

1.3 RESEARCH OBJECTIVES

The aim of this study is to investigate the influence of market, psychological and social factors on organic food purchase decision and to examine whether it impacts on consumer satisfaction and other post-purchase outcomes, such as repurchase intentions, willingness to share word-of-mouth and willingness to pay a price premium in South Africa.

1.3.1 Theoretical objectives

The study's theoretical objectives are:

- to study and report on the organic food supply and demand globally, in Africa and South Africa;
- to review literature on the various underlying theories and models explaining how psychological, market and social factors impact on organic food purchase decision;

- to review literature on the extent consumers are satisfied with the consumption of organic food and how it affectsother post-purchase outcomes, such as willingness to pay a price premium, share word-of-mouth and repurchase intention; and
- to develop a conceptual model, which delineates how market, psychological and social factors affect organic food purchase decision, satisfaction and post-purchase outcomes, such as willingness to pay a price premium, share word-of-mouth and repurchase intention.

1.3.2 Empirical objectives

The study's empirical objectives are:

- to investigate the influence of price, distribution and communication (market factors) on organic food purchase decision;
- to assess the extent to which consumer perception of organic product attributes, environmental attitude, behavioural beliefs, perceived value and overall image (psychological factors) influence organic food purchase decision;
- to determine whether peer group and family (social factors) influence organic food purchase decision;
- to assess the extent to which consumers' organic food purchase decision affect their consumption satisfaction; and
- to examine the relationships between consumer satisfaction with organic food purchase and other post-purchase outcomes, such as willingness to pay a price premium, share word-of-mouth and repurchase intention.

1.4 LITERATURE REVIEW

This section describes organic food, reviews theories and models, which may explain the intention and decision to purchase an organic food. The section also develops this study's proposed conceptual model from the review of empirical literature. The section starts by describing organic food.

1.4.1 What is organic food?

Although organic food comprises only a small fraction of the food market, its rapid growth has generated much interest among consumers, businesses as well as researchers (Voon, Ngui, and Agrawal, 2011). The National Organic Standards Board of the U.S. Department of Agriculture (USDA) established a national standard for the term "organic," in which organic food was defined as food produced without the use of synthetic fertilizers and pesticides, genetic engineering, growth hormones, irradiation, and antibiotics (Lim, Yong, and Suryadi, 2014:299). Paul and Rana(2012:413) also see organic food as those that are environmentally safe, produced using environmentally sound methods that do not involve modern synthetic inputs, such as pesticides and chemical fertilizers, do not contain genetically modified organisms, and are not processed using irradiation, industrial solvents, or chemical food additives.

In terms of food that comes from living animals; meat, eggs and dairy products, the animal must not be fed antibiotics or growth hormones according to Organic Foods Production Act 1990 (Gracia and de Magistris, 2007).The production of organic food is regulated through sets of specific standards of crop production with the aim of achieving optimal agro-ecosystems which are socially, ecologically, and economically sustainable. Food which is produced without using conventional pesticides can be labelled as organic food. The choice of organic versus inorganic food is significantly influenced by the perception of the health effect of organic foods. Households who perceive organic foods as healthier are more likely to purchase organic food, and they have a higher willingness to pay than other households (Andersen, 2007). Organic food is perceived as healthier and safer and organic practices are perceived to be more environmentally sound (Paul and Rana, 2012). The next section discusses theories and models, which provides ideas on why consumers may be interested in organic food.

1.4.2 Theories and models underpinning this study

A theoretical framework is literature that helps to comprehend the concepts surrounding the research more broadly (Creswell, 1994). Theories and models found useful to comprehend the concepts and their relationships in this study are the Biophilia Theory, Aertsens et al.'s (2009) adapted Theory of Planned Behaviour and Yiridoe et al.'s (2005) model. The theories and models are discussed below.

1.4.2.1 The Biophilia hypothesis (Wilson, 1984; 1995)

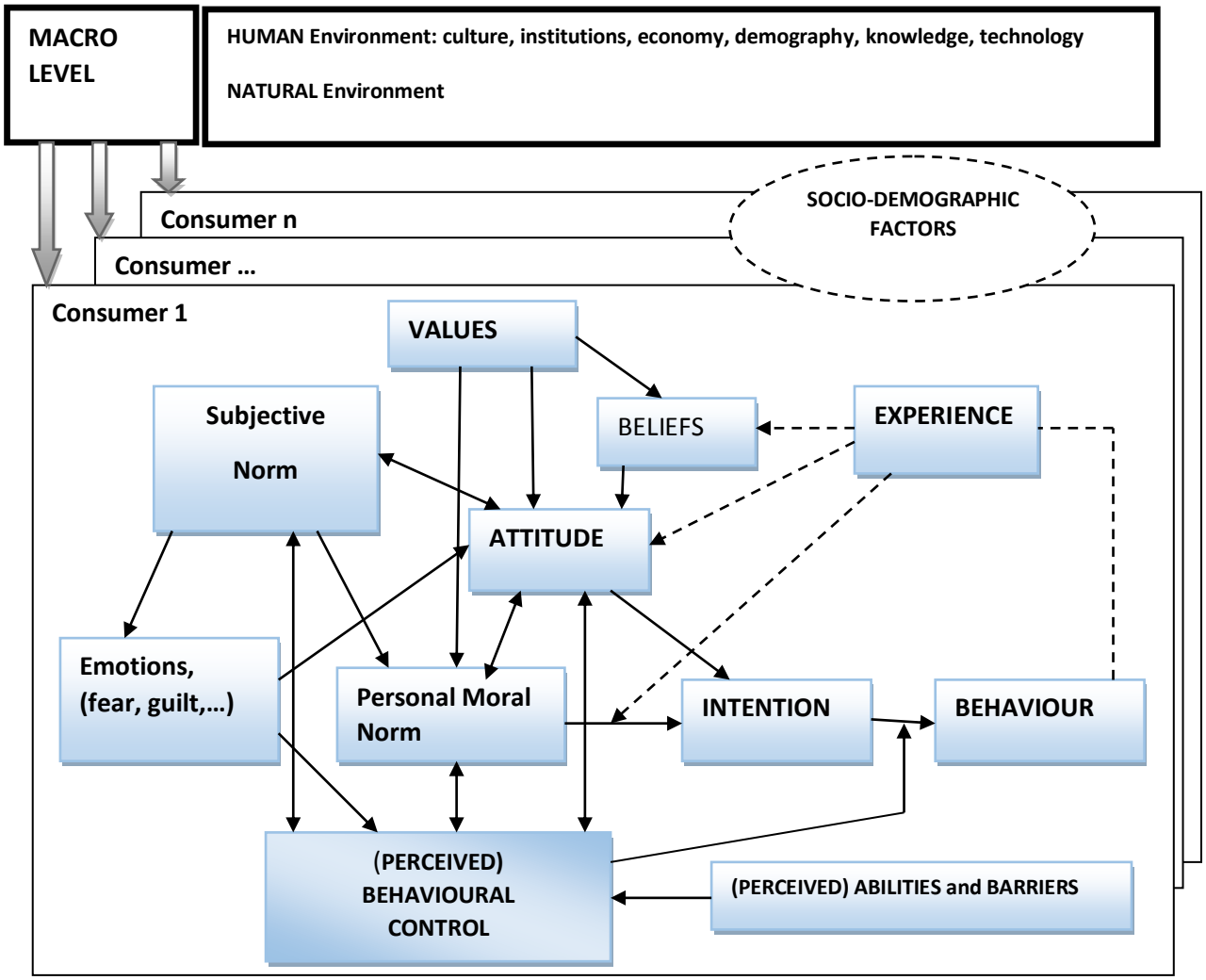
Aesthetic pleasure and emotional enticement associated with nature is the "central issue of Biophilia" (Wilson, 1984:84).The Biophilia hypothesis has been applied to many areas of life, including mental health (White and Heerwagen, 2013). This is largely due to refinements in the theory where Radmore (2012) stated that Biophilia was a complex set of learned behaviours and processes based on our connection to nature. These learnings are split into Biophilia, which are positive learnings and 'approach' behaviours and Biophobia which are negative learnings with 'avoid' behaviours. Unlike Fisher (2003) who claims that our connection to nature is replaced by technology, Wilson (1984) argues that our Biophilic feelings are integrated into our cultural systems as exemplified by our attractions to zoos and other natural environments. The Biophilia hypothesis asserts the existence of a fundamental, genetically based, human need and propensity to affiliate with life and lifelike processes (Kahn, 1997:1). Recent studies have,for example,shown that even minimal connection with nature such as looking at it through a window increases productivity and health in the workplace, promotes healing of patients in hospitals, and reduces the frequency of sickness in prisons. The Biophilia hypothesis will be used in this study to understand whether environmental altitudes and the consumption of organic food provide pleasure and satisfaction to the consumers.

1.4.2.2 Adapted TPB-model of organic food purchase behaviour

The Theory of Planned Behaviour (TPB) is an extension of the Theory of Reasoned Action (TRA), which deals with behavioural intentions and has been utilised as a platform for satisfaction studies (Myers and Mintu-Wimsatt, 2012:1). As with the TRA, the chief idea behind TPB is a person's intention to undertake behaviour (Ajzen, 1991:181)based on his/her attitude toward that specific activity along with subjective behavioural norms held by that person (Ajzen, 1991).For organic food purchase behaviour, Aertsens et al. (2009) adapted the TPB by incorporating Schwartz' values theory. They proposed that values are motivators for organic food consumption. Security values, which incorporate safety, health, harmony and stability of the society, of relationships, and oneself are the motives for purchasing organic food. Other values, such as hedonism, stimulation, universalism, benevolence, self-direction and conformity are determinants of organic food purchase decision. The appeal of these values drives positive attitude, which includes cognitive and affective components and are predictors of purchase

intention. Subjective norm or social norms, personal norm or moral norms and perceived behavioural control derived from TPB were identified contributors of organic food purchase intention and behaviour. Socio-demographic factors and macro-level factors (culture, technology…) are not mentioned explicitly in Aertsens et al.'s (2009) adapted TPB model. However, they are present implicitly as consumer groups, segmented and based on differences in socio-demographic factors, which may also differ in relation to attitude, intention or behaviour. The model proposed that gender, having children, age and education are associated with organic food consumption. Lastly, Aertsens et al.'s (2009) model indicates that macro-level factors such as cultural differences, economic factors, knowledge and technological factors are related to organic food consumption. Aertsens et al.'s (2009) model is presented in Figure 1.

Figure 1.1: Aertsens et al. (2009) Model of personal determinants



Source: Aertsens et al. (2009:1141) adapted TPB-model of organic food purchase behaviour

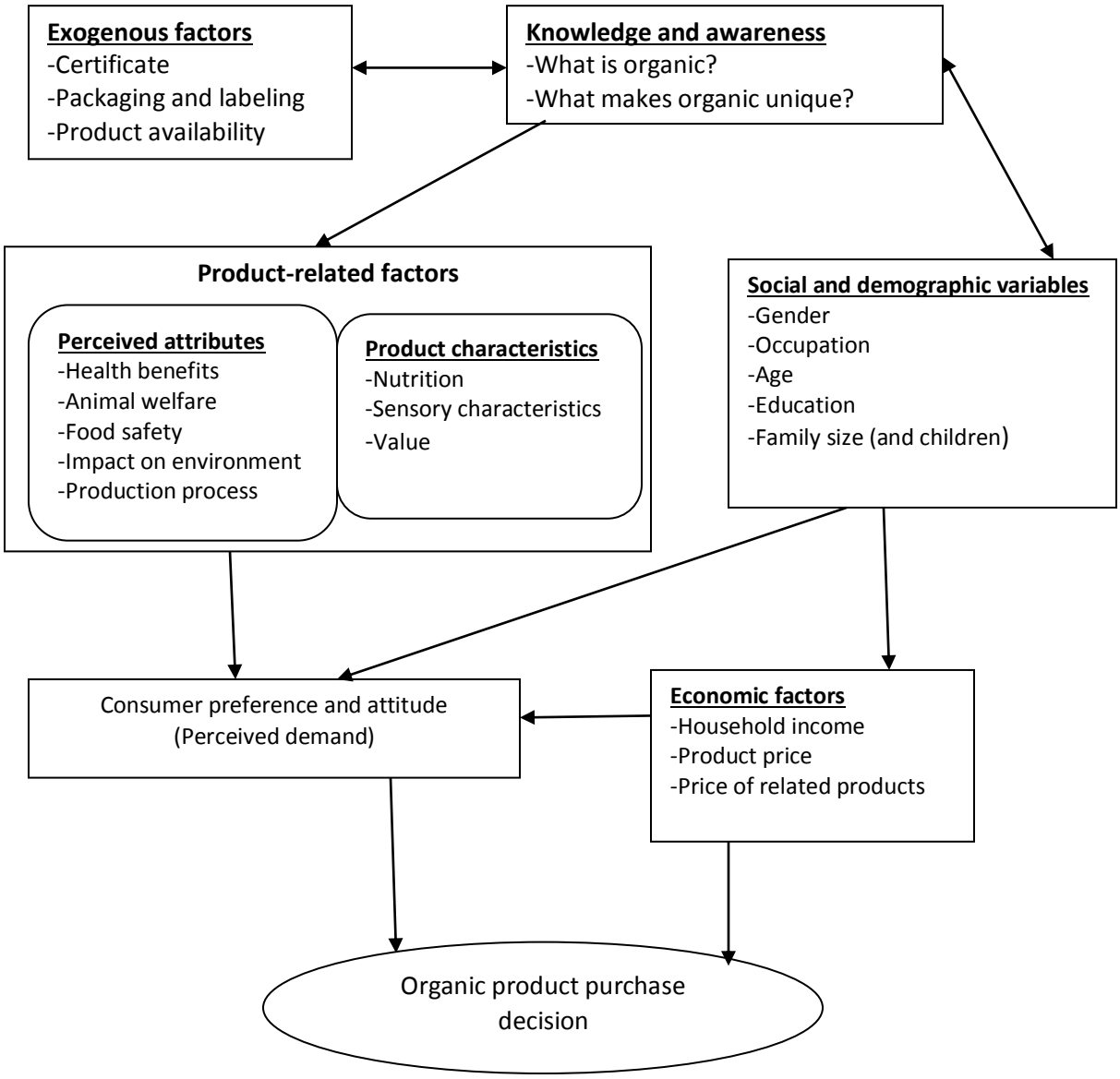
While Aertsens et al.'s (2009) model provides important personal/psychological factors, which may affect the organic food purchase intention and behaviour, they did not show how the purchase decision may lead to satisfaction and other post-purchase outcomes such as repurchase intention, willingness to pay the price premium associated with organic food and the willingness to spread word-of-mouth. Guided by the TPB idea of purchase intention, Lee, Hsu, Han and Kim (2010) suggest that when consumers are satisfied with the overall image of green hotels, they may hold future intentions in terms of the willingness to repurchase, willingness to pay a price premium and the willingness to spread word-of-mouth.

In addition to these important post-purchase outcomes, which Aertsens et al. (2009) did not consider in their adapted TPB model, they did not show how social and market external determinants can affect organic food purchase behaviour. Yiridoe et al.'s (2005) model provides such external determinants.

1.4.2.3 Model of factors affecting organic product purchase decision

Yiridoe et al.'s (2005) model in Figure 1.2 proposes that exogenous/market factors, such as certification, organic food packaging and availability and knowledge and awareness of organic food affect the perception of product-related attributes, which in turn impact on consumers' preference and attitude towards organic food. Socio-demographic and economic factors also affect consumers' organic food preference and attitudes, which are drivers of organic food purchase decision.

Figure 1.2: Yiridoe et al. (2005) Model of factors affecting organic product purchase decision



Source: Yiridoe et al. (2005:196)

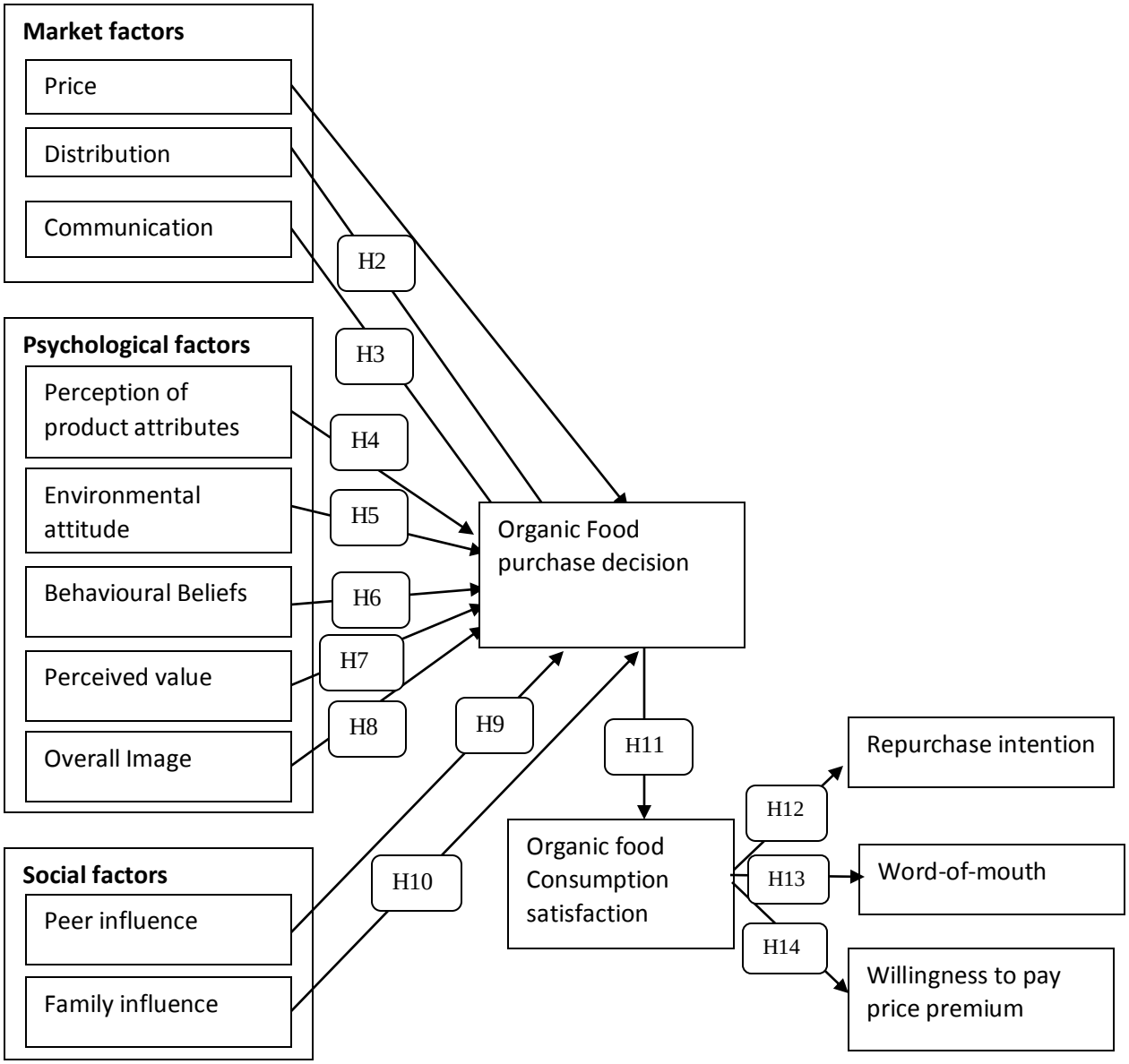
Even though Yiridoe et al.'s (2005) model suggest various personal/psychological market, economic and social factors, which may possibly drive organic food purchase decision, they considered only one psychological factor which was attitude, and ignored the possible social influence of a peer group. Their model did not show how the purchase decision can affect satisfaction and other post purchase outcomes such as willingness to pay a price premium, willingness to spread word of mouth and repurchase intentions.

1.5 CONCEPTUAL MODEL AND HYPOTHESES DEVELOPMENT

This study reviews literature on the drivers and outcomes of organic food purchase and consumption decision to propose its own conceptual model. From the literature review, the Biophilia Theory, Aertsens et al.'s (2009) adapted Theory of Planned Behaviour and Yiridoe et al.'s (2005) model were found useful and was integrated to develop this study's conceptual model and resultant hypotheses. Market factors (price, distribution and communication), psychological factors (perception of product attributes, environmental attitude, behaviour beliefs, perceived values and overall image), and social factors (peer influence and family influence) are proposed to be predictors of organic food purchase decision of this study's conceptual model. Consumption satisfaction, consumer repurchase intention, willingness to pay a price premium and spread word-of-mouth are proposed to be organic food post-purchase outcome variables. Figure 1.3 presents the proposed conceptual model, while the hypotheses development is discussed thereafter.

The conceptual model in Figure 3 proposes that the various market, psychological and social factors are likely to positively affect organic food purchase decision, which may in turn positively lead to consumption satisfaction. Consumption satisfaction is proposed to likely drive other post-purchase outcomes, such as repurchase intention, willingness to share word-of-mouth and to pay a price premium. These proposed relationships are discussed next and the hypotheses are formulated.

Figure 1.3: The conceptual model of this study and hypothesis development



1.5.1 Hypotheses Development

This next section discusses the hypothesised relationships between the research constructs under investigation.

1.5.1.1 Market factors and organic food purchase decision

Price

Setting a price for a new product in the market is difficult (Jakpar, Na, Johari and Myint, 2012:223). Setting green price is even more difficult, especially as it is about pricing methods in which economic and environmental costs of production and marketing have to be calculated to provide consumers with a fair value and businesses with a suitable profit (Delafrouz, Momenpour, Goli and Momenpour, 2014:1118). According to Xia, Monroe and Cox (2004), price fairness refers to consumers' assessments of whether a seller's price is reasonable, acceptable or justifiable. The main consumption barriers for organic food found in literature are the relatively high price premium (Aertsens et al., 2009) or the perception of high price (EPOPA, 2006). The actual or perceived high price can influence consumers'purchase decision (Hussain, Khokhar and Asad, 2014).

Distribution

Another identified consumption barrier for organic food purchase is the inadequate availability (i.e., distribution) of organic food products. Distribution plays a key role within the marketing mix, and the key to success is its successful integration within the mix, ensuring that customers get their products at the right place and at the right time (Chen and Chai, 2010). Green distribution includes activities related to monitoring and raising environmental consciousness in company's demand chain. Its tactical efforts include cooperation with network partners to redevelop the product or waste disposal adjustments and customer's assurance of possibility of recycling the recyclable materials (Constantinos et al., 2012). Companies may strategically set necessary policies for distributors to take more environmental standards in implementing special marketing roles (Delafrouz et al., 2014).

A distribution channel consists of a group of individuals or organisations that assist in getting the product to the right place at the right time. Distribution plays a vital role, primarily because it ultimately affects the sales turnover and profit margins of the organisation. If the product cannot reach its chosen destination at the appropriate time then it can erode competitive advantage (Yeboah et al., 2013:28). This will be particularly so for organic food products whose customers are unique and dispersed.

Communication for Awareness Creation

Even when marketers succeed to make products available, an effective communication strategy will be needed to achieve desired objectives (Yeboah and Atakora, 2013). Communication, which is the process by which information is exchanged and understood by a targeted audience, is expected to raise enough awareness about the availability and benefits of the products (Kenneth and Baack, 2007). Green promotion/communication reflects the relations designed for raising the awareness of beneficiaries of company's efforts, obligations and successes in protecting the environment (Dahlstrom, 2011). It may include activities to reduce any negative environmental effect of company's marketing efforts and/or improve consumers' health (Kotler, 2011).

A number of studies suggest that lack of information about organic food can act as a barrier to consumers'purchase decisions that ultimately restrict their satisfaction (Sultan, Pearson, Henryks and Anisimova, 2014; Henryks, Pearson, Anisimova and Sultan, 2013; Sultan and Pearson, 2011; Yin, Wu, Du and Chen, 2010). In particular, Sultan and Pearson (2011:5) state that the focus of marketing communication should be on creating interest and desire amongst consumers. Therefore, communication about organic food product should be positively associated with consumer purchase decision.

Drawing from the literature above, the following hypotheses are formulated:

H1: Price of organic food products has a negative relationship with purchase decision.
H2: Distribution of organic food products is positively associatedwithpurchase decision.
H3: Communication positively influences purchase decision of organic food products.

1.5.1.2 Psychological factors and green consumer satisfaction

Perceived Product Attributes

A review of the literature shows that little attention has been paid to the issue of perceived products attributes and purchase decision (Gan, Wee, Ozanne and Kao, 2008:94). Product attributes has become theview of a product's quality. In operations management, multiple dimensions of quality have been identified as indicators of products' fitness for usage. That is, does a product perform as expected and do the features meet customers' needs? Another

important dimension of quality is the reliability of the product, which is the tendency of itto always deliver on the promises made about the performance of the product (Jakpar et al., 2013). Product attributes should therefore match eight dimensions, namely, performance, features, conformance, reliability, durability, serviceability, aesthetics, and customer-perceived quality (Jakpar et al., 2013:223).Product attributes have been found to play a very important role in influencing purchase decisions towards organic products (Gas et al., 2008; Slevitch, Mathe, Karpova and Scott-Halsell, 2012:803).

Environment Attitudes

Attitude is a predictor of a consumer's buying intention and buying behaviour (Chen and Chang 2013:67; Zhang and Prybutok, 2005). Environmental attitudes constitute a significant part of environmental consciousness. Awareness on environmental attitudes are formed because the values are believed to be used by consumers to solve problems and make decisions(Terenggana, Supit and Utami, 2013:324).Chen (2007); Thøgersen (2007a) and Dean et al. (2008) report asignificant positive relationship between attitude and consumers' decisions to purchase organic food. Also, Aertsens et al. (2009) suggest a positive and significant relationship between the attitude towardsorganic food and the decision to buy. Gracia and Magistris (2007) conclude that organic food purchases are positively and significantlylinked with a positive attitude towards organicproducts with respect to health and environmental benefits, and behavioural beliefs.

Behavioural Beliefs

Behavioural beliefs need to be considered when examining the influences that affect purchasing decisions (Pickett-Baker and Ozaki, 2008:281). Behavioural belief refers to the individual's belief that the specific behaviour would lead to a certain outcome (Fishbein and Ajzen, 1975). Belief itself can be created from different indicators such as product performance in the market, trust and the extent to which consumers have been educated on the production and benefits of a specific product.

Perceived Value

Li and Hong (2013:163) argue that perceived value represents customer cognition of the nature of relational exchanges with their suppliers. On the basis of the behavioural model, purchase behaviour is significantly influenced by the cognition of value that consumers receive from a

purchased product (Boksberger and Melsen, 2011:234). For organic food Yeridoe et al (2005) view perceived value in light of health benefits, animal welfare, food safety, impact on environment and the production process. They suggest that this perceived value influences consumers' preference and attitude towards organic food and ultimate purchase decision.

Overall Image

Overall image encompasses appreciations of characteristics such as physical environment, service levels, and merchandise quality (Yoo, Donthu and Lee, 2000:198). Image provides a tremendous amount of information to consumers about store environment, customer service and product quality. For a green hotel, Lee et al. (2010) found that the overall image creates favourable purchase intentions, which should ultimately drive purchase decision.

Based on these relationships between psychological factors and purchase intention espoused in the literature reviewed, the following hypotheses are formulated:

H4: The perception of organic food product attributes is positively associated with purchase.
H5: Environmental attitude towards organic food is positively associated with the purchase decision.
H6: Behavioural beliefs about organic food positively influence purchase decision.
H7: Perceived value enjoyed from organic food is positively associated with purchase decision.
H8: Overall image of organic food is positively associated with consumer purchase.

1.5.1.3 Social factors and consumer purchase decision

The value-action gap identifies a crucial point of influence where many consumers would be reactive due to the presence of others (Anvar and Venter, 2014:186). For instance, some people might throw rubbish in bins when other people around them would not do so. An individual can be highly influenced by his or her social surroundings including relatives, friends, colleagues and business partners (Han et al., 2010). Lasuin and Ching (2014) define social influence as the change in an individual's thoughts, feelings, attitudes or behaviours that results from interaction with another individual or a group. In this current study, social influence can be referred to as the change of individual attitudes or behaviours through the influence of others. Social influence plays an important role in consumers' decision to repurchase, spread word-of-mouth and

willingness to pay the premium through satisfaction (Ohman, 2011:196). But for this to happen, Lasuin and Ching (2014:5) suggest that social influence, especially peer pressure first influences consumers to perform the buying behaviour.

According to Park and Ha (2012), social influence consists of friends, family, educators, employers, professional colleagues, experts and the media. Out of these influences, Ooi, Kwek and Tan (2012:249) suggest that peer pressure and family members have a strong impact on organic food purchase decision. The following hypotheses are therefore proposed:
H9: Peer pressure positively influences organic food purchase decision.
H10: Family members positively influence organic food purchase decision.

1.5.1.4 Purchase decision and consumer satisfaction

Consumer satisfaction has been of great interest to marketing researchers and practitioners alike (e.g., Zhang and Prybutok, 2005; Chen and Chang 2013). The prevailing view is that consumers experience satisfaction or dissatisfaction with consumption as well as with the purchase decision (Chang and Kukar-Kinney, 2011). Consumer satisfaction with the purchase decision has been found to be a significant contributor to consumers' overall satisfaction judgments (Chang and Kukar-Kinney, 2011:748). Product availability, pre-purchase information, and product evaluation and choice are all determinants of satisfaction/dissatisfaction with the purchase decision process (Han et al., 2010). Heitmann, Lehman and Warren (2007) propose that decision satisfaction is determined by the consumer's achievement of choice goals, such as high choice confidence, low anticipated regret, and low evaluation costs.

For a natural or green product like organic food and according to the Biophilia hypothesis theory, consumers gain pleasurable and emotional enticement associated with nature when purchasing green products (Wilson, 1984). This suggests that their purchase of organic food will grant then satisfaction. The consumption satisfaction has been found to have a positive effect on loyalty and willingness to recommend the product to others (Heitmann *et al.*, 2007).

H11: Consumer organic food purchase decision positively influences satisfaction.

1.5.1.5 Consumer satisfaction and willingness to pay a price premium

Consumer satisfaction is perceived as an essential determinant of long-term consumer relationship (Zhang and Prybutok, 2005; Chen and Chang, 2013). Satisfaction has been widely used to measure the relationship between consumers and businesses (Kim, Zhao and Yang, 2008; Yeh and Li, 2009).Overall, satisfaction is defined as the emotional impact of a product on consumers after they have purchased and evaluated their use of the product (Chen, 2013). On the other hand, consumer willingness-to-pay a price premium for organic products is an important determinant of profitability and long-term financial sustainability.Willingness-to-pay the premium is defined as the maximum price a customer is likely to pay for a product or service under the given circumstances of time and place (Mukherjee, 2012).The willingness-to-pay for particular food attributes is linked to an observation that consumers make trade-offs for improved attributes associated with consuming particular products (Bonti-Ankomah and Yiridoe, 2006). Researchers have suggested that consumers who are satisfied with organic food attributes, distribution, price, value etc. are likely to pay the price premium associated to green products and organic food (Mukherjee, 2012; Karatu and Mat, 2015). Therefore, the study proposes:

H12: Consumer satisfaction of organic food products influences the willingness to pay the premium.

1.5.1.6 Consumer satisfaction and repurchase intentions

Future purchase intentions have a relationship with customer satisfaction (Li and Hong 2013:164). Tien, Hsu and Chuang (2012:257) propose that satisfaction is a key role to build and retain a consumer's repurchase decisions. Specifically, they found that satisfaction relates positively to consumer repurchase intention. Customers evaluate future purchase intentions based on the value obtained from previous experiences, with relationship benefits as a proxy for expectations of future benefits. A number of previous studies have supported the strong and positive relationship between consumer satisfaction and repurchase intentions (see, for example, Tien et al., 2012; Li and Hong, 2013). From these studies, it can be concluded that satisfied consumers are more likely to buy again or to buy more in future transactions than dissatisfied customers. The improvement of customer satisfaction can therefore increase customer repurchase intention of green organic food. Thus, the following hypothesis is formulated:

H13: Customer satisfaction is positively associated with repurchase intention.

1.5.1.7 Consumer satisfaction and willingness to spread word-of-mouth

When consumers are satisfied with their buying and consumption process, it may result in post-purchase outcomes such as change of previous negative opinion, future repurchase intention and brand loyalty (Siddiqi, 2011). The level of consumer satisfaction can also well explain post-purchase behaviours, such as complaints or positive word-of-mouth effect(Casalo, Flavián and Guinalíu, 2008:400). Jan, Abdullah and Shafiq (2013) found that customer satisfaction has an impact on word-of-mouth. This finding was supported by Taghizadeh et al. (2013) who found a positive relationship between satisfaction and word-of-mouth. Therefore, this study proposes the following:

H14: Consumer satisfaction with organic food consumption positively affects the willingness to spread word-of-mouth.

To empirically test the proposed hypotheses, the following methodology will be useful.

1.6 RESEARCH DESIGN AND METHODOLOGY

1.6.1 Research philosophy

A research philosophy symbolises a researcher's perception of how knowledge is built (Saunders, Lewis and Thornhill, 2012). The two research philosophies that deal with distinctive views on how knowledge is developed are: positivism and interpretivism.

1.6.1.1 Positivism

Positivism has been defined by numerous individuals over the years. Kolakowski (1972), for example, states that positivism embraces a four point doctrine: (1) the rule of phenomenalism, which asserts that there is only experience; all abstractions be they “matter” or “spirit” have to be rejected; (2) the rule of nominalism, which asserts that words, generalisations, abstractions, etc. are linguistic phenomena and do not give new insight into the world; (3) the separation of facts from values; and (4) the unity of the scientific method. Burrell and Morgan (1979:21) define positivism as an epistemology "which seeks to explain and predict what happens in the social world by searching for regularities and causal relationships between its constituent elements."

It is the submission of scientific reasoning in understanding, where the researcher and reality are detached. Positivism is associated with quantitative research methodology. Positivism is anchored on the assumption that social and natural worlds are influenced by 'fixed and unaltered laws', hence human behaviour can be established and determined through 'scientific' means (Malhotra and Birks, 2003). A positivism approach assumes that reality and the world at large are fixed, definable, stable, orderly, provable; observable and discoverable through structured methodologies and that hypotheses can be tested and relationships and associations credibly established (Crossan, 2003; Saunders et al., 2012).

1.6.1.2 Interpretivism (phenomenological)

Interpretivism is a name given to a divergent epistemology to positivism (Bryman and Bell, 2007). Interpretivism is of the view that the world and reality are not objective but are collectively constructed and specified whose significance is made by people. The paradigm attempts to discover how people imagine and feel about a certain subject. According to Bryman and Bell (2007:17), interpretivism recognises that the subject matter of social sciences – people and their institutions,is fundamentally different from that of natural sciences. This philosophy emphasises on understanding why people have different experiences.

Based on the foregoing discussion, this study employsa positivist paradigm as the researcher's philosophy because hypothesis would be stated and findings of the study are expected to be compared with the stated hypotheses.

1.6.2 Research Approach: Deductive

This study will follow a deductive approach, whereby theoretical propositions will be outlined first through a literature review (Neuman, 2006) and then empirically tested. Deductive approach is the process of reasoning one or more statements to reach a logically certain conclusion (Cooper and Schindler, 2006). During the course of the fieldwork, the theoretical section will be periodically updated with recent statistics in order to ensure the relevance of the study. The empirical research study will take place under normal field conditions where phenomenal variables exist (Schaefer and Dillman, 1998).

1.6.3 Research Type: qualitative versus quantitative

Malhotra (2010) identifies two types of research approaches to collect empirical data. These are qualitative and quantitative approaches. A quantitative research approach is more useful for testing, while a qualitative research is more useful for discovering (Bryman and Bell, 2005).This study employsa quantitative research approach because hypotheses will be tested statistically to achieve the stated objectives. In addition, quantitative research makes it possible to quantify the data and to be able to subject it to various forms of statistical analyses undertaken in this study (Malhotra, 2004). One central reason for using this research approach is to enable the researcher to interpret the data and generalise the results from the sample to the population of interest (Dlodlo and Dhurup, 2010). It allows the use of questionnaires to collect data and controls bias by using randomised sampling methods.

1.6.4 Research strategy

Saunders et al. (2012) define research strategy as the overall plan that will be employed by the researcher in order to gather the primary data and answer the research questions. The most common research strategies employed in qualitative and quantitative research include surveys; interviews, grounded theory; ethnography; action research, archival research, case study and experiment, amongst others. A survey strategy will be employed in this study to seek the opinion of the sample where the researcher designs questionnaires for data collection to answer the research questions (Cooper and Schindler, 2006). A survey is a primary data collection method that exploits a highly structured research instrument from a large and representative sample (Zikmund, 2003; Saunders et al., 2012). Surveys allow the researcher to explore the characteristics, attitudes and behaviours of the targeted respondents through interviews or a self-administered research instrument.

1.6.5 Research design

Research design refers to a plan followed to execute the research project (Malhotra, 2010). A research design is a master plan that specifies the methods and procedures for collecting and analysing needed information for a research (Curwin and Slater, 2008). It can also be an expressed or an unexpressed logical sketch where the empirical data is connected with the research purpose, which enables researchers to draw conclusions. A descriptive research design

would be employed for this study. Descriptive research design explains a clear and accurate picture of the market environment, which gives the reader relevant information about a topic. The descriptive approach often fits quantitative studies due to its nature and hypotheses. The next section discusses the sampling design followed in the study.

1.6.5.1 Sampling design

Sampling design is the process by which the researcher specifies and selects the sample elements that form part of the study from the population (Churchill and Iacobucci, 2005). The following sampling procedure, as alluded to by Parasuraman and Grewal (2008) and Gupta (2011) and Tustin, Ligthelm, Martins and Van Wyk (2010) is followed in this study. The procedure includes key steps, namely, the target population, the sampling frame, sampling method, and the sample size. The steps are discussed in the following sections.

1.6.5.1.1 Target population

The population is the entire group of people about whom information is needed. It is also called a universe or population of interest (McDaniel and Gates, 2008).Wiid and Diggines (2011) define a population as a group of entities with a common set of characteristics. For the purpose of this study, the researcher had to be precise in specifying exactly what elements were of interest and what elements were to be excluded. The target population for this study will be restricted to consumers of organic food products in South Africa. The sampling criteria will be minimum age of 18 years, both male and female from all racial groups in South Africa.

1.6.5.1.2 Sample frame

A sampling frame is a list of sample element in the population source (Malhotra, 2010). According to McDaniel and Gates (2010), a sampling frame is the instrument in which the components of the population from which the study samples are to be drawn are listed. The following sample frames would be used for the research. The available physical sampling frames will include malls and shopping centres in South Africa.

1.6.5.1.3 Sampling method

Pellissier (2007) identified probability sampling and non-probability sampling as the main types of sampling. In probability sampling, each element of the population has a known positive probability of being selected as a unit of the sample, whereas in non-probability sampling, the probability that a specific unit of population selected is not known (Wiid and Diggines, 2011). Considering that data was collected from organic markets, and there was an unknown chance of selecting the sample elements, a non-probability sampling technique was employed in this study. A convenience sampling procedure was used to draw out the sample owing to the absence of an accurate sampling frame. Thus, the researcher nominated those sampling elements that were readily accessible, available and in close proximity to him at the survey locations (Sekaran & Bougie 2013). Moreover, considering the time and financial constraints of this study, applying a convenience sampling procedure was viewed as cost-effective and less time-consuming (Malhotra 2010:377).

1.6.5.1.4 Sample size

The sample size refers to the elements to be included in a research study (Gupta 2011). Sample size provides a basis for the estimation of sampling error. The researcher took cognisance of the direct impact that sample size has on the appropriateness of data and the power of statistical computations (Lighthelm and Cant, 2003). The determination of the final sample size involves judgement as well as calculation. For the purpose of this study a sample of 500 individuals was selected. The historical evidence approach was used to determine the sample size based on past similar studies on green consumption of organic food (Jan et al., 2013; Muhammad et al., 2015; Doszhanov and Ahmad, 2015; Upamannyu et al., 2015) used 300, 384, 300 and 407 respectively.More so, according to previous studies the chosen sample size is regarded large enough to make a good representation of green consumption.

1.6.6 Questionnaire design

The self-reporting questionnaire was employed to collect the required data. The questions are structured according to the various variables in the study namely: market factors, psychological factors, social factors, purchase decision, consumer satisfaction, repurchase intentions, word-of-mouth as well as willingness to pay the premium. The questionnaire compriseseight sections (A,

B, C, D, E, F, G, H and I). Section A seeks biographic information of the respondents using multi-choice and dichotomous questions. Section B is divided into three sections addressing market factors namely; price, distribution and communication with the scale items adopted from previous studies (Allsop et al., 2007; Voon et al., 2011).

Section C is divided into five sections addressing psychological factors, namely; consumer perception of product attributes, environmental attitude with scale items adapted from Mun (2014), behavioural belief with items adapted from Han and Kim (2010), perceived value items adapted from Doszhanov and Ahmad (2015), and overall image with items adapted from Lee and Baack (2007). Section Dis divided into two subsections addressing social factors, namely; peer influence with items adapted from Mun (2014), and family influence with items adapted from Mun (2014). Section E comprisesquestions on purchase decision with scale items adapted from Aertsens et al., (2009).

Section F comprises consumer satisfaction with organic food products with scales adapted from Chang and Fong (2010). Section G comprises questions on repurchase intention with the scale adopted from Ha, Muthaly and Akamavi (2010:886). Section H addresses question on willingness to pay the premium of organic food products with scale adopted from Voon et al., (2011).Last, Section I comprises questions on word-of-mouth with items adopted from Park and Lee (2009). Section B, C and D are independent variables in this study while Section E is the mediating variable. Section F, G and Hare the outcome variables (dependents). Section A applies multiple choice and dichotomous questions while section B-H apply five-point Likert scale ranging from (1) strongly disagree to (5) strongly agree while (3) represents neither agree nor disagree. All statements are rephrased/modified to fit the context of the present study.

1.6.7 Data gathering technique

Primary data collection is accomplished through a survey (face-to-face) using structured questionnaire. For the purpose of this study, personally administered survey is used based on the situation and the nature of data required. Face-to-face surveys are known to generate large amounts of data. The use of the questionnaire during the survey generates essential information useful for improving response rate. A survey is a method of collecting primary data based on communication with a representative sample (Dillman, 2007). A survey will be used because it is

ideal in providing a quick, inexpensive, efficient and accurate means of assessing information about a population (Tustin *et al.*, 2005). The choice of a suitable survey technique was dictated by the aims of the study and the data required for achieving the objectives (McDaniel and Gates, 2010). The use of a self-administered questionnaire was employed because of its cost effectiveness and easy to administer. The method also ensured a greater possibility of anonymity and greater convenience for the respondents since they could complete the questionnaire at their own time and pace (Bryman and Bell, 2007).

The secondary data is culled from other related works, books, journals, presentations as well as information from extant literature on green marketing and consumer behaviour to help complete the objectives of the research.

1.6.8 Data analysis approach

Data analysis is not an end in itself; its purpose is to produce information that helps address the problem at hand (Malhotra, 2010).

1.6.8.1 Data analysis procedure and statistical approach

A Microsoft Excel spreadsheet was used to enter all the data and then copied to the Statistical Package for Social Sciences (Version 24.0 for Windows) programme; a statistical package used to code data, test data reliability and validity and sometimes to run the statistical analysis. The data was analysed in two ways. Firstly, descriptive analysis in the form of frequency distribution, tabulations, graphs and tables for demographics and the test of reliability and validity. Descriptive statistics help provide the characteristics or appearance of sample data (Babin and Zikmund, 2010). Secondly, considering the multivariate nature of this study the proposed relationships among the variables was analysed using Partial Least square based Structural Equation Modelling.

1.6.8.2 Measurement model and structural model: Model fit assessment

Anderson and Gerbing (1988) proposed a two-step procedure to analyse data collected on the research constructs. Prior to testing the hypotheses, confirmatory factor analysis (CFA) is performed to confirm accuracy of the multiple-item constructs measures. In this study AMOS 7 was used. A confirmatory measurement, or confirmatory factor analysis model, specifies the

relations of the observed measures to their posited underlying constructs, with the constructs allowed to inter-correlate freely (Chin, 1998). Initial specification search led to the deletion of the items that were less than the recommended 0.5. This was done to provide for an acceptable fit and the resultant scale accuracy.

Partial Least Square (PLS) path models are usually defined using two sets of linear equations known as the measurement model and structural model (Garson, 2016). The measurement model specifies the relationships between unobserved or latent variables (LV) whereas the outer model specifies the relationships between a LV and its manifest variables (Henseler, Dijkstra, Sarstedt, Ringle, Diamantopoulos, Straub, Ketchen, Hair, Hult and Calantone, 2014). The inner and outer model is sometimes also known as the structural and measurement model (Hair et al., 2014).

Measurement model was established by testing internal consistency, indicator reliability, convergent validity and discriminant validity. While the structural model was validated by evaluating each endogenous LV's coefficient of determination (R2). R2 measures the relationship of an LV's explained variance to its total variance. According to Chin (1998), a value of R2 around 0.67 is considered substantial, values around 0.333 are average and values of 0.19 and lower are considered weak (Hair et al., 2014).

1.6.8.3 Hypotheses testing

The study tested the hypotheses using PLS-SEM path analysis, with each hypothesis tested separately for each of the dependent measures. A path analysis will be executed, to test research hypothesis, to specify the path coefficient and significance levels of the posited seven linear relationships between the eight research constructs.

1.6.8.4 Pilot study

A pilot test and pre-test were performed with n=20 respondents to develop, adapt and check the feasibility of techniques, to determine the reliability of measures, and to estimate the size of the final sample. A pre-test of the questionnaire is imperative to identify and correct deficiencies and to ensure that the questionnaire communicated the information correctly and clearly to the respondents. In order to collect accurate data the instrument used must be both reliable and valid (Mouton, 2003). The researcher made use of a pilot test of the questionnaires before the main

survey to establish the appropriateness of the reliability of the scales and construct validity under examination.

1.6.9 Reliability and Validity of the measuring instrument

The reliability and validity assessment are discussed hereafter:

1.6.9.1 Reliability analysis

Reliability is the extent to which a scale produces consistent results if repeated measurements are undertaken. Malhotra (2010:284) states that the reliability of a measure indicates the extent to which the measure is without bias (error-free) and that it offers consistent measurement across time and across the various items on an instrument. The researcher made use of Item-total correlation values, Cronbach's coefficient alpha (α), and Composite Reliability (CR) to check the measurement reliability. Nunnally (1978) suggested that the new developed measures could be accepted with an alpha value of 0.60; otherwise, 0.70 should be the benchmark. The second measure of internal consistency is CR, the CR measure threshold for modest is 0.70. Composite reliability is computed from the squared lambda values and the summation of the error variance terms (Starkweather 2012:4).

1.6.9.2 Validity analysis

Validity is defined as the extent to which differences in observed scale scores reflect true differences among objects on the characteristic being measured rather than systematic or random errors (Last, 2001). Validity assesses whether the instrument being used is measuring what the researchers actually think they are measuring and also whether the concept is being measured accurately (Martins et al., 1996). Two validity assessments were undertaken in this study, namely, convergent and discriminant validity. Convergent validity measured using Item-to-total correlation, and factor loadings. On the other hand; discriminant validity measured using Average Variance Extracted value versus Shared Variance and Inter-construct Correlation Matrix.

Convergent validity measures the extent to which the scale correlates positively with other measures of the same construct (Malhotra, 2004). Discriminant validity measures the extent to

which a measure does not correlate with other constructs from which it is supposed to differ. It involves demonstrating a lack of correlation among differing constructs (Zikmund, 2000).

1.7 SIGNIFICANCE AND CONTRIBUTION OF THE STUDY

This study made theoretical and practical contributions.

1.7.1 Theoretical Contribution

Organic food demand has been growing globally at an average annual rate of about 20 percent, driven by a variety of factors (Squires et al., 2001). Studies into the factors have been fragmented and contradictory results have emerged from various cultures. There was, therefore, a call to consolidate the various factors (Yiridoe et al., 2005) and to rank the importance of the factors in different cultures (Squires et al., 2001). In line with consumer behaviour models, this study contributes by grouping the various reported drivers of organic food purchase decision into psychological, market and social factors. The study goes further by investigating whether the resultant purchase decision will lead to consumer satisfaction and other post-purchase outcomes, such as the willingness to pay a price premium, share word-of-mouth and repurchase in the future.

The resultant conceptual model proposed in this study will not only improve the consumer behaviour model related to organic food, but a researcher studying consumer behaviour for other product categories can use the model. This study's conceptual model will also improve the popular used TPB by incorporating important consumer behaviour and marketing constructs, such as the perception of product attributes, consumer satisfaction, overall image and post-purchase outcomes. This is particularly important for marketers to get more useful insights into the antecedents and the outcomes of purchase decision, especially as the post-purchase outcomes are missing in the consumer behaviour and TPB models.

The empirical testing of the model will provide important insights to consumer researchers and practitioners as to the important factors driving organic food purchase decision and satisfaction in South Africa. This is particularly important because the EPOPA (2006) report shows that information, especially academic information on organic food demand and purchase is lacking in Africa.This study will contribute to the existing literature on green consumerism in a South

African setting, especially as studies on the relationships between South African consumers' market, psychological and social factors is still lacking in the country.

1.7.2 Practical Contribution

The EPOPA (2006:14) report highlights supermarket chains, such as Pick'nPay, Shoprite – Checkers and Woolworths and their extensive networks put much effort in promoting the distribution and consumption of their certified organic produce in South Africa. Despite these efforts, the report indicates that a good number of South African consumers may not only be still ignorant of the importance and affordability of organic, but the retail outlet faces competition from local farmers' markets and health shops who sell a mixture of "organically grown but not certified" food products.

For effective promotion and distribution of their certified organic food, the retail outlets need information on the psychological, market and social factors driving organic food purchase decision and whether those who are already purchasing are satisfied with their decision. This study not only provides this much needed information, but indicates whether the market of organic food will be sustainable from this study's measurement of future repurchase intention, willingness-to-pay a premium and to share word-of-mouth. This will guide the marketers' appropriate allocation of their promotion and distribution budgets.

This study would also be useful for businesses and marketers, because it will provide insights into green market potentials and help them to target green consumers of organic food in South Africa.

1.8 ETHICAL CONSIDERATIONS

This involves protecting confidentiality of the participants and also an important operational expression of this principle. The identities of the respondents were protected during the process of data collection; in particular, the respondents were in no instances forced to disclose their names. The data will be aggregated without any reference to any particular respondent, and strictly used for academic purposes. Ethical clearance for the study was obtained from the University of Witwatersrand, and a letter of approval authorised the researcher to proceed with the study. All data collected will be securely stored at University of Witwatersrand and will then be disposed of in accordance with instructions from the Ethical Clearance Committee.

The next section defines key terms that are used throughout this thesis.

1.9 DEFINITION OF KEY TERMS

This section provides definitions of key terms employed in this study. These terms are defined in the context of electricity conservation.

Green consumption: is a form of consumption that is compatible with the safeguard of the environment for the present and for the next generations(Ibok and Etuk, 2014).

Organic food:as food produced without the use of synthetic fertilizers and pesticides, genetic engineering, growth hormones, irradiation, and antibiotics (Lim, Yong, and Suryadi, 2014).

Pro-environmental behaviour: A set of behaviour that harms the environment as little as possible, or even benefits it(Sawitria, Hadiyanto and Hadi, 2014).

Purchase decision:the decision-making process and physical activity individuals engage in when evaluating, acquiring, using or disposing of goods and services (Khuong and Duyen, 2016).

Green satisfaction:is the consequence of personal comparison of perceived overall organic food benefits and cost borne by customers for buying it (Mohaydin, Chand, Aziz, Bashir and Irfan, 2017).

Social influence: is the change in an individual's thoughts, feelings, attitudes or behaviours that result from interaction with another individual or a group (Lasuin and Ching, 2014:4).

Green price: is the excess paid for organic food that is justified by the true value of the organic products, which may be indicators of consumers' demand for that product (Lim et al., 2014).

Green distribution: includes activities related to monitoring and raising environmental consciousness in a company's demand chain and consists of a group of individuals or organisations that assist in getting the product to the right place at the right time (Delafrouz et al., 2014).

Communication for awareness: is the process by which information is exchanged and understood by a targeted audience, is expected to raise enough awareness about the availability and benefits of the products (Yeboah and Atakora, 2013).

Perception of product attributes: comprise complex bundles of attributes which must be translated into benefits for customers, including taste, texture, freshness, food quality and health benefits (Aschemann and Aagaard, 2014).

Environmental attitude: Consumer feelings, sentiments, mood, and emotions about the environment and incorporate cognitive component (learn), affective component (feel) and conative component (do) (Wang and Tsai, 2014).

Behavioural beliefs: refers to the individual's belief that the specific behaviour would lead to a certain outcome (Fishbein and Ajzen, 1975).

Perceived value: is a consumer's overall assessment of the utility of a product based on "what is given" and "what is received" (Kukar, Nancy and Kent, 2012).

Image of organic food: is a "whole range of impressions, conceptions and apprehensions towards organic food brand in the customers' memory which is correlated to the sustainability and eco-friendly concerns" (Doszhanov and Ahmad, 2015:3).

Peer influence: is a group of people whose values and attitudes influence an individual's current behaviour (Schiffman and Kanuk, 2012).

Family influence: is regarded as a member of the household being considered as an expert and one whose knowledge is trusted, and parents frequently fulfil this role (Schiffman & Kanuk, 2014).

Repurchase intention: is defined as an individual's judgment about buying organic food products again, taking into account his or her current situation and likely circumstances (Khan, Liang and Shahzad, 2015).

Word-of-mouth: is defined as an oral, person-to-person communication between a receiver and a communicator whom the receiver perceives as non-commercial, concerning a brand, a product or a service (Luong, Vo and Le, 2017).

Willingness to pay price premium: is defined as the sum of money representing the difference between consumers' surplus before and after adding or improving a food product attribute (Rodriguez, Lacaze and Lupín 2008).

1.10 THE STRUCTURE OF THE THESIS

The structure of the thesis will be as follows**:**

Chapter 1: Introduction and background to the study

The first chapter introduces the study by, among other aspects, outlining the problem statement and presenting the research objectives of the study. This opening chapter also provides a preliminary literature review and presents the proposed conceptual model for the study, an overview of the research methodology as well as its significance and contributions of this study.

Chapter 2: Literature Review: Organic food supply and demand in South Africa

Chapter two unveils the landscape of the organic food market globally as well as the South African context. It underlines the supply and demand of organic food and the problems in the supply and demand and the efforts to mitigate organic food supply problems in the South Africa. This second chapter also profiles organic food consumers through literature.

Chapter 3: Theoretical and models explaining market, psychological and social factors

The third chapter focuses on the application of pro-environmental behaviour to the environmental problems occurring worldwide. The chapter first provides background to the theories underpinning organic food purchase decision. The Biophilia hypothesis theory is discussed followed by TRA and TPB that explain organic food purchase decision. Several models are presented as a cornerstone to understand the determinants of organic food purchase decision. This chapter also provides a literature review on market, psychological and social factors affection organic food purchase decision derived from various models.

Chapter 4: Outcomes of organic food purchase decision

In chapter four, a literature review on the outcome of organic food purchase decision and other post-purchase outcomes are discussed. It starts by discussing consumer satisfaction with purchase decision, followed by the discussion on repurchases intention, willingness-to-pay the price premium and willingness to spread word-of-mouth.

Chapter 5: Conceptual Model and Hypothesis Development

Chapter five further provides the theoretical background underpinning the proposed conceptual model. This chapter was guided by socio-psychological theories and models such as the modified TPB (Aertsens et al., 2009) and Yiridoe et al.'s (2005) model of determinants of organic food purchase decision, and other empirical models. The hypotheses relating to the relationships between variables in the conceptual model were formulated.

Chapter 6: Research Design and Methodology

Chapter six delineates the research methodology employed to empirically test the conceptual model and achieve the objectives of the study as set out in chapter one, including matters relating to target population and sampling process, data collection and data analysis. Ethical considerations related to the study are also outlined.

Chapter 7: Data Analysis and Discussion and Presentation

Chapter seven focuses on presenting and discussing the empirical findings obtained from the survey. The main statistical data analyses used in this chapter are the following: descriptive statistics, assessment of normality, and the Smart Partial Least Square based structural equation modelling

Chapter 8: Conclusions and Recommendations.

This chapter recapitulates the key findings of the study and draws certain conclusions. Recommendations relevant for the organic sector are presented as well as the theoretical and its practical contributions. The chapter also outlines the limitations of the study and provides suggestions for future research.

1.11 CONCLUSION

This chapter serves as an introduction and background to the study. Its main purpose was to provide an overview of its content and delineates its scope. Accordingly, it touches on important elements such as the study background, research problem and identification of the research gap, the research objectives formulation and methodology. It also provides a preliminary literature review and briefly presented the proposed integrated conceptual model developed in this study. The chapter concludes by providing an overview of its theoretical and practical contributions, definition of key terms and chapter classification of the eight chapters that constitute this thesis.

As highlighted earlier in the background of this study, the relevance of this study lies in the organic food consumption by several countries in general and South Africa in particular. The next chapter provides a detailed discussion of the organic food market, focusing on the supply and demand worldwide with a focus on South Africa.

CHAPTER 2

GREEN CONSUMPTION AND ORGANIC FOOD MARKET IN SOUTH AFRICA

2.1 INTRODUCTION

The value of organic food and its perceived health benefits for consumers in both developed and developing countries have been known for decades. In South Africa, the organic food consumption is growing as incomes rise and structural reforms take place (Van Biljon, 2013; King and Thobela, 2014). The main consumer trends driving organic food consumption observed over the last ten years in South Africa are an emerging middle class, introduction of supermarkets in townships, with the lower income groups spending habits becoming sophisticated, movement towards fresh healthy food and a growth in franchising (smaller stores located closer) as a result of the importance of convenience shopping trends (Engel, 2008).These have also been influenced by global consumer trends towards foods that support a healthy lifestyle and a growing awareness and interest in the way food is produced and its impact on the environment. South African food retailers are responding to these changing consumer trends toward health and environmental concerns with the introduction of organically produced food and beverages in the late 1990s and beginning of 2000.

This chapter reviews the global and South African organic food market in terms of the demand and supply situations. It begins by creating an understanding of what green consumption and organic food are and boththe actual and potentialbenefitsof organic food.It then profiles organic food consumers. The chapter then turns to the demand and supply of organic products in South Africa, focusing on the distribution and marketing channels, consumer characteristics, total area cultivated, number of farms and the small scale organic farmers.The chapter ends with a brief description of the future prospects and potential for organic products, focusing on food products in the global and South African market.

2.2 GREEN CONSUMPTION

2.2.1 Description and Benefits of Green Consumption

Green consumption emerged in marketing scholarship through the *Theory of ResponsibleConsumption*by Fisk (1974), Henion and Kinnear's (1976) concept of *Ecological Marketing*, and Kardash's (1976) notion of the "*Ecologically Concerned Consumer*". Green

consumption is a popular butcontroversial concept in contemporary society, not least because it is an apparent oxymoron (Peattie, 2010). Green often implies the conservation of environmental resources, while consumption generally involves their destruction. Green consumption is also contested as an idea, highly context dependent as a set of practices, as well as complex and multifaceted in both theory and practice (Jackson, 2005). It overlaps other concepts, such as ethical, sustainable, or responsible consumption, leading to a lack of clarity and consistency in notions of green consumption within research literature (Peattie, 2010).

Green might be assumed to relate only to environmental issues, but these are subtly intertwined with the social and economic strands of sustainable development. For example, Fair Trade coffee is considered an archetypal socially motivated purchase, yet Fair Trade standards also cover protecting environmental resources and biodiversity. Similarly, organic food purchasing might be assumed to represent ecologically motivated green consumption, yet consumers also perceive it as offering taste or personal health benefits (Peattie, 2010). Instead of wrestling with such distinctions this review considers green consumption to be more broadly oriented toward sustainable development. This is in line with the United Nations Environment Programme's conception of sustainable consumption as comprising a number of key issues, such as meeting needs, enhancing quality of life, improving efficiency, minimising waste and taking a life cycleperspective.The programme also takes into account the equity dimension, for both current and future generations, while continually reducing environmental damage and the risk to human health.The lifestyles of people and their consumption behaviours are moderated in accordance to the 'green ideology' (Withanachchi, 2013).

Green consumption is a construct under the concept of green marketing because it starts from marketers' commitment towardsa sustainable environment (Ibok and Etuk, 2014). As much as marketers have a role to play, the process of green consumption can be driven by social behaviours such as preference for bio foods, recycling, reusing, limiting over-consumption and using environmentally friendly systems. Green consumption is a form of consumption that is compatible with the safeguard of the environment for the present and for the next generations. In general, Lorenzen (2014) asserts that sets of practices, such as carpooling to work, buying fair trade coffee or organic food, or rejecting certain products or services, and even boycotting specific companies can also be called green consumption. Withanachchi (2013) views green

consumption as a natural science phenomenon in relationto energy usage and CO^2 emission. The implementation of green consumption spans from institutional arrangements to individual behavioural changes. It requires consumers' responsibility or co-responsibility for addressing environmental problems through adoption of environmentally friendly behaviours, such as the use of organic products, clean and renewable energy and the research of goods produced by companies with zero, or little negative impact (Connolly and Prothero 2008; Perera and Klein, 2011).

Introduced by western societies owing to the necessity to protect the environment and people's health from the effects caused by industrial pollutants and by continuous economic and populationgrowth, the green market has exploded globally. Even thoughthegrowth was slow in the 1990s, interest in green consumptionincreased from early 2000s.Even with the latest recession, it has continued to grow mainly due tothe health conscious and environmental protection values that consumers continue to hold(Wu and Chen, 2014).Green consumption is also gaining momentum because of its benefits to society.

Green consumption often generates both public and private benefits. A consumer benefits from organic food directly because is more nutritious and healthier with fewer risks to personal health from pesticides and herbicide residues (Chander and Muthukrishnan, 2007). Another private benefit of green consumption is on organic skin-care (organic soap, for example) is perceived to be less harmful to the skin than conventional soap, which contains synthetic chemicals or ingredients (Wu and Chen, 2014). Anton, Deltas, and Khanna (2004) assert that private benefits from green consumption can induce consumers to pay more for products and firms to invest in cleaner technologies. However, Chander and Muthukrishnan (2007) maintain that though this may internalise the negative externalities from the production of the goods to some extent, it may have only a modest impact and lead to only a small reduction in total pollution.

Besides the direct private benefits to individual consumers, consumption of green goods also generates indirect public benefits as it helps preserve the environment. Organic farms,for example, are more sustainable and environmentally better than conventional farms because they do not release synthetic pesticides or herbicides into the environment (Chander and Muthukrishnan, 2007). Thus, the consumption of organic food,which will later be described in

this chapter does not only directly benefit a consumer, but also helps in preserving and sustaining diverseecosystems, which in turn indirectly benefit all consumers.

2.2.3 Types of green consumption

Green consumption is closely related to the notions of sustainable development or sustainable consumer behaviour, ethical consumption and responsible consumption (Liao and Li, 2010). It is a form of consumption that is compatible with the safeguard of the environment for the present and for the next generations.The following are the principle areas of green consumption.

2.2.3.1 Green energy

Green energy includes natural energetic processes that can be harnessed with little pollution (Pinto, Herter, Rossi and Borges, 2014).Green or renewable energy is generally defined as energy that is collected from resources which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat (Global Status Report, 2016). Renewable energy often provides energy in four important areas: electricity generation, air and water heating/cooling, transportation, and rural (off-grid) energy services. It is derived from natural processes that are replenished constantly (Peattie, 2010). In its various forms, it derives directly from the sun, or from heat generated deep within the earth. Included in the definition is electricity and heat generated from solar, wind, ocean, hydropower, biomass, geothermal resources, and biofuels and hydrogen derived from renewable resources.

2.2.3.2 Green fashion

Green fashion takes the form of ethical clothing, eco clothing and organic clothing. Ethical clothing refers to clothing that takes into consideration the impact of production and trade on the environment and on the people behind the clothes we wear (Cervellon, Hjerth, Ricard and Carey, 2010). Eco clothing refers to all clothing that has been manufactured using environmentally friendly processes. It includes organic textiles and sustainable materials such as hemp and non-textiles such as bamboo or recycled plastic bottles (Lawson, 2008). Organic clothing is clothes that have been made with a minimum use of chemicals and with minimum damage to the environment. They are usually sold throughfair-trade to achieve better prices, decent working conditions, local sustainability and fair terms for farmers and workers in the developing world

(Cervellon et al., 2010). The three main reasons that would motivate the purchase of organic cloths are: environmental -friendly protection; health impact and ethical concern (Peattie, 2010). Consumers pay attention to the origin and the materials of the clothes they buy and the fact that they are not harmful to the environment (Ertz, Karakas and Sarigollu, 2016). Consumers require and evaluatethe label certifying the organic origin to know their practices and to build trust.

2.2.3.3 Green food

In the food area, there is a recent growing demand for less environmentally-damaging food production. This leads people to buy more organic and local food (Seyfang, 2007). Organic food is produced through agriculture which does not use artificial chemical fertilizers and pesticides, and animals reared in more natural conditions, without the routine use of drugs, antibiotics and wormers common in intensive livestock farming (Aertsens et al., 2009). Consumers can also choose to buy local food in order to reduce the social and environmental impacts of "food miles" -the distance food travels between being produced and being consumed. This behaviour can create a new sense of connection with the land through a concern for the authenticity and provenience of the food eaten, operating a social as much as a technological innovation (Gracia and de Magistris, 2007).In addition, taste, health and safety concerns can be other reasons behind this consumption practices.

2.3 ORGANIC FOOD COSUMPTION

2.3.1 Definition of Organic Food

Organic foods are those not processed by irradiation, industrial solvents, or chemical food stabilisers and do not include any additive ingredients (Allen and Albala, 2007). The term ‘organic' refers not only to the food itself, but also to how it was produced. Foods labelled organic must be certified by the National Organic Program (NOP), which took effect on October 21, 2002. Organic food is derived from crops or animals produced in a farming system that avoids the use of man-made fertilisers, pesticides, growth regulators and livestock feed additives (Williams, 2002; Institute of Food Science and Technology, 1999). Organic foods are foods which are produced through methods that do not involve modern synthetic inputs such as non-natural pesticides and chemical fertilisers. They must be grown and processed using organic

farming methods that recycle resources and promote biodiversity - two key elements of environmentally sustainable agriculture.

To be considered organic food, crops must be grown without using synthetic pesticides, bioengineered genes, petroleum-based fertilizers and sewage sludge fertilizers. Organic livestock must have access to the outdoors and be given no antibiotics or growth hormones. Organic foods may not be irradiated and should not have any side effects or risk of consumption. In addition, many studies also show that the level of important elements that are required for the body such as vitamins, protein are higher in organic food (Shamsollahi, Chong and Nahid, 2013:93). Nowadays, people are becoming more sensitive about their nutrition, health and value of the food that they consume. Increase in knowledge is making humans to not only take more care of themselves butalso the environment for healthy and safety purposes. These have spurred the request for organically developed goods has become greater than before (Chen, 2009) for number of benefits.

2.3.2 Actual and Potential Benefits of Organic Food Consumption

According to the consensus of international research, consumers choose organic food for various reasons. Although the differences in ranking these reasons exists owing to some cultural and demographic factors, the main reasons are personal/better health, product quality, concern about degradation of natural environment,and improved taste. Consumers also consider pesticide-free to be an important attribute of organic foods (Pearson, Henryks and Jones, 2010). Consumers benefit directly from consuming organic food because it is more nutritious and healthier with fewer risks to personal health from pesticides and herbicide residues (Chander and Muthukrishnan, 2007). Scientists also claim that organic foods do not have any side effects or risk of consumption (Riddle and Markhart, 2010). In addition, many studies also show that the level of important elements that are required for the body such as vitamins, protein and other health-giving properties are higher in organic food (Shamsollahi, Chong and Nahid, 2013:93).

Researchers at the University of Washington found that a diet composed of predominantly organic food provides a dramatic and immediate protective effect against exposures to organ phosphorus (OP). OP is organic compounds containing phosphorus used primarily as an alternative to chlorinated hydrocarbons that persist in the environment (Riddle and Markhart,

2010). They conclude that consuming food grown using organic production methods can virtually eliminate exposures to a dangerous class of insecticides known to disrupt neurological development in infants and children. In regard to nutrition, mothers consuming mostly organic milk and meat products are found to have about fifty percent higher levels of rumenic acid (Conjugated Linoleic Acid) in their breast milk (Riddle and Markhart, 2010). This CLAis responsible for as much as 85-90% of total health content in dairy products. It can also be considered as the principal dietary form (Destaillats, Buyukpamukcu, Golay, Dionisi and Giuffrida, 2005). According to research conducted by the USDA, California Dept. of Health, and Consumer Union, the greater reliance of organic beef and dairy farmers on pasture and forage grasses increases the levels of CLAs in milk and beef, and in turn in the breast milk of women eating organic animal products.

Another critical benefit of organic food is quality. The product quality parameters that consumers generally relate to organic food, particularly fresh fruits and vegetables, include the fact that it tastes better and that the supply chain delivers a fresher product (Fearne, 2008;Pearson et al. 2010). Concern for the environment is another reason for purchasing organics. The evidence supports the fact that organic farming is less damaging to the natural environment (Brown and Geldard, 2008). Concern about animal welfare is more important for particular organic products and countries where intensive animal farming systems are commonly used. This includes chicken meat and eggs, pork products and, to a lesser extent, beef and dairy products.

The next section discusses the profiles of organic consumers.

2.3.3 Profiles of Organic Food Consumers

Consumer demographic characteristics are the most documented important aspects of consumer profile that explain organic food purchases (Pearson, Henryks, Sultan and Anisimova, 2013). Most previous studies, including Tsakiridou, Boutsouki, Zotos and Mattas (2008) and Ureña, Bernabéu and Olmeda (2008) have pointed out that demographic profiles of consumers (gender, age, education level and income) significantly influence their purchase decisions of organic food. While findings across research studies using demographic profiling are sometimes contradictory, there have been some consistent results that have emerged across studies (Hughner, McDonagh, Prothero, Shultz II and Stanton, 2007).

Looking atgender, consumers of organic food in general are female, according to the Food Marketing Institute (2001), have children living in the household and are older (Hughner et al., 2007). Most studies show that women have more positive attitudes towards organic food than men (Giannini, Chen, Paramonov and Wu, 2014). Women eat fruits and vegetables morefrequently than men do. They are also more willing to follow recommendations given by health experts than men do(Li and Xin, 2015).Some findings,however,indicate that gender contributes only a limited amountthat explains consumer preferences for organic food (Hoefkens, Camp, Verbeke, Aertsens and Mondelaers,2009; Li and Xin, 2015). Consumers with a high level of education are more likely to regard environmental aspects as important infood quality and more likely to pay a premium price for organic food (Hughner, McDonagh, Prothero, Shults II and Stanton, 2007). Most studies found that consumers with a higher level of education have a more positive attitude towards organic food (Ureñaet al., 2008; Li and Xin, 2015).

Age is a significant variable of predicting organic food purchase. Youngpeoplehave been found to more likely purchase organic food than older people (Li and Xin, 2015). While they purchase organic food in consideration of the environment and animal welfare, the older people regard their own health as the most important reason. According to Baranski et al. (2014), young consumers' positive attitudes toward organically grown food are strongerthan the likelihood of their purchasing it. Their findings show that it is the older consumers who are more likely to purchase organic food, probably because of the cost.Other studies found no age difference in the purchase of organic food (Giannini et al., 2014).

Considering that organic food products are relatively expensive, consumers who purchase themare mainly from well-off families with high levels of education (International Trade Centre, 2011). These consumers include people working for large or foreign companies, managerial staff, expatriate families and high-ranking government officials. Being expensive, the purchase of organic food may suffer amongprice sensitive consumers and countries. Organic food purchase, which is alsoconsidered a western lifestyle and food consumption are increasingly becoming popular, especially among younger generations who have travelled overseas to study or work.

Using multi-variables, organic food consumershave been classified into eight main groups: white collar families; familieswith young children; families with health issues; overseas returnees; business people; government officials; young people; and foreigners living in the country. Each group has different consumption preferences and behaviour. When making these classifications, Li and Xin (2015) suggest thatthe time, place, cultural contexts and the market where the classifications are made should be considered.

The following section discusses the global organic food market.

2.4 THE GLOBAL ORGANIC FOOD MARKET

The organic food market is growing globally and its worth currently stands at 72 billion US dollars with 43 million hectares of organic agricultural land cultivated worldwide **(**Organics International and the Research Institute of Organic Agriculture (FiBL), 2015). A growing demand for foods that are healthful, tasty and environmentally friendly are the principal drivers of organic food sales. The world organic food consumption and development since the end of the nineteenth century was about 20% each year (Shamsollahi, Chong and Nahid, 2013). There are estimates thatin the future, global growth of organic food would be between 10 to 50% annually, which will depend on the country. For example, the world organic food sales were raised from more than 20 billion dollars in 2002 to about more than 50 billion dollars in 2008 (Nastase, Stoian and Ion, 2011).

The largest organic food markets are concentrated in North America and Europe. The increasing consumer demand in these markets are a result of growing awareness of the nutritional value of food, health and food safety, controversy surrounding introduction of foods containing genetically modified organisms and the impact of agricultural production methods on the environment. The highest growth is expected in European countries and emerging economies of India, Brazil, China and South Africa (Engel, 2008).In developing countries, the market for organic productsisentering into its growth phase and the consumption is greater than the production. This has pushed-up the price of an organic product compared to its conventional alternative. This price premium has encouraged farmers in developing countries to pursue organic farming but the conversion period takes three-years.

2.4.1 European Market for Organic Food

The European Union (EU) is actively promoting the growth of the organic sector (Anderson, Wachenheim and Lesch, 2006). It is estimated that 95% of total global retail sales of organic food products occur in the EuropeanUnion (EU) (Dimitri and Operholtzer, 2009).In 2005 the European market for organic food products was valued between 13-14billion Euros (Willer & Yussefi, 2007; Trade Information Brief, 2014). The bulk of these sales wasconcentrated in former EU 15 countries. Europe's largest markets in descending order are the United Kingdom (1.213 billion GBP), Germany (3.9 billion Euros), Italy (2.4 billion Euros), France (2.2 billion Euros) (Sahota, 2015). The main market channels of distribution are specialists and supermarkets for organic food products (Organic Monitor, 2015) and their performance depend on economic developments. The growth rate is attributed to government subsidies of industry promotions, which lower price premiums and higher levels of consumer awareness than is found in other countries (Anderson et al., 2006).

The German organic food market has expanded considerably since its introduction in the early 1970s (Zielke, 2010). Initially, organic products were only available via direct sales by organic food farmers or in health food stores (Gottschalk and Leistner, 2012). By 2005 Germany's organic market had grown and was valued at US$ 4.2 billion, representing roughly 2.5 percent of its total retail food sales. It is the second largest market for organic products in Europe and is also the fastest growing market for organic products there, achieving a 12% per annum growth rate in 2005 (Trade Information Brief, 2015). The country's domestic production satisfies 60% of the population's demand for organic products (CBI, 2005).

Switzerland has the highest market share of organic products as a percentage of its total retail food market, standing at 4.5 percent in 2005,and the highest per capita consumption per annum of 100 Euros (Trade Information Brief, 2014).

Based on estimates in 2005, the United Kingdom was the third largestglobal market for organic products valued between US$1.84-US$ 1.9 billion per annum. The boom period for organic food in the United Kingdom was from 2000-2004 when the market achieved 68% growth. The United Kingdom's retail food industry is dominated by supermarkets, which are considered to be the most developed in the world. In 2004, approximately 86% of organic sales were through

supermarkets (Willer and Yussefi, 2007). The United Kingdom consumes more organic products than it produces. The shortfall is met from imports. In 2004, 76% of its total organic imports were for fruit, vegetables and salad crops. The majority of the market's fruit was imported from the United States, Central America, Spain, the Netherlands and France.

The Italian market was worth 1.4 billion Euros in 2003, comprising approximately 1.5 % of total food sales. Fruit and vegetables account for over 50% of organic food sales. The supermarkets' share of the organic retail market is 30%, while the remainder is held by organic stores and direct sales. The price premiums levied on organic food compared to conventional products in supermarkets and organic stores in Italy are roughly 25% and30%, respectively (TIB, 2015).

In France the market for organic products is small but growingrapidly from 0.5% of total food sales in 1997 to 1.5% in 2003 (CBI, 2005). Supermarkets are an important distribution channel and account for 50% of total organic sales while the rest is sold in health stores, direct sales and open-air markets. The supermarkets' position as the main distribution channel for organic produce is strengthening, increasing the demand for organic processed food beyond its current average annual growth rate of 17.5 percent. The domestic market for organic products is relatively small compared to European standards. In Eastern Europe, the consumption of organic food is small, but it is experiencing high growth. This area mainly produces food that is exported to Western European manufacturers to process and package to be sold by large retail chains (Trade and Industrial Policy Strategies, 2015).

In Europe, the supply and demand for organic produce varies between EU member states.Currently, retailers are the main suppliers of organic food in most European countries and are stimulating the demand for organic produce (Stopes, 2016).Organic food products are sold to grocery retailers (for example, supermarkets, departmental stores and discount stores), natural food and health stores and directly from the farm (Engel, 2008). Consumers in Denmark, Switzerland, Sweden and the United Kingdom get most (more than 70 percent) of their organic purchases from grocery retailers. In Germany, Italy and France the dominant suppliers of organic products are natural food and health stores where consumers purchase approximately 50 percent of their organic products (Willer and Yussefi, 2007). With the entry of supermarkets and

discount stores into the organic food sector, the supply of organically producedfood has risen substantially (Aschemann and Hamm, 2007).

The discount stores, as relative newcomers in the organic food sector, are making inroads as suppliers of organic food. Compared with conventional supermarkets, they tend to stock a more limited range of products and pursue a very specific strategy of low pricing (Zielke, 2010). Statistics regarding sales of organic products by shopping location demonstrates that discount stores already dominate other sources of organic supply in Germany with a market share of 27.3% (Holst, 2008).

2.4.2 Asian Market for Organic Food

It is difficult to discuss this region's demand and supply for organic foods as each country's organic market is at a different stage of development. Generally, the organic market size of Asia is US $4.4 billion, while the leading countries are China, Japan and South Korea, according to the Organic Monitor (2015). The local markets are growing in these countries as the government is playing a significant role in terms of the labelling of organic products (International Trade Centre (ITC), 2011).Even though Singapore is a prosperous country, the population's demand for organic products is limited as they assume that all products sold in retail outlets is safe because it is endorsed by the government.

South Korea has the potential to be a profitable market but restrictive certification laws for fresh produce make it difficult to enter this market. These laws are not applied to processed goods. The South Korean consumers are aware ofthe benefits of consuming organic foods.Considering their beliefs of the link betweenthe intensive use of pesticides, which is a key feature of domestic agriculture there andcancer (FiBL, 2015), their altitude towards organic food will definitely be favourable.

Taiwan's organic market is classified as embryonic. The market's ability to move into its next stage of development has been slowed down by consumers' low confidence in organic products, tarnished by misleading claims (Organic Monitor, 2015). The demand for organic products in Malaysia also suffers from lack oftrustin the authenticity of organic products.In 2012, however, the Malaysian government expected the domestic organic industry to be worth US$210 with an estimatedgrowth rate of 20 percent per annum.

The most attractive markets in the Asian region are Japan, the region's largest, most established and sophisticated market, and China, the region's fastest growing market (Willer and Lernoud, 2016).Philippine consumersconsume organic food by buying their products directly from thefarm or from supermarkets.In Asia, Philippines is an important producer of organic coffee. The region's largest producers of organic products are,however,China, SriLanka and Turkey.Straddling the continents of Europe and Asia, Turkey tries to be a bridge between west and east (Trade Information Brief, 2015). The portion of Turkey's land in Europe is small (about 5 percent), the largest part being in Asia. Demand for organic products in the region is limited, falling below domestic production (Organic Monitor, 2014). The majority of the region's surplus production is exported to Japan, United States and Europe (FiBl, 2016). Both the domestic market for organic goods and the region's ability to export its products are constrained by bottlenecks throughout the value chain (FiBL, 2016). Most of the region's production is certified by foreign agencies. Only China, the region's largest exporter, has established a local certification body (Li and Xin, 2015).

Throughout the Asian region, governments are increasing their subsidies allocated to organic farming. In 2005 the Thai government approved US$26.6 million, the Sri Lankan government earmarked US$ 4,150,000 for agriculture projects including organic projects and the Chinese government provided subsidies of between US$ 4000 - US$ 6000 to farmers, depending on their location (Trade and Industry Policy Strategies, 2015) (TIPS). Japan is a main importer of organic products. This situation arises due to the interaction of consumers' preferences, limited availability of agricultural land and wet, humid climatic conditions. Supply shortages of fresh fruit and vegetables are particularly acute as demand for these products comprise almost 75% of Japan's organic food sales (FiBL, 2016).

Japanese consumers' demand for mandarins, kiwi fruit, strawberries, oranges and bananas is particularly high compared to supply. The Japanese climatic conditions make it difficult for domestic farmers to grow these products. They therefore import organic food from the Southern African Development Community (SADC) countries, whose climateisideally suited to grow organic food (Willer and Lernoud, 2015). Japanese farmersare, however, growinglimited quantities of citrus fruits and the government protects its farmers' market by applying a high tariff on imports. Consumers' growing demand for fresh fruit and vegetables coupled with the

introduction of strict certification laws in 2001 exacerbated supply-side shortages. In Japan, products can only be labelled organic if they satisfy Japanese Agricultural Organic Standards (JAS). When the new standards were introduced, the organic market's value fell by 90% from US$3 billion in 2000 to US$250 million in 2001 (McKinna, 2006). Products that were no longer deemed to be organic were classified as 'specially cultivated crops' or 'Green Foods' which are grown with reduced use of chemical pesticides and fertilisers" (McKinna, 2006:28).

The Chinese market is also important because of consumers' potential propensity to consume organic products. The interaction between the following variables could create a lucrative organic food market in China: (a) strong cultural pull towards healthy eating (b) growth of local organic certification bodies (c) increased public concern about food safety (d) rising per capita income levels (e) spread of supermarkets and (f) China's one child policy that causes parents to give their children the best of everything. In addition, a spate of food contamination incidents across the country has reduced consumers' confidence in food safety. Thishas increased their awareness about the benefits of consuming organically grown products. While there is high potential for the demand of organic food in China, factors such as high/ divergent price premiums levied on organic products, confusion among consumers about what is an organic product are constraining China's supposed organic food market growth. For example, on certain goods, the organic version carries a 300 – 400% price premium. However,on average price premium levels range from 10%-50% with 20-30% as an approximate average (IFAD, 2005). When price premiums fit into this acceptable range, consumers' overriding question turn to whether the products' certifications are authentic. The structure of China's retail food sector is changing. Traditional markets are being replaced by supermarkets, which will affect the rate at which organic products are introduced to the public and the type of products demanded by consumers (Liao and Li, 2010).

2.4.3 American (North America and Latin) Market for Organic Food

The American organic food market is one of the world's largest, growing at a rate of 11.5%.More farmers cultivating organically, more land certified organic, and more countriesreporting organic farming activities account for the growth of the organic food market (FiBL, 2015).Specifically, the market size for organic food in North America is US$35 billion and the leading country is USA (Organic Monitor, 2015). The market growth is stimulated by

rapid and growing demand for organic products over the past few years. Per capita consumption of organic food was over $35 per person in 2003, nearly doubling the value in 1999 (Dimitri and Oberholtzer, 2005:3). The extent of the growth in organic goods becomes apparent when its 20% growth rate is compared to the 2%- 3% growth achieved by the conventional food industry (FiBL, 2015).

The sector's phenomenal growth in demand can be attributed to a change in consumers' preferences for healthy lifestyles. This is not surprising, considering that especially largeretailers, such as Kmart are promoting a good healthy life. Experts predict that the sector will continue to achieve strong growth (Dimitri, Oberholtzer and Green, 2006). Already, two-thirds of US consumers report using organic products and 27% report being regular (weekly) users (The Hartman Group, 2013). The majority (62 percent) of the consumers buy organic products from natural product stores (International Trade Centre, 2013).The rest (31 percent) is from supermarkets and hypermarkets and seven percent through clubs, food box systems and food service outlets (FiBL, 2015; Sahota, 2015).

In Latin America, most organic products are produced for the export market and thereis a small market for organic products. The retail sales in 2007 for Latin America was $ 100 000, mostly concentrated in the larger cities in Brazil and Argentina (Willer and Yussefi, 2007; Engel, 2008). In Argentina and mainly in Buenos Aires, organicfoodproducts are sold in supermarkets, specialist shops and via home delivery services.Argentina is the largest producer of organic products in Latin America withapproximately 900 farmers cultivating 340 000 ha.

Bolivia is the world leader inproduction of organic cocoa and one of the largest producers of organic coffee (FiBL, 2015). Organic farming is currently a niche market in Bolivia. However, theintroduction of a national eco label and expected rise in demand is about to change all that.Organicfoodis mainly for export andintermediaries are used forthe export. Organic production in Bolivia has shown tremendous growth, from 31 025 ha certified production in 2000 to 364 100 ha in 2002(Roduner, 2012). The organic food market is developing in Peru with opportunities for sales in farmers' markets andhome delivery (Engel, 2013).

Demand for organic products is less than the continent's production.Consequently, South America is a net exporter of organic products. Organic crops are mostly destined for export

markets in Europe, United States and Japan. The region exports a range of organic products including coffee and cocoa beans, bananas (Dominican Republic, Ecuador, Costa Rica and Ecuador), other fruit (Brazil, Chile, Colombia, Honduras, Dominican Republic, Argentina, Mexico, Costa Rica), fresh/ dried vegetables (Argentina, Brazil and Chile), sugar (Paraguay, Brazil,Ecuador and Argentina), grains (Bolivia, Peru) and meat (Argentina). Exports from South America have a good market reputation amongst importers in developed countries because these goods are competitively priced and supply is consistent. Research indicates that monetary trade in fresh organic fruit and vegetables is greater than other food categories (FiBL, 2015).

2.4.4 Oceania Market for Organic Food

This region includes Australia, New Zealand, and island states like Fiji, Papua New Guinea, Tonga and Vanuatu.Australia is the continent's largest producer and exporter of organic goods and thus its trade patterns shape the continent's trade patterns (FiBL, 2015).Growth in Oceania's organic industry has been strongly influenced by rapidly growing overseas demand. Domestic sales are, however, also growing (FiBL, 2015). The export sales across all organic product categories in 2014 totalled a healthy $340 million (The Australian Organic Market Report, 2014).Australia and New Zealand are large producers of organic food products in the Oceania region (Organic Monitor, 2015). Australia has the distinction of having the world's largest percentage of its agricultural land dedicated to organic farming.

According to the Australian government's records, Europe is the country's largest exporting partner (Willer and Lernoud, 2016). This is not surprising as it is one of the countries on the third party list for the EU, which simplifies market access issues. This makes it cheaper and easier for exporters to import Australian products as parties can bypass a maze of bureaucratic procedures (Environmental Research, 2013). This gives Australia's farmers a relative competitive advantage compared to countries that are not on the list. In 2001, 70 percent of Australia's total organic exports (measured in quantity) was imported by Europe, especially the UK, Italy, Switzerland, France, the Netherlands and Germany (The Australian Organic Market Report, 2014). Although the volume of trade has remained relatively stable since 2001, the important issue is that the composition of Australia's trading partners has slowly changed. Other countries such as Japan, USA, Singapore, and Hong Kong have emerged as promising future export markets for Australian produce (Wynen, 2006).

The Oceanic continent's exports in 2003 ranked in decreasing order of quantity were grain, processed products; drinks, juices and meat. Farmers from Oceania could have been competitors to the SADC farmers also exporting organic food to Europe and Asia.Becausethese countries (e.g., Australia and New Zealand) use counter-seasonal advantage to supply exotic fruits to the northern hemisphere countries, they do not directly compete with the SADC farmers, especially as theproduction costs are lower than their counterparts in Oceania. ThisgivestheSADC's producers a competitive advantage.

2.4.5 African Market for Organic Food

In Africa there is a large percentage of uncertified organic produce that is sold locally, and which does not enter the export market (Engel, 2008). Egypt and South Africa are two of the few African countries that have a small domestic market for organic products (Willer and Lernoud, 2015). While South Africa has historically been one of the leading consumers of certified organic produce in Africa (Willer and Yussefi, 2008), the production is relatively small. Uganda has the highest number of organic producers in Africa with almost 190000 organic producers (Willer and Lernoud, 2015). South Africa reports only 250 certified producers (FiBL, 2015). However, South Africa together with Egypt have the largest domestic markets for organic food and beverages in Africa.The value of the South African domestic market is estimated between US $500 000 to US $830 000 with organic products accounting for 0.3 percent of the total food market (Engel, 2008).

Both Egypt and South Africa have made a huge progress to develop EU compatible standards. Kenya, Uganda and Tanzania are moving towards this goal, but at a slower pace (Willer and Yussefi, 2007). Even though Egypt, South Africa, Kenya, Uganda and Tanzania have established private certification organisations and Morocco, Ghana and Zambia are developing their own standards (Willer and Yussefi, 2007:) the African producers are still reliant on foreign standards and certifying bodies. This makes it difficult for them to participate in international markets. This in turn limits their production and as a result they do not benefit from economies of scale. Furthermore, it impedes the development of a domestic market as farmers can only retain their margins, as their production costs are higher, by selling goods for prices that are above consumers' threshold. Poor certification systems hinder the development of Africa's organic sector, creating a "chicken and egg" situation where the market does not develop because the

necessary infrastructure is not in place, and the infrastructure is not there because the market is inadequately developed (Ntambi, 2006:101).

The African region also faces the problem of low demand for organic food due to low income levels, long distance to large markets and the insufficient availability of markets. As a result, the primary market for organic produce is the international market, but to access this market producers must have documented proof that they have complied with regulated processes. South Africa is SADC's largest producer comprising 53% of the region's organically farmed land in 2005. As the region is a net exporter of organic products it can be deduced that South Africa is also the region's largest exporter. South African farmers and producers supply a limited range of good quality products. This strategy has allowed them to build a reputation in (a) Europe for fresh fruit, Rooibos and honeybush tea, and processed medicinal herbs, (b) United Kingdom for fruit (c) processed products in the USA (d), Rooibos tea in Japan and (e) Bio Suisse pecan nuts in Switzerland. Ad hoc exports are also made to Australia and New Zealand.

As the majority of global sales is for organic fruit and vegetables, this category deserves to be broken down further. South Africa's export product range includes deciduous fruit (mainly apples), citrus fruit (oranges, lemons and clementines), blueberries and raspberries. The main export market for these products is Europe (Willer and Lernoud, 2015). Other African exporters are Tanzania, Zambia and Mozambique. These countries can use South Africa's reputation as a quality supplier to gain access into the above markets. This could be done by feeding into South African farmers' value chains or providing complementary products. For example, honey could be a complementary product to tea. The reasons behind South Africa's success lies in building a certification network to access international markets, making organic foods a commercial product in domestic markets (FiBL, 2015). In 2015 the market's estimated value was ZAR 150 million, using import agents to distribute the products.

The industry has access to international certifiers, such as Ecocert International and the UK Soil Association. Furthermore, in 2001 the National Department of Agriculture's released its Draft Organic Standards that were based on the EU 2092/91 Regulations, the IFOAM standards, and Codex Alimentarius (EPOPA, 2006b:7). Unfortunately,since the release of this document the Department of Agriculture has not promulgated these standards, which is slowing down the

industry's development. However, the private sector continues to sponsor the sector's development: in 2001 South Africa's local certification agencies started inspecting and certifying goods for Pick´n Pay, Shoprite-Checkers and Woolworths (EPOPA, 2006). South African producers use export agencies, such as Katopé and Eurafruit, to handle their exports. These agencies take ownership of the produce and market it under their trade name, and therefore require certification, or act as non-certified agents, in which case the produce is marketed under the producer's name or that of a foreign retail chain.

South African products that have been exported through established relationships with foreign trading partners include citrus (by one of the largest certified co-operative groups in South Africa) and medicinal herbs and herbal extracts. Of particular importance to certify organic South African farmers' success is drawing on the marketing activities of the Dutch Company, Eosta, and theirWelsh business partner, Organic Farm Foods (EPOPA, 2006).Africa has the lowest area under organic management. However, it is important tonote that in Africa there is certified and uncertified organic production. The uncertified organic production is not well documented. Most of the organic agriculture in Africa is uncertified and will continue to remain so in the short term (Willer and Yussefi, 2004). It is important, therefore, to develop and sustain a local market within African countries for these uncertified products and to find alternative forms of standards and certification within this context. Certified organic production for a wide range of product groups is mostly for export by large plantations or farms or small-scale farmers (Willer and Yussefi, 2007). There are products that are sold in farmers' markets often with no price premium. Organic production in this case promotes food self-sufficiency, improves soil fertility and relies heavily on traditional knowledge (Engel, 2008). The discussion of supply and demand of organic food in South Africa follows in the next section.

2.5 SUPPLY AND DEMAND OF ORGANIC FOOD IN SOUTH AFRICA

2.5.1 Suppliers of organic food in South Africa

Only a few studies in South Africa have attempted to quantify and describe the organic industry. The two most notable recent studies are the FRIDGE report commissioned by the South African Chamber of Trade and Industry and IFOAM's annual World of Organic Agriculture reports (Willer and Lernoud, 2015). The FRIDGE survey was undertaken in 2008, which makes the

World of Organic Agriculture 2015 the most up-to-date data on organic production/supply in South Africa. There are 250 certified organic producers in South Africa that managed 156 608hain 2012 (Willer and Lernoud, 2014), mainly for export and include fresh fruits, vegetables, cane sugar, herbs and spices (Engel, 2008). Within the organic industry there are producers that are certified organic, certified organic in conversion and not certified. South African organic food producers supply mainly 95 percent for the export market (Van Biljon, 2013). The availability of supply of organic products locally and in particular organic grocery lines has been cited as a constraint by retail food stores (King and Thobela, 2014). Small-scale farmers also export organic products under the Fair Trade logo.Food retail stores are the main outlets where organic products are being sold (Brodie, 2014). The main South African domestic organic producers have not necessarily identified themselves by means of the survey (South Africa Organic market study; Kelly and Metelerkamp, 2015).However, the following are the major producers of organic food in their categories based on the South Africa Organic Market Survey:
Crop production:

- Kirklington Organic Farm;
- Lorraine Trust;
- Emerald Acres;
- Modderfontein Farm;
- Datan Boerdery;
- A.M. Muller and Sons; and
- Blue Sky Organics.

Input manufacturers, with nationwide product distribution:

- Agro Organics;
- Biological Control Products;
- Bioearth; and
- Microbial Solutions.

In relation to markets outlets, the supermarket chains, with their extensive networks, have done much to promote the distribution and consumption of certified organic produce in South Africa. These retail outlets face opposition from farmers' markets, box schemes, and health shops, from whom a mixture of "organically grown but not certified" and certified produce is available

(FiBL, 2016). South Africa is one of thirty (30) African countries that produce certified organicproducts, according to the Supermarket and Retailer (2012). However, most of these organic products are exported owing to higher revenue from foreign exchange. South Africa exports a range of organic food products mostly to European countries including France (sweeteners), Netherlands, United Kingdom, Germany and Denmark (fresh fruits), dried fruits and nuts (Netherlands) and vegetables (Germany), as reported by the Research Institute for Organic Agriculture (FiBL) (Euromonitor International, 2016). There are also emerging small-scale farmers that sell their organic products under the Fair Trade logo. The domestic market is growing at an average of 30 percent per year but is faced with challenges of supply shortages (Willer and Lernoud, 2015).South Africa has a favourable position for expansion in thedomestic market as a result of the following developments in the last few years:

- establishment of a separate section for organics at the Johannesburg fresh produce market;
- proposition of national regulations for organic products;
- establishment of South African organic certification bodies; and the
- Formation of three South African organic associations.

The South African industry is worth R150 million and a brief review of the demand looks at the size of the industry (King and Thobela, 2014). South Africa is one of only a few countries with a significant domestic market for its organic produce (Institute of Natural Resources, 2008). Naidoo (2012) shows that the country could be the largest market for organic food in Africa. The research by the Bureau for Agricultural Policy in 2007 and 2008 shows that the three largest trends being introduced in new food products were indulgence, convenience and health (Kelly and Metelerkamp, 2015). While the FiBL (2015) data suggest negative growth of organics in South Africa, local players paint a somewhat contrary picture. South Africa boosts a number of retailers of organic food. According to interviews with organic industry stakeholders (Kelly and Metelerkamp, 2015), over 90 percent of organic food was sold through the formal retail sector.

Woolworths and Pick ‘n Pay are the only big retailers who mention organic produce in their annual reports. According to Woolworths HoldingsLtd, the Good Business Journey report (2013), Woolworths reported strong growth in its ‘Free range and organic’ food category. This category grew from R0.67 billion in 2011, to R1.7 billion in 2012, ending at R4 billion in 2013.

The exact value of organic food disaggregated from free-range products was not possible to ascertain. Although it is not clear how much of the organic market Woolworth controls in South Africa, it is recognised as one of the leading outlets (Kelly and Metelerkamp, 2015). Moreover, competitor Pick ‘n Pay also cites in their annual report growing demand for organic and Fair Trade products (Pick ‘n Pay, 2013). The indication was that the organic category grew by 50 percent during 2012 (Van Biljon, 2013). At the other end of the retail spectrum, the Bryanston Organic market, South Africa’s oldest community market for organic food, the sentiment appears to be the same as the demand for organic food is growing in South Africa. Audrey Wainwright, the market operations manager, highlighted that despite growth in demand, profit margins on organic produce for smallholder producers remain slim due to high input and transport costs (Kelly and Metelerkamp, 2015).

The major retail food chains in South Africa overall, according to Euromonitor International (2016), are Woolworth’s Holdings Ltd, Tiger Consumer Brand Ltd, Allganix Foods (PTY) Ltd, Harrewyn Organics (PTY) Ltd, Pick and Pay, Shoprite Checkers and Spar. In addition, there are several store-based retailing offering the organic food products such as grocery retailers, convenience stores, modern grocery retailers, discounters, forecourt retailers, hypermarkets, supermarkets, traditional grocery retailers, food/drink/tobacco specialists as well as independent small grocers (Euromonitor International, 2016). The non-store retailers supplying organic food in South Africa include vending, home shopping, internet retailing and direct selling. Organic product lines were launched in Woolworths in 1999 with 10 lines, Pick n Pay in 2000 and both Shoprite Checkers and Spar in 2002. Woolworths has expanded their product lines from 10 to 150 and organic products are available in 60 percent of their stores. There are also several organic food markets in South Africa, the list below shows the top ten organic food markets in the country:

- **Bryanston Organic and Natural Market, Johannesburg, Gauteng**

The Bryanston organic and natural market is a Johannesburg original outdoor market, which provides a haven of calm and a leisurely shopping experience. This market operates bi-weekly (Thursdays and Saturdays) and showcases an astonishing variety of organic fruits and vegetables from local producers and is plentiful in local coffee roasts, homemade preserves and much more.

- **Boeremark Market, Bloemfontein, Free State**

Boeremark is one of the oldest farmers' markets in South Africa located in Bloemfontein. This organic food market was established long before food markets became so popular. It is heldevery Saturday at Bankovs Boulevard and characterised bya peaceful, outdoor market which is full of stalls selling all kinds of organic food and fresh produce, magnificent cheeses and handcrafted treasures that keepconsumersrepurchasing.

- **Greyton Saturday Morning Market, Western Cape**

This organic food market is situated on the picturesque village green of the Western Cape.Greyton market offers a widerangeof organically produce and freshly made delights, from artisan breads to homemade delicacies including cheese, preserves, yogurt and cured meat. This market is affectionately known as organic foodie heaven.

- **Neighbourgoods Market, Braamfontein, Gauteng**

This is the award-winning market that originally started in Cape Town and has become so popular that organisers launched a Johannesburg edition in inner-city Braamfontein. Neighbourgoods Market is dedicated to urban regeneration, which warehouse-style is set out over two floors in an historic building on Juta Street and features an extensive rooftop area with views over Braamfontein. The offerings include artisan coffee and chocolates, fresh oysters on ice, organic wine, diverse African cuisine and impromptu jazz performances.

- **Karkloof Farmers' Market, Howick, KwaZulu-Natal**

This appealing market is located inthe heart of the KwaZulu-Natal midlands. It operates every Saturday morning and is a must visit for anyone looking to source the best produce from local farmers and small businesses. Karkloof Farmers' market offersa wide variety of organic food from the freshest seasonal organic fruit and veggies, to artisan breads, local yogurt, award-winning cheeses and stunning fresh-cut flowers.

- **Outeniqua Farmers' Market, George, Western Cape**

The Outeniqua Farmers' Market is the garden route's top organic foodie market. This market offers an array of locally-grown organic produce including stunning cupcakes, Thai food bursting with flavour to gourmet burgers, homemade ice cream.

- **Earth Fair Food Market, Cape Town**

The city of Cape Town has been at the forefront of South Africa's food market evolution. The city now boasts many of the country's best-loved markets, including the Earth Fair Food Market. This market offers a huge selection of organic food from free-range meats to traditional stone-ground bread.Earth Fair food market is committed to providing convenient and affordable access to ethical and organic food producers and high-quality products, all in a family-friendly, relaxed atmosphere.

- **Oranjezicht City Farm Market, Cape Town**

The Oranjezicht City farm market is a neighbourhood non-profit project celebrating local food, culture and community. This weekly market (held on Saturday mornings) provides a selling-ground for local, small-scale organic fruit and veggie farmers.

- **Tokai Forest Market, Tokai, Cape Town**

Tokai Forest Market offers a wonderful selection of organic produce; stalls filled with gorgeous homemade crafts, clothing and accessories; and family-friendly entertainment including performances by local musicians, horse rides, science demonstrations and arts and crafts workshops. Foodies, fashionistas and families love it there.

- **Slow Food Market, Stellenbosch**

The Slow Food Market opens every Saturday and is characterised by bursting with character and charm, features speciality food and wine producers, food artisans, local farmers, natural and organic merchants, clothing, jewellery, seasonal goods and designer ware. All traders are from Stellenbosch and the surrounding areas.

Despite the fact that organic food markets are growing at a fast pace in South Africa, the question still remains on who the organic food buyers are.

The next section discusses the buyers of organic food in South Africa.

2.5.2 Buyers of Organic Food in South Africa

Eating organic food is steadily becoming a contemporary mainstream trend with growing numbers of consumers choosing the full flavour of food that is produced in harmony with nature. The use of all chemicals such as synthetic fertilisers, pesticides, herbicides, antibiotics and growth hormones is strictly prohibited in organic food production. The perception of organic food as a basket of earthy produce has changed significantly (Thom and Conradie, 2012).Meeting consumer demands for a wide variety of organic food products is a major focus of the Woolworths Good Food Journey. The question always remains, who are the buyers of organic food in South Africa?

South African middle and upper income consumers are keeping pace with these global food trends with many willing to pay a price premium for organic products (King and Thobela, 2014). The perception is that organic food is priced at a level that only the middle to upper income consumers can afford the luxury thereof. There is a reason to believe that organic food buyers are working class consumers. In contradiction to this, it is the experience of at least one retail store where higher-priced, non-organic produce, side by side with the certified equivalent, sold faster than the certified produce (Engel, 2008; Bienabe, Vermeulen and Bramley, 2011). This supports the contention that the consumption of certified produce may be a function of consumer education and awareness, and that these consumers, seeking quality produce, shop at more "upmarket" outlets thereby generating the demand for certified produce. A case can be made that organic food buyers possess a good educational level and have awareness or knowledge of organics. The majority of consumers may be of the "younger" generations, but not exclusively so. None of the supermarket chains who were requested to participate in Engel's (2008) studywere prepared to qualify their consumer profiles. Furthering the education/ awareness experience, consumers with medical conditions, such as cancer, actively seek organic produce irrespective of certification status (Supermarket and Retailer, 2012).

These consumers usually purchase produce directly from producers at farmers' markets, where trust and consistent supply are more significant than the need for certification. It is also apparent that parents of young children are becoming increasingly aware of the health risks associated with non-organic and processed/ refined foods, and consequently seek organically grown food irrespective of the certification status thereof (Van Biljon, 2013). Woolworths maintain that their

consumers prefer organic food because of the taste and because it contributes to the environment (Woolworths Good Food Journey, 2015). It seems reasonable to claim that taste seekers and environmental conscious consumers are the buyers of organic foodstuffs. Spar sells organic products in most of their stores that cater for upper-income groups (Supermarket and Retailer, 2012). Shoprite Checkers has also introduced organic produce to maintain their market share in the upper end of the consumer market (Engel, 2008). From the literature above, it can be deduced that buyers of organic food in South Africa are working class (mostly middle to upper class), consumers with educational background, organic food awareness, environmental conscious consumers, taste seekers and most notably people with medical conditions.

2.5.3 Problems in the Organic Food supply and Demand in South Africa

The notion that the limiting factor in the South African organic sector is supply rather than demand also seems pervasive in other grey literature (Engel, 2008; Erasmus, 2008; Kelly and Metelerkamp, 2015). The term grey literature refers to research that is either unpublished or has been published in non-commercial form (Brodie, 2018). Farmers Weekly (2008) reported that in South Africa the low supply of locally produced organic products is the main restriction for markets. Notably, most recently, the local trade publication Supermarket and Retailer (2012) reported that while supermarkets increasingly seek to feature organic foodstuffs on their shelves, "demand far exceeds the supply." On the other hand, the Pick 'n Pay's (2013) annual report highlights the availability of suitable organic suppliers as a key priority in expanding its organic range. Another limiting factor inhibiting growth of the category is consistency of supply, which Pick 'n Pay ascribed to as the lower yields of organic farming compared to conventional agriculture (Van Biljon, 2013).

Woolworths in 2009 launched their farming for the future standard for their farmers, which attempts to reduce chemical usage and protect biodiversity, but do not completely exclude use of inorganic fertilisers or plant protection (Brodie, 2018). The reasons behind for this decision as opposed to further promotion of organic standards do not seem related to a lack of demand but is rather more concerned that organic agriculture cannot produce enough to feed the whole country (Kelly and Metelerkamp, 2015), that is, it is "not feasible to source and sell only organic produce" (King and Thobela, 2014:163). The reasons why larger producers are not stepping into the demand-supply gap did not come through as a prominent issue in the literature. Naidoo

(2012) cites the higher costs of production for farmers (and hence prices for consumers) as a disadvantage to the growth of organics. The Institute for Natural Resources (2008) report that South African organic producers do not seem to receive the same level of premiums from local retailers as earned internationally (despite consumers paying a fairly high premium).

In terms of supply from smallholders, it should be noted that compatibility issues with retail giants such as Woolworths and Pick ‘n Pay could be resulting in a significant market mismatch situation. In other words, supply of organic food may exist, but not in the right quantity, quality and variety at the right times and at the right price to match current demand. Both smallholder organics as well as Pick ‘n Pay and the Department of Trade and Industry have cited the stringent quality and health and safety requirements of retailers as a major barrier to smallholders wanting to supply retailers (Van Biljon, 2013). This could in turn be driving some producers to abandon expensive organic certification and seek tout simpler and more profitable, marketing channels in the informal sector. The rise in consumers’ demand for organic foods stems from a change in the consumers’ value system which affect their preferences; so-called “emotional” factors, combined with an increase in their disposable income. First, consumers’ motivation to “go-organic” arises from concerns that conventional food is laced with chemicals which are detrimental to ones’ health. Medical studies suggest that certain food allergies are aggravated by eating specific chemicals in food. As consumers become increasingly health conscious, the perception that eating food that is closer to its natural state improves one’s health, physical appearance and longevity gains public sentiment. Based on this belief system, the consumers’ decision to eat organic products is seen as a way to improve one’s health and “control” specific dietary and allergy conditions.

Organic products are sold for a premium because they are undersupplied. Second, consumers’ purchasing decisions are being influenced by the belief that every person in society has a shared responsibility to create a cleaner environment. This has increased the demand for organic goods as they become more affordable. Selling a greater quantity of cheaper goods has increased farmers’ profitability and as a result they could plough their excess profits into improving their function throughout the value-chain. This has allowed farmers to produce better quality at a lower cost and thus their goods could be sold at a lower price without affecting their margins.

The next section discusses the trends, competitive landscape and prospects of organic food in South Africa.

2.5.4 Trends, competitive landscape and prospects of Organic food products in South Africa

2.5.4.1 Trends

Organic packaged food grows by 15% in current value terms to reach sales of R279 million in South Africa in 2015 (Euromonitor International, 2016).Organic packaged food remains niche in South Africa, which is largely owing to the high cost of production, thus pricing the potential product out of contention. In order to be certified as organic, guidelines need to be followed from the soil up, and organic packaged food products only appeal to a small group of consumers who have upperliving standards and are educated about the benefits of organic products, which therefore limit the potential target consumer group (Supermarket and Retailer, 2012).Organic food is very expensive, and while many such consumers favour organic fresh food, organic packaged food is not as widely available or as popular. When and if the economy weakens, many consumers would stop purchasing organic as it is regarded as being a luxury rather than a necessity in the public eye (Kelly and Metelerkamp, 2015). While organic rice achieved slightly higher value growth at 25% in 2015, it was from a significantly smaller base than organic prepared baby food (21%). Organic prepared baby food is the biggest player in organic packaged food in South Africa based on Euromonitor International, 2016).

Organic dairy packaged food achieved 14% value growth in 2015 and accounted for 76% of total organic packaged food sales. Private labels hold by far the biggest share in this category, thanks to the Woolworths private label range of organic dairy products(Euromonitor International, 2016).In March 2012, South Africa's R146 food labelling regulations came into force. The new laws restrict the advertising claims of many products and are supposed to offer consumers protection in terms of being secure in the knowledge of what ingredients a product contains, and what benefits the product has. Many manufacturers and smaller retailers did not make the necessary changes to their food labels due to the high cost of testing products and creating new labels (Organic Monitor, 2016). Organic packaged food tends to be private label and thus is mostly sold through upmarket retailers (Kelly and Metelerkamp, 2015). The category remains expensive and niche in South Africa.

2.5.4.2 Competitive landscape

In South Africa, according to Euromonitor International (2016), private label accounted for 79% of organic packaged food value sales in 2015. This can largely be attributed to Woolworths (a more upmarket South African retail chain). In 2015, Woolworths was the clear leader in organic bakery products, organic dairy and organic confectionery.Pick ‘n Pay has a growing range of organic private label products on its shelves. However, it remained largely insignificant in terms of the total category. It is assumed that this is due to the sheer dominance of the Woolworths organic range as well as the fact that organic food appeals to the upper living standard measures groups who frequent places like Woolworths when choosing their organic food (The Institute for Natural Resources, 2015).Organic food is produced without chemicals or fertilising the soil, which therefore makes the food expensive due to high production costs, as economies of scale cannot easily be achieved.

2.5.4.3 Prospects

Organic food is expected to see increased shelf space over the forecast period (Organic Monitor, 2016). The increase in distribution and possible entry of more private label players should contribute to future growth. An increase in distribution may result in more competitive pricing for the products, which in turn would drive growth as organic food becomes more affordable. Euromonitor International predicts a value of 6% at constant 2015 prices over the forecast period. However, this strong growth is from a small base and the actual organic packaged food category remains negligible in South Africa, with only dairy and baby food having any real presence.Organic food will continue to remain niche over the forecast period (Organic Monitor, 2016). The high prices make this category less attractive, particularly in the light of the economic downturn. Thus, while there is much room for growth, it will remain constrained over the forecast period.

2.6 CONCLUSION

This chapter has discussed green consumption, types of green consumption and the benefits of green consumption. Ithas also provided an overview of organic food consumption, defining organic food, providing benefits both actual and potential. The profiles of organic consumers was also described. The global organic food market was discussed with the focus on European,

Asian, North and Latin America as well as African market. The supply and demandof organic food in South Africa with the emphasis on supplier and buyers of organic food was discussed. The problems in the organic food supply and demand was also outlined. The chapter concludes by outlining the trends, competitive landscape and prospects of organic food in South Africa.

The next chapter provides a literature review on the theories underpinning the study as well as the variables under investigation such as market, socio-psychological and social factors affecting organic food purchase decision, satisfaction and other post-purchase outcomes. Data on the organic market in South Africa is inconsistent, unreliable and conflicting at times. As such it is difficult to establish concrete trends and figures. Overall, it appears that the organic market has increased in Africa and South Africa precisely. The demand is also growing, according to reports from major retailers. It is important, therefore, to look at the factors that affect organic food purchase decisions, satisfaction and other post purchase outcomes such as willingness to pay price premium, word-of-mouth as well as repurchase intention.

CHAPTER 3

THEORIES AND MODELS EXPLAINING HOW MARKET AND SOCIO-PSYCHOLOGICAL FACTORS AFFECT ORGANIC FOOD PURCHASE DECISION

3.1 INTRODUCTION

Chapter two provides a detailed description of green consumption, the benefits and types of green consumption. The review of organic food market in the global context is also discussed and profiles organic food consumers, the demand and supply of organic food and the buyers and suppliers of organic foodin South Africa. It concludes by discussing the trends, competitive landscape and prospects of organic food in South Africa.

This chapter provides a comprehensive review of the theories and models, which suggest the drivers and consequences of organic food purchase decisions. It is divided into five broad areas: The first section discusses the use of the Biophilia hypothesis theory and the theory of planned behaviour by various studies to understand organic food purchase decision. The second section discusses the market factors, such as price, distribution and communication affecting organic food purchase decisions. The third section examines the psychological factors, including perception of product attributes, environmental attitude, behavioural beliefs, perceived value as well as overall image of organic food. The fourth section is dedicated to the discussion of social factors, such as peers and familythat affect organic food purchase decision. Lastly, the chapter discusses the purchase decision process.

3.2 THEORIES AND MODELS EXPLAINING ORGANIC FOOD PURCHASE

3.2.1 Biophilia Hypothesis Theory

The key evolutionary theory referenced within the environmental connectedness perspective is theBiophilia Hypothesis theory (Beery, Jonsson and Elmberg, 2015). Fromm, the German-born American psychoanalyst was the first to use the term *Biophilia in the Anatomy of Human Destructiveness* in 1973 as a description of a productive psychological orientation and "state of being" (Krcmarova, 2009:4). It states that a man choosing progress can find a new unity through the development of all his human forces, which are produced in three orientations. These orientations can be presented separately or together: Biophilia, love for humanity and nature, and independence and freedom. Fromm described Biophilia as "the passionate love of life and of all

that is alive" (Roger, 2015:1). The term was later employed by an American biologist Edward Wilson in 1984 by his work, named *Biophilia*. Wilson (1984) introduced the idea into the scholarly and public discourse and eventually described biophilia as "the innately emotional affiliation of human beings to other living organisms" (p. 157).Wilson (1984) also hypothesises the existence of biophilia, a fundamental, genetically based human need and propensity to affiliate with other living organisms (Kahn, 1997). Altogether, Wilson (1984:157) defines Biophilia Hypothesis as an "innate tendency to focus on life and lifelike processes", meaning that we gain the most satisfaction from processes that mimic the nature of life on many levels, be they cognitive or emotional. Since then, the biophilia hypothesis has been applied to many areas of life including health (White and Heerwagen, 2013).

To understand the deep underpinnings of biophilia and its manifestation in modern cultural and physical landscape, Roger (2015) maintains that people need to go back in time to their ancestral life as mobile hunting and gathering bands. Connection to nature on a daily basis reinforces the values of respect and care for the environment that are necessities for sustainable communities (Beery, Jonsson and Elmberg, 2015). However, not all closeness to nature is equally attractive or beneficial. The biophilia hypothesis and supporting research points out that as a species, people still need to be responsive to nature's forms, processes, and patterns (Heerwagen, 2010). Therefore, the Biophilia hypothesis has evolved to guide functional behaviours associated with finding, using, and enjoying natural resources that have aided survival and reproductive fitness and avoided those that are harmful (Island Press, 2005).For example, the study by Gupta and Dash (2011) has shown that even minimal connection with nature such as looking at it through a window increases productivity and health in the workplace, promotes healing of patients in hospitals, and reduces the frequency of sickness in prisons.

As society becomes estranged from the natural world, it implies serious consequences for an individual wellbeing. Relentless environmental destruction could have a significant impact on our quality of life, not just materially but psychologically and even spiritually (Wilson and Kellert, 1993).Wilson (1995) suggests that people's evolutionary biology predisposes us to be attracted to biological elements that in the past helped us to survive. For instance, a flowering tree indicates that it will soon produce fruit. A positive reaction to flowers, which would signal a potential food source, would be an adaptive benefit (Kellert and Wilson, 1993).It is becoming

increasingly well demonstrated that biophilic elements have real, measurable benefits relative to such human performance metrics as productivity, emotional well-being, stress reduction, learning, and healing. And from an environmental standpoint, biophilic features foster an appreciation of nature, which, in turn, should lead to greater protection of natural areas, eliminate pollution, and maintain a clean environment (Roger, 2015).

The consumption of organic food is regarded as being kind to nature, especially as it is beneficial to both the individual and the environments in terms of health benefits and environmental preservation. Even marketers are increasingly emphasising the importance of treating nature and the environment as a stabilised force in gaining business competitiveness (Alamsyah and Angliawati, 2015). Therefore, the impact of environmental activities on consumers' attitude and satisfaction is of a great interest (Chen, Huang, Peng, Hackley, Tiwsakul and Chou, 2015).Many consumers now realise that their purchase decisions of organic food directly influence the environment. Health also seems to be a widely given reason for consumers' changing habits towards organic food consumption (Chen et al., 2015). Consumers seem to associate happiness and pleasure with the consumption of organic food products (Vega-Zamora, Torres-Ruiz, Murgado-Armenteros and Parras-Rosa, 2014).Following the Biophilia hypothesis,therefore, there is need to understand whether environmental attitudes and the consumption of organic food provide pleasure and satisfaction to organic food buyers.

3.2.2 Theory of Planned Behaviour

The theory of planned behaviour (TPB) is an extension of the theory of reasoned action (TRA), which has been used to explain consumer actions (Delafrooz, Paim and Khatibi, 2009). The behaviour under TRA is predicted by attitude in the form of behavioural beliefs and outcome evaluations as well as subjective norms in the form of normative beliefsand motivation. TRA was specifically designed to predict human behavioursunder complete volitional control(Dennis, Jayawardhena and Papamatthaiou, 2010). That is, this theory assumed that most individual behaviours are derived from the intensity of volitional efforts for the specific decisions/behaviours. According to this theory, individuals are rational and motivation-based in their decision-making processes and make a reasoned choice among various alternatives (Fishbein and Ajzen, 1975). The TRA also considers non-volitional control in explaining an individual's behaviour from subjective norms. Attitude towards behaviour is considered to be an

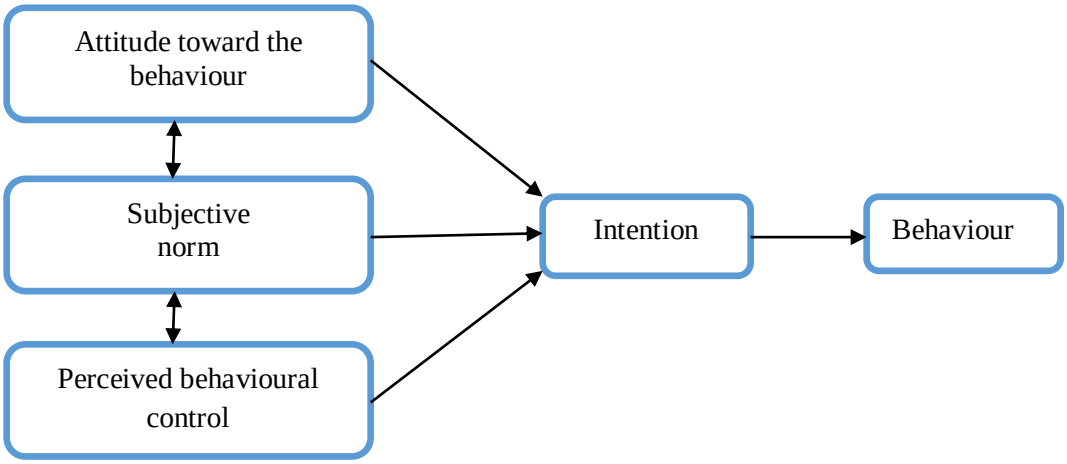
individual's definite or negative assessment of relevant behaviour, and often comprises an individual's salient beliefs towards the perceived results of undertaking the behaviour (Al-Swidi, Behjati and Shahzad, 2012). The subjective norm is a necessary role of normative beliefs that represent an individual's intuitive recognition of the truth, whether important referents approve or disapprove the behaviour (Dennis et al., 2010). Both the attitude, which originates from behavioural beliefs and the subjective norms derived from normative beliefs are proposed to be driving behaviour intention.

The intention in turn drives actual behaviour (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975). Empirically testing this proposal in the green environment, it was found that the consumer's attitude toward organic food is reflected by their perceptions of product attributes, behavioural beliefs, perceived value as well as store overall image (Slevitch et al., 2012; Jakpar et al., 2013), which can also be measured by the degree to which a consumer favourably regards organic food.

While both TRA and TPB state that attitude towards behaviour and subjective norm are the direct determinants of intention to perform behaviour, the TPB expands the TRA through the addition of perceived behavioural control (Ajzen, 1991). This perceived behavioural control is another construct that is intuitive recognition of the truth of ease or difficulty in performing a particular behaviour. Delafrooz, Paim and Khatibi (2011) refer to perceived behavioural control as the individual's perception of the skills' availability, availability of resources, and opportunities that may facilitate the behaviour.

The viewpoint of ease or difficulty narrates or associates as to whether or not an individual thinks that she/he occupies the necessary resources and opportunities essential to undertake behaviour (Myers and Mintu-Wimsatt, 2012).Figure 3.1 demonstrates the theory of planned behaviour.

Figure 2.1: The theory of planned behaviour



Source: Ajzen (1991)

Figure 3.1 suggests that attitudes, subjective norms, and perceptions of behavioural control combine to produce intentions that determine performance of the behaviour (Ajzen and Sheikh, 2013).

3.2.2.1 Criticism of the TPB

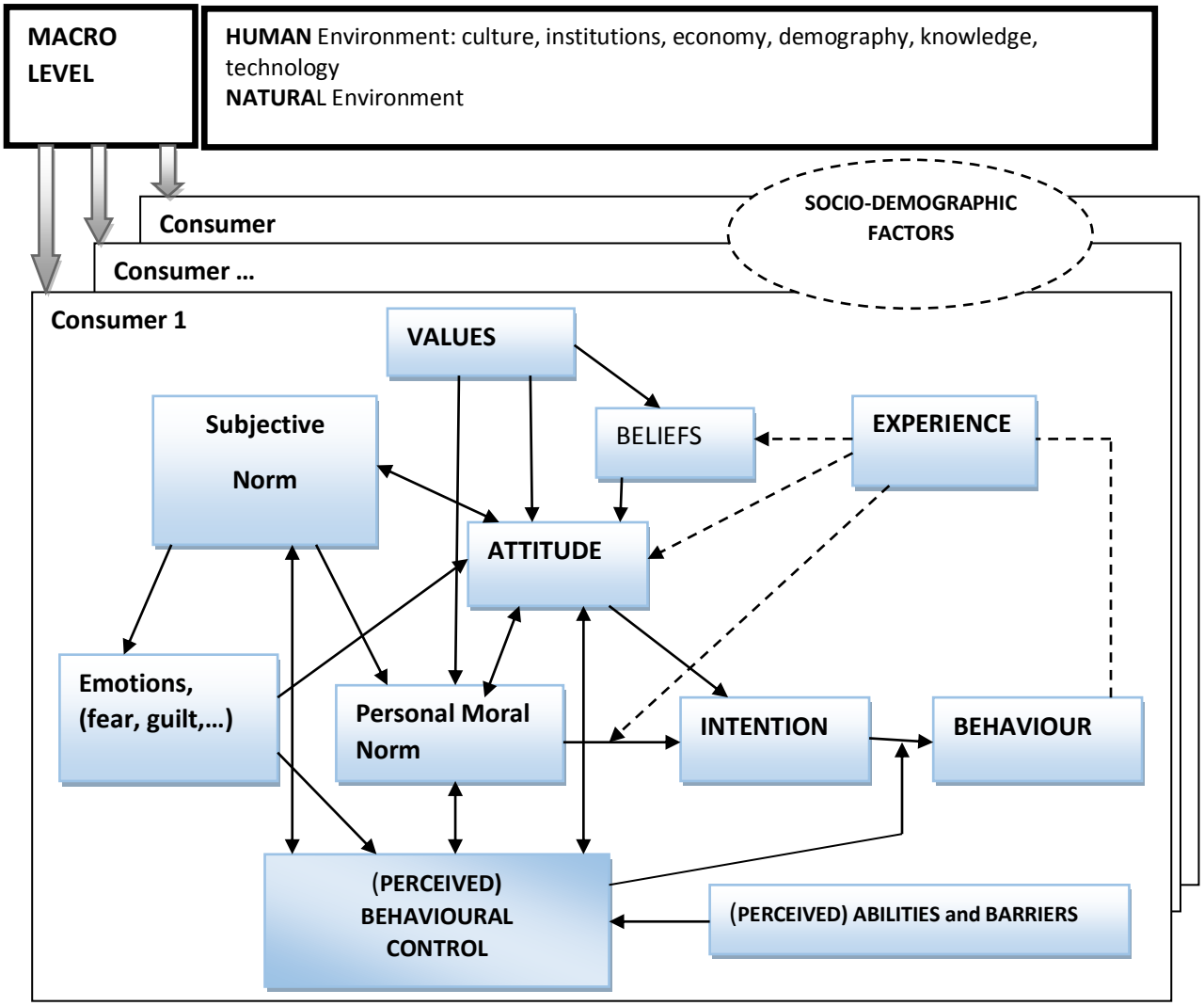
Empirically testing the TPB, several studies have suggested that when dealing with a choice, prediction of intentions and behaviour can be improved if attitudes, norms, and perceived control with respect to the alternative courses of action are taken into account (Gardner and Abraham, 2010); and whether attitudes, subjective norms and perceived behavioural control all explain consumer intentions have resulted in inconsistent findings. This inconsistency might be due to overly broad definitions of the target behaviour (Lee, Cerreto and Lee, 2010).For example, Czerniak, Lumpe, Haney, and Beck (1999) found that subjective norm and perceived behavioural control were the only two statistically significant predictors of behavioural intention. Sugar, Crawley, and Fine (2004) found that the only significant predictor of behavioural intention was attitude toward the behaviour. Salleh and Albion (2004) reported that only attitude and subjective norm were significant predictors of intention. In addition to this inconsistent result, the TPB has been criticised.

One of the criticisms levelled against the TPB is its inability to bridge the attitude-intention-behaviour gap. This has been widely reported in green consumption studies that have employed the TPB (Carrigan, Moraes and Leek, 2011; Bray, Johns and Kilburn 2011; Papaoikonomou, Ryan and Valverde, 2012). This gap is manifested when individuals who report a favourable attitude and intention towards ethical behaviours fail to actually engage in the behaviour (Yeow et al., 2014). Another weakness that has been attributed to the TPB is its assumption that behaviour is planned and intentional. Hogg and Vaughan (2005) specifically noted the failure of the TPB to acknowledge the habitual nature of some behaviour. Also, previous studies have not determined the influence of various situational factors that may confound the relationship between environmental attitudes and behaviour (Rahman and Joshi, 2015). Although the TPB examines the antecedents of consumer intentions in pre-consumption situations, it does not predict whether there would be purchase in future (post-purchase behaviour).The attitude-intention–behaviour models also ignore environmental and many other personal factors, which may impact on consumer purchase behaviour (Carrington, Neville and Whitwell, 2010; Agrawal and Rahman, 2015).

3.2.2.2 Extension of the TPB

In view of the shortcomings of the TPB, researchers such as Chan and Bishop (2013) and Donald, Cooper and Conchie (2014) have extended the TPB by incorporating other factors, such as moral norms and habits, among others, to enhance the predictive power of this theory in terms of pro-environmental behaviour.Aertsens et al. (2009) and Aertsens, Mondelaers, Verbeke, Buysse and Huylenbroeck (2011)on their part linked Schwartz' values theory and the theory of planned behaviour (TPB) to include additional personal factors affecting organic food purchase intention and behaviour. They also introduced external factors, which may affect the organic food purchase process. Their resultant model is presented in Figure 3.2.

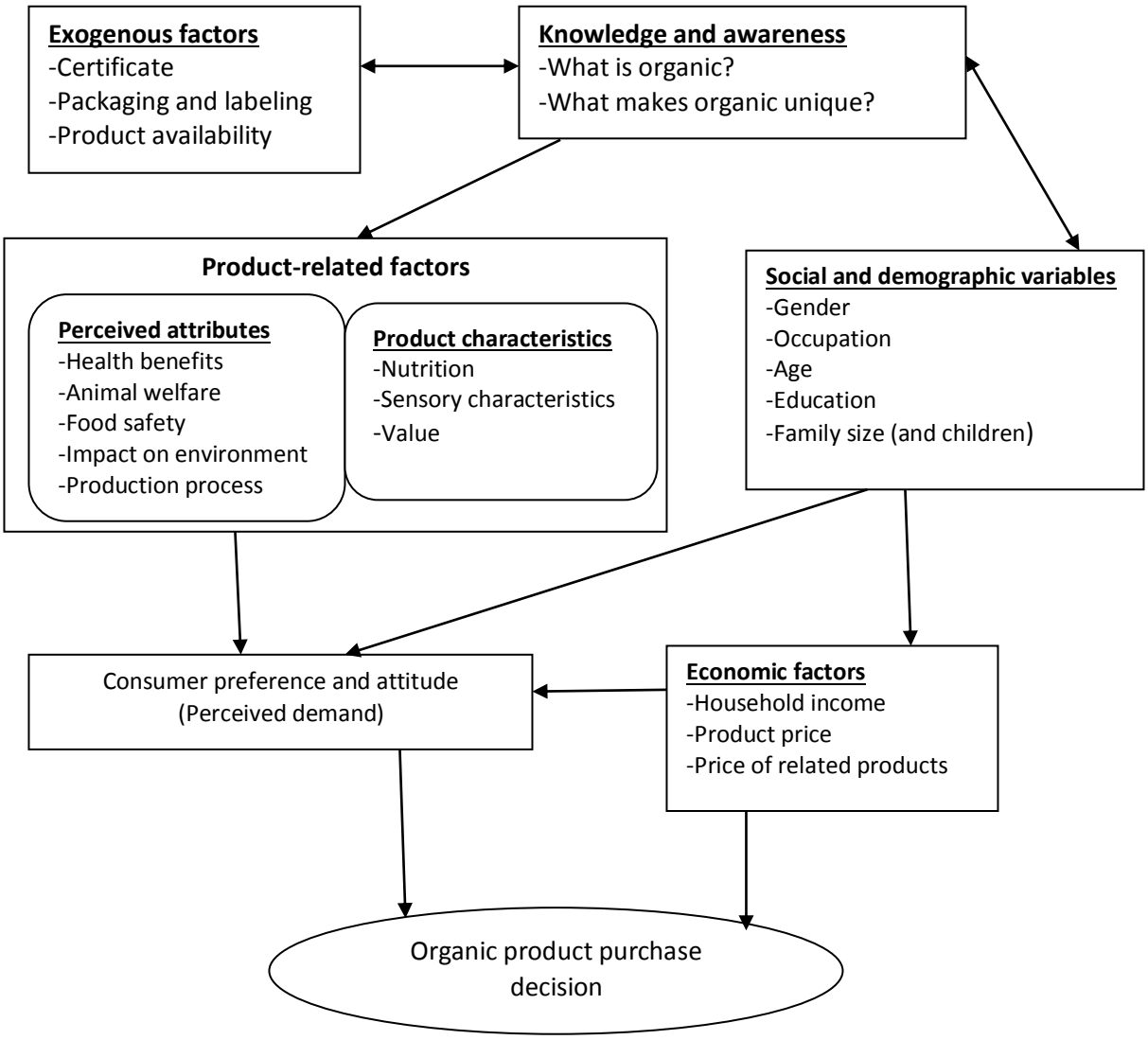
Figure 2.2: Aertsens et al. (2009) Model of personal determinants



Source: Aertsens et al. (2009:1141) adapted TPB-model of organic food purchase behaviour

Figure 3.2 shows that in addition, the attitudes, subjective norms and perceived behavioural control proposed can drive purchase intention in the original TPB model, other personal or psychological factors, such as values, emotions and personal norms can also interplay in the process. For organic food purchase to be possible, however, economic or market factors, such as the product price, communication and distribution has to be considered. Yiridoe et al.'s (2005) model suggests some of these factors as presented in Figure 3.3.

Figure 2.3: Yiridoe et al. (2005) Model of factors affecting organic product purchase decision



Source: Yiridoe et al., (2005:196)

Even though Yiridoe et al.'s (2005) model in Figure 3.3 is not an extension of the TPB, it is suggesting that market factors, such as product availability, awareness (to be created by communication), price and social factors, such as the family, have parts to play in organic food purchase decision. Yiridoe et al., (2005) did not, however, consider post-purchase outcomes, such as customer satisfaction, willingness to spread word-of-mouth and repurchase decision. For green consumption and in the service industry, Han and Kim (2010) and Lee et al. (2010) highlight important post-purchase outcomes, such as customer satisfaction, willingness to pay a price premium, spread word-of-mouth and to repurchase decision, suggested in this study that

can enrich the TPB model. This is possible because Han and Kim (2010) empirically found that service quality, customer satisfaction, overall image and frequency of past behaviour predicted hotel revisit intentions. According to Lee et al. (2010), the overall image of green hotels is a strong driver of revisit intention, willingness to pay a price premium and to also spread word-of-mouth. The findings suggest that these constructs are significant in the pre/post purchase decision-making process. This study, therefore, selected various significant constructs from the TPB and other modified models including values, beliefs, attitudes, social norm, satisfaction and image. This study seeks to discover whether these factors will improve the explanatory power of organic food purchase decisions.

3.3 MARKET FACTORS AFFECTING ORGANIC FOOD PURCHASE DECISION

Market factors are controllable parameters that firms use to influence the consumer buying process (Kotler, 2010; Nguyen, Phan and Vu, 2015). These factors, therefore, should be taken into consideration given the fact that organic food consumption is an emerging new trend. Market factors which can also be referred to as marketing mix are a company's tactical marketing tools which can be used to impact product demand (Delafrouz et al., 2014). These mixes include product, price, distribution and promotion. As a result of the popular environmentalism in the world today, sale of products which are not harmful to the environment are considerably gaining ground and many consumers are inclined to pay extra for them(Chen, 2010; Kordshouli and Bouzanjani, 2012). Organic foods have become common in most grocery stores, either side-by-side with conventional foods or in separate aisles. This was not the case a few decades ago. The organic food market has become ingrained into the conventional food market as the consumer behaviour evolves (Shahidul, 2013).

Studies have been conducted on how market mix elements, such as price strategies (Tung, Shih, Wei and Chen, 2012), product strategies (Jansen and Stevels, 2006; De Ferran and Grunert, 2007), distribution strategies (Tung et al., 2012) and communication strategies (Salgado-Beltrán, Espejel-Blanco and Beltrán-Morales, 2012) are determining consumers' organic food purchase decision. The next sub-section discusses the impact of these marketing mix elements. Product is, however, excluded because it is examined under the psychological factors, in terms of perceived product attributes.

3.3.1 Impact of Price

Karatu and Nik-Mat (2015) and The American Marketing Association (2013) define price as the formal ratio that indicates the amount of money needed to acquire a given quantity of goods or service. It can be operationalised as the monetary value fix on a product in light of a company's policy on pricing strategy that connects to the environment and creates a perfect match between revenue and profit. Scholars conceptualise price as the expression of value that is assigned to that product or service in monetary terms (Salgado-Beltránet al., 2012; Delafrouz et al., 2014; Jakpar et al., 2012).A high price can be perceived favourably when consumers believe that the price of the product is positively related to its quality. Priceaffects both customers and retailers' decision, especially as the market is now very competitive (Salgado-Beltrán et al., 2012).

Retailers use price to position, differentiate and design their marketing and business strategies (Pastiu, 2013). Customers use price as a main point of reference to judge what is offered in the market (Maya, López-López and Munuera, 2011). Völckner and Hofmann (2007) maintain that price plays a complex role in consumers' evaluation of a product andisoften perceived as a quality signal. It is also a main factor in transaction relationship where it is one of the mediums used by marketers to counter the market, either in attracting or in retaining customers or as an element in competing with competitors (Zhen and Mansori, 2012).Marketers also use price as communication medium to transmit product quality and image to customers (Jakpar et al., 2012).

For organic food, price is seen as a cost, representing the amount of money consumers have to sacrifice for a transaction (Marian et al., 2014). Most organic products are offered with higher prices than conventional products. In this way, most consumers pay the higher price only if they find out about product's added value (Delafrouz et al., 2014). Consumers are not assumed to perceive price just as a cost, but also as a cue to product quality (Marian, Chrysochou, Krystallis and Thogersen, 2014). There have been negative perceptions of organic food cost whereby consumers complain of high prices of these products (Marian et al., 2014). D'Souza (2007); Grail Research (2010); Karatu and Nik-Mat (2015) affirmed that consumers have the notion that organic foods are highly priced in comparison to conventional alternatives. Though concern for the environment will induce purchase decision, high price can inhibit the actual purchase because consumers are sometimes price sensitive. Previous studies have found that consumers have

higher quality expectations regarding organic food products compared to conventional counterparts (Scholderer, Nielsen, Bredahl, Claudi-Magnussen and Lindahl, 2004; Marian et al., 2014). The impactof price on organic food purchase has been viewed to be dependent on the type of consumers. For example, Marian et al. (2014) found that although most consumers link high prices of organic products to unfavourable consequences for the household budget, higher prices were mentioned less often as a problem by regular consumers than by occasional ones.. Similarly, Aschemann, Hamm, Naspetti and Zanoli (2007) have found that price becomes less significant when consumers start to buy organic products more regularly, their experience increases and organic food becomes a lifestyle choice.

Van Herpen, Van Nierop and Sloot (2012) are also of the opinion that price has no significant effect on the market share of organic foods. In contrast, Bezawada and Pauwels (2013) found that organic sales increase strongly with lower regular prices, even for the "core" organic segment, that is,consumers with high intrinsic value for organics. The authors suggest that although core organic consumers have much experience with buying and consuming organic products, the greater perceived benefits do not convince them to buy organics at any cost (Van Herpen et al., 2012; Bezawada and Pauwels, 2013). Hence, reducing the regular price of organic products would not only be effective for non-buyers or less experienced organic buyers, but it would also stimulate core buyer purchase. A study by Ngobo (2011) adds further complexity to this picture, finding that price has an inverted U-shape relationship with the purchase of organic food. In other words, up to a certain point higher prices lead to increased demand, but after this point demand decreases with increasing price. This suggests that consumers find a price for organic food acceptable, even appropriate, up to a certain point (Delafrouz et al., 2014). The higher prices of organic foods are viewed by many as being the primary barrier that keeps organic foods from a larger overall share of the food market (Smith, 2010; Marian et al., 2014). What causes higher prices for organic food is a question that needs to be answered.

3.3.1.1 Factors driving the price of organic food

a) According to Organic Farming Research (2014), the organic food price tag reflects more closely the true cost of growing the food; substituting labour and intensive management for chemicals, the health and environmental costs of which are borne by society. Other experts argue that there are various reasons which account for this price difference between conventional and

organic food (Organic Monitor, 2006; European Parliamentary Research Service, 2015). One of the reasons is thatorganic food is produced without chemicals, therefore production costs are typically higher because organic farming is more labour-intensive.

b) Considering that organic farms tend to produce less than conventional farms, demand of organic food overwhelms supply.

c) There is a higher cost of fertiliser for organic crops compared to cheaper sewage sludge and chemical fertilisers used by conventional farmers. Organic farmers eschew inexpensive solutions in order to keep the crops natural and use compost and animal manure instead. These are more expensive to transport.

d) Organic farmers conduct sophisticated crop rotations to keep the soil healthy and to prevent weed growth. Organic farmers after harvesting may use that area to grow 'cover crops' which add nitrogen to the soil to benefit succeeding crops.

e) Post-harvest handling cost, organic produce must be separated from conventional produce after being harvested to avoid cross-contamination. Organic crops are handled and shipped in smaller quantities since organic farms tend to produce less, which results in higher costs.In addition, organic farms are located further from major cities, which consequently increases the shipping cost.

f) Organic certification, acquiring organic certification is more expensive than the usual farming operations, farm facilities and production methods have to comply with certain standards. Also organic farms must pay an annual inspection/certification fee depending on the size of the operation.

g) To cover the cost of higher loss conventional farmers use certain chemicals to reduce the loss of crops. For example, synthetic pesticides repel insects and antibiotics maintain the health of the livestock. Since organic farmers are not applying these chemicals, their losses are higher, which in return costs the farmer more and increases the cost to the consumer.

h) Better living conditions for livestock, higher standards for animal welfare means more costs for organic farms. Organic feed for cattle and other livestock, according to the Food and

Agriculture Organisation of the United Nations (2015), can cost twice as much as conventional feed.

i) Organic food grows more slowly. Not only are organic farms typically smaller than conventional ones, but they also on average take more time to produce crops because they refrain from using chemicals and growth hormones used by conventional farmers.

j) Lastly, on the availability of subsidies,production-oriented government subsidies reduce the overall cost of crops. Katsarova (2015) from the European Parliamentary Research Service stated that in 2012 a mandatory spending on farm subsidies was $7.5 billion while programmes for organic and local foods only received $15 million. This ultimately increases the cost of organic food for consumers. Prices exist not only when comparing organic versus non-organic, but also arise from the venue where the product is sold: farmers markets, grocery stores, or wholesale to restaurants (Aschemann and Aagaard, 2014).

Considering the higher cost factor in the production and supply of organic food, there is the tendency of the cost to be transferred to consumers as higher prices. This may affect the purchase decision of organic food.

3.3.2 Distribution

Organisations benefit from providing greater access and platforms for consumers to acquire their offerings (Okoroafo and Koh, 2009). There should be an effective distribution system for any organisation to convey finished organic food products from manufacturer to consumers (Yeboah et al., 2013). This is so because without distribution the products will not be available at the point of purchase and the marketing mix will break down and consequently fail. The distribution of organic food products is an integral part of the organic supply chain (Ferguson, Weseen and Storey, 2005). Distribution is crucial for the growth of the organic sector (Gottschalk and Leistner, 2013) and serves as a direct link between the producer and the consumer (Canavari, Centonze and Nigro, 2007).Distribution/place comprise the channels, coverage, assortments, location and inventory and also the process of moving finished and semi-finished goods to the end-user (Karatu and Nik-Mat, 2015).

Kotler and Keller (2009) simply describe distribution as making the product available or accessible to consumers. Organic food distribution systems are the mechanisms by which food moves from the producer (such as a farmer) to the customer (Healthier Food Retail Guide, 2015). Although there are many inter-connected elements in organic food distribution systems, the primary components related to healthier food retail are transportation, storage, and marketing. Other facets of distribution related to healthier food retail include processing and packaging. Consumers source organic foods in a variety of ways; grocery stores, retailers, health food stores, farms, organic market and restaurants as outlets for organic foods (Ferguson et al., 2005). Consumers perceive organic food availability as how easily they think the product can be obtained (Olivova, 2011; Zhen and Mansori, 2012). Are organic foods however easily available? What are the consequences of its non-availability?

Kumar (2012) states that the availability of organic food products encompasses the ease with which consumers locate and purchase the product for their use. Besides, the availability of organic food productsis most often in designated channels (i.e. retail outlets, grocery stores, convenient stores, organic food markets, etc.) and adequate information on location can enhance consumers' effort to locate and make purchases or be forced to change outlets or switch to other brands (Karatu and Nik-Mat, 2015). Mass food retailers (hypermarkets, supermarkets, frozen food and discount stores) have played an active role in the expansion of the organic market as distributors.Well-off industrial countries are characterised by abundant availability of products in diverse retail settings, according to Gottschalk and Leistner (2013).

In certain regions of the world, however, organic food purchases have been constrained by non-availability of the product at the point of sales (BoniniandOppenheim, 2008; Karatu and Nik-Mat, 2015).Non-availability of organic food can negatively affect the intention to buy, especially if there was initial product interest (Karatu and Nik-Mat, 2015). Studies have shown that the organic food supply chain is not always available and/or efficient and is regarded as a barrier to thepurchase of organic food (Henryks and Pearson, 2014). Consequently, Vermier and Verbeke (2008) assert that if there was the intention to purchase a product and the consumer discovers that the product is out of stock, he/she becomes discouraged and the behaviour becomes difficult to perform. The inaccessibility of organic food prevents the intention to buy from being translated into actual purchase.

For a solution, there are some recommendations. Karatu and Nik-Mat (2015) suggest that organic food production can be increased by developing a distribution system within the framework of the overall economic system conditioned by the development of market-competition relations. They further recommend that technology should be employed to facilitate physical distribution and the activities of distribution channels members. In order to achieve faster development of organic food supply, producers should select suitable distribution channels to make organic food available to the intended markets and consumers. Peter and Olson (2010) suggest that good site locations and a large number of outlets are important advantages in the organic food market. To be purchased, the organic food must be available for the customers at various outlets of purchase. When organic products are available in retail outlets such as supermarkets, it is possible for customers to have variety of organic products (Organic Trade Association, 2011). Generally, organic food could be purchased from different suppliers, which range from the producers such as organic farms to retailers such as supermarkets and health food shops. The selection of the type of suppliers should depend on buyers' needs and requirements (Giannini, Chen, Paramonov and Wu, 2014).

Frequent access to organic food can also be made possible by selling organic food on the Internet, especially as it is reported that a lot of consumers prefer to buy organic food this way. Findings show that the unavailability barrier is not experienced by consumers who buy online (Hoefkens, Camp, Verbeke, Aertsens, and Mondelaers, 2009). Organic food producers should therefore seek various sales channels to meet consumers' needs.

3.3.3 Communication

Communication is defined as the process by which information is exchanged and understood by two or more people, usually with the intent to motivate or influence behaviour (Yeboah and Atakora, 2013). While Elliott and Polyakova (2014:163) define communication as "an interactive and collaborative process in which the two parties work together to establish a message and reach a mutual understanding of the knowledge contained within." Communication (or perceived organic food communication) construct can be operationalised as the extent and depth of understanding organic food information and certification that consumers receive from various sources.The environmental promotion and advertising can express a relationship between organic food and the environment, and can promote a green lifestyle (Schwentesius, Nelson and

Gómez-Cruz, 2010). Further communication and policy modification is needed to reinforce consumers' confidence in organic food purchase decision (Tung et al., 2012).

Henryks et al. (2013) and Yin et al. (2010) identify two main communication sources which are controlled and uncontrolled. The controlled communications are advertising, newsarticles, information from labels and sales people, and consumer promotions including direct advertising (Kotler, 2011). Uncontrolled communications, on the other hand, refer to sources such as blogs, word-of-mouth, social networking sites, special and independent comments and reviews on organic food, nutrition and well-being (Dahlstrom, 2011). Word-of-mouth, interpersonal contact and peer communication play a relevant role in the consumption of organic food. Specialised shops allow transferring of information through skilled personnel, while this is difficult in large retail shops.

Communication is a critical factor in informing consumers about the benefits of organic foods. If credible and verifiable, communication can help consumers feel they are making the right choice in buying the organic food (Salgado-Beltrán et al., 2012). For organic food suppliers to satisfy and retain their customers in the ever-evolving green consumption environment, communication must be taken seriously in as much as it influences customer demand (Kenneth and Baack, 2007). Advertising, for example, can be an important determinant in the formation of attitude (Teng and Laroche 2007) which could ultimately influence sales (Wang, Hult, Ketchen and Ahmed, 2009; Requena-Silvente and Walker 2007; Kim 2005). Promoting products influences consumer purchase intentions (Okoroafo and Koh, 2009). Chu and Liu (2008) investigated the impact of manager promotion programmes on store performance and found a positive association. End users and experts such as entertainers and athletes have been known to influence purchase decisions (Teng and Laroche, 2007). Positively framed messages are more persuasive than negatively framed ones when coupled with informational evidence (Grewal and Levy, 2010). Conclusively, these studies established a direct linkage between communication activities and consumer purchase decision.

For purchase decision to be possible, Sultan and Pearson (2011:5) observe that, "the focus of communication should be on creating interest and desire amongst consumers." The importance of this is two-fold: first, it is essential that the communication appeals to the values held by organic consumers in the target audience. Second, this communication should aim to develop a

positive perception about organic food and that there should be trust in the communication sources (Sultan et al., 2014).In addition to creating interest, desire and positive perception about organic food, awareness should also be created, because consumers may sometimes not detect the difference between conventional and organic food. Consumers may only know that a product is organic when they are informed (Slevitich et al., 2012).

An effective communication informs consumers about the other three elements (product, price and distribution) of marketing mix. For example, consumers could be informed about the product attributes and consequences, as well as prices and places where the products are available (Peter and Olson, 2010). It has been found that more information about organic food, which increases consumers' organic food knowledge, will positively influence consumers' attitudes toward organic food products (Briz and Ward, 2009). Hence, it is important for marketers to effectively communicate the benefits of organic food in order to positively affect organic food purchase decisions.

3.4 PSYCHOLOGICAL FACTORS AFFECTING ORGANIC FOOD PURCHASE DECISION

Psychological influences on consumer behaviour has been widely evaluated and described in the scientific literature, especially in relation to the selection and purchase of organic food, services or experiences (Smith, Walker and Hamidova, 2012). Common psychological factors reported to be driving product purchase are motivation, perception, attitudes, beliefs and values (Ivan and Penev, 2011; Kotler and Armstrong, 2013). The perception of a product that attributes environmental attitudes, behavioural beliefs, overall image and perceived value have been identified to be the psychological factors affecting purchase decisions and will thus be discussed in the next subsection.

3.4.1 Perceived product attributes

Consumers are spoiled with alternatives to choose from and the decision to pick any of the alternatives is based on individuals' goals and objectives. More so, a comparison between products is a complex phenomenon as a product possesses several attributes for which consumers might have different valuations or perceptions (Costa, Garcia and Ibanez, 2007). Lancaster (1966) introduced a model where the consumer attaches importance to attributes rather

than the product itself. In Lancaster's approach, consumers choose into a panel of characteristics according to their preferences. The theory is based on objective characteristics, which means that the quality level of the product attribute is exogenous and given, for which consumers might differ in terms of willingness to pay the price (Costa, Garcia and Ibanez, 2007). Another model of attributes was proposed by Gwin and Gwin (2003) who posit that consumer choice is based on maximising utility from the product attributes subject to budget constraints. Choice theory suggests that the consumers' decision-making process depends on certain basic product attributes (Rajaguru 3andMatanda, 2007). What then is product attributes?

3.4.1.1 Description of product attributes

First, a product is any tangible and intangible item that satisfies a need (Aaker, 2008: Copan, Copan and Hulbert, 2009).Attributes are descriptive characteristics that characterise a product or service. They are what a consumer thinks about a product or service is or has and what is involved in its purchase or consumption (Keller, 1993; Wang and Tang, 2011). Benefits are the positive outcomes that come from the attributes. For example, people seek products that have attributes that will provide benefits of solving their problems and fulfilling their needs (Aaker, 2008).

Attributes comprise both intrinsic and extrinsic dimensions and are differentiated based on how directly they relate to product or service performance. Intrinsic attributes are product or service-related attributes, which are directly related to product physicality. For consumers, intrinsic attributes are requisite, they vary by product or service category (Peter and Donnelly, 2007). These attributes are distinguished by branded product's essential ingredients and features, which determine the nature and level of product performance (Malasi, 2012).Intrinsic brand attributes refer to measurable and verifiable superiority on some predetermined ideal standard or standards, thus serving as a measure of quality. Wang and Tang (2011) measured intrinsic brand attributes by assessing products in terms of their quality whether they were well made and show good workmanship. They are related to a product's physical composition and service request. Intrinsic brand attributes simplify the consumer choice process (Aaker, 2008).

Extrinsic attributes, namely, non-product related attributes, are defined as external aspects of the product or service that are related to its purchase or consumption (Wang and Tang, 2011). They

are related to a brand's symbolic attributes and may also serve as a measure of product quality. Extrinsic brand attributes satisfy consumers' underlying needs for social approval or self-esteem. They allow consumers to experience positive emotions and to help them communicate to others their values and personal features (Li, 2004; Kotler and Kelly, 2009; Wang and Tang, 2011).

3.4.1.2 Attributes sought from organic products

Organic food products comprise complex bundles of attributes which must be translated into benefits for customers. Consumers therefore buy organic food for the benefits which they provide (Kotler et al., 2009). Previous studies have associated organic food consumption with health consciousness, environmental consciousness, trust of organic food claims and desirability of organic food attributes such as taste, texture, freshness (Voon, Ngui and Agrawal, 2011; Gil and Soder, 2006). For example, when consumers plan to purchase organic food, they have different criteria for their preferences, such as food quality, food taste, health benefits, etc. (Godes and Silva, 2012; Moe and Schweidel, 2012). Bonti-Ankomah and Yiridoe (2006) grouped organic food attributes into general and commodity-specific attributes. General attributes relate to food safety and human health, environmental effects, and farm animal welfare aspects, while commodity-specific attributes include visual appeal, nutritional value, taste, freshness, etc. Certain combinations of product attributes may facilitate alternative uses of the product, which might induce a demand for larger quantities (Pearson and Henryks, 2008).

Aschemann and Aagaard (2014)identified five broad organic food quality attributes, namely, safety, nutrition, value, package, and production process. Although consumers may not adequately differentiate between organic and conventional products with respect to their general attributes, they may recognise the unique taste, visual appeal, or freshness of particular products. However, sensory characteristics that are product taste, visual appeal and freshness alone may not be sufficient in determining whether a product is organic or not(Pearson and Henryks, 2008). Consequently, quality signals, such as product labels, help transform credence characteristics into search attributes, thereby enabling buyers to more clearly assess product quality. A key benefit of the quality attributes of organic food products is in terms of human health (Bonti-Ankomah and Yiridoe, 2006), nutritious as well as safer and healthier (Teng and Wang, 2015).

In terms of environmental concerns, Pavan (2010) characterises organic product based on a few features, including originally grown, recycle/reusable, contain natural ingredients, contain recycled content, do not pollute environment and contain approved chemical.Even though organic food is generally regarded as more nutritious and safer than conventionally-produced food, health-conscious individuals are more likely to consume health enhancing attributes of organic food.Based on the literature from different scholars and academics, organic food product attributes generally match eight dimensions. They are performance, features, conformance, reliability, durability, serviceability, aesthetics as well as customer perceived quality which, according toBonti-Ankomah and Yiridoe (2006), consumers' perception of these attributes can positively affect their purchase decision.

3.4.2 Environmental attitudes

Attitude has been conceptualised differently by different researchers. Palani and Sohrabi (2013) proposed three components of attitudes. They include cognitive component (learn), affective component (feel) and conative component (do). The belief and knowledge held by individuals about a product or about precise attributes of the offering is what cognitive component refers to. It represents the formation of attitudes called learning. An affective component of attitude relates to a person's feelings or emotions towards an object (in this case, environment), whether it is good, bad, pleasant or unpleasant (Lee, 2008). Consumer feelings, sentiments, mood, and emotions about the environment are included in thiscomponent, and there are hundreds of different emotions that humans can experience, any of which could be an affective component of attitude (Wang and Tsai, 2014).

The action component of attitude is constructed when an individual intends to behave in a certain way (Chen, 2009). Observable behaviour is referred to as conative component (Schiffman and Kanuk, 2012). Generally, the more positive the attitude, the stronger the intention to perform a behaviour and vice versa (Aman, Harun and Hussein, 2012).Despite the three dimensions of attitude, this study examines the impact of environmental attitude, which Achchuthan and Velnampy (2016:83) define as "the individual's value judgment of environmental protection which taps the individuals' cognitive assessment of the value of the environmental protection,"In the literature, researchers have identified environmental attitude as an important predictor of the

green products and behaviour (Lee, 2008; Mei, Ling and Piew, 2012; Achchuthan and Velnampy, 2016).

Positive attitude towards a product drives a number of good outcomes. For example, attitude is the most significant predictor of consumers' willingness to pay more for ecologically favourable products (organic food) (Mei, Ling and Hooi, 2012). Attitudes are also better predictors of pro-environmental behaviour than other variables (Anvar and Venter, 2014). Attitudes also inform behaviour (Young et al., 2010). Ajzen's Theory of Planned Behaviour suggests that attitude, derived from consumers' beliefs is a good predictor of purchase intention and behaviour (Baker and Ozaki, 2008).

Chekima, Wafa, Wafa, Igau and Chekima (2015) denote that environmental attitudes are rooted in a person's concept of self and the degree to which an individual perceives himself or herself to be an integral part of the natural environment. Mun (2009) and Chen and Chai (2010) assert that the attitude of the consumer towards environmental protection formed from personal norm, the feeling of moral obligation of consumers, is a power predictor of environmental behaviour. This was also confirmed by Lee (2008) and Rashid(2009 and 2010).This means that the more a person is morally obliged to protect the environment and save the limited natural source on earth, the more positive the attitude will be expressed in behaviours or actions. In other words, the more positive environmental attitude will lead to a stronger intention to perform an environmental behaviour.

For organic food, studies show that it is particularly consumers' attitudes towards the health attributes and the environment which are the most important factors explaining consumers'decision-making processes for organic food (Lea and Worsley, 2005; Tsakiridou, Boutsouki, Zotos and Mattas, 2008, Roitner-Schobesberger, Darnhofer, Somsook and Vogl, 2008; Magistris and Gracia, 2008). Hughner, McDonagh, Prothero, Shultz and Stanton (2007) and Nasir and Karakaya (2014) reviewed previous research and highlight attributes of organic food for which consumers can develop attitudes towards are health, the environment, food safety, animal welfare, desires for supporting the local economy and a healthy lifestyle. For example, it was found that the positive attitude towards environmental protection was what affected organic

food purchase decision (Chen and Chai, 2010; Rashid, 2010; Nasir and Karakaya, 2014; Chekima et al., 2015).

3.4.3 Behavioural beliefs

Fishbein and Ajzen (1975) describe beliefs asthe information that a person possesses about an object, action or event that can be linked to some attribute. Beliefs can be conceptualised as "cognition" (Alamsyah and Angliawati, 2015) and represent an individual's perception (opinion) of the relationship between a given object, action or event and the particular attribute associated with it (Smith, Walker and Hamidova, 2012). Belief formation is a lifelong dynamic process (Du Plessis and Du Rand, 2012) that can be developed by direct observation (descriptive beliefs about products are mainly formed by consumers through their experience with them), by information (informational beliefs are formed by accepting information provided by an outside source such as mass media, relatives, friends, doctors, etc.) and by inference (inferential beliefs are formed by inferential connections through previously acquired experience and knowledge) (Fonti-Furnols and Luis Guerrero, 2012; Smith et al., 2012; Fernqvist and Ekelund, 2014).

Behavioural beliefs derived from experiences or acquired knowledge are personal characteristics that can determine consumer attitudes, buying intentions and preferences (Ivan and Penev, 2011) even though they may be true or false, correct or incorrect (Claret, Guerrero, Ginés, Grau, Hernández, Aguirre, Peleteiro, Fernández-Pato and Rodríguez-Rodríguez, 2014).Behavioural beliefs relate to an individual's subjective assessment that performing some behaviour will result in a specific consequence (Pickett-Baker and Ozaki, 2008).Consumers possess some beliefs about organic food products. Consumers, for example, believe that organic food brings about good health, value, good taste, are environmentally friendly (Zagata, 2012)and has ecological welfare benefits (Magistris and Gracia, 2008; Lee and Goudeau, 2014). One of the main reasons consumers feel that organic foods are healthier is because they perceive them to be grown "naturally" (Aertsens et al., 2011).

The beliefs about organic food can affect attitudes, values, brand image and affect consumer buying behavior (Aertsens et al., 2009; Rani, 2014). Li and Xin (2015) also found that positive behavioural beliefs about organic food characteristics may predict future purchase behaviour.

Suppliers of organic food, therefore, should investigate and consider consumers' various beliefs about organic food.

3.4.4 Perceived value

Perceived value has already been explored and has a positive impact on marketing performance (Akbar, Hassan, Khurshid, Niaz and Rizwan, 2014). It also has an essential factor in maintaining long term customer relationship (Rizwan, Asif, Hussain, Asghar, Hassan and Javeed, 2013). The concept of value was first operationally investigated and defined by Rockeach (1968,1973,1979) as "an organised set of preferential standards that are used in making selections of objections and actions, resolving conflicts, invoking social sanctions, and coping with the needs or claims for social and psychological defences of choices made or proposed" (Kulikovski and Agolli, 2010:11). In other words, value refers to an enduring belief that a specific end state of existence of a specific mode of conduct is preferred to a different-end state or mode of conduct for living one's life (Krystallis 2008).

Kristallis (2008:165), extending Rockeach's definition stated that values can "be seen as the most abstract cognitions and they serve as standards or models for attitudes, beliefs and behaviours." Generally speaking, consumers are value driven (Karatu and Nik-Mat, 2015).Perceived value is defined in terms of four attributes, that is, value is low price; value is whatever a consumer wants in the product; value is quality a consumer gets from the product; and value is what a consumer gets when they give…. (Ha, Nguyen and Gizaw, 2014). These attributes were summarised to describeperceived value as a consumer's overall assessment of the utility of a product based on "what is given" and "what is received" (Kukar, Nancy and Kent, 2012).

The value obtained are subjective or perceived because they differ with each individual consumer (Zeithaml, 1988). The perceived value for organic food is viewed in terms of the quality, benefits and the utility derived from using these food products compared to what is given, such as money and time(Kim, Xu and Gupta, 2012). Perceived value of organic food is also viewed in terms of the total features, benefits and performance in the minds of customers (Lim, Yong and Suryadi, 2014). Perceived value of a set of attributes can lead to positive word-

of-mouth and raise purchase intentions. According to Chang and Chen (2008), if consumers perceive that the value of a product is higher, they are more likely to purchase the product.

Previous studies lay claim that perceived value is crucial in marketing performance because organisations could foster consumer purchase intention via product value (Steenkamp and Geyskens, 2006; Zhuang et al, 2010). Those consumers who are environmentally concerned will engage in purchasing organic products for their environmental benefits (Yaacob and Zakaria, 2011; Delghanan and Bakhshandeh, 2014; Liang and Chaipoopirutana, 2014; Rajput, KauraandKhanna, 2014).A number of studies have shown value to have a major prevalence on driving the decision-making process of consumers towards purchasing organic food (Bellows and Onyano, 2008; Kulikovski and Agolli, 2010).The value that motivates organic food consumption behaviour as explained by the Theory of Consumption Value, Schwartz' values theory and the modified theory of planned behaviour (TPB) attributed to functional, conditional, social, emotional and epistemic utility (Sheth et al., 1991; Verbeke et al., 2011), security, hedonism, stimulation, universalism, benevolence,self-direction, conformity and power (Aertsens et al., 2009: Jahromi, Adibzadeh and Nakhae, 2015).

Despite this broad conceptualisation of Schwartz' values, most empirical studies have traditionally interpreted value more narrowly as the trade-off between quality and price(Delghanan and Bakhshandeh, 2014; Liang and Chaipoopirutana, 2014).In investigating the price dimension, value researchers have come to recognise that the "price" customers pay can extend far beyond money to include investments of time and effort. Theorganic food consumption itself can also be rich in value (Karatu and Nik-Mat, 2015). The value concept in this study is viewed as unidimensional that affect organic food purchase decision.

3.4.5 Overall image

The image of organic food is defined "as a whole range of impressions, conceptions and apprehensions towards organic food brand in the customers' memory which is correlated to the sustainability and eco-friendly concerns" (Chen, 2010:309; Doszhanov and Ahmad, 2015:3).Overall image plays a significant role in predicting a consumer's favorable/unfavorable decisions and has increasingly attracted the attention of academic and industry professionals (Kim, and Ok, 2009; Han and Kim, 2010). Overall image is an important cue during the process

of consumers' purchase decision-making (Wang and Tsai, 2014), and is one of the important elements in the process of brand development (Wajiya, 2013). Researchers across different fields have identified the importance of overall image in customers' decision-making processes (Han and Back, 2009; Han, Hsu and Sheu, 2010).

Overall image consists of physical factors including the physical characteristics of organic food products, such as packaging design, logo, brand name, product functionality and usability (Han et al., 2010), and psychological factors that are shaped by emotions, beliefs, values, and personality, which are considered by consumers to represent organic food product (Wajiya, 2012 and 2013).It is plausible that when a firm proclaims to deliver environmentally friendly products, the existing quality perceptions in the consumer's mind may positively influence or enhance a greener brand image (Doszhanov and Ahmad, 2015). Overall image is assessed from individuals' total perceptions of a product (or service) and its salient attributes generated by processing information from various sources (Han and Kim, 2010). Overall image can be assumed as a set of brand associations that are collected in the minds of consumers (Wajiya, 2013).

Overall image of organic food products seems a good reason for the buying activities, decisions, and behaviours of individuals (Mayer, 2012; Namkung, 2013; Doszhanov and Ahmad, 2015). Several studies have investigated the influence of image (brand image, corporate image, store image, product image etc.) on purchase decision, purchase intention, word-of-mouth, repurchase intention as well as purchase behaviour in the literaturethat focuseson the green hotel sector. For example, Ryu, Han and Kim (2007) in their empirical investigation found that a positive overall image of a hospitality firm increases customer willingness to revisit and spread positive word-of-mouth. Also, Han et al.'s (2009) study on hotel customers' behaviours indicate that one's overall perception of a green hotel (overall image) is positively associated with an individual's intention to buy a green hotel product, to recommend it, and to pay for it.

Ambolau, Kusumawati and Mawardi (2013) consider the relationship between image and purchase decision of students. Musay (2013) maintains that overall image which consists of elements including company image, consumer image, and product image has a dominant effect on purchase decision. Torlak, Ozkara, Tiltay, Cengiz and Dulger (2014) found the positive relationship between image and word of mouth on cell phone brand. Onigbinde and Odunlami (2015) in their findings reveal that brand image has significant influence on consumer buying

decision of beverage products. Sumadhinata's (2012) study found that there is the influence of image with consumer purchasing decisions at Widyatama University. Riaz' (2015) study reveals that overallimage influences consumer buying behaviour. Similarly, Luong, Vo, Ho and Le (2017) found the influence of brand image on buying decision. Image has been found to affect word-of-mouth in the case of local fashion brands among young consumers (Anggraenia and Rachmanitab, 2015).

In the area of green or organic products, Joshia and Rahmanb (2015) pointed out that image is another important factor that influence green purchasing. Moreover, Novianti and Naryo (2015)examined the influence of corporate image, user image, and product image toward purchase decision on MUI Halal food certification, focusing on a Pizza Hut restaurant in Malang. Their findings revealed that all these predictors viewed as overall image are linked with purchase decision of certified food (organic).Overall image plays an important role in enhancing a company's performance because it is an indirect tool which is able to change consumer buying behaviour (Malik, Ghafoor, Iqbal, Ali, Hunbal, Noman and Ahmad, 2013), therefore a positive image of it leads to consumer buying decision. Moreover, Luong et al. (2017) state that consumer buying decision totally depends on overall image, which creates the highest values regarding the company (Chevalier, 2012). Nevertheless, the number of research that measures the effect of overall image on consumer purchase decision is still limited.

Considering these empirical studies, it seems likely that overall image may play an important role in predicting organic food purchase decision when this construct is integrated into the TPB model. This study, therefore, will measure overall image as a predictor of organic food purchase decision as a unidimensional construct rather than elements or dimensions.

3.5 SOCIAL FACTORS AFFECTING ORGANIC FOOD PURCHASE DECION

According to one of the sciences of human psychology, social influence occurs when one's emotions, opinions, or behaviours are affected by others. Wahid, Rahbar and Tan (2012:39) and Lasuin and Ching (2014:2) state that "social influence is a proxy of subjective norm." In other words, social influence has the same meaning with subjective norm. Theory of Planned Behaviour (TPB) explains the factor of subjective norms associated with social pressures to perform or not to perform a specific behaviour (Han et al., 2010). In addition, DeLamater and Myers (2010) state that social influence is the changes of a person's attitude and behaviour

which is influenced by another person's action such as persuading and threatening. Han et al. (2010) also highlight the issue of referents where a consumer would act when thinking whether their referent would approve or disapprove certain behaviour.

According to Lasuin and Ching (2014:3), social influence is "the change in an individual's thoughts, feelings, attitudes or behaviours that results from interaction with another individual or a group." Social influence has been conceptualised in many forms and can be broadly seen in the different phenomenon like compliance influence, identification influence, internalisation influence, conformity influence, minority influence, self-fulfilling prophecy influence, reactance influence, obedience influence and persuasion influence (Mostafa, 2007; Rashotte, 2007; Ling, 2013).The Theory of Consumption Value states that social value entails the quest for identification with a significant social group and the extent to which an individual complies with the expectations of peers through the purchase and consumption of products or services. There are some people that an individual keeps in mind when making a purchase decision (Makgosa and Mohube, 2007). Usually, such people disseminate opinions and other individuals are pressured into following their trend, becoming associated with them and using them as a standard of their purchase decisions (Schiffman and Kanuk, 2012).

Lasuin and Ching (2014) state that social group consists of friends, family, educators, employers, professional colleagues, experts and the media. Meanwhile, Maram and Kongsompong (2007) suggest that social influence consists of friends, family, associates, salespeople and even strangers.Makgosa and Mohube (2007) labelled such people as entertainment figures, sports heroes, political leaders, parents, co-workers, teachers as well as peers. These individuals help to disseminate information to their social circle (Elliot and Polyakova, 2014).Social influence plays an important role in consumers' purchase decision of organic food (Ohman, 2011). Social influences have been found to more likely promote many recycling activities in young consumers (Anvar and Venter, 2014). Products that require more financial and social benefits such as organic food tend to be influenced by family members and peers (Drozdenko, Jensen and Coelho, 2012). This study therefore not only considers the influence of family and peers but views social influence as the change of individual attitudes or behaviours through the influence of these two forces.

3.5.1 Peer influence

Peers, according to Schiffman and Kanuk (2012), are a group of people whose values and attitudes influence an individual's current behaviour. Johnson (2014) defines peer influence as an "external" force by friends, which affect an individual's attitude or behavioral outcome. The concept of peer influence/pressure is of great importance in understanding consumer buying behaviour as these groups make a major and significant impact on purchase decisions (Lorenz, Rauhut, Schweitzer and Helbing, 2011: Yang, 2011). From a consumer behaviour perspective, peer pressures are crucial because they inform and make individuals aware of specific products and brands; provide individuals with opportunities to compare their own thinking with the attitudes and behaviour of the group; and influence individuals to adopt attitudes and behaviour consistent with the norms of the group (Makgosa and Mohube, 2007; Schiffman and Kanuk, 2007).Generally, the social circle of a person comprises of his or her peers, which constitute siblings, friends and acquaintances (Gillani, 2012).

Teenagers and youngsters are usually vulnerable to peer pressure and have a high tendency to make decisions and develop behaviours which positively comply with the peer's expectations (Mokgosa and Mohube, 2007). Peers make an individual aware of a certain product and also infuse their own opinions to the customer while doing so. Consequently, when the customer starts developing his own opinion he develops the one which is consistent with that of the group (Schiffman and Kanuk, 2007; Gillani, 2012). Peers also tend to influence product selection, information processing, attitude formation and shopping behaviour (Chung, Han and Koo, 2013).

Peer influence has been found to have a significant effect on purchase behaviour, which is continually re-enforced by the individual's peer group (Niu, 2013; Johnson, 2015). Peers are more influential and viewed as knowing more about products. When individuals want to be accepted into a peer group, they tend to spend more money while shopping with friends (Huang, Wang and Shi, 2012). Peers also influence teenagers' retailing attitudes and purchase decisions (Mangleburg, Doney and Bristol, 2004).In a study conducted in Botswana, it was found that young consumer behaviours were manipulated by peer pressure to not only fit-in and be accepted but to also copy trends and lifestyles of their peers (Makgosaand Mohube, 2007).

Peers exert three types of influences, namely,informational, value expressive and utilitarian influences (Makgosa and Mohube, 2007; Akar, Yuksel and Bulut, 2015; Chung et al., 2013). Informational influence is perceived as enhancing one's knowledge of the environment and/or ability to cope with an aspect of the environment (Akar et al., 2015). Informational influence also entails observing the behaviour of others or actively searching for information from others with the appropriate expertise (Chung et al., 2013). Informational influence is likely to influence an individual if he or she accepts information from others as evidence about reality and desires to make informed decisions (Mangleburg et al., 2004).

Utilitarian influence is when individuals comply with the preferences or expectations of others to avoid punishments or to achieve rewards (Yang 2011). This occurs when the individual perceives that others have the ability to mediate significant rewards or punishments, he or she believes that his or her behaviour will be known to others and is motivated to obtain the reward or to avoid punishment (Akar et al., 2015). Value expressive influence is concerned with an individual's motive to enhance his/her self-concept (Makgosa and Mohube, 2007). Value expressive influence is likely to influence an individual because of the desire to enhance one's ego. This could also be achieved by associating and disassociating oneself with others (Hui and Buchegger, 2009). Even though utilitarian and value expressive influence are conceptually separated, their measures cannot be separated (Yadav, De Valck, Henning-Thurau, Hoffman and Spann, 2013). Consequently, they have been combined together into a single concept referred to as normative influence.

Normative are subjective norms that form part of the TPB (Chung et al., 2013) and perceived social pressure for performing or not performing behaviour (Ajzen, 1991). Normative influence is defined as the tendency to comply with the positive expectations of others. Informational and normative influences also differ in their determinants (Akar et al., 2015; Hui and Buchegger, 2009). The major determinants of informational influences include message content, source credibility and trustworthiness, whereas characteristics of peer influence such as appearance and social status are the major determinants of normative influence (Lorenz et al., 2011; Yadav et al., 2013). Although peer pressure is conceptualised as comprising informational and normative influence, in this study peer influence will be measured as unidimensional construct affecting organic food purchase decision and is consistent with the latter view.

3.5.2 Family influence

Family can be defined as any group of people closely connected by blood(Khattak and Raza, 2012).The family unit can be classified by two orientations, namely, the family orientation and the family of procreation (Peart, 2013). The former refers to the consumer's parents and siblings and the latter, if applicable, to the consumer's spouse and children (Armstrong and Kotler, 2009; Kotler and Armstrong, 2013). The roles that family members take in decision-making are of interest as different members take different roles and display different behaviour. Roles are influencers, gatekeepers, deciders, buyers, users and disposers (Peter and Olson, 2010). It is evident that one family member cannot carry out all of these roles without influence of other family members (Peart, 2013).Family influence includes spouse, child, elderly parents and siblings.Family influence is regarded as a member of the household being considered as an expert and one whose knowledge is trusted, and parents frequently fulfil this role.Family is an important reference group that influences consumer attitudes (Schiffman & Kanuk, 2014). Du Plessis et al. (2007:261-262) identify the family as one of the environmental influences that could affect consumers' purchase behaviour of green products.

The family unit as a whole is the most important consumer buying organisation in society. Members of the family are the most influential reference group (Peter and Olson, 2010). The family role is important in every culture and society because it is the most important foundation and structure of society (Chaudhary, 2013). Some researchers argue that household is considered the relevant unit of analysis, not the individual consumer (Gengler, 2010; Khattak and Raza, 2012). The family has been identified as the most important decision-making and consumption unit and key research area for understanding of consumer behaviour (O'Malley and Prothero, 2007). It forms an environment of socialisation in which an individual will evolve, shape his/her personality and acquire values (Rani, 2014). From the family, consumers can also develop attitudes and opinions on various subjects such as politics, society, social relations and even desires. Family influence is an "external" force, which affects an individual's attitude or behavioral outcome (Johnson, 2014).

Family members especially parents appear to play an important role in the consumer socialisation of their offspring and are instrumental in teaching them the rational aspects of consumption (Johnson, 2015). Nelson and Jenny (2005) found that a strong organised family

significantly makes more joint buying decisions on vacation (specialty product) than a weak organised family. They also established that a modern family makes significantly more joint purchase decisions on vacation than a traditional family. Nelson and Jenny (2005) proved that a strong unified family significantly makes more joint purchase decision on furniture (shopping product) than a weak unified family. For an organic food viewpoint, Johnson (2014) maintains that family influence plays a crucial role in the purchase decision of organic food products. Similarly, Johnson (2015) found that parents, as part of family, influence college students' purchase behaviour. Familial influence is an "external" force by family members, which affects an individual's attitude or behavioural outcome towards organic food (Johnson, 2015).

3.6 PURCHASE DECISION

Purchase decision is the decision-making process and physical activity that individuals engage in when evaluating, acquiring, using or disposing of goods and services (Khuong and Duyen, 2016). Similarly, Taheri, Mosayeb, Azizi and Mohsen (2013) view purchase decision as behaviours shown by decision-making units in the buying, usage and disposal of goods and services. Suryani (2008) stated that purchase decision tends involve two parties or more. Generally, there are five parties that are involved: initiator, influencer, user, buyer, and decider.This decision can be in the types of products and services consumers buy, the shopping habits, the actual purchasing behaviour, the brands bought and even the chosen retailers, etc. (Rani, 2014). A purchase decision is influenced by various marketing, socio-cultural, psychological and even economic and situational factors. For example,socio-culturally, a consumer can be led by his or her culture, subculture, social class, his membership groups, celebrities and family(Vermier and Verbeke, 2006 and2008). The extent of the influence depends on the type of product.

Purchase decision for organic food,for example, are reportedly influenced by various factors, including motives related to social and environmental responsibility (environmental protection, animal welfare), as well as economic factors and barriers (organic price premium).Factors related to one's well-being (health, taste and quality-related preferences) are concerns for the well-being of family members (Aertsens, Mondelaers, Verbeke, Buysse and Van Huylenbroeck, 2011; Urban, Zverinova and Scasny, 2012) also believe that they affect organic food purchase. It is also reported that trust and communication of organic food (Picket-Baker and Ozaki, 2008), health

benefit, availability and ecological awareness (Paul and Rana, 2012), attitude and behavioural control (Voon et al., 2011), personal characteristics (Vernekar and Wadhwa, 2011), environmental attitudes, self-efficacy, social influence, store image, willingness to pay more, role of a salesperson (Ling, 2013), green awareness of price, brand image, impact of product on environment on the environment and customer attachment (Suki, 2013; Hussain, Khokar and Asad, 2014), family influence (Ishaque and Tufal, 2014), social, economic and demographic factors (Ibok and Etuk, 2014), green marketing mix (price, product, place, promotion) and demographics (age, sex, marital status, educational status) (Delafrouz et al., 2014) are also drivers of organic food purchase decision. Before a decision is made, a consumer has to go through a number of stages. Various models and theories have been provided to delineate the decision-making process. Hoyer and MacInnis (2010:12) explain that "the process of making consumption decisions involves four stages: problem (need) recognition, information search, decisions making (behaviour), and post purchase evaluation." In a model provided by Belch and Belch (2003) as seen in Figure 3.4, Hoyer and MacInnis' (2010) second stage is divided into 'information search' and 'evaluation of alternatives' steps.

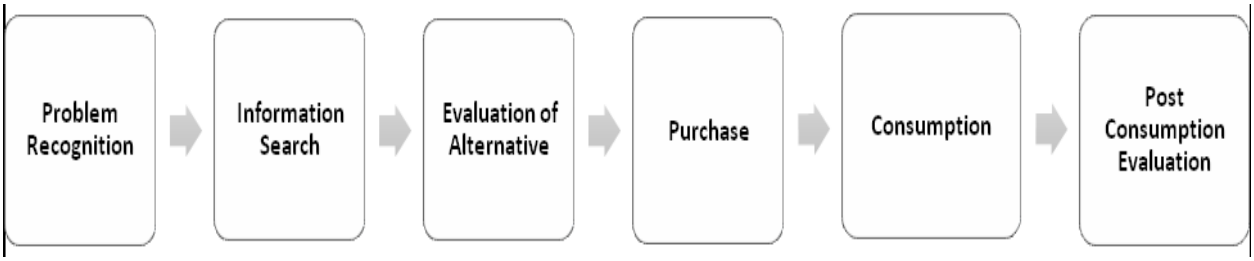
Figure 3.4: Stages in the Consumer Decision-Making Process



Source: Belch and Belch (2003:110)

Blackwell, Miniard and Engel (2006) providea decision-making process with six steps including problem recognition, information search, evaluation of alternatives, purchase, consumption and post purchase evaluation as shown in the Figure 3.4.

Figure 3.5: Consumer decision process model



Source: Blackwell et al. (2006:157)

Blackwell et al. (2006) consider the importance of how a purchased product is consumed, before the post-purchase evaluation takes place. The consumption of the product is what determines satisfaction of the consumer and affect the post-purchasing activities. The post-purchase stage, whereby consumers judge whether product performance meets their expectations is considered as important, since it has a direct consequence on the consumers' future purchase patterns (Evans, Jamal and Foxall, 2009).

An organic food consumer's decision-making process has been examined by various researchers (Belch and Belch, 2003; Shank, 2009; Schwarz, HunterandLaFleur, 2013).Hamzaoui-Essoussi and Zahaf (2008) proposed a conceptual model of decision making with regard to organic food consumers. They have schematically integrated different dimension in their model in order understand decision making process of organic food consumers. Hamzaoui-Essoussi and Zahaf (2009) proposed that organic consumers in their decision-making are motivated by various reasons including environment, health, lifestyles as well as benefits.

The first step is problem recognition or how to recognise organic food. This stage takes place whenever a consumer recognises a significant difference between the desired and the actual state of affairs, which is insufficient magnitude to arouse and activate the decision process or need triggered by internal or external stimuli (Khatib, 2016). Need recognition occurs when consumers realise that they have an unfulfilled need (Hoyer and MacInnis, 2010).Needs might be triggered by internal stimuli but also by external stimuli. What is of interest here is that organic food might trigger needs through labelling and certification displayed on a product. In their study,Hamzaoui-Essoussi and Zahaf (2008) maintain that consumers recognise organic food by labelling and certification of the product.

The second stage is information search, when consumers have a certain interest in a product, they tend to go through several steps before carrying out any action (Khatib, 2016).Information about organic food is captured by six subthemes: source of information, identification, what is organic, motivations to buy, knowledge, and the difference between organic and conventional (Hamzaoui-Essoussi and Zahaf, 2009). If consumers lack information/knowledge with regard to organic food, they will not be able to: identify organic food products; know what organic is; and differentiate between organic and conventional alternatives. Hoyer and MacInnis (2010) claim that once the need recognition stage has passed, consumers want to be exposed to information.Contextual factors (type of retailers, easiness to identify the products, etc.) moderate organic food consumers' behaviours and hence strengthen/weaken their attitudes about fostering organic purchases. More specifically, thosefactors will shape the consumers' decision process in terms of products and choice of stores.

Once an option is identified as the best/suitable solution according to the individual's needs after accumulating sufficient information, they undertake alternative evaluation (Khatib, 2016). Depending on their motives or goals, organic consumers establish criteria for evaluating choice alternatives. For instance, which alternative is the simplest to use or to arrange, or what are other users' experiences, because there is a need to confirm whether or not the information is reliable and to verify that the organic food product will work out as anticipated (Hamzaoui-Essoussi and Mehdi Zahaf, 2009).After the assessment of choice alternatives, consumers formulate beliefs regarding them, which guide their attitudes, intentions, and ultimately their choice among alternatives (Khatib, 2016). Besides, several studies have provided evident findings that the decision-maker will increasingly seek ways to simplify the evaluation process when a decision becomes more complex (Association for Psychological Science, 2008). Organic consumers have vast alternatives on what to buy and where to buy organic food. What to buy include fruits, vegetables, meat, dairy, breads and prepared food, while where to buy include specialty stores, open markets, superstores as well as buying directly from farms(Hamzaoui-Essoussi and Zahaf, 2009).

In the purchase decision, Kotler and Keller (2009) have suggested that during the course of evaluation the consumer eventually forms preferences among the products in the choice desk, although there are two factors which can interfere between the purchase intention and purchase

decision - the attitude of the others and unanticipated situational factors, which may result in a readjustment of the consumer's purchase intention. At this stage, consumers will decide whether they will buy products/services or not.

Post purchase decisionafter consumption, the consumer then experiences certain levels of satisfaction or dissatisfaction and evaluates the wisdom of the choice made in selecting the alternative (organic food). Two potential outcomes are derived from this phase – satisfaction or dissonance. When the consumer experiences dissonance towards thepurchase, the choice is 'devaluated' and the consumer begins the process of searching, obtaining information and evaluating other options for future buying decision, which triggers new behaviour (Khatib, 2016). This is the phase when the consumer decides whether or not to move from merely implementing the organic food to a fulladaption; that is, whether to use the organic products repeatedly, or repurchase, or not, since the organic consumer always has a choiceregarding the products priority, frequency of usage, and new circumstances of new uses. When individuals are comfortable in using a specific organic food produce regularly, they will recommendits use to others as well(Hamzaoui-Essoussi and Zahaf, 2009).

Basically, consumers are driven by several cues and motives to buy organic food products. These motivations are rooted in their knowledge of what organic is, and the influence of the different sources of information, i.e. Internet, family, friends, books, etc. Before making any purchase decision this information is processed and combined to another set of data related to labelling and certification, hence to consumption satisfaction. This leads to three main pre-purchaseconditions including how consumers perceive organic food; how they identify those products; and how they differentiate organic food products with regard to natural products. Once this preliminary search-analyses-choice phase is finished, consumers choose not only what they are going to buy but also where they are going to buy organic food products.

3.7 CONCLUSION

This chapter focuses on explaining the theories and models used to understand consumers' purchase decision of organic food products. The Biophilia theory and various models adapted from the theory of planned behaviour were used to identify the possible market, psychological and social factors affecting organic food purchase decision. The chapter further discusses the

extent to which the identified market, psychological and social factors affect organic food purchase decision. Marketing mix elements such as price, distribution and communication are examined in terms of how they affect organic food purchase in this study. Psychological factors include perception of product attributes, environmental attitude, perceived value, behavioural beliefs as well as overall image of organic food. Even though several social influence factors affect behaviour, peer pressure, family influence, celebrities were specifically examined as factors that can influence organic food purchase. Lastly, this chapter briefly discusses the consumer's decision-making process with reference to organic food purchase decision. The next chapter (chapter four),discusses more elaborately the post-purchase outcomes of organic food consumption, such as satisfaction; repurchase intention, willingness to pay the price premium and word- of-mouth communication.

CHAPTER 4
CONSUMPTION SATISFACTION OF ORGANIC FOOD AND OTHER POST-PURCHASE OUTCOMES

4.1 INTRODUCTION

Chapter three provides a comprehensive review of the theories and models underlying the study.A detailed discussion on the market, psychological and social factors affecting organic purchase decision is also presented. This chapter reports on literature reviewed onthe outcomes of purchase decisions. It examines organic food consumption satisfaction and other post-purchase outcomes, such as repurchase intention, willingness to spread word-of-mouth and pay a price premium. These are considered in terms of how theyhave been explained by various constructs in previous studies. The chapter starts by discussing consumption satisfaction as documented in the extant literature, then explores post-purchase outcomes of organic food purchase decision, whichinclude repurchase intentions, willingness to pay a price premium and the spread of word-of-mouth.

4.2 CONSUMPTION SATISFACTION

4.2.1 Satisfaction Defined

The word satisfaction,which first appeared in English during the thirteenth century derived from the Latin word *satis* (meaning enough) and the Latin ending *faction* (from the Latin *facere* meaning to do/make) (Aigbavboa and Thwala, 2013). Early usage of the word satisfaction focused on it being some sort of release from wrong doing. Later citings of the word emphasise it as a "release from uncertainty" (Oxford Library of Words and Phrases, 1993:1). Modern usage of the word has tended to be much broader, and satisfaction is clearly related to other words such as satisfactory (adequate), satisfy (make pleased or contented) and satiation (enough). The study on satisfaction has grown rapidly from the 1970s, with over 500 studies carried out on the concept (Aigbavboa and Thwala, 2013).Despite the overwhelming quantity of literature surrounding the concept of satisfaction, even in this present time, certain key issues have either gone unresolved or have recently been brought into question. This is with regards to a comprehensive understanding of the constructs that drive satisfaction in a typical consumer environment.There are two principal clarifications of satisfaction within the literature: satisfaction as a process and

satisfaction as an outcome (Yazdanifard and Mercy, 2011). Satisfaction can be viewed as an outcome of a consumption activity or experience; which is referred to as a process. As an outcome, satisfaction is the end state resulting from the consumption experience.As a process it is the perceptual evaluative and psychological process that contributes to satisfaction. This classification is, however, complementary, considering that one often depends on the other(Mwatsika, 2016). Research efforts have been devoted at understanding the cognitive processes involved in satisfaction evaluations.Satisfaction has thus been evaluated in the following domains (Taheri and Akbari, 2016):

- Product satisfaction;
- Satisfaction with the purchase decision experience (consumption satisfaction);
- Satisfaction with the performance attributes;
- Satisfaction with the store or institution; and
- Satisfaction with pre-purchase experience.

Ahmed and Rahman (2015) believe that consumer satisfaction is based on the perceptual and rational feelings raised from estimation during and after consumption. In other words, consumer satisfaction is a complicated human thought that involves cognitive and effective procedures, together with further psychological influences (Yeboah and Atakora, 2013). The disconfirmation paradigm of consumer satisfaction or dissatisfaction proposes that satisfaction or dissatisfaction results from the discrepancy between consumer's pre-purchase expectation and post-purchase evaluation (Chan and Kukar-Kinney, 2011). According to Chinomona and Dubihlela (2014), satisfaction is a post consumption experience which compares perceived quality with expected quality, thus a comparative behaviour between inputs beforehand and after consumption. Satisfaction is an abstract concept where the actual satisfaction varies from individuals and product types, including organic food (Jiradilok, Malisuwan, Madan and Sivaraks, 2014).

4.2.2 Customer Satisfaction in the Organic Food Market

In the green environment, consumer satisfaction with the purchase decision process is essential in evaluating organic food products' performance.Customer satisfaction can be easily defined as the consequence of personal comparison of perceived overall organic food benefits and cost borne by the customer for buying it (Mohaydin, Chand, Aziz, Bashir and Irfan, 2017). When

organic food provides a pleasurable level of fulfilment and emotional response to a consumer it is often referred to as satisfaction. Pleasurable means that fulfilment increases pleasure or reduces displeasure or anxiety. Fulfilment is determined by the customers' expectations about organic food. Consumers over the past decade have consumed organic food because of the perception that eating it is good for health and grows by using organic manure, a natural resource. There are many elements which attract consumer interest in organic food, which is free from pesticides and chemical residues (Kumar, 2017). These elements include food quality, food safety, price satisfaction, availability (shop location), packaging, human health and environmental protection along with sensory attributes such as nutritive value, taste, freshness and appearance influence organic food consumer satisfaction (Shafiea and Rennie, 2012).

In addition, consumers are satisfied because organic food promotes a balance of human, other living organisms and nature. It also promotes no artificial preservatives and best maintain the originality of food. This prevents excess use of harmful ingredients and thereby ensures health,thus providing pleasurable fulfilment to consumers (Kalaiselvi, 2017). Moreover, if the perceived organic product performance does not meet customer expectations, the likely result is dissatisfaction (Ramesh and Divya, 2015).Hsu and Chen (2014) indicates that satisfaction is a general feeling that can be directly evaluated. Consumers compare organic food products with their ideal standards. They might feel satisfied with these products at first but change their opinion after comparing them with their original expectations.Jakpar, Na, Johari and Myint (2012) argue that satisfaction is a result of the interaction of "customer anticipation value" and "cognitive performance."

Based on the literature espoused above, satisfaction with an organic food can be operationalised as the degree of overall pleasure or contentment felt by the customer, resulting from the ability of organic food products to fulfil the consumer's desires, expectations and needs in relation to the purchase of conventional food. The consumer's arousing responses to the usage of organic food is viewed as satisfaction (Ramesh and Divya, 2015). Consumption and satisfaction of organic food purchase decision is an important element to understand in order to satisfy customers about what they need and want. In addition, the formation of satisfaction needs to be understood in order to evaluate customers' purchase decision of organic food. Organic food satisfaction also

includes cognitive and emotionalvaluation of both the food and the providers (Jakpar et al., 2012). Businesses gain when the evaluation is positive or favourable.

4.2.3 Customer Satisfaction as a Business Performance Indicator

Consumer satisfaction is important for businesses as it is one of the indicators of the extent to whichbusiness objectives, vision and mission have been achieved (Yeboah and Atakora, 2013). Arham (2010:85) concurs by stating that satisfaction is arguably the "key towards sustainable business development." This is being proved by business articles from different fields, which show that satisfaction is an arousal to special acknowledgements (Slevitch et al., 2013). Viewing consumer satisfaction as a key performance indicator within a business, elevate the role of customers to that of stakeholders (Adolphson, Eklöf and Parmler, 2012). This is particularly so because prioritising consumer satisfaction is essential to improving business' profitability (Shih, Yu and Tseng, 2015).

Customer satisfaction is a major objective of relationship marketing (Ramayah and Leen, 2013; Mpinganjira, 2014). Satisfaction has become one of the more important key marketing priorities which are the threshold for customer loyalty and retention that ensures their repeat purchasing habit and good word-of-mouth (Han and Rau, 2009; Kim, Cho and Brymer, 2013; Mohaydin et al., 2017). Loyalty means that businesses are capable of making more profits and building a good brand image. Numerous studies have reported the impact of satisfaction on positive outcomes such as customer loyalty, positive word-of-mouth communication and repurchase intentions (Danesh, Nasab and Ling, 2012; Kalaiselvi, 2017; Mohaydin et al., 2017). Customer satisfaction is also important for customer relationship because it reduces customer defection (Mpinganjira, 2014).

It has been found also that satisfaction has a direct economic benefit. Although there is little empirical research on customer satisfaction in the food retailing industry it addresses the impact of satisfaction on business performance. Satisfaction is a critical factor in relationship marketing.Maintaining customer satisfaction has been recognised as one of the fundamental factors to the expansion, survival and growth of the business (Dubihlela and Chauke, 2016) as it leads to an increase in market share and to acquiring repeat and referral business, which, ultimately, results in greater profitability (Donnelly, 2009; Mohaydin et al., 2017). The

satisfaction construct is often used as a marketing benchmark to examine company performance (Chauke and Dhurup, 2017).However, when customers are dissatisfied, the results are unfavourable. It is therefore important to understand customer dissatisfaction in order to maintain a sustainable business, given that the negative effects of customer dissatisfaction in businesses may be even greater than its positive effects (Kim, Kim and Heo, 2017). There are negative consequences when customers or consumers are not satisfied. Unsatisfied consumers are quick to switch from the brand which fails to fulfil basic requirements (Chinomona and Dubihlela, 2014). Furthermore, Morgan (2009) notes that an unhappy customer may relate a bad experience to five (5) to 15 other people, as opposed to the less number of people customers who will inform when satisfied. In addition, customers may express their unhappiness by spreading negative word-of-mouth, switching their business provider, or complaining to the company (Kim et al., 2017).

Other studies have found that 75% of dissatisfied customers make negative comments to their acquaintances whereas only 38% of satisfied customers share their positive experience about the service (Kim, 2011; Kim et al., 2013). Furthermore, giving customers an unpleasant experience also increases the number of complaints about a firm's products. Customer complaints can therefore be considered as a form of critical feedback, which may enable an organic food store or retailer to rectify its problems and shortcomings (Kim et al., 2017). As a result, complaining behaviour is regarded as a powerful reaction that requires a response from a provider, thus necessitating additional cost and effort (Ro and Wong, 2012). The significance of minimising customer dissatisfaction is also a priority for businesses because bringing in a new customer requires more effort than retaining an existing one (Maio and Haddock, 2014).

With the negative outcomes of dissatisfied customers, it is important to measure the level of customer satisfaction

4.2.4 Measurement of Customer Satisfaction

In marketing literature, as well as in information studies, satisfaction has been conceptualised and measured with the guidance of the disconfirmation theory (Yeboah and Atakora, 2013). According to this theory, satisfaction is determined by the discrepancies between perceived performance and cognitive standards such as expectation and desires (Shih et al.,

2015).Consumer expectation is viewedas a customer's pre-trial beliefs, especiallyfororganic food product (Ramesh and Divya, 2015).Perceived performance is defined as a customer's perception of how organic food products fulfil needs, wants, and desires (Yeboah and Atakora, 2013).Disconfirmation is defined as a consumer subjective judgment resulting from comparing their perceptions ofperformance received (Adolphson et al., 2012).Oliver (1980) describes the process by which satisfaction judgment is reached in the expectancy-disconfirmation-framework. The expectancy-disconfirmation indicates that perceived qualitymay increase or decrease directly with expectations. In terms of the purchase decision of organic food,perceived qualitymay either confirm or disconfirmpre-purchase expectations of these products. Satisfaction is positivelyaffected when expectations are perceived and perceived quality are met or exceeded(Jiradilok et al., 2014).

Several studies have emphasised the multi-facet nature of satisfaction and have used multiple item scales to measure customer satisfaction (Lin, Fang and Tu, 2010; Pratminingsih, Lipuringtyas and Rimenta, 2013; Vidhya and Rajkumar, 2013). Customer satisfaction could be measured by measuring it after a certain performance and by measuring satisfaction experienced by customers after purchasing organic food product. Lin et al. (2010:1528) propose the five ways of measuring satisfaction:

- quality and experience of transacting from the store;
- the reliability and accuracy of the product or service advertised;
- the comparative enjoyment of shopping with one particular shop and another;
- the price satisfaction when comparing to the service or product; and
- the prevalent overall feeling of satisfaction.

In the food retail industry, the high relevance of organic food quality and attributes for business success is recognised and examined by periodical studies (Lee and Yun, 2015; Mohaydin et al., 2017). The literature documents different methods of measuring satisfaction. Objective measures look into the real performance procedures (Lee and Yun, 2015). Fishbein and Ajzen (1975) and Mwatsika (2016) outlined three dominant paradigms to the measurement of consumer satisfaction, which can also be applied in the organic food environment. They are the following:

Importance-performance approach(Fishbein and Ajzen, 1975) – Thisproposes that consumption satisfaction with purchase decision, is a composite of (1) the perceived importance

of a range of organic food attributes or benefits, and (2) the customers' beliefs about the degree to which theseorganic foods have each attributed. The importance-performance approach enables the business to analyse whether the product has performed in attributes considered important by the consumer (user). If the product/service performs in attributes considered important by users then the product/service has more chance of satisfying customers (users) and subsequently retaining them for repeat purchases and business growth. Mwatsika (2016) considers this as a very interesting conception of customer satisfaction that has received considerable empirical support in literature.

Expectations-performance disconfirmation- proposed by Parasuraman, Zeithaml and Berry (1985), this approach is based on the proposition that consumers evaluate or measure their satisfaction with a product/service by comparing pre-consumption expectations with post-consumption perceptions (performance) as previously discussed.

Performance only approach - proposed by Cronin and Taylor (1992) for the measurement of customer satisfaction,this approach challenges the previous two approaches by proposing that customer satisfaction is affected by the customers' perceptions of the performance of the product/service only. This approach ignores the importance (Fishbein and Ajzen, 1975) and customers' expectations (Parasuraman et al, 1985) in the measurement of customer satisfaction.

With these approaches, researchers have multi-dimensionally assessed customer satisfaction and have come out with global measures(capturing satisfaction at multiple levels). They have viewed overall satisfaction to be a function ofsatisfaction with multiple experiences or with consumption experiences (Vidhya and Rajkumar, 2013; Jiradilok et al., 2014).

This study, however, measures customers' consumption satisfaction as a one-dimensional construct embodying overall evaluation of organic food after purchase and consumption in line withMpinganjira's (2014) cumulative measurement of customer satisfaction of organic food as an overall image which, as Lee et al. (2010) suggest, could lead to post-purchase outcomes, such as willingness to pay a price premium, spread word-of-mouth, as well as make repurchases. These post-purchase outcomes are discussed in detail in the next section.

4.3 POST-PURCHASE OUTCOMES

Post-purchase behaviour is the final stage in the consumer decision process when the customer assesses whether he is satisfied or dissatisfied with a purchase (Khatib, 2016). The way consumers feel about their purchase decision will significantly influence whether they will recommend the product to friends, willingness to pay more for it, purchase the product again or consider other products within the brand selection. A customer will also be able to influence the purchase decision of others because he or she will likely feel compelled to share his or her feelings about the purchase (Hamzaoui-Essoussi and Zahaf, 2009). In different sectors, the purchase decision has considerable outcomes including satisfaction (Mugge, Schifferstein and Schoormans, 2010; Han and Ryu, 2012); consumer-product attachment (Mugge et al., 2010), loyalty (Han and Kim, 2010), retention and commitment (Han and Ryu, 2012), repurchase intentions, spreading word of mouth commutation as well as willingness to pay more for organic food (Lee et al., 2010).

Several researchers (Taylor, Ishida and Wallace, 2009; Han and Kim, 2010; Han and Ryu, 2012) have used socio-psychological theories and models to explain the post- purchase-decision making process. The theory of repurchase decision-making (TRD) that is more comprehensively explains individuals' post-purchase decision-making processes was developed and tested in Han and Ryu's (2012) study in full-service restaurants. The model of goal-directed behaviour (MGB) involving volitional, non-volitional, emotional, and motivational elements was developed by Han, Hsu and Sheu (2010) in green hotel environment and showed substantially improved predictive capacity over the theory of planned behaviour. However, although this theory is superior to the theory of planned behaviour, its sufficiency in explaining post-purchase decision-making processes is still questionable. For instance, there is growing empirical evidence that customer satisfaction, service quality, switching costs, and image are imperative in explaining a customer's post-purchase decision-making process (Ryu, Han and Kim, 2008; Han and Ryu, 2009). These studies emphasise the significance of such variables in forming post purchase behaviour. Their outcomes are discussed in the next section.

In the consumer-product relationship literature, Schifferstein and Zwartkruis-Pelgrim (2008) defined consumer-product attachment as "the strength of the emotional bond a consumer experiences with a product." Mugge et al. (2010) suggests that product attachment is

conceptually distinct from materialism, involvement, brand attachment, and attitude or affect toward the object. Product attachment is typically concerned with a specific object or product variant (Lee and DeLong, 2017). Product attachment is also conceptually distinct from consumer-brand relationships because the latter implies that consumers develop relationships with brands, rather than with specific objects (Lee and DeLong, 2017). Finally, attachment is not the same as attitude or evaluative affect (Mugge et al., 2010). Although positive attitudes toward the product are often reflected in strong attachment Mugge, Schoormans and Schifferstein (2009) found that stronger attachments were not always associated with positive emotions, nor were negative feelings always associated with weak attachments.

Other post purchase outcomes are related to customer satisfaction and loyalty. Satisfaction has been discussed in this chapter (see section 4.2) asbecomingone of the more important key marketing priorities as a threshold for customer loyalty, which ensures customer repeat purchasing habit and good word-of-mouth (Han and Rau, 2009; Ryu, Lee and Kim, 2012). Effective satisfaction creates a long-term relationship between the sellers and the buyers as well as increasing their loyalty through repeat purchase behaviour and attitudes (Rahman and Jalil, 2014). Customer loyalty is an important requirement of all sorts of sectors or fields (Han, Hsu, Lee and Sheu, 2011).Itprovides the feedback of a successful retail marketing strategy in a competitive market that creates value for money for customers.

Customer loyalty is a situation where a consumer keeps purchasing the product at the same shop for a long time. It is also repurchase behaviour and a commitment to re-patronise the product despite influences and marketing efforts to cause a switching behaviour and keep the relationship with a particular company in future purchases (Chauke and Dhurup, 2017). Chaiyasoonthorn and Suksa-ngiam (2011) investigated the factors affecting customers using modern retail stores in Bangkok and found that customer loyalty is one of the key factors contributing towards repeat purchase behaviour.

While still on post-purchase outcomes, customer retention has been described as a customer's intention to stay with the particular retailer or a product in future (Mahapatra and Kumar, 2017). Khan (2013) asserts that the customer retention phenomenon occurs when a customer purchases a product again and again. Some researchers argued that customer retention is the outcome of relational marketing efforts (Manoj and Sunil, 2011; Jeng and Bailey, 2012). Khan (2013) found

that customer retention in the hotel industry is a very important post purchase outcome. Customer retention is the activity that a selling organisation undertakes in order to reduce customer defections (Njane, 2013).

For green service, Lee et al. (2010) proposes the willingness to pay the price premium, repurchase intention and willingness to spread word-of-mouth as outcomes of organic food purchase decision. These post-purchase outcomes are discussed in the next section.

4.3.1 Willingness to pay a price premium

Price perception and customer willingness to pay have been considered as two important factors in organic food consumption in relation to attitude and behaviour (Anvar and Venter, 2015). Salgado-Beltrán et al. (2012) and Lim et al. (2014) explain that price premiums are the excess pricespaid over and above the fair price that are justifiedby the true value of the organic products, whichmay be indicators of consumers' demand forthat product. Along these lines, the notion of "willingness to pay" was defined by Rodriguez, Lacaze and Lupín (2008:2) as the sum of money representing the difference between consumers' surplus before and after adding or improving afood product attribute.

Several studies around the world suggest that consumers are willing to pay price premiums for organic food products and services (Rodríguezet al., 2008; Dickieson and Arkus, 2009; Kulikovski and Agolli, 2010; Loo, Caputo, Nayga Jr., Meullenet and Ricke, 2011; Salgado-Beltrán, Espejel-Blanco and Beltrán-Morales, 2012; Anvar and Venter, 2015; Dimara, Manganari and Skuras, 2015). For example, Ureña, Bernabéu, and Olmeda (2008) note that organic consumers are willing to pay approximately 10–25% premium on organic foods. In Tanzania, Valerian, Domonko, Mwita and Shirima (2011) found that consumers are motivated to pay for organic products because higher nutritional value and carry low health risk.

In United Arab Emirates, Mohammad, Fathelrahman and Ullah (2015) found that for certified organic food products the consumers were willing to pay a price premium because of both product and consumer related factors. Product related factors relate to price, quality, product type (perishable or non-perishable) and origin of production (Bhatta, Doppler and Bahadur, 2009). Consumer related factors include (Pinna, Del Chiappa and Velcovska 2014). Dimara, Manganari and Skuras' (2015) study conducted in Greece found that consumers are willing to pay the price

premium in order to support environmentally friendly practices for green hotel services. Based on the literature reviewed on willingness to pay the price on organic food in other countries, the question may arise as to whether this is possible in South Africa.

While there is evidence that consumers are willing to pay premium for green practices (Han, Hsu and Lee, 2009; Dimara et al., 2015), some consumers have been found to be reluctant to pay more (Han and Chan, 2013). The willingness to pay a price premium also depends on consumers' heterogeneity with regard to ethical behaviour. The more ethical they are, the more likely the willingness to pay higher prices (Luchs, Naylor, Irwin, and Raghunathan, 2010; White MacDonnell, and Ellard, 2012). Vermeir and Verbeke (2008), Olson (2013) and Dimara et al. (2015) and Vecchio and Annunziata (2015) identified another important issue in green pricing, which is the consumers' attitude-behaviour gap. Positive attitude towards paying higher for organic food does not often translate to actual behaviour of pay for it. Consumers sometimes ratherresort to purchasingconventional alternatives (Vlaeminck and Vranken, 2015).

In some cases, consumers may be willing to pay the higher price, but not beyond 10-20 percent (Bonti-Ankomah and Yiridoe, 2006; Hamzaoui-Essoussi and Zahaf, 2012). This is particularly so because the analysis of specific organic food markets across some countries have shownsubstantially higher actual price mark-ups (Valerian, Domonko, Mwita and Shirima, 2011). Valerian et al. (2012) further reported organic price premiums ranging from 10 percent to as high as 100 percent depending on the country. For instance, organic price premiums for different types of products in Italy ranged from 35-100 percent. If compared, price premiums in Turkey, ranged from 43 percent for pickled vine leaf, to as high as 46 percent for mixed dried fruits (Pouratashi, 2012).

Pouratashi (2012) reviewed two decades of studies onconsumers' willingness to pay a price premium for organic food products in various countries. The findings are the following:

- In the study conducted in Spain, Gil, Gracia and Sanchez (2000) showed that actual organic consumers were willing to pay a premium of 15-25 percent for organic food.
- In Greece, Fotopoulos and Krystallis (2001) showed that organic consumers were expected to pay from 19 to 63 percent for organic food products.

- In Italy, Corsi and Novelli's (2002) found that only organic consumers who could remember the price of some of the conventional organic food such as steak beef and roast beef were willing to pay 52 and 58 percent respectively on top of the regular prices for these types of organic products.
- In Denmark, Millock, Hansen, Wier and Anderson (2002) revealed that 35 percent of the respondents were willing to pay more for any type of organic food products.
- In Italy, Canavari, Nocella and Scarpa (2003) found that 65.8 percent were willing to pay the proposed premium price for organic peaches and apples in their survey.
- Angulo, Gil and Tamburo (2003) found in their study that 72.5 percent of Spanishorganic food consumers were not willing to pay a premium for a labelled food with a traceability certificate despite concerns with the issue of food safety.
- Gifford, Bernard, Toensmeyer and Bacon (2005) conducted a study in the US and found that half of the respondents were offering on average a 20–30% premium.
- In Nepal (South Asia), Aryal, Chaudhary, Pandit and Sharma (2009) revealed that all respondents in Kathmandu valley were willing to pay price premium although the level of acceptability varied considerably. A total of 58 percent of them were willing to pay 6-20 percent price premium whereas 13 percent were willing to pay up to 50% price premium with an average price premium of about 30 percent.
- Asadi, Akbari, Sharifazadeh and Hashemi (2009) revealed that the majority of respondents were not willing to pay a price premium higher than 20 percent in Iran.

Based on these findings, it seems reasonable to claim that the premiums that organic food consumers are willing to pay vary from one country to another and based on products. This difference can be explained by many factors including consumers' knowledge, awareness (communication) consumption satisfaction and other related factors about organic products. Rodriguez et al. (2008) indicate that efforts to develop a willingness to pay a price premium model for an attribute change are found in several works, including Halbrendt, Sterling, Snider and Santoro (1995) and Van Ravenswaay and Wohl (1995).These models are based on the Lancaster Demand Theory in which consumers are hypothesised to derive utility not directly from products but from a collection of characteristics or attributes that organic food possesses. These characteristics determine consumers' willingness to pay a price premium.

4.3.1.1 Determinants of willingness to pay price premium for Organic Food

Consumers' willingness to pay higher for organic food is for various reasons. Considering the severity of harm caused by ecological issues to the environment, they are willing to pay higher price for certain green products including organic food that mitigate the harm caused (Anvar and Venter, 2015). Other reasons include environmental friendliness, health, and food quality and safety (Lim, Yong and Suryadi, 2014). Rodriguez et al. (2007) also found that consumers are willing to pay higher prices for organic food because of greater utility level (i.e., value) and reduced health risk and environmental degradation.

In developed markets for organic agriculture, most studies conducted have tried to establish connections between the willingness to pay for organic food products and a particular consumers' lifestyle (Rodriguez, Lupín and Lacaze, 2006). Consumers' segmentation based on those variables has resulted in several profiles of potential organic consumers. Empirical findings carried out in countries with a significant level of organic food consumption demonstrate that the main reason why consumers are willing to pay the price premium for these products is health care, healthy eating lifestyle, disease prevention and to decrease agriculture impact on the environment (Goldberg and Roosen, 2005; Pouratashi, 2012; Gumber and Rana, 2017).In addition, it is also reported that factors, such as the country, organic product category, and socio-demographic factors (gender, age, income, and education) influence consumers' willingness to pay a price premium (Yiridoe, Bonti-Ankomah and Martin, 2005; Bonti-Ankomah and Yiridoe, 2006; Ureña et al., 2008; Gumber and Rana, 2017). Effective factors influencing consumers' willingness to pay a price premium are summarised below:

- Krissoff (1998) reported that consumers' perception of the safety of organic products affected consumers to pay the price premium. They perceive that these products are safer, healthier and more environmentally friendly than conventionally products.
- In the United Kingdom, product characteristics such as nutritive value, freshness, taste, and food safety influence consumer' willingness to pay the price premium as reported by Makatouni (2002).
- Among the factors that affect willingness to pay for organic foods, Angulo et al. (2003) identified factors such as consumers' use of food labels, experience with the product as well as prices consumers actually pay.

- Krystallis and Chryssohoidis (2005) postulated that consumers were willing to pay more for organic food because they perceived these products to be having higher quality and are safer foods that they could trust more than their conventional alternatives.
- Bonti-Ankomah and Yiridoe (2006) and Owusu and Anifori (2013) reported issues of food safety, taste and nutritive value as factors driving consumers' willingness to pay more for organics products.
- In the Argentinean domestic market, many consumers are willing to pay higher prices for healthy products, i.e. organics because they increase their utility level by reducing perceived health risks (Rodriguez et al., 2008).
- Haghjou, Hayati, Pishbahar, Mohammadrezaei and Dashti (2013) reported that factors like the consumer's concerns about food safety, perception of conventional food's health risk like agrochemicals as well as consumers' friendly attitude toward the environment and their comprehension of these products as trustful food had positive effect on willingness to pay a price premium.

4.3.2 Word-of-mouth

Word-of-mouth (WOM) has been defined as an oral, person to person communication between a receiver and a communicator whom the receiver perceives as non-commercial, concerning a brand, a product or a service (Allsop, Bassett and Hoskins, 2007; Luong, Vo and Le, 2017). Anggraeni and Rachmanita (2015:444) define word of mouth as the process that allows consumer to share information and opinions about the product, brand or service. Furthermore, Taghizadeh, Taghipourian and Khazaei (2013) define WOM as an informal communication regarding a product, brand and services that is not commercial in nature. It is possible for consumers to promote the products that they feel compatible with. Those kinds of customers may promote products and brand by giving away the product, doing some kind of voluntary activities related to the brand as well as spreading positive word of mouth (Anggraeni and Rachmanita, 2015).

WOM is seen as a powerful persuasive force, particularly in the diffusion of information about new products (Dean and Lang, 2008). These messages provide the experiences of the previous buyers and affect other consumer buying decisions directly (Luong et al., 2017). Moreover, those effects may be positive or negative; while satisfied consumers are likely to continue buying the

product and share reviews of good product with the others; dissatisfied consumers tend to remember only the defects of product and spread the reviews of those ones (Park, Lee and Han, 2007). Word-of-Mouth is an important component of a complex and dynamic market place environment (Allsop, Bassett and Hoskins, 2007). It is especially important for providers whose offerings are largely experience or credence based (Anggraeni and Rachmanita, 2015). For this study, word-of-mouth communication is defined as a consumer to consumer informal communication of positive and negative information about organic food products they have purchase and consumed.

In organic food environment, customers rely heavily on the advice and suggestions from others who have used or experienced the products. Furthermore, consumers often trust each other more than they trust communication from retailers, markets, farms or stores, thus highlighting the importance of word-of-mouth (Ng et al., 2011). According to Jan, Abdullah and Shafiq (2013), word-of-mouth is one of the most influential decision-making factors in the service purchase decision that helps to accelerate the consumer adoption cycle, increase acceptance or rejection speed, and shows purchase intentions. It has been proven that it is an effective and powerful marketing medium for consumers from the initial stage of information generation to the selection of products and finally to the post-purchase stage (Lee, Mullen and Fraedrich, 2011). In addition to the decision-making stage identified by other authors, Shirsavar, Gilaninia and Almani, (2012) found the importance of word of mouth communication in information search stage. In fact, Yang, Zhang and Zuo (2009) stated that it is the only marketing tool seeping from one customer to another and is very low-cost.

Specifically, Nguyen and Romaniuk (2014) found positive word-of-mouth to be seven times more effective than newspaper and magazine advertising, four times more effective than personal selling and twice as effective as radio advertising in influencing consumers to switch brands. In fact, word-of-mouth has been shown to be more powerful than printed information primarily because its information is considered to be more credible. Another reason for the power of word-of-mouth marketing is that it is always relevant and timely, is driven by customer needs and it grows exponentially. For example, one tells a story to five people; they may each tell it to five more, who may also tell it to five more after that (Cengiz and Yayla, 2007). Word-of-mouth can be described in terms of direction, valence and volume. Its direction can be input

into the decision-making process, or output of the purchase process. Its valence can be positive or negative. Since 90 percent of the advertising is viewed by consumers as non-credible while 90 percent of word-of-mouth as credible, this situation has enhanced the effectiveness of word of mouth (Shirsavar et al. 2012).

Word-of-mouth is usually spread because the message senders wish to share their positive and negative experiences to help facilitating others' decision-making processes or to decrease his or her own doubts regarding their own behaviours (De Valck, Van Bruggen and Wierenga, 2009). Considering Anggraeni and Rachmanita's (2015) suggestion that customer satisfaction is an important determinant of positive word-of-mouth (Liang and Wang, 2007), it is regarded in this study as an outcome of consumption satisfaction of organic food.

4.3.3 Repurchase intentions

The concept of repurchase intention was adopted and modified from a social psychology and marketing perspective. Both the Social Exchange Theory (Thibaut and Kelley, 1959) and Investment Model of Commitment (Rusbult, 1980) explains repurchase intention in a social psychology perspective as intention to continue, or to stay in a relationship referred to as relationship maintenance. Ha, Janda and Muthaly (2010) are of the view that repurchase intentions show the existing customer's self-judgment prospective move to engage in rebuying the same product or from the previous service provider. Taheri and Akbir (2016) deduce that repurchase intention indicates customers' long-term relationship with an organisation and theiraim for next purchase move with the same company. Similarly, Upamannyu, Gulati, Chack and Kaur (2015) refer to repurchase intentionas the probability or, chance of using the previous service provider again in the future.Lam, Lau and Cheung (2016) explain repurchase intent as a consumer's behavioural intention that indicates the tendency to stay, continue or, leave the service from a current supplier. Customer's intention to repurchase products has been studied as a manifested form of loyalty (Khan, Liang and Shahzad, 2015).

Very few studies have been conducted on the concept of repurchase intentions directed towards organic food. For this reason and from an organic food stand point, repurchase intention can be defined as an individual's judgment about buying organic food products again, taking into

account his or her current situation and likely circumstances. Companies benefits from consumers' repurchase intention, as discussed in the following sub-section.

4.3.3.1 Significance of repurchase intention to companies

The phenomenon of repeat purchase intentions is of significant interest to marketers and retailers (Mpinganjira 2014). Mosavi and Ghaedi (2012), as well as Mpinganjira (2014)highlight that repurchase intentions have a diagnostic value as it helps management know whether customers will switch to competitors or not. Repurchase intention with reference to intended behaviour, can have positive or negative intention to repeat purchase (Noth, Jaroenwanit and Brown, 2015). Two kinds of positive repurchase intent are: intent to re-buy and commitment to assume positive word-of-mouth and recommendation. Repurchase intention is a key defensive marketing goal that decides business success. Companies are relying more on defensive strategies as cost of attracting a prospective customer is becoming more expensive (Upamannyu et al., 2015). They are focusing more on existing customers to persuade them to make a repurchase instead of opting for an offensive marketing strategy (Taheri and Akbir, 2016) that tries to acquire new customers and increase the market share.

Marketing managers rely on repurchase intentions to predict sales and increase profits in a variety of marketing activities. They also use it to forecast demand for existing products(Pérez, Sánchez, Abad, Carrillo and Fernández, 2007). Most importantly, repurchase intentions are the most widely used indicator of customer satisfaction, trust and loyalty to firms.

4.3.3.2 Determinants of repurchase intention

Several studies have concentrated on determining the basic antecedents of repurchase intention (Mosavi and Ghaedi 2012; Rahman, Mohamad, Muniem, Fattah and Aziz, 2014). Other studies have considered the predictive power of repurchase intention for subsequent repurchase behaviour (Mpinganjira 2014). Relying on the stochastic and deterministic approaches to customer retention analysis, it is viewed as a key behavioural outcome for relationship marketing success (Rahman et al., 2014). Following the Expectancy Confirmation Theory (ECT) model as described by Oliver (1980), it is posited that confirmation and satisfaction are the primary determinants of the intention to repurchase. According to Noth, Jaroenwanit and Brown (2015), it is switching barriers, which directly affect repurchase intention. This suggests that if the barrier

to switch back to conventional food is low, consumers can easily switch back to it if they perceive that organic food benefits are below theirexpectations. Customers' repurchase intention also depends on the value obtained in their previous transactions, such as appropriate performance criteria (benefits), competition, and cost considerations (Lam, Lau and Cheung, 2016).

It is expected that customers will increase repurchase intention when they feel satisfied (Liang, 2012), while their post purchase behaviourof satisfaction/dissatisfaction reflects mostly on negative behaviour such as complaints, negative word-of-mouth and brand switching (Noth et al., 2015). Some customers,however,have been found to repurchase a product even when they are dissatisfied. This study focuses on the extent to which customers' satisfaction with organic food consumption affect their repurchase intention.

4.4. CONCLUSION

The main purpose of this chapter is to comprehensively review literature on consumer satisfaction with purchase decision of organic food in terms of its origin, definition and significance. The various definitions of consumer satisfaction provided by scholars revolve around the following similar areas: outcome of a consumption activity, pleasure emanating from consumption experience, and release from uncertainty. The chapter also provided areas where satisfaction is evaluated, which include product satisfaction, satisfaction with the purchase decision experience, satisfaction with the performance attribute, satisfaction with the store or institution, and satisfaction with pre-purchase experience.

This chapter also sheds light on some of the post purchase outcomes, including willingness to pay the price premium, repurchase intention as well as word-of-mouth communication. The findings on willingness to pay the price premium from the past studies are presented in order to understand the value of the factors contributing or affecting consumers' willingness to pay more for organic food. Word-of-mouth communication was reviewed in order to understand the impact of oral and informal communication among customers in promoting (positive or negative) organic food. Lastly, repurchase intention is also discussed. The next chapter presents the conceptual model of the study in terms of the relationships proposed between the constructs under study.

CHAPTER 5
REVIEWING THEORIES AND MODELS EXPLAINING ORGANIC FOOD PURCHASE DECISIONFOR CONCEPTUAL MODEL AND HYPOTHESES DEVELOPMENT

5.1 INTRODUCTION

The preceding chapter delineates the importance of consumer satisfaction in predicting future behavioural intention. It also provides comprehensive literature review on post purchase outcome such as willingness to pay a price premium for organic food, spreading word-of-mouth as well as repurchase intentions. Factors that drive the purchase decision in the first place, especially for organic products are not known. Saleki and Seyedsaleki (2012) and Sawitri, Hadiyanto and Hadi (2014) suggest that theories and models can guide social marketers to identify marketing, psychological (attitudinal), normative, environmental or other social factors, or a mixture of these driving pro-environmental behaviours. This chapter reviews theories and models explaining marketing, psychological and social factors affecting organic food purchase decision and pro-environmental behaviours.

The transdisciplinary nature of green consumption requires a broad exploration of market,psychological, social and consumer behaviour disciplines to unveil the overarching factors influencing purchase decisions of organic food. The relationships between the factors will be used to develop a conceptual model which outlines how the different factors relate to each other in influencing organic food purchase decision and other post purchase outcomes including satisfaction, willingness to pay the price, word-of-mouth as well as repurchase intention.The chapter starts by discussing the implications of behavioural theories and models in the green consumptionplanning process. It then explores the predominant factors of organic food purchase decisions as documented in the extant literature. Based on this review, the chapter ends by presenting a conceptual model and hypotheses of this study.

5.2 THE IMPORTANCE OF BEHAVIOURAL THEORIES IN EXPLAINING PRO-ENVIRONMENTAL BEHAVIOUR

Pro-environmental behavioural change has become a central of not only environmental policy but also applied environmental psychology owing to growing insight into the harmful impact of

the lifestyles practised in modern societies on the environment(Sawitria, Hadiyanto and Hadi, 2014). It is notable that pro-environmental behaviors differ from general purchase-related consumer behaviours. General purchase behaviour is driven by an assessment of its benefits and costs that are of immediate relevance solely to the individual consumer performing the behaviour (Kaufmann, Panni and Orphanidou, 2012). By contrast, environmentally conscious behaviour is unlikely to deliver instant, personal gain or gratification but rather a future-oriented outcome (e.g. cleanerenvironment) that often benefits society as a whole, including the undertaker of the behaviour (Kim and Choi, 2005).

Pro-environmental behaviourbenefits individuals as well asthe environment compared to the alternative behaviour (Eide, 2013). For example, driving a hybrid car over a normal car is fuel efficient for the owner and protects the environment. Purchasing organic food over conventional food products is healthier to the individual and also the environment. While the benefits abound, the reasons behind this behaviour is not always known. Differenttheories have been utilised by researchers to understand the drivers of these behaviours. These theories in many studies had been carried out in different circumstances, for instance, the use of cars with low carbon emission (Lane and Potter, 2007), textile use and disposal (Morgan and Birtwistle, 2009), conserving energy (Gupta and Ogden, 2009), psychological factors affecting consumer behaviour (Vainikka, 2015), and organic food purchase (Saleki and Seyedsaleki, 2012).

The process of unveiling the motivators and barriers of behaviour is more effective when guided by behaviour theories and models. A holistic comprehension of the motivators and barriers requires a theoretical framework(Sawitria, Hadiyanto, and Hadi, 2014). A theory presents a systematic way of understanding events, behaviours and/or situations (Morris et al., 2012). A theory is a set of interrelated concepts, definitions, and propositions that explains or predicts events or situations by specifying relations among variables. A theory is defined as "interrelated sets of concepts and propositions, organised into a deductive system to explain relationships about certain aspects of the world" (Hutchison, 2003:12; Robbins, Chatterjee and Canda, 2005:21; Donovan, 2011:15). A theory, in other words, is a way of learning from previous work (Hastings, 2007:20). Lewin's (1951:169) legendary statement puts it this way: "there is nothing as practical as a good theory." He makes the point that theories are the backbone of behaviour research. Theories and models help explain behaviour as well as suggest how to develop more

effective ways to influence and change behaviour.Bandura (1986) postulates that theories can guide the search to understand why people do or do not practise health promoting behaviours; help identify what information is needed to design an effective intervention strategy; and provide insight into how to design a programmethat is successful. Various theoretical models of pro-environmental behaviour may reflect the same general ideas. Each theory employs a unique vocabulary to articulate the specific factors considered to be important (Defra, 2008).

Social science theories are better understood as models that work in a limited range of settings rather than laws of science which hold and apply universally. Thus, social science theories should be tested. Testing theories ongreen consumption behaviour, Donovan (2011:15) contends, pinpoints relevant determinants shaping behaviour, and ultimately provide direction for tailored interventions that concentrate on the identified and appropriate influencing factors. Koenig-Lewis, Palmer, Dermody and Urbye's (2014) and Muposhi and Dhurup (2016) concur the use of theory to understand sustainableconsumption lifestyles. The next section reviews theory-based studies that examines drivers of organic food purchase decision.

5.3 WIDELY-USED THEORY-BASED STUDIES ON ORGANIC FOOD PURCHASE DECISION

Organic food is considered as part of a wide range of pro-environmental behaviours, which Saleki and Seyedsaleki (2012:101) define as "food guaranteed to have been produced, stored, and processed without adding synthetic fertilizers and chemicals". Thus, measures and strategies are being sought to promote organic food consumption due to its perceived benefits, such as health and environmental friendliness (Zagata, 2012).Throughout the years, there have been different suggested theories explaining consumer behaviours. Some originate from social sciences: psychology, economics, and sociology. Others focus on the influences of variables in marketing, and emphasise the influences of external elements like advertisement, physical product differentiation, promotion, packaging, and retail, availability, direct selling, point of sale display, etc. (Saleki and Seyedsaleki, 2012). Even though there are many existing models and theories explaining consumer behaviour, Jackson (2005) and Morris et al. (2012) provide a selection of common models and theories that have been specifically used to understand pro-environmental consumer behaviour. Table 5.1 presents the commonly used theories and models.

Table 5.1: Widely used socio-psychological theories and models for explaining pro-environmental behaviour

THEORIES	REFERENCES	DESCRIPTION
Theory of Reasoned Action (TRA)	Ajzen and Fishbein (1980)	This theory the best-known social psychological attitude-behaviour model. It adjusts expectancy value theory to incorporate normative social influences on behavioural intention.
Theory of Planned Behaviour (TPB)	Ajzen (1991)	TPB is an extension of the TRA to incorporate the actor's perceived control over the outcomes of his or her behaviour.
Value-Belief-Norm Theory	Stern (2000)	An attempt to adjust Schwartz's Norm Activation theory to incorporate a more sophisticated relationship between values, beliefs, attitudes and norms.
Theory of Consumption Values	Sheth, Newman and Gross (1991)	This identifies functional, social, emotional, conditional and epistemic values as antecedents of choice behaviour.
Biophilia Hypothesis Theory	Wilson (1984)	It proposes an innate tendency to focus on life and lifelike processes, meaning that we gain the most satisfaction from processes that mimic the nature of life on many levels, be they cognitive or emotional.
Expectancy-Value Theory	Fishbein (1973), Ajzen and Fishbein (1980)	A broad class of theories (of which rational choice theory is one) based on the idea that behaviour is motivated by the expectations we have about the consequences of our behaviour and the values we attach to those outcomes.
Field Theory	Lewin (1951)	Influential early social-psychological theory positing behaviour as a function of a dynamic 'field' of internal and external influences. Behavioural change relies on unfreezing (existing behaviours), shifting to a new level, and then refreezing.
Cognitive Dissonance Theory	Festinger(1957)	Argues that people are motivated to avoid internally inconsistent (dissonant) beliefs, attitudes and values.
Attitude-Behaviour-Context (ABC) Theory	Stern and Oskamp(1987)	A kind of field theory for environmentally significant behaviour. Behaviour (B) is an interactive product of 'internal' attitudinal variables (A) and 'external' contextual factors (C)
Interpersonal Behaviour (TIB)	Triandis(1977)	Like the Theory of Reasoned Action, the Theory of Interpersonal Behaviour (TIB) includes both expectancy-value and normative belief constructs.

		However, TIB also includes the influence of habitual, social and affective factors on behaviour.
Norm Activation Theory	Schwartz (1977)	One of the better known attempts to model pro-social or altruistic behaviours: a personal norm (PN) to behave in a pro-social way is activated by awareness of the consequences (AC) of one's actions and the ascription of personal responsibility (AR) for them.
Self-Discrepancy Theory	Higgins (1987)	Suggests that people are motivated to act according to feelings aroused by the perceived gap between their actual and 'ideal' selves.
Subjective Expected Utility (SEU)	Ajzen and Fishbein 1980, Eagly and Chaiken 1993	A form of expectancy value theory closely related to the rational choice model, SEU theory suggests that behaviour is a function of the expected outcomes of the behaviour and the value assigned to those outcomes.
Social Cognitive Theory	Bandura (1986)	Social cognitive theory explains human functioning in terms of a model of triadic reciprocality which include three factors (i.e., cognitive and other personal factors such as affective states and physical attributes, external environmental influences, and overt behavior) affecting one another.
Social Exchange Theory		SET argues that attitudes and behaviours are determined by the rewards of interaction minus the penalty.
Behavioural Reasoning Theory	Westaby(2005)	BRT identifies new linkages underlying intentions and behaviour. The theory proposes that reasons serve as important linkages between beliefs, global motives, intentions and behaviour.
Protection Motivation Theory	(Rogers 1975)	It builds upon threat identification and response in order to understand behaviour. The model consists of two parts, known as the threat appraisal process and the coping appraisal process, where the first is the process of understanding a threat and the latter describes how the threat is coped with.
Personal Determinants Model	Aertsens et al. (2009)	Provides important personal/psychological factors affecting organic food consumption.
Yiridoe Model	Yiridoe et al (2005)	Proposes that exogenous/market factors, such as certification, organic food packaging and availability and knowledge and awareness of organic food affect

		the perception of the product-related attributes, which in turn impact on consumers' preference and attitude towards organic food.

Source: Own Compilation (2017)

As indicated in Table 5.1, many socio-psychological theories and models have been applied to explain pro-environmental behaviours. A close inspection of this table reveals that thesetheories and models are not only intertwined but also revolve around similar socio-psychological variables, such as social influences, attitudes, intentions, norms, values or beliefs. More so, the theories indicate two overriding lines of research, namely, the rational (individualistic) approach and the moral (altruistic) approach as suggested by Sawitri, Hadiyanto and Hadi (2014).

The next section discusses the theories embedded in these two approaches.

5.3.1 Rational theories(individualistic approach)

Rational theories are based upon the assumption that consumers conduct a cost-benefit analysis in their decision making (Eide, 2013). The basic tenet of the individualistic approach is that human behaviour is motivated by the desire to maximise the expected benefits for personal interests. For example, environmental protection may be hindered by a negative attitude toward organic food as consumers perceive it to have a bad taste, its inconvenience in terms of accessibility and limits the quality of life. The key theories embedded in the individualistic approach are the TRA (Fishbein and Ajzen, 1975), the TPB (Ajzen, 1991), Behavioural reasoning theory (Westaby, 2005), protection motivation theory (Rogers, 1975), and similar theories, which deal with psychological variables including beliefs, attitudes, subjective norms and perceived behaviour controls. Nonetheless, evidence from the past proves that the TPBhas been used in numerous organic food studies (TarkiainenandSundqvist, 2005; Vermeirand Verbeke, 2006; Vermeir and Verbeke, 2008; Arvola, Vassallo, Dean, Lampila, Saba, Lähteenmäki and Shepherd, 2008; Aertsens, et al., 2009; Yazdanpanah and Forouzani, 2015).

The TPB model was extended by adding "perceived behavioural control" to the TRA model in order to handle circumstances in which consumers are restricted from the required behaviour due to limited availability and affordability of the product. In such cases, perceived behavioural control is the customer's personal view of his or her capability to carry out certain behaviour

(Ajzen, 2002). Regarding organic products, one of the elements of perceived behavioural control could be perceived higher price. This could limit the purchases of the product. Considering its merits and demerits discussed in chapter three, TPB is integrated with other models in this study to understand drivers of organic food purchase decision.

5.3.2 Moral-based theories (altruistic approach)

Contrary to the rational theories, the moral-based theories evaluate consumers' consideration of moral implications of their decision-making process (Eide, 2013). The altruistic (or collectivistic) approach is premised on the fact that people prioritise collective interests over their personal interests (López-Mosquera and Sánchez, 2012).These theories, of course, only have application value where there are moral considerations in play such as with regards to purchasing organic food. Green consumption is considered a form of altruistic behaviour in so far as individuals have to relinquish personal benefits for the sake of collective wellbeing (Sawitri et al., 2015).There are fewer theories that are morally based, and therefore this section highlightsthree theories. The first two theories are also related to each other, as the first one presented is an extension of the latter. To explain pro-environmental behaviour, the altruistic approach is mainly crystallised by the NAM (Schwartz and Howard, 1981), or deriving models such as the Value-Belief-Norm theory (VBN) (Stern, 2000), and the Biophilia Hypothesis (Wilson, 1984). VBNconsiders altruistic considerations as measures to predict behaviour.

The VBN theory was introduced in order to develop a conceptual framework to predict individual conservationist action (Stern, 2000). The consideration to purchase may lead the consumer to take upon himself several distinctive forms of pro environmental behaviour. The Norm-Activation Theory (NAT) (Schwartz, 1977) has been used to explain the way an environmental concern is transformed into behaviour. The theory presents normsas external factorspredicting environmental behaviour, which may be influenced through personal and subjective norms (social influence) (Eide, 2013). Matthies et al.'s (2012) study shows that both the subjective norm of parents as well as the activation of personal norms through communication of the problem had influence on children's behaviour. The Norm-Activation theory has been applied to the extended Value-Belief-Normtheory as the final antecedent of behaviour by Sawitri et al. (2015).

The Biophilia Hypothesis (Wilson 1984) suggests that we gain the most satisfaction from processes that mimic the nature of life on many levels, be they cognitive or emotional. These core values are defined as biospheric (concern for the planet), altruistic (concern for the wellbeing of others) and egoistic (concern for one self). However, there are, according to Stern (2000), evidence that traditional values have a negative correlation with pro-environmental behaviour. Thus, in line with what the Biophilia Hypothesis theory proposes, it, in addition to the TPB has guided the proposed theoretical framework of this study.

5.4 COMBINING THE INDIVIDUALISTIC AND ALTRUISTIC APPROACHES

As highlighted from the foregoing discussions, a large proportion of consumers may feel that their efforts to stay healthy through green consumption are motivated by the potential self-interest drawn from such efforts. Others may be involved in organic food consumption based on environmental concern and the public good. However, behaviour in general results from multiple motivations or determinants. Many consumers are motivated to purchase organic food by both self-interest and collectivist determinants (Vermeir and Verbeke, 2006; Aertsens, et al., 2009).

Considering that organic consumers are motivated by both self and collective interests, a number of studies have successfully integrated individualistic frameworks with the altruistic approach to understand pro-environmental behaviour (see for example, Yiridoe et al., 2005; Aertsens et al., 2009). Aertsens et al. (2009) report that when incorporated together, the NAM (an altruistic model) and TPB (an individualistic model) variables were both able to explain organic food purchase behaviour. Also, Aertsens, Mondelaers, Verbeke, Buysse and Huylenbroeck's (2011) study consolidated both Schwartz' values theory and the theory of planned behaviour (TPB) to include additional personal factors affecting organic food purchase behaviour. This section highlights some studies that combined both individualistic and altruistic approaches to predict pro-environmental behaviour as a whole.

5.4.1 Aertsens, Verbeke, Mondelaers and Huylenbroeck (2009) model

As discussed in both Chapter one and three of this study, Aertsens, Verbeke, Mondelaers and Huylenbroeck (2009) linked Schwartz' values theory and the TPB to understand personal and moral factors affecting organic food purchase intention and behaviour. Aertsens et al.'s (2009) report that when marketers appeal to values such as "security", "hedonism", "universalism",

"benevolence", "stimulation", "self-direction" and "conformity", consumers will have a favourable attitude towards organic food consumption. In addition to this positive attitude, personal norm, subjective norm and perceived behavioural control can also impact on the purchase of organic food.

5.4.2 Yiridoe, Bonti-Ankomah and Martin (2005) model

Yiridoe, Bonti-Ankomah and Martin (2005) recommend the consolidation of the diverse factors that are empirically found as drivers of organic food purchase and consumption, discussed in chapter three. These factors were consolidated into personal/psychological, health-related, market, environmental, social and demographic factors that drive organic food purchase decision and consumption. They were derived from different theories including TPB, TRA, VBN as well as NAM.

The next section uses the foregoing literature review to develop a conceptual model for the current study.

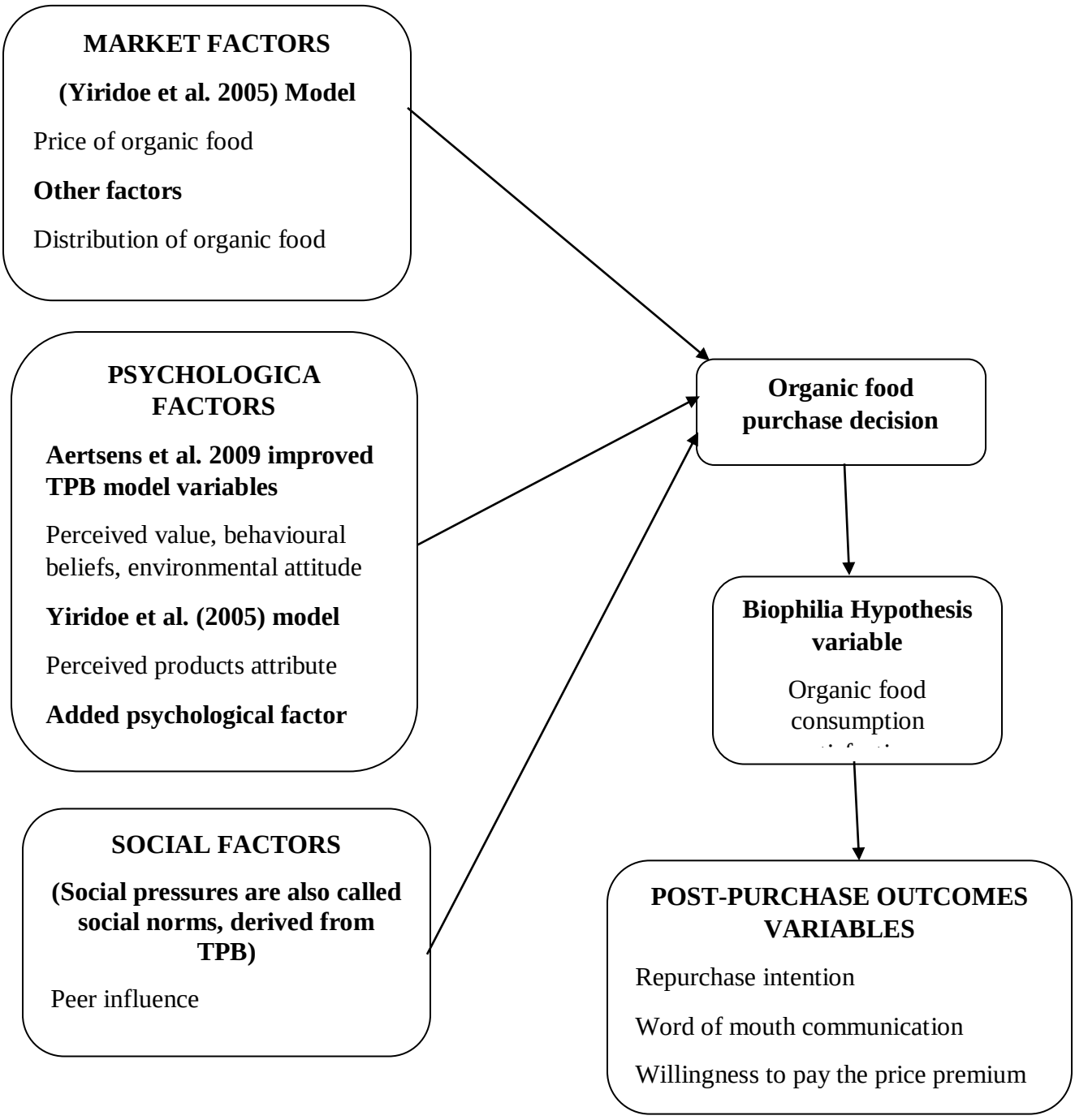
5.5 DEVELOPMENT OF THE CONCEPTUAL MODEL OF THIS STUDY

Based on the foregoing theoretical accounts as well as the literature reviewed in Chapter three, it can be concluded that the studies on organic food consumption behaviour in the last decades have largely been dominated by social and psychology research (Vainikka, 2015). This explains the predominant focus on the role of socio-psychological determinants (mainly developed from the TPB, deriving models and proposed biophilia hypothesis theory) to understand pro-environmental behaviours (Yiridoe et al., 2005; Aertsens et al. 2009). These studies suggest that pro-environmental behaviours are mainly derived from changes in an individual's attitude, norms, self-efficacy and beliefs. The important influence of market variables on organic food consumption behaviour has received inadequate attention (Hussain, Khokhar and Asad, 2014).

The consideration of market factors in understanding pro-environmental behaviours is particularly important, when evaluating the intention-actual behaviour relationship (Hussain, Khokhar and Asad, 2014). As Boksberger and Melsen (2011) note, a positive attitude and strong intention to perform behaviour are not always sufficient to steer an action or behaviour. This suggests that internal (or psychological) and external (or social) motivations do not always

suffice to influence individuals' decision to purchase organic food. For organic foodpurchase behaviour, for example, some market factors, such as price, communication for awareness creation anddistribution of these food products may affect the decision to purchase. The development of this study's conceptual model takes a holistic approach by not only integrating psychological and social variables (internal and external factors), but by also encompassing marketing (or market) variables that may significantly affect the purchase decision of organic food products in a socio-economically diverse country like South Africa. Figure 5.1 depicts the proposed general conceptual model of this study.

Figure 5.1: General conceptual model of this study

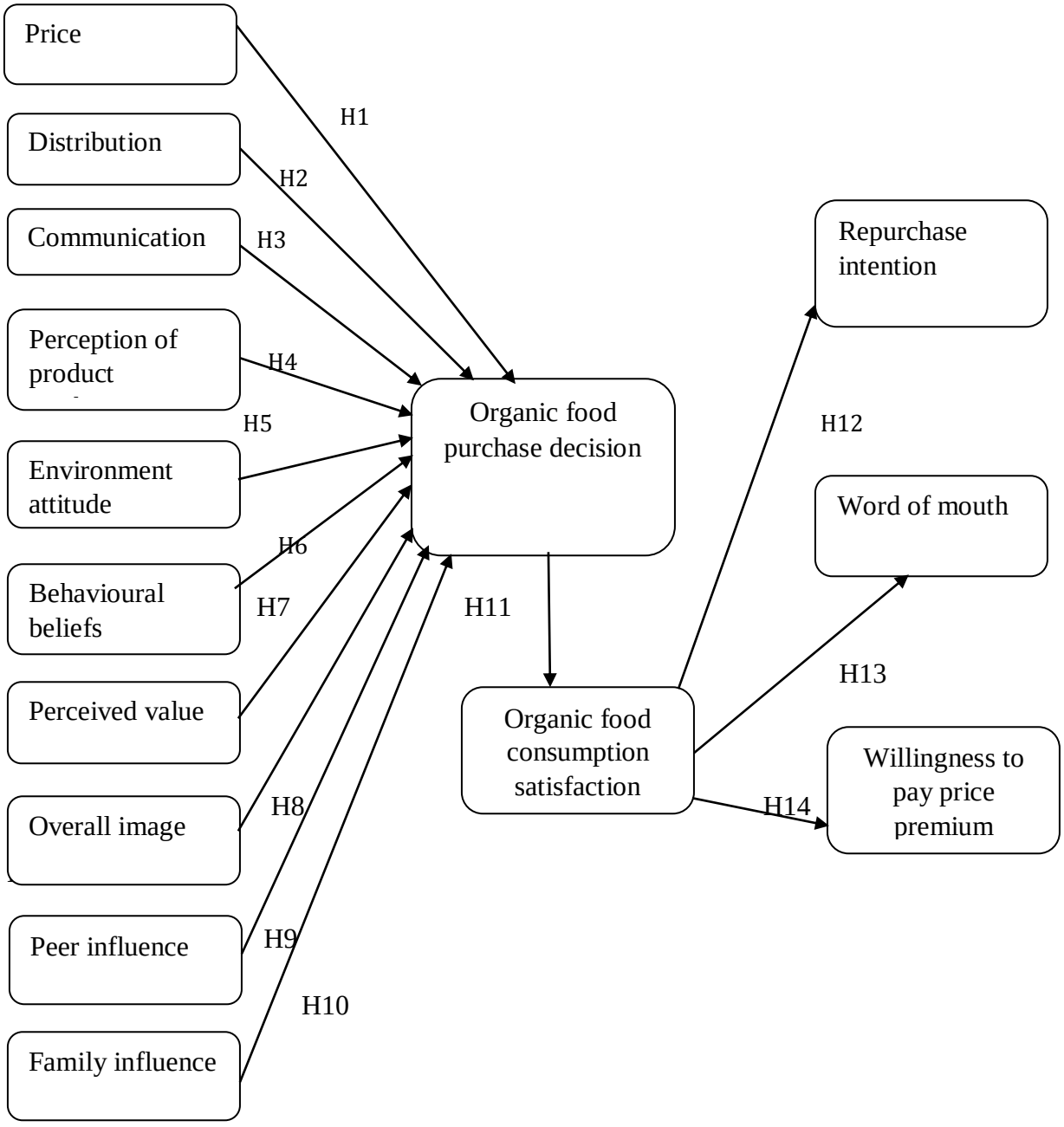


Source: Author's own model designed from reviewed models and literature (2017)

Figure 5.1 suggests that organic food purchase decision is predicted by market, psychological variables (mainly stemming from TPB and other models) and social factors. Organic food purchase decision and other post purchase outcomes is mediated by organic food consumption

satisfaction (Stemming from the Biophilia hypothesis). A more detailed picture of the interrelationships between the variables in Figure 5.1 is provided in Figure 5.2.

Figure 5.2: Detailed conceptual model of this study with hypothesised relationships



Source: Author's own model

The next section describes the constructs and discusses the relationships between them.

5.5.1 Market factors and purchase decision of organic food

As discussed in Chapter three and shown in Figure 5.2, the marketing factors consist of variables stemming from Yiridoe et al.'s (2005) model as well as other variables widely used in a number of green marketing studies (Antanasoaie, 2012; Marian, Chrysochou, Krystallis and Thøgersen, 2014; Hamzaoui-Essoussi and Zahaf, 2014; Gunasundari and Sathiya, 2016).

5.5.1.1 Price of organic food

Price is a vital and important factor in the green marketing mix (Tiwari et al., 2011). Organic food price is about pricing methods in which economic and environmental costs of production and marketing have been calculated providing the consumers with a value, and businesses with a suitable profit (Constantinos et al., 2012). Organically produced foods are often moreexpensive as compared to conventional foods which areharmful for health and environment (Hussain, Khokhar and Asad, 2014). Most consumers have been found to be willing to pay the higher price only if they find out about the product's added value (Manjunath, 2013). The valueassociated with environment-friendlyproducts relateto product safety, price andlabel which influence consumer purchasing behaviour for these organic food products(Chaipoopirutana, 2011).Furthermore, the high price of these products is due to the higher cost incurred in the processes, materials and to certain extent the cost involved in getting a certified eco-label for them (Ling 2013).

The perceived relative advantage (e.g., quality and functionalperformance) of organic food over conventional alternatives is likely toinfluence consumer acceptance (Barnard and Mitra, 2010). If the majorbenefits of organic food are perceived to be higher than thecost, then consumers will be motivated to purchase theseproducts even if they are priced somewhat higher than non-organicsubstitutes (Ling, 2013). Price is always thought as the determinant factor in making a purchasing decision of organic food (Atanasoaie, 2012; Yazdanifard, 2014).Other authors, however, found that price premium or its perception has been the main barrier for organic food consumption (EPOPA, 2006; Aertsens et al., 2009;Bravo, Cordts, Schulze and Spiller, 2013; Marian, Chrysochou, Krystallis and Thøgersen, 2014). The actual or perceived high price can influence consumers purchase decision (Hussain et al., 2014:10).It can therefore be hypothesised that:

- (H1): The price of organic food products has negative relationship with purchase decision.

5.5.1.2 Distribution of organic food

Distribution of organic food products is another element in the marketing mix that plays a role in consumers' purchasing decision (Yeboah et al., 2013). The limited availability oforganic food products is the second most cited barrier to the purchase of it (Chryssohoidis and Krystallis, 2005; Tsakiridou, et al., 2008; Atanasoaie, 2012; Henryks and Pearson, 2014). Organic food is not as easily available as conventional food and consumers often need to alter their shopping behaviour if they are seeking to purchase it (Henryks and Pearson, 2014). The same studies that cited price as a barrier also cite availability as a problem (Yeboah et al. 2013). The lack of easily available organic food results in it requiring more effort and being lessconvenient for some consumers (Henryks and Pearson, 2014). Yeboah et al. (2013) assert that with the right distribution strategy in place, thatis, with the right mode of delivery and the right speed of delivery to the appropriate place of purchase, customer satisfaction can be significantly increased. Failure to deliver these at practical points will result in the loss of orders and income to the company and long-term customer loyalty will decline (Delafrouz et al., 2014). Hence it is proposed that:

- (H2): There is a positive association between distribution of organic food and purchase decision.

5.5.1.3 Communication for awareness creation

Communication (or perceived organic food communication) construct refers to the extent and depth of understanding organic food information and certification that consumers receive from various sources (Pearson, Henryks, Sultan and Anisimova, 2013). According to Hussain et al. (2014), consumers' awareness of products marketed ingreen marketing is important in guiding their purchasingdecision of green products.Consumers' awareness of organic food price, benefits and quality significantly influences their purchasing decisionof green products (Sultan, Pearson, Henryks and Anisimova, 2016). Awareness of green products play a very important role in reducing environmental future damages and impact of human beings on the environment by designing, consuming and labelling of organic food (Delafrooz, 2014). More so, consumers

become more careful aboutenvironmental preservation.Retailers use different unique promotion strategies to promote organic products (Sultan and Pearson, 2011).

Green consumers know the importance of environmentsafety and protect the natural environment by their increasing consumption of organic products (Yazdanifard, 2014). Advertising provides the information to theconsumer about organic food by advertising, which also help to motivate and bring about change inconsumer purchasing behaviour positively (Hussain et al., 2014).Because organic products are credence goods, consumers (unlike producers who are aware that their products are organic) may not know whether a product is produced using organic or conventional methods, not even after repeated purchase and consumption, unless they are told it is so (Sultan et al., 2016). Thus, awareness and knowledge about organically produced foods are critical in the consumer purchase decisions. If an individual cannot clearly differentiate between two alternative products, a price premium on the organic product can confuse and/or affect the individual's purchasing decision in favour of the cheaper product (Bonti-Ankomah and Yiridoe, 2006). Therefore, it is hypothesised that:

- (H3): Communication positively influences purchase decision of organic food products.

5.5.2 Psychological factors

As mentioned earlier, the environmental psychology makes a substantial input in green consumption research (Sawitri et al., 2014). The psychological variables in Figure 5.2 model consist of determinants stemming mainly from the TPB as well as an additional construct widely used in a number of organic food related studies (e.g. Yiridoe et al., 2005; Aertsens et al. 2009). The next section describes the relationships between the constructs.

5.5.2.1 Perceived product attributes

Organic food consumers tend to perceive such products as having particular intrinsic (quality and safety) characteristics (Bonti-Ankomah and Yiridoe, 2006). In reality, a consumer's decision choice in favour of organic food is made by comparing a bundle of observable and unobservable characteristics of the product. In practice, organic product attributes are not easily assessed by the consumer. A large number of studies attempt to answer the question of which product characteristics consumers value as important and what motivates organic food consumption

(Hemmerling, Hamm and Spiller, 2015). The credence characteristics of organic food are qualities which are difficult or, in some cases, impossible to detect, but which nevertheless play an important role for the buyer (Bonti-Ankomah and Yiridoe, 2006). According to Bonti-Ankomah and Yiridoe (2006), a credence good is one for which a buyer's decision choice is dominated by perceptions about the product's credence characteristics. The credence characteristics and quality aspects of organic products are important because a consumer may not necessarily associate 'organic' with the production process, but with the quality attributes of the product. According to Hemmerling et al. (2015),the characteristics of organic foods that may enter the utility function of the consumer can be grouped into general and commodity-specific attributes.

General attributes relate to food safety and human health, environmental effects, and farm animal welfare aspects, while commodity-specific attributes include variables such as visual appeal, nutritional value, taste, freshness, etc (Pearson et al., 2007; Cerjak, Mesic, Kopic, Kovacic and Markovina, 2010). The characteristics of organic food may therefore be an input into the consumer's demand function for "good health", while the price of organic food becomes the cost of the investment in "good health"(Klöckner and Ohms,2009). The above discussion suggests a possible link between organic foodperceived quality attributes and consumer demand for organic food, which is purchase decision. Therefore, the following is hypothesised:

- (H4): The perception of organic food product attributes is positively associated with purchase decision.

5.5.2.2 Environmental attitude

Environmental attitude refers to the individual's"value judgment and it taps the individuals" cognitive assessment of the value of environmental protection (Lee, 2008). The empirical findings regarding the relationship between attitudes and environmental behaviour are somehow contradictory (Milfont and Duckitt, 2010). Some studies have reported a positive relationship between environmental attitude and pro-environmental behaviour such as purchase decision (Kim and Choi, 2003; Tilikidou, 2007; Vicente-Molina, Fernández-Sáinz and Izagirre-Olaizola, 2013), while others find a negative relationship (Cottrell, 2003). Furthermore, other studies reveal a weak relationship between attitudes and pro-environmental behaviour (Milfont and

Duckitt, 2010).However, a positive relationship between environmental attitude and environmental behaviour has been dominant in many studies (Kotchen and Railing, 2008).

Most recently, it is found that Egyptian consumers' attitude towards green purchase can influence their green purchase intention and affect their green purchase behaviour in a direct manner (Mostafa, 2007; Irawan and Darmayanti, 2009). Karunarathna, Naotunna and Sachitra (2017)suggest that if consumers have a positive attitudetowards environmental safety, they will eventuallytransfer it into a real practice by making purchase decision of organic food. Becker, Tavot, Friedler and Bar (2015) found that consumers value environmental protection as the main reason they purchase organic food. Lee and Yun (2015) postulate that consumers make positive cognitive and affective judgments about buying organic foods because they associate buying organic foods with environmental protection and animal welfare, a sign of positive attitude towards the environment. In marketing literature, environmental attitudeis identified as an important predictor of the green purchase decision and behaviour (see for example, Mei et al., 2012; Arttachariya, 2012; Lee, 2014; Achchuthan and Elnampy, 2016). Hence the following is hypothesised:

- (H5): Environmental attitude towards organic food is positively associated with the purchase decision.

5.5.2.3 Behavioural beliefs

Pickett-Baker and Ozaki (2008) state that consumer beliefs need to be considered when examining the influences that affect purchasing decisions. Zagata (2012) maintains that exploration of these beliefs (behavioural beliefs,normative beliefs and control beliefs) requires specific observations. Hence, the addition of these beliefs in the TPB model enables thelinkage of personal values and attitudes because people's attitudesare formed by specific beliefs about the attributes of a given objectand individual evaluation.Leeand Goudeau (2014)are of the view that behavioural beliefs and other perceptions about organic products are classified as cognitions. In addition, the affect-behavior-cognition (ABC) approach to attitudes serves as the foundation for the hierarchy of effects, whichis a theoretical approach to attitude, suggesting that affect, behaviour, and cognition take place in sequential order (Babin and Harris, 2010). The components of the hierarchy ofeffects can be arranged in various sequences because the order in

which the parts takeplace is typically based on the type of decision a consumer is making (Babin and Harris, 2010; Solomon, 2011).

Lee and Goudeau (2014) state that decisions begin with cognitions (i.e. "I think this is a good product"),followed by affects (i.e. "I buy this product because I like it"), and finally behaviours (i.e. "I always buy this product").Literature on organic food consumption lists several behavioural beliefs as motives for consumers to purchase organicfoods (Lee and Goudeau, 2014). Among the most popular are health and ecological welfare benefits (Magistris and Gracia, 2008). Organic food purchase decision is shaped by the belief of the health and ecological benefits associated with these food products. Hence the following hypothesis is proposed:

- (H6): Behavioural beliefs about organic food positively influence purchase decision.

5.5.2.4 Perceived Value

Values are enduring beliefs that a given behaviour is desirable or good and include valuing the environment. Values are regarded as principles that guide the formation of attitudes and actions (Pickett-Baker and Ozaki, 2008) although values do not always lead to behaviour in real life. Perceived value is not only an important component for long-term customer relationships, but also plays an essential role in affecting purchase intentions (Zhuang, Cumiskey, Xiao and Alford, 2010). Perceived value was found to have a positive influence on customer green purchase intention in Lam, Lau and Cheung's (2016) study.Yee, San and Khoon (2011) suggest that perceived value is an important factor in purchase or consumption decisions. The authors further maintain that customers are interested to know what kind of benefit or values they can obtain from organic products to make their purchase decision. It is therefore hypothesised:

- (H7): Perceived value enjoyed from organic food is positively associated with purchase decision.

5.5.2.5 Overall image of organic food

Many researchers across various fields have identified the significance of overall image in customers' decision- making processes (Ryu et al., 2007; Han et al., 2009; Han and Kim, 2010).Prendergast and Ho (2002) investigated the impact of store image and found that a firm's

image is a critical driving force in intention. In their empirical investigation of the role of overall image in a hospitality setting, Ryu et al. (2007) stated that a positive overall image of a hospitality firm increases customers' willingness to revisit and spread favorable word-of-mouth. In addition, Han et al.'s (2009) research on hotel customers' behaviours indicated that one's overall perception of a green hotel (overall image) is positively associated with his/her intention to buy a green hotel product, to recommend it, and to pay for it. There is little literature on organic food image and purchase behaviour that explain this relationship. However, considering the above-mentioned empirical studies, Han and Kim (2010) suggest that overall image play an important role in predicting purchase behaviour when this construct is integrated into the TPB model. Hence it is proposed in this study that:

- (H8): Overall image of organic food is positively associated with consumer purchase decision.

5.5.3 Social factors

The social influence (social norms) in the Figure 5.2 model consists of factors stemming mainly from the Aertsens et al.'s (2009) modified TPB model. Subjective norms concern the perceived social pressures to undertake or not undertake a behaviour (Ajzen, 1991; O'Neal, 2007). Individuals' subjective norms reflect their beliefs about how others, who are important to them, would view them engaging in a particular behaviour (Voon, Ngui and Agrawal, 2011; Aertsens, Mondelaers, Verbeke, Buysse and Van Huylenbroeck, 2011). McClelland's (1987) theory of needs suggest that individuals tend to perform behaviour that is deemed desirable by loved ones or referent group, due to their need for affiliation and group identification. In this vein, individuals' intention to consume organic food is likely to be strengthened if they believe that their loved ones expect them to do so, or they wish to be identified with other individuals who are consuming organic food (Chen 2007; Voon et al., 2011). This study identifies peer pressure and family members as the most important social group influencing organic food purchase decision.

5.5.3.1 Peer pressure

Peer pressure can be a form of influence where a person is convinced to purchase organic food even when they might not want to buy, but which they perceive as "necessary" to maintain a

good relationship with their peers, such as friends (Ling, 2013). Social influence by peers plays an important role in consumers' purchase decision of green products (Irawan and Darmayanti, 2009; Ohman, 2011; Lasuin and Ching, 2014). Ooi et al. (2012) also propose that peer pressure as a part of social influence will influence the consumers on green purchasing among Malaysian consumers. Also, Lee (2008) found out that peer influence was the most important factor for Hong Kong's adolescents' green purchasing behaviour compared to other factors.Makgosa and Mohube (2007) as well as Jorgensen (2015) found that peer pressure has a significant relationship with purchase decision. It is therefore hypothesised that:

- (H9): Peer pressure positively influences organic food purchase decision.

5.5.3.2 Family influence

Ishaque and Tufail (2014) noted that the involvement of family members in the purchase of some product utilised by the whole or any member of the family cannot be ignored. For this purpose, researchers have been continuously analysing the process of decision-making within a family (Jorgensen, 2015; Wiese and Kruger, 2016). In families, members have a great influence when it comes to the purchase decisions, especially the products which are perceived expensive with health benefits such as organic food. The importance of family members for environmentally responsible behaviour is thoroughly documented in the literature (Biel and Thøgersen, 2007; Aertsens, Verbeke, Mondelaers and Van Huylenbroeck, 2009). In the context of food choice, Vermeir and Verbeke (2006) report that the desire to comply with other people could explain strong intentions to purchase sustainable dairy products despite weak personal attitudes. Applied to organic food consumption, Chen (2007), Thøgersen (2007) and Dean et al. (2008) find a significant positive relationship between consumers' intention to purchase organic food and their family influence. Hence, the following is hypothesised:

- (H10): Family members positively influence organic food purchase decision.

5.5.4 Organic food purchase decision and Consumption satisfaction

The prevailing view is that consumers experience satisfaction or dissatisfaction with consumption, as well as with a decision process (Darke et al., 2010). Consumer satisfaction with the decision process has been found to be a significant contributor to consumers' overall

satisfaction judgments (Heitmann et al., 2007; Chang and Kukar-Kinney, 2011). Product availability, pre-purchase information, and product evaluation and choice are all determinants of satisfaction/dissatisfaction with the purchase decision process (Chang and Kukar-Kinney, 2011). Heitmann et al. (2007) proposed that decision satisfaction is determined by the consumer's achievement of choice goals, such as high choice confidence, low anticipated regret, and low evaluation costs.Research on consumers' satisfaction has traditionally focused on consumption satisfaction, derived from consuming a product or service (Luo and Homburg, 2007). This misses the logic that consumers also form satisfaction judgments concerning the decision-making process they experience before product purchase, and that it also influences their overall satisfaction (Mishra, 2017). It is worth noting that both consumption and decision satisfaction with organic food purchase decision are equally important. In addition to contributing to consumption satisfaction, decision satisfaction has a positive effect on post-purchase outcomes, such as loyalty and willingness to recommend the product to others (Chang and Kukar-Kinney, 2011). Therefore, it is proposed that:

- (H11): Consumer organic food purchase decision positively influences satisfaction.

5.5.5 Consumption satisfaction and other post-purchase outcomes

Evaluation of the chosen alternative is a fundamental part of the post-purchase behaviour of the decision-making process. During and after consumption, organic food consumers form evaluations of these food products as well as their consumption experience. The post-purchase outcomes come in many forms, including willingness to pay the price premium for organic food, willingness to spread word of mouth as well as repurchase behaviour.

5.5.5.1 Consumption satisfaction and willingness to pay a price premium

Generally, customer related outcomes of satisfaction are behavioural intentions which can be experienced by customer commitment, repeat purchases and price perception and the resultant willingness to pay the price premium (Homburg, Hoyer and Koschate, 2005; Homburg, Koschate, and Hoyer (2005; Stock, 2005; Luo and Homburg, 2007). The most central finding in this context is that satisfaction increases customer loyalty and influences future repurchase intentions and behaviour (Cotes-Torres, Muñoz-Gallego and Cotes-Torres, 2012). Another mechanism through which satisfaction can enhance profitability is related to pricing. Research

shows that highly satisfied customers are willing to pay premium prices (Homburg, Koschate, and Hoyer 2005) and are less price sensitive (Luo and Homburg, 2007).

Furthermore, Homburg, Koschate, and Hoyer (2005) also emphasise the importance of the relationship between customer satisfaction and willingness to pay the price premium because price is a key element in any company's profitability equation. In a study of factors affecting consumers' potential willingness to pay for organic food products in Bangalore, Mishra (2017) reveals that consumption and decision satisfaction increase customer willingness to pay for organic food products. Considering these empirical evidence, it is therefore hypothesised:

- (H12): Consumer satisfaction with organic food products influences the willingness to pay a premium.

5.5.5.2Consumption satisfaction and repurchase intention

Lee and Yun (2015) and De Toni, Eberle, Larentis and Milan (2017) recognise that there is scarce literature on the consideration of internal factors that determine the intent of repurchasing organic food. However, there is evidence thatsatisfaction is an important precursor in promoting customer repurchase behaviour (Chinomona and Dubihlela, 2014; Lee and Yun, 2015; Dubihlela and Chauke, 2016; Chauke and Dhurup, 2017). When consumers are satisfied, it can affect a buyer's decision to continue a relationship with the products or organisation (Ndubisi, Malhotra and Chan, 2009).

Seiders, Voss, Grewal and Godfrey (2005) further propose thatsatisfaction positively influences both repurchase intentionsand behaviour.Satisfaction can be considered as pre-purchase measurement and a key factor that affect the behaviour of repurchase intention (Nguyen and Gizaw, 2014). The consumer is more likely to make a repeat purchase only if he derives an acceptable minimum level of satisfaction from the last purchases (Dubihlela and Chauke, 2016). Satisfied consumers are more likely to share their experiences with others, generate positive effect towards purchase intention (Chauke and Dhurup, 2017). One example can be "spreading word of mouth."Kitchathorn(2016) also found that customer satisfaction is an antecedent/predictor of repurchases intention. Hence the following is hypothesised:

- (H13): Consumption satisfaction is positively associated with repurchases intention.

5.5.5.3 Consumption satisfaction and willingness to spread word of mouth

Jan, Abdullah and Shafiq's (2013) study on the impact of customer satisfaction on word of mouth revealed that customer satisfaction has a significant positive impact on word-of-mouth. Customer satisfaction is an influential factor toward positive word-of-mouth based on Koller, Floh and Zauner's (2011) observation. If an organic food product meets the consumers' expectation they will be satisfied, and will lead to the spreading of positive word-of-mouth (Chang and Chou, 2014). Specifically, if organic food products are able to provide quality, value and benefits as perceived that satisfy or even exceed consumers' expectation, they will consider recommending the product to others (Lam, Lau and Cheung, 2016).Cotes-Torres, Muñoz-Gallego and Cotes-Torres (2012) reported that the level of satisfaction increases customers' positive feedback or word-of-mouth (WOM) regarding a particular product, which will ultimately benefit a company's profitability.Jan (2013) alsopostulates that customer satisfaction shapes word-of-mouth communication.It is therefore hypothesised that:

- (H14): Consumer satisfaction with organic food consumption positively affects the willingness to spread word-of-mouth.

5.6 CONCLUSION

This chapter highlights behavioural theories and models, which mainly explain pro-environmental behaviour. The purpose was to identify possible market, psychological and social factorsaffecting organic food purchase decision and other post-purchase outcomes with which to develop a conceptual model. Given the extensive contribution of social psychology in understanding pro-environmental behaviour, the models and theories found to be explaining green consumption behaviour were rooted mostly in social psychological. Extensive literature review was undertaken to understand the importance of pro-environmental behaviour.

Even though the theories and models provided an overabundance of factors, which can possibly predict organic food purchase behaviour, they have been categorised into two overriding perspectives. These are the self-interest perspective based on theoretical frameworks, and the altruistic approach captured by Biophilia hypothesis theory and related frameworks or models. The theory of planned behaviour (TPB) is an extension of the theory of reasoned action (TRA), which has been used to explain consumer actions. TPB was used as a theoretical framework in

this studyas well as Biophilia hypothesis theory. Following the latter, there was a need to understand whether environmental attitudes and the consumption of organic food provide pleasure and satisfaction to organic food buyers.

The consumption of organic food is regarded as being kind to nature, especially as it is beneficial to both the individual and the environment in terms of health benefits and environmental preservation. In addition to the theories, various models which explain purchase decision of organic food were used such as Yiridoe et al. (2005) as well as Aertsens et al. (2009).While most of these frameworks provide psychologicalpredictors of pro-environmental behaviour, this study goes beyond the usual internal psychological factors and introduces marketing and social variables to better understand and explain organic food consumption behaviour.

Since the aim of this study is to fully inform marketers on the factors to consider when designing strategies to foster organic food purchase, a detailed and holistic conceptual model to delineate possible factors has been developed. The next chapter discusses the methodology employed to empirically test this model in a South African environment.

CHAPTER 6

RESEARCH METHODOLOGY

6.1 INTRODUCTION

Chapter five discussed theories and models available in understanding pro-environmental behaviour and presented a conceptual model that underpins this study. Furthermore, theoretical relationships between constructs were established and discussed in line with the extant literature on organic food consumption. Hypotheses were posited and needed to be empirically tested accordingly. The aim of this chapter is to delineate the methodology that will be used to empirically test the hypotheses. The chapter is divided into six main sections. The first section presents the research paradigm or philosophy sustaining this study. This is followed by highlights of the essence and process of marketing research followed in conducting this study. The third section provides research approach and strategy employed in conducting this study. This study was quantitative and involved data collection through conducting a survey. The fourth section provides details relating to the implementation of the research design including the target population and sampling, questionnaire development and administration. The fifth section focuses on data analysis, while the last section concludes with the summary of ethical issues considered when conducting the study.

6.2 RESEARCH PARADIGMS

A paradigm is defined as "the basic belief systems or worldview that guides the investigator" (Guba and Lincoln, 1994:105). A paradigm defines a framework for understanding and shaping both what we see and how we understand it (Babbie, 2007). Research paradigms help researchers to reflect their primary assumptions concerning the world and the foundation of knowledge (Guba and Lincoln, 1994). As noted by Guba and Lincoln (1994), research paradigms are characterised through their ontology, epistemology and methodology. Bryman (2012:27) asserts that ontological questions in social research relate to the nature of reality. Ontology is specifically associated with the question of whether reality can be perceived as objective or as subjective (Poterotto, 2005:127). On the other hand,epistemology is about 'how you know something,' the focus being on the relationship between the researcher and the reality (Guba and Lincoln, 1994:108). It addresses the fundamental question of whether the researcher is part of the reality

being discovered or is external to it (Bryman, 2012:27). Meanwhile, methodology is about 'how one goes about finding out reality' i.e. undertaking the research (Guba and Lincoln, 1994:109).In general, researchers usually are guided by three major research paradigms - positivism, constructivism/interpretivism and critical theory. The subsection below describes in detail the common research paradigms used in marketing research, contrasting them in relation to their ontological, epistemological and methodological perspectives.

6.2.1 Positivist paradigm

A positivist research paradigm usually is associated with a quantitative research approach that assumes there is one true reality that can be discovered by means of rigorous empirical study (Creswell, 2009). Within this paradigm, researchers view themselves as neutral observers where the outcome of the research is not influenced by their values, beliefs and biases (Guba and Lincoln, 1994). Babbie (2013:35) states that positivism embraces a four-point doctrine: (1) the rule of phenomenalism, which asserts that there is only experience; all abstractions be they "matter" or "spirit" have to be rejected; (2) the rule of nominalism, which asserts that words, generalisations, abstractions, etc. are linguistic phenomena and do not give new insight into the world; (3) the separation of facts from values; and (4) the unity of the scientific method. Positivism is anchored on the assumption that social and natural worlds are influenced by 'fixed and unaltered laws', hence human behaviour can be established and determined through 'scientific' means (Babin and Zikmund, 2010:145).The positivist paradigm espouses an ontological position that reality is objective (Kraus, 2005), and the epistemology is that in the quest for knowledge the researcher is separate from the research and does not influence the outcomes of research (Denscombe, 2010).

The positivist approach formulates assumptions from a theoretical framework, which then operationalises and statistically tests the hypothesis using collected empirical data (Hennink, Hutter and Bailey, 2011). Babin and Zikmund (2010) and Bryman (2012) suggest that the doctrine of positivism hinges on testing theories and subsequently providing material for the establishment of principles. In terms of research methodology, a positivist approach is mainly associated with the use of quantitative research methods. The main benefits associated with the positivist approach are that it adheres to the hypothetical-deductive method that requires systematic observation of phenomena and hypotheses testing that rely on empirical studies,

which may be generalisable (Babbie, 2013). However, the major criticisms against this philosophy are to do with the failure to uncover the in-depth, holistic, contextual, and subjective influences that shape human experiences. Hence, within a positivist paradigm, researchers are expected to distance themselves from the research subject in order to ensure objectivity during the data collection and analysis phases (Bryman and Bell, 2007).

6.2.2 Constructivist/Interpretivist paradigm

Meanwhile, a constructivist/interpretivist paradigm holds the assumption that researchers are allowed to develop subjective meanings from individuals' experiences towards certain issues in order to understand a certain phenomenon (Creswell, 2009). This paradigm grew out of the philosophy of Edmund Husserl's phenomenology and Wilhelm Dilthey's and other German philosophers' study of interpretive understanding called hermeneutics (Mertens, 2005). These approaches to research have the intention of understanding the world of human experience, suggesting that reality is socially constructed (Cohen and Manion, 1994; Mertens, 2005). The interpretivist/constructivist researcher tends to rely on the "participants' views of the situation being studied" (Creswell, 2003:8) and recognises the impact on the research of their own background and experiences. Constructivists do not generally begin with a theory (as with post positivists) rather they "generate or inductively develop a theory or pattern of meanings" (Creswell, 2003:9) throughout the research process.

Interpretivism recognises that the subject matter of social sciences – people and their institutionsis fundamentally different from that of natural sciences (Bryman and Bell, 2007). The interpretivist paradigm views reality as being subjective and characterised by the epistemological position that the researcher cannot be completely detached from the research process as reality is perceived by social actors in the research process (Denscombe, 2010). Reality is noted to involve subjective meanings formed through people's life experiences (Hennink et al., 2011).

This philosophy emphasises on understanding why people have different experiences and is useful when researchers seek to understand how people make sense of social problems (Hennink et al., 2011) and seek to grasp the subjective meanings of social actions (Bryman, 2012). Methodologically, the constructivist researcher is most likely to rely on qualitative data collection methods and analysis or a combination of both qualitative and quantitative methods

(mixed methods). Quantitative data may be utilised in a way which supports or expands upon qualitative data and effectively deepens the description (Mackenzie and Knipe, 2006).

6.2.3 Critical theory

Finally, the critical theory research paradigm holds assumptions that reality is shaped by social, political, cultural, economic, ethnic and gender values (Guba and Lincoln, 1994). Historical ontology of the critical theory assumes that there is a 'reality' that is apprehendable.Within this research paradigm, a researcher's main objective is to acquire a single apprehensible reality, whereby that reality is shaped by social values and by influences from other forces(Mackenzie and Knipe, 2006).Critical theorists believe the perpetuation of the subjective-objective controversy is problematic. The objective-subjective label is socially contrived and not a natural fact. Critical theorists have shown that 'objective' practices are those that have been shown to be the most 'subjective' (Guba and Lincoln, 1994).

When it comes to the research enterprise, critical theorists recognise the positive association of 'objectivity' to natural sciences and less positive association of 'subjectivity' to interpretive sciences (Kincheloe and McLaren, 1994). This is seen as an artefact of a system defined to privilege the 'objective' label and the natural sciences and is therefore recognised as a linguistic construction.Critical theorists are not just trying to describe a situation from a particular vantage point or set of values (e.g. the need for greater autonomy or democracy in a particular setting), but that are trying to change the situation(Mackenzie and Knipe, 2006).

Methodologically, critical theoretical approaches tend to rely on dialogic methods; methods combining observation and interviewing with approaches that foster conversation and reflection (Kincheloe and McLaren, 1994). This reflective dialogue allows the researcher and the participants to question the 'natural' state and challenge the mechanisms for order maintenance. This is a way to reclaim conflict and tension.

The characteristics (methods, key focus, and data collection tools) associated with these research paradigms are presented in Table 6.1 below.

Table 6.1: Characteristics of the three research paradigms

Criteria/Focus	Positivism	Constructive/Interpretivism	Critical Theory
Research Methodology (Primary)	Although qualitative methods can be used within this paradigm, quantitative methods tend to be predominant	Qualitative methods dominate although quantitative methods may also be utilised	Qualitative dialogic methods dominate this paradigm; methods combine observation and interviewing
Theory building/ Theory testing	Postulate theories that can be tested in order to confirm or reject. Test theories in a controlled setting, empirically supporting or falsifying hypotheses through a process of experimentation.	Theories are constructed from multiple realities. Theory is shaped by social and cultural contexts.	Theories are built from analysing power relationships (deconstructing the world).
Role of researcher	Uncover reality Scientifically explain, describe and predict phenomena	Study social, cultural and mental phenomena to reveal why people behave in certain ways. Describe the multiple realities	Political emancipation and increasing critical consciousness
Nature of reality	Objective, true reality exists by the unchangeable natural cause-effect laws. Reality is generalized Researchers and reality are independent	Reality is constructed, interpreted and experienced by people in their interactions with each other and wider social systems	Reality is shaped by social, political, cultural, economic, ethnic and gender values
Nature of Knowledge	Knowledge is based on verified hypotheses	Knowledge is based on subjective beliefs, values, reasons and understanding	Knowledge is constituted by the live experience and the social relations that structure these experiences

Source: Adapted from Guba and Lincoln (1994) and Bryman and Bell (2007)

Although a host of different terms have been used by scholars to typify paradigms (Mackenzie and Knipe, 2006), two overarching paradigms dominate social marketing research, namely, positivism and interpretivism, as previously discussed.Based on the foregoing discussion, this study employed a positivist paradigm as the researcher's philosophy because hypotheses were posited and the study's findings are expected to be compared with the stated hypotheses. This is consistent with the objective of this study, which is to investigate the market, psychological and social factors affecting organic food purchase decision and other post-purchase outcomes based on a theoretical framework with several quantifiable variables. Statistical methods were used to ascertain whether the framework fits the data.

The detail of the research process followed during this study is presented in the next section, stating the essence in a discussion of marketing research.

6.3 ESSENCE AND PROCESS OF MARKETING RESEARCH

6.3.1 Essence of marketing research

Malhotra (2010:35) defines marketing research as "a systematic and objective identification, collection, analysis, dissemination, and use of information that is undertaken to improve decision making related to identifying and solving problems." This definition incorporates the systematic and objective approach denoting the steps that marketing research usually follows. Lamb, Hair, McDaniel, Boshoff, Terblanche, Elliott and Klopper (2015) maintain that the fundamental purpose of market research is to support informed decision making when addressing marketing problems.

Burns and Bush (2010)assert that the main purpose of marketing research is to connect consumers to the marketers (or social marketers) byproviding genuine information that can inform marketing strategy. One similarity between social and commercial forms of marketing is the central role of market research in facilitating the process of identifying and then satisfying consumers' needs and desires (Lamb et al., 2015).

The two definitions of market research cited above and other definitions (see, for example, McDaniel and Gates, 2008) share the common idea that it is the sequential process that

characterises the marketing research. The next sub-section looks at the marketing research process in detail as it relates to the process undertaken in this study.

6.3.2 The marketing research process

A host of successive steps that steers the marketing research process are documented in the marketing literature. For example, Lamb et al. (2010, 2015) proposes seven steps of marketing research process: defining the marketing problem; collect some secondary data by reconsidering the objectives; formulating the research objectives; hypotheses; propositions; plan the research design; collect data; analyse and interpret; and prepare and present the report. Malhotra (2010) proposes a marketing research process consisting of six steps: defining the problem; developing an approach; formulating a research design; doing field work or collecting data; preparing and analysing data; and preparing and presenting the report. Similar to Lamb et al.'s (2010) marketing research process, Tustin, Ligthelm, Martins and Van Wyk (2010) also identify seven steps of marketing research process. This study followed largely Kotler and Lee's (2011) eight steps in specifically conducting social marketing research. The steps are:

- Purpose: this first step deals with the ultimate goal of the research. It is about being clear of the decision that the research will help to inform or the question(s) that the research needs to help answer.
- Audience: This step is about answering the questions "for whom is the research being conducted and/or who will utilise the research?"
- Informational objectives: This step assesses the specific type of information social marketers need to make these decisions and/or answer the research question. The variables of interest need to be clear to the researcher.
- Respondents: This step deals with the issue of who will provide the information i.e. from whom will information be collected.
- Technique: This step entails deciding and applying the most efficient and effective techniques to collect the information.
- Sample size, source and selection: This stage entails deciding on how many respondents to target and how to select them.

- Pre-test and fielding: This step involves first pretesting the data collection tools (e.g. questionnaire) with a small sample to refine the instruments and then proceed with the fieldwork itself.
- Analysis: This step entails deciding on and using data analysis techniques and supporting software for making sense of the data.
- Report: The last step relates to the format to be used when presenting the report.

Burns and Bush (2009) caution that not all marketing research systematically uses all steps in order but maintain that it is normal for some steps to be sidestepped. With regards to step one, the ultimate purpose of this study is to better inform retailers as well as social marketing strategies toward organic food consumption. Thus, as discussed in chapter one, this study seeks to investigate the major factors (market, social and psychological) that shapeorganic food purchase decision through an integrative empirical model. In terms of audience, the study is conducted to help inform both researchers and practitioners. Detailed discussions on the theoretical and practical implications of the study are provided in chapter eight. Step three has been addressed through presentations in chapter one and chapter five. In chapter one, the specific objectives of the study are set out and presented. Chapter five outlines the proposed conceptual model of the study and both the dependent and independent variables of interest are indicated in the model.

The rest of this chapter focuses on issues relating to step four to eight. Step nine deals with the format of the report. As this study was conducted in fulfilment of requirement of doctoral degree (PhD), the report comes in the form of a thesis. As mentioned earlier in this chapter, this study espouses a positivist stance. A quantitative survey is therefore followed to address the questions this study seeks to answer. Section 6.4 provides details of the research approach and strategy followed.

6.4 RESEARCH APPROACH

This study followed a deductive approach, whereby theoretical propositions were outlined first through a literature review (Neuman, 2006) and then empirically tested. During the course of the fieldwork, the theoretical section was periodically updated with recent statistics in order to ensure the relevance of the study (Schaefer and Dillman, 1998). Mansourian and Maddan (2007)

categorise research into two sets, namely, qualitative and quantitative research. Qualitative research is more useful for exploring new constructs or themes in a phenomenon, while quantitative research is useful for testing objective theories by examining relationships between presumed variables or constructs(Bryman and Bell, 2007). It therefore involves data collection that is typically numerical and analysed using mathematical models(Creswell 2009). Quantitative research is an approach for testing objective theories by examining relationships among variables(Babbie, 2013). Table 6.2 discusses both characteristics and differences between the two research approaches.

Table 6.2: Qualitative and quantitative research methods

Factors/ Characteristics	Qualitative methods	Quantitative methods
Research objectives	Discovery and identification of new ideas, thoughts, feelings; preliminary insights on and understanding of ideas and objects	Validation of facts, estimates, relationships, predictions
Type of research	Normally exploratory designs	Descriptive and causal designs
Type of questions	Open-ended, semi-structured, unstructured, deep probing	Mostly structured
Type of execution	Relatively short time frames	Usually significantly longer time frames
Representativeness	Small samples, limited to the sampled respondents	Large samples, normally good representation of target populations
Type of analyses	Debriefing, subjective, content, interpretive, semiotic analyses	Statistical, descriptive, causal predictions and relationships
Researcher skills	Interpersonal communications, observations, interpretive skills	Scientific, statistical procedure translation skills; subjective interpretive skills
Generalisability of results	Very limited; only preliminary insights and understanding	Usually very good; inferences about facts, estimates of relationships

Source: Hair, Bush and Ortinau (2008)

The quantitative research approach was followed in this study. As shown in Table 6.2, the rationale in choosing quantitative studies lies in the fact that the objectivity and coherence that is necessary to address the issues that underpin organic food consumption are catered for within the procedure. Furthermore, this method is also flexible and permits replication of the research procedure thus enhancing validity and reliability of research findings (Babin and Zikmund, 2016). The researcher was also able to quantify the data which enhanced the accuracy of the research findings. In addition, this quantitative approach was adopted to determine the relationships between the study variables of interest. The approach was appropriate because it enhances the accuracy of results through detailed statistical analysis such as descriptive, correlation analysis, Smart Partial Least Square (PLS) and avoids the element of subjectivity associated with the qualitative approach (Du Plessis and Rousseau, 2007). Schiffman and Kanuk (2009) assert that the quantitative approach is descriptive in nature and requires large samples that help in generalising the results of the population. This tool is applicable mostly for testing specific research hypotheses (Mansourian and Maddan, 2007).

6.5 RESEARCH DESIGN

Research design is the blueprint that is followed in collecting and analysing the data (Churchill, Brown and Suter, 2010). The research design delineates the structure of the investigation in such a way as to attain the research objectives (Burns and Bush, 2010). It also ensures that the research will be relevant to the problem at hand and will use economical procedures (Churchill et al., 2010). Thus, a research design is a preliminary plan for conducting a research. Berglund (2007) and Harrison and Reilly (2011) characterised research by three scientific purposes, which are exploratory, descriptive, or explanatory designs. While qualitative research is commonly exploratory in design, quantitative research commonly follows causal or descriptive research design (Malhotra, 2010).

Causal design is mainly geared toward testing cause-and-effect relationships (Churchill et al., 2010). Causal research is usually undertaken when the researcher wants to understand the variables which cause (independent variables) some effects (dependent variables) in a given phenomenon (Malhotra, 2010). With this design, experiments can be appropriate for assessing causality (Churchill et al., 2010). An experiment manipulates an independent variable to evaluate its effect on a dependent variable while controlling for extraneous variables (Burns and Bush,

2010). Regardless of whether these experiments are conducted in a laboratory or on the field, the experimental method proves to be a more convincing method to establish causal relationships thananexploratory and descriptive design (Churchill et al., 2010). With regards to this study, experiments could have been a better way to predict organic food consumption. However, considering the costs and substantial amount of time that experiments entail, the researcher could not afford to adopt such an approach.

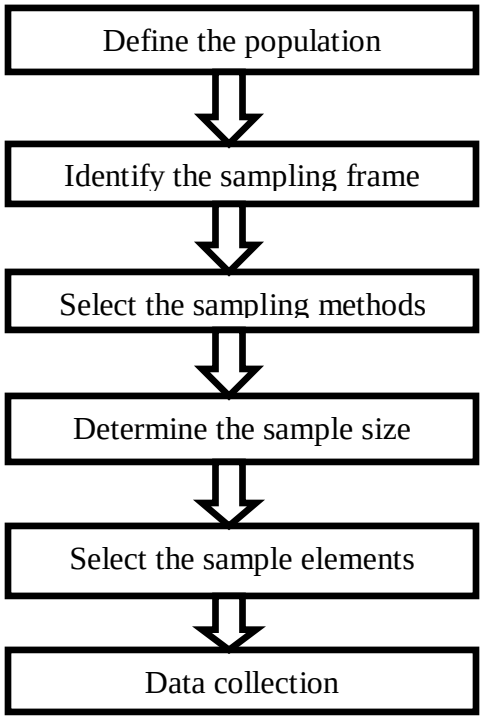
The purpose of a descriptive research design is to describe a given phenomenon when the researcher is aware of what to investigate but does not have the answers to the research questions (Harrison and Reilly, 2011). Descriptive research design is conclusive research that describes some groups of people or other entities such as companies (Malhotra, 2010). Descriptive research is the most common in marketing research both at academic and professional levels (Berglund, 2007). This type of research design is generally undertaken to (1) describe the characteristics of certain groups (e.g. organic food consumers), (2) determine the degree to which marketing variables are associated, (3) determine the proportion of people who adopt a certain behaviour (e.g. purchasing organic food), and (4) make specific predictions (e.g. using an empirical model to predict the consumer's organic food consumption) (Malhotra, 2010).

This study was descriptive in design. There are two common types of descriptive research, namely, cross-sectional and longitudinal studies. Cross-sectional design involves the collection of data from sample units at one point in time (Malhotra, 2010). Longitudinal design repeatedly measures the same variables from a fixed sample population, over a given period of time (Burns and Bush, 2010). Unlike cross-sectional design, which gives a snapshot of information in one point in time, longitudinal design examines the same people using the same variables over a given period of time (Malhotra, 2010). The present study follows a cross-sectional design since its intention is to model relationships between market, psychological and social factors affecting organic food purchase decision in a segment at a specific point in time. The following section provides more details regarding the sampling design and data collection during the quantitative phase of the study. It starts by providing details on the target population, sampling method, sample size and data collection.

6.5.1 Sampling design

Once a particular research design is selected, the data collection needs to be determined. Pragmatic marketing research appreciates the notion that a sample rather than a census is a more feasible approach for data collection (Babin and Zikmund, 2016). A sample is often more accurate and practical than obtaining information from the entire population (Struwig and Stead, 2004). Sampling is deemed necessary when it is impossible to survey the entire population of an unmanageable size and it is unnecessary to assume that a census would necessarily provide more useful results than a planned survey.The development of a sampling plan is a particularly critical aspect of survey methodology as it provides a foundation for a sound measurement (McDaniel and Gates, 2008). Specific steps, as recommended by Parasuraman and Grewal (2008) as well as Gupta (2011), were followed in developing the sampling procedure for the empirical study as indicated in Figure 6.1 bellow. These include identifying the target population, identifying the sample frame, selecting the sampling method, determining the sample size and gathering information from the sample elements (Wiid and Diggines, 2011).

Figure 6.1: The steps in the sampling process



Source: Adapted from Wiid and Diggines (2011)

The present study is interested in ascertaining the market, psychological and social factors affecting organic food purchase decision in South Africa, therefore it was impractical to conduct a systematic census of all consumers in South Africa. A sample was therefore employed in this study. According to Babin and Zikmund (2016), the process of sampling entails using a subset (sample) of the larger population to make conclusions about the whole population. Before selecting the sample units, several decisions need to be taken into consideration. These include defining the target population, choosing the sampling method, determining the sample size and selecting the actual sampling units (Malhotra, 2010; Tustin et al., 2010; Wiid and Diggines, 2011).

6.5.1.1 Defining the target population (Who and Where?)

It is suggested by Wiid and Diggines (2011:184) that at the inception of the sampling procedure, the researcher needs to clearly define the target population by responding to the question, "who dowe want to investigate?" When defining the target population, elements such as the geographical boundaries, time and units are included (Tustin et al., 2010). Informed by the objective of this study, the target population was restricted to consumers of organic food in Gauteng, South Africa. The sampling criterion was limited to minimum age of 18 years, both male and female from all racial groups in South Africa. These consumers were chosen as a result of a recent growing demand for less environmentally-damaging food production. Confining the study to the province of Gauteng is justified by the fact that it is the most populated region (12 464 000 habitants) and includes the most heterogeneous racial and ethnic groups (Stats SA, 2017). Moreover, because of its large population, the residential sector in Gauteng province is the largest in the country (Musango, 2014). In addition, Gauteng was selected due to the permission that is granted to undertake this research at the Bryanston Organic Market in Sandton, Johannesburg.

6.5.1.2 The sample frame

After the target population is defined, the researcher assembled a list of all eligible sampling units referred to as the sampling frame. Bryman and Bell(2007:182) define sample frame as "a listing of all units in the population from which the sample is selected and each unit of analysis is included only once." It consists of a set of directions for identifying the target population,

including the different types of sample sources and the basis on which respondents are selected (Bradley, 2007). Common examples of sample frames include, but are not limited to, customer lists and maps as well as physical sampling frames such as shopping malls and centres, amongst others (Tustin et al., 2010). For the study's purpose, Bryanston Organic and Natural Market was used as a physical sampling frame in the absence of an accurate list of organic consumers. Bryanston Organic and Natural Market was identified because is one of the top ten Organic food markets in the country and the biggest in Gauteng in terms of activities and years of existence (Euromonitor International, 2016).

6.5.1.3 Choosing the sampling technique

There are two distinctive categories of sampling that can be applied in research, namely, probability and non-probability sampling methods (Zikmund,Babin,Carrand and Griffin, 2009; Malhotra, 2010). In probability sampling, elements of the population have a known likelihood of being selected into the final sample (Burns and Bush, 2010). Provided the selection is objective and not subjected to the whims of the researcher, probability sampling allows the researcher to more confidently generalise the study to the larger population (Churchill et al., 2010).

In non-probability sampling, the probability that a specific unit of population is selected is not known (Wiid and Diggines, 2011). Non-probability sampling methods sometimes involve the personal and subjective judgment of the researcher or the field workers (Malhotra, 2010). As a result, non-probability sampling methods are often subject to biases. Nevertheless, because the researcher is more likely to correctly select the respondents deemed suitable to participate in the study, and the technique is more cost effective, non-probability sampling techniques are widely used in academic research (Burns and Bush, 2010). Considering that data was collected from Bryanston Organic and Natural Market, and there was the total number who visit this market was unknown for a probability sampling, a non-probability sampling method was therefore employed in this study.

This study used convenience sampling method, which falls into the category of non-probability sampling methods. Convenience sampling is a type of non-probability or non-random sampling where members of the target population that meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to

participate are included for the study's purpose (Etikan, Musa and Alkassim, 2015).The convenience sampling technique was adopted so as to get information from the respondents at their own convenient times. Convenience sampling is affordable, easy and the respondents are readily available (Cresswell and Clark, 2011).

6.5.1.4 Determining the sample size

Determining the appropriate sample size is an important consideration in academic research (McDaniel and Gates, 2008). Hence a number of factors are commonly considered when deciding on a sample size. These include the available funds to cover the cost, time constraints, the heterogeneity of the population and the type of analysis the study seeks to undertake (Bryman, 2012). These factors were taken into consideration when determining the sample size of this study. Firstly, historical evidence approach was used in determining the sample size which uses previous similar studies as indicated in Table 6.3 below.

Table 6.3: Previous studies in determining the sample size

Year	Scope	Sample size	Authors
2011	Determinants of Willingness to Purchase Organic Food	570	Voon et al.,
2012	Green purchase intention of Malaysian consumers	230	Meiet al.
2013	Nationwide online survey of organic food products	1011	Sultan et al.,
2014	Consumers green purchase decision of diary and meat products of Kaleh Company in Guilan province	384	Delafrouz et al.
2014	Green Consumption Behavior	560	Wu & Chen
2014	Green Purchasing behaviour among Gen Y in Malaysia	500	Nizam et al.,
2014	Determinants of Intention to Purchase Green Products in Nigeria	502	Karatu & Mat

Source: Author's Own compilation (2017)

Based on the historical evidence approach, the average as indicated by the table above, between 500 to 600 sample size, is deemed appropriate. Secondly, various multivariate statistical analysis techniques are used to analyse the data and test the hypotheses in this study. The main techniques include confirmatory factor analysis and Smart PLS. These analyses require a substantial amount

of sample units. The algorithm underpinning the Smart PLS (which is in fact a key analysis technique used in this study) is sensitive to the sample size. Hair et al. (2014) suggests that the sample size should be determined by the number of constructs, number of measured items, as well as multivariate normality. Table 6.4 summarises the key sample size prerequisites for conducting a Partial Least Square (PLS) based on structural equation modeling (SEM) technique.

Table 6.4: Sample requirements for Partial Least Square (PLS) regression based SEM

Minimum sample size required	Conditions
Model complexity and basic measurement model characteristics	
Minimum 100	• Five or fewer constructs • More than three items each • High item communalities (0.6 or higher)
Minimum 150	• Seven or fewer constructs • Modest communalities (0.5) • No under-identified constructs
Minimum 300	• Seven or fewer constructs • Lower communalities (below 0.45) • Multiple under-identified constructs
Minimum 500	• Large number of constructs • Lower communalities • Fewer than three measured items
Multivariate Normality **When data deviate from multivariate normality, higher sample size is required**	

Source: Adapted from Hair et al. (2014)

Hair et al. (2014) suggest that for a complex model with more than seven constructs as indicated in Table 6.4, the minimum sample size required is 500 or more. The proposed conceptual model in this study can be considered as a complex model given the thirteen constructs that were included in the Partial Least Square analysis. In line with the recommendations shown in the table above, this study initially targeted a minimum of 500 respondents. The final sample size of

612 was used in the survey. The methods and approaches used to collect data are explored in the following subsection.

6.6 DATA COLLECTION AND RESEARCH STRATEGY

Descriptive designs generally rely on either survey or observation methods to collect data. According to Burns and Bush (2010), surveys involve interviewing a large number of respondents using structured questionnaires. The questions can be asked in varied ways such as verbally, in writing, using a computer, and using mobile devices (Bryman, 2012). Observation, on the other hand is, "about employing systematic rules for recording behavioural patterns of the population under scrutiny" (Malhotra, 2010:230).

Both observation and surveys have their advantages associated with them. One of the main advantages of observation is that it limits the gap between stated behaviour and actual actions (Bryman, 2012). It helps minimise the problem of social desirability whereby respondents in a survey tend to provide biased information about their behaviour in order to represent themselves in a more favourable light (Kreuter, Presser and Tourangeau, 2008). Notwithstanding these important benefits associated with observation, many limitations explain why it is not widely used in social research (Bryman, 2012). The main limitations are the fact that observation neglects the context in which the behaviour is performed, observation is unable to provide information about the underlying motives, preferences and intentions behind behaviour, and more particularly it is costly and time consuming. Compared to observations, surveys provide many advantages for an academic social research project. Burns and Bush (2010) describe five key advantages of surveys:

a) Surveys provide uniform and standardised questions to all respondents;
b) Uniformity of questionnaires makes it easy to administer a survey;
c) A survey can enable the researcher to delve beneath the surface by inquiring about motives and circumstances influencing consumers' actions;
d) Standardisation of the questionnaire allows computerised data analysis programs to quickly analyse the data collected; and
e) Surveys uncover subgroup differences because they use large sample sizes.

A large sample size is necessary if the researcher aims to make generalisations from the study (Hair et al., 2014). Although observation may have provided more accurate information about organic purchase behaviours, a survey was conducted as this allowed the researcher to develop greater insight into underlying factors that shape organic food purchase decisions, which is in fact the core purpose of this study. Moreover, the straightforwardness and relative cost-effectiveness of surveys makes it more appropriate for this research. Thus, a cross-sectional survey was implemented in this study. Hair et al (2014) provide taxonomy of survey methods or modes commonly used in marketing research:

- Person-administered: this method entails that a trained interviewer visits the respondents either in their home, workplace or in malls (mall-intercept interview) and administers the questionnaire in person. The mode of communication can be a paper-pencil personal interview, or a computer-assisted interview on a laptop or any other electronic device like tablet or smart phone.
- Telephone-administered: in this case the field worker calls the respondents on their fixed line or personal cell phone. A computer can also be used to assist the interviewer in the process of collecting the data.
- Self-administered survey: here the respondents are requested to complete the questionnaire themselves without the presence of an interviewer. Hair et al. (2013:116) identifies four types of self-administered survey including mail surveys, mail panel surveys, drop-off surveys and online surveys. With mail surveys the questionnaires are sent to participants using the postal mail service. The mail panel survey is nearly similar to the mail survey, the difference being that in a mail panel survey the respondents have agreed in advance to take part to the survey. The drop-off survey requires that questionnaires are hand-delivered to respondents and are returned by mail or are picked up by the researcher or field workers. The online survey which is progressively gaining popularity is based on the principle that the researcher invites the respondents to complete a questionnaire hosted on the Internet.

This study utilised a person-administered survey where respondents were personally visited at the Bryanston Organic Market. The data collection process thus employed a paper-based questionnaire. This approach is premised on the principle that data collection modes should

match respondents' preferences and availability (Saunders et al. 2012). The choice of survey methods was motivated by the relatively low cost associated with this data collection method. Moreover, the absence of a trained interviewer when the respondent is completing the survey, limits the risk of interviewer-respondent bias (Zikmund and Babin, 2007). Furthermore, a survey preserves the anonymity of respondents better. This can therefore contribute to more openness and honesty in the process of completing the questionnaire. It is further noted that surveys provide a quick, inexpensive, efficient and accurate means of assessing information about a population (Saunders et al., 2012), which suited the current study.

6.6.1 Measuring instrument and scaling process

The marketing researcher needs to decide on what information needs to be collected and the type of questions to be asked before developing the measuring instrument. Marketing researchers measure consumer characteristics and attributes such as attitude, perception or income level (Malhotra, 2010). There are different types of scaling used to measure these elements. In marketing, a scale is referred to as "a device providing a range of values that correspond to different characteristics" (Zikmund and Babin, 2010:324). In marketing research, numbering systems are commonly employed to convey information about the attributes being measured (Tustin et al., 2010). The most commonly used scale measurement levels in marketing research are nominal, ordinal, interval and ratio scales. These scale measurements are discussed below:

- Nominal scales

The most elementary type of scale design is nominal. Zikmund and Babin (2010) view a nominal scale as a categorical scale that can help to assign a value to an object for identification or classification. Typical examples of nominal scale are gender (male and female), racial groups, or answers involving yes or no.

- Ordinal scales

Ordinal scales, according to Malhotra (2010), are ranking scales. While they may have nominal properties, ordinal scales can also allow the objects to be ranked in a hierarchical manner (Burns and Bush, 2010). An example can be to rank brands in terms of preference (such as higher than, about the same as, lower than).

- Interval scales

Babin and Zikmund (2016) assert that an interval scale has an equal and known distance between each descriptor of an attribute. In other words, equal distances on the scale denote equal distances in the characteristic being measured (Malhotra, 2010). An example of interval scale is the Likert scale.

- Ratio scales

A ratio scale is the most sophisticated type of scale because it represents absolute quantities (Babin and Zikmund, 2016). Ratio scales are the ultimate nirvana when it comes to measurement scales because they tell us about the order, they tell us the exact value between units.Unlike interval scales, ratio scales have a meaningful zero point. Ratio scales,according to Tustin et al.(2010:397)allow the researcher to identify the "absolute differences between each scale point but also to make comparisons between the responses." An examples of ratio variables include height and weight.

Nominal, ordinal and interval categories of scale measurement were utilised in this study. Gender, for example, was measured using a nominal scale, while monthly income (in Rand) and purchase frequency of organic food measured using an ordinal scale. Market, psychological and social factors (attitudes) were measured using an interval scale. In terms of the interval scale, a Likert scale was utilised. The Likert scale is a type of scale that allows respondents "to rate how strongly they agree or disagree with carefully constructed statements" (Zikmun and Babin, 2010:346). In this study, respondents were requested to specify their level of agreement with a set of items (or statements) that define their attitude, behavioural intention and beliefs toward organic food (See Annexure 2).

The next section discusses how the questionnaire was designed.

6.6.2 Questionnaire design

This study used a structured questionnaire consisting of a series of questions that respondents answered. A questionnaire is a document designed with the purpose of seeking specific information from the respondents. It is a formal framework comprising a set of questions and scales designed to generate primary raw data (McDaniel and Gates, 2006). Questionnaire design

is a systematic procedure that requires researchers to go through a series of important steps (Burns and Bush, 2010). Hair et al. (2013) proposed the following seven steps for designing a questionnaire:

Step 1: Confirm research objectives.
Step 2: Select appropriate data collection method.
Step 3: Develop questions and scaling.
Step 4: Determine layout and evaluate questionnaire.
Step 5: Obtain initial client approval.
Step 6: Pre-test, revise, and finalise questionnaire.
Step 7: Implementing the final survey.

The questionnaire enabled the researcher to achieve the following six functions, as proposed by Tustin et al. (2010):

- it helped translate the research objectives into specific questions;
- it enabled standardised questions and response categories so that every participant responded to identical stimuli;
- by its wording, question flow and appearance, it fostered cooperation and kept respondents motivated throughout the interviews;
- questionnaires served as permanent records of the research;
- the questionnaires helped speed up the process of data analysis; and
- the questionnaires contained the information on which reliability assessments were made, and they could be used in follow-up validation of respondents' participation in the survey.

A questionnaire was designed to collect primary data. The respondents were given instruction to put a cross (X) to the statement that represented their level of agreement. Thus far, the research objectives have been delineated in chapter one, the variables identified in the conceptual model developed in chapter one and chapter five, and the data collection methods described in the preceding sections of this chapter. Thus, the questionnaire layout, questions and scaling can be developed.

6.6.2.1 Questionnaire layout

Burns and Bush (2010) maintain that the way a questionnaire is arranged and flows are key aspects that affect the quality of collected information. The ease of completing the questionnaire, the utilisation of the correct format, and the appropriateness of questions can all motivate respondents to fill in the questionnaire in an effective way (Zikmun and Babin, 2010). In general, a good questionnaire flows from general to more complex and specific questions (Hair et al., 2013). The questionnaire layout sections are outlined as follows:

Section A: Questions based on biographical profile scale.
Section B: Questions based on Market factors affecting organic food purchase decision:

- MD: distribution; and
- MC: communication.

Section C: Questions on psychological factors affecting organic food purchase decision:

- PP: perception of product quality;
- PE: environmental attitude;
- PB: behavioural beliefs;
- PI: image; and
- PV: perceived value.

Section D: Questions based on social factors affecting organic food purchase decision:

- SP: peer influence; and
- SF: family influence.

Section E: Questions on organic food purchase decision (PD).
Section F: Questions on organic food consumption satisfaction (CS).
Section G: Questions on post-purchase outcomes:

- RI: repurchase intention;
- WP: willingness to pay the price premium; and
- WOM: word-of-mouth.

The questionnaire assembled for this study contained seven sections in line with the questionnaire construction discussed in section 6.6.2.2 below. The first focused on gathering the respondent's demographic and other background information. Biographical questions included

the gender; age group; ethnicity/race; education level; racial group and monthly income. Other background questions included information related to knowledge of organic food, how long have you purchased organic food (experience) and how often do you purchase organic food (frequency).

The second section assessed the extent to which respondents are affected by market factors in their organic food purchase decisions. The market factors chosen for this study were distribution of organic food as well as communication awareness of these food products. The third section examined the five psychological factors affecting organic food purchase decision. These are perception of product attributes, environmental attitude, behavioural beliefs, perceived value, and the image of organic food.

The fourth section focused on the two social factors such as peer influence and family influence used in this study, while section E comprised questions on organic food purchase decision as an outcome. The sixth section examined consumption satisfaction emanating from organic food purchase decision, while the other post-purchase outcomes such as repurchase intention, willingness to pay the price premium and word of mouth were represented by the seventh section. Section B-G were measured using a five-point Likert scale ranging from (1) strongly disagree to (5) strongly agree, and (3) represented neither agree nor disagree.

6.6.2.2 Question format and construction

The questionnaire designed for this study included closed-ended questions. Closed-ended questions or structured questions refer to questions that necessitate the respondent's choice from pre-set responses (Tustin et al., 2010). The structured question can be either multiple choice, dichotomous or scale,as recommended by Malhotra (2010). The conceptual model developed in the previous chapter includes market, psychological and social variables. These variables are typically measured by constructs because a single item cannot properly capture a whole concept such as attitudes toward the environment to purchase organic food.

As explained by Babin and Zikmund (2016), the term construct alludes to concepts that are measured with multiple items. All the constructs incorporated in the conceptual model have been developed from the extant literature and were adapted to the present context of the study.The items forming the constructs in this study were adapted from several previous studies found in

the broad pro-environmental literature and from the researcher and the promoter‘s experience (see Appendix B for a copy of the survey questionnaire).The promoter was instrumental in guiding this process.

In this study, existing scales that were available in the literature were used for most of the variables on account of their wide recognition and acceptability in pro-environmental (organic food) literature. The variables and the sources of the measuring items are presented in the table 6.5 below.

Table 6.5: Scale items sources

Variable	Number of items	Source
Price	Five (5)	Allsop (2007) and Voon et al. (2011)
Distribution	Five (5)	Allsop (2007) and Voon et al. (2011)
Communication	Five (5)	Allsop (2007) and Voon et al. (2011)
Environmental attitude	Four (4)	Ooi, Kwek and Tan (2012) and Mun (2014)
Perceived value	Four (4)	Zielke (2010) and De Toni and Mazzon (2013)
Behavioural beliefs	Four (4)	Hand and Kim (2010)
Perception of product attributes	Four (4)	Mun (2014)
Image of organic food	Four (4)	Lee and Baak (2015)
Peer influence	Four (4)	Sinnappan and Rahman (2011) and Mun (2014) and Ha, Hsu and Sheu (2010)
Family influence	Four (4)	Sinnappan and Rahman (2011) and Mun (2014) and Ha, Hsu and Sheu (2010)
Purchase decision	Five (5)	Aertsens et al (2009)
Consumption satisfaction	Five (5)	Chang and Fong (2010)
Repurchase	Four (4)	Wu, Chen, Chen and Cheng (2014) and De Toni, Eberle, Larentis and Milan (2013)
Word of mouth	Four (4)	Wu, Chen, Chen and Cheng (2014) and De Toni, Eberle, Larentis and Milan (2013)
Willingness to pay the price premium	Four (4)	Wu, Chen, Chen and Cheng (2014) and De Toni, Eberle, Larentis and Milan (2013)

The scales that were not well constructed in the literature needed to be developed for the measurement of some variablesto fit the current context of the study.

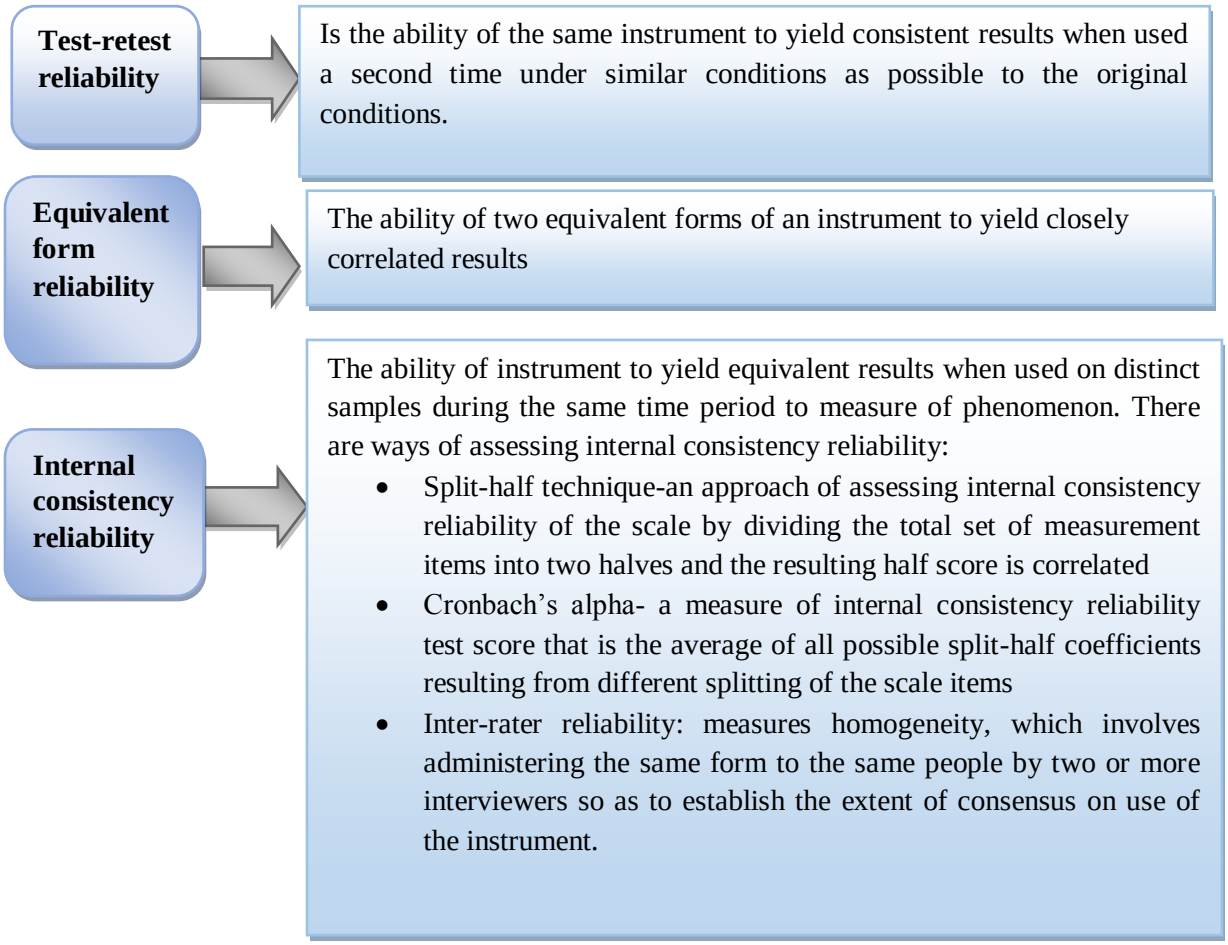
6.7 RELIABILITY AND VALIDITY ASSESSMENT

The researcher should ensure that the scales used in the questionnaire are not only reliable but valid when conducting a survey. Hence the reliability and validity analysis were undertaken.

6.7.1 Reliability measurement

Reliability is the extent to which a scale produces consistent results if repeated measurements are undertaken (Malhotra, 2010). If the results of a study can be reproduced using similar methodology, then the research instrument is considered to be reliable (Babin and Zikmund, 2016). Zikmund and Babin (2010) assert that a scale is reliable when different attempts at measuring it converge on the same result. There are various general classes of reliability estimates (Malhotra, 2010), and are briefly described in Figure 6.2.

Figure 6.2: Reliability assessment explained



Source: Garson (2007:765)

Nunnally (1978) recommends calculation of coefficient alpha (also known as Cronbach alpha) in order to assess the reliability of a multiple-item variable. Dubihlela (2012) suggests that coefficient alpha can be applied to scales with as few as two items. Malhotra (2010:285) points out that if the coefficient alpha is too low, the indication is that either the scale had few items, or the items had very little in common. Given the many multiple-item measures utilised in this questionnaire, an internal consistency approach was applied to assess the reliability. Internal consistency refers to the homogeneity of the items that form the scales (Zikmund and Babin, 2010). In other words, it is the degree to which the items forming the scale are correlated. Internal consistency can be assessed by the split-half method or Cronbach's alpha coefficient. The split-half method consists of splitting the scale into two randomly selected sets of items and checking the results of one half against the other half (Field, 2013). Cronbach's alpha is the most commonlyapplied estimate of internal consistency in social research (Zikmund and Babin, 2010). It was therefore used in this study. An important property of coefficient alpha is that its value tends to increase with an increase in the number of scale items (Malhotra, 2004).

This coefficient varies from 0 to 1. Despite the intensive debates around the acceptable threshold of the alpha value in order to ensure reliability (Field, 2013), a value equal or above 0.7 commonly indicates satisfactory internal consistency in marketing research (Malhotra, 2010). In this study the reliability of the scale was first assessed during the pilot study. The results of this analysis will be discussed in the section related to the pilot study. Reliability was later assessed as part of the main analysis.

6.7.2 Validity assessment

Validity is the extent to which differences in observed scale scores reflect true differences among objects on the characteristic being measured rather than systematic or random errors (Hair et al., 2013). Validity assesses whether the instrument being used is measuring what the researchers actually think they are measuring and also whether the concept is being measured accurately (McDaniel and Gates, 2008). A valid instrument must cover the extent to which it provides adequate coverage of the topic under investigation (Babin and Zikmund, 2016). Although different authors employ different labels to describe the techniques used to assess validity, there are two commonly used ways of establishing validity in marketing research. These are content validity and construct validity.

Content or face validity reflects the subjective agreement among experts, that a scale logically reflects the concept that is the focus of attention (Zikmund and Babin, 2010). In other words, content validity can be assessed by asking other experts whether the scale seems to be getting at the concept being measured (Bryman, 2012). In this study content validity was ensured when designing and refining the questionnaire. Discussions held during brainstorming meetings with the promoter while designing the questionnaire helped ensure this.

Construct validity assesses the core concept the scale is in fact measuring (Malhotra, 2010). In other words, each item forming the scale must reflect the construct and show a significant correlation with other items within the scale (Churchill et al., 2010). There are three types of construct validity, namely, convergent validity, discriminant validity and nomological validity. Convergent validity is the degree to which the multiple items share a high proportion of variance (Hair et al., 2013), and is another way of validating internal consistency because highly reliable scales usually hold convergent validity (Zikmund and Babin, 2010). Discriminant validity reflects the degree to which a scale does not correlate with other scales from which it is supposed to differ (Malhotra, 2010). This type of validity reflects how unique and distinctive a scale is (Zikmund and Babin, 2010). In this study, to ensure construct validity, exploratory and confirmatory factor analyses were performed when analysing the final data to confirm the validity of the scales.

The ensuing section presents howpre-testing of the questionnaire was undertaken.

6.8 PRE-TESTING THE QUESTIONNAIRE

After questionnaire design, it is imperative to check the potential errors before the main survey. Bryman and Bell (2010) define pre-testing as a useful technique for detecting and eliminating potential errors before the main survey. The study conducted a pre-test of the questionnaire to identify and correct deficiencies and to ensure that it met the researcher‘s expectations in terms of the information that was obtained. The items were tested for clarity and appropriateness in a pre-test with 10 respondents, including professionals. Respondents were requested to complete the questionnaire and indicate any ambiguity or difficulty that they experienced in responding to the questions.

Conducting a pre-testing before administering a large-scale survey is always important, especially when data is gathered through a self-completion questionnaire (Bryman, 2012). Zikmund and Babin (2010) identify important questions to consider while pre-testing a self-administered questionnaire. These are:

- Does the questionnaire flow naturally?
- Are the questions clear and easy to understand?
- Can respondents answer the questions easily?
- Which alternative forms of questions work best?

Based on the pre-test feedback, some items were eliminated and/or modified (Malhotra, 2010). The modified questionnaire was then also used to conduct a pilot test, which is reported in the next section.

6.9 PILOT STUDY

Since this questionnaire was being used in a South African context, it was necessary to examine the reproducibility of the different scales with a total number of 20 respondents. Therefore, the researcher conducted the Cronbach alpha coefficient test before the main survey in order to determine the reproducibility of the scale items, as suggested by Andrew and Halcomb (2006).The primary purpose was to establish the appropriateness of the Likert scale format and the reliability of the scales under investigation. In this regard, the pilot stage results were factor analysed in order to determine the dimensionality of scales (particularly the market factors, psychological factors, social factors, purchase decision scale, consumption satisfaction scale and the post-purchase outcomes scale). Items with factor loadings less than 0.30 were eliminated in the pilot stages.

The objective at this stage was to determine whether all the scale dimensions did "factor out" as intended (Dhurup, 2004:249). Further examination of the alpha values revealed that all the factors exceeded the reliability recommended benchmark value of 0.70. The pilot test reveals that all the constructs under investigation yielded satisfactory results aseach of the scales ranged from 0.707 to 0.953, thus demonstrating good internal consistency and reliability (See Table 6.5) below.

As discussed in sub-section 6.7.1, the internal consistency of a constructs is best assessed by means of Cronbach's alpha. By convention Cronbach's alpha needs to be equal or greater than 0.7, though sometimes a value of 0.6 is acceptable (Field, 2013:710). Table 6.6 presents results of the reliability test for each construct during the pilot test stage.

Table 6.6: Reliability of scales during pilot study

Constructs	No. of Items	Cronbach's alpha
Price	5	0.711
Distribution	5	0.821
Communication	5	0.707
Perception of products attributes	4	0.806
Environmental attitude	4	0.893
Behavioural beliefs	4	0.750
Perceived value	5	0.750
Organic food image	4	0.737
Peer influence	4	0.786
Family influence	4	0.855
Purchase decision	5	0.953
Consumption satisfaction	5	0.812
Repurchase intention	4	0.752
Willingness to pay the price premium	4	0.941
Word of mouth	4	0.828
Overall reliability of the scales	**66**	**0.928**

All the study constructs had a Cronbach's alpha of higher than 0.7 thereby indicating good reliability. The main survey was then undertaken and the process is highlighted in the following section.

6.10 IMPLEMENTING THE FINAL SURVEY

6.10.1 The Fieldwork and Response rate

Three research fieldworkers were recruited from a list of registered fourth-year university students pursuing marketing degrees. These fieldworkers were briefly trained by the researcher

in subject knowledge, interpersonal skills and professionalism (Dubihlela, 2012). Data collection activities took place at Bryanston Organic and Natural Market in Sandton, Johannesburg between the 1st of June and 29th of July 2017. The researcher together with the three trained fieldworkers undertook the data collection process for a period of two months every Thursday and Saturday.

A total number of 750 questionnaires were distributed by the researcher and fieldworkers. The questionnaires were then screened after data collection. However, due to a number of reasons, some of the questionnaires were not returned, while some were incomplete. After systematically screening all questionnaires, and getting rid of incomplete ones, a total of 612 were found usable, representing 81.6 percent response rate.

6.10.2 Data preparation process

Babin and Zikmund (2016) define this process as checking the data for accuracy before entering the data into the computer to transform it. The two major phases of data preparation which the researcher employed in this study were coding and data editing. These were employed to ensure that the collected data were complete and ready for analysing. These methods are discussed in the sections that follow.

6.10.2.1 Editing of Questionnaires

Churchill and Iacobucci (2005) define editing as a process of checking the completeness, consistency, and legibility of data and making the data ready for coding and transfer to storage. The researcher reviewed the questionnaires after the completion of the fieldwork, checking for the completeness and accuracy of the received questionnaires and preparing them for data analysis. In the process, some unsatisfactory questionnaires were discarded along the lines of Malhotra's (2010) recommendations. Completed questionnaires were checked once more prior to entering into the computer in order to find out if there were any problems of errors or omissions on the questionnaires. For example, questions were left unanswered by respondents. When the researcher discovered a problem like item non-response, the data were adjusted to make itcompletely consistent, or readable,as suggested by Zikmund (2000). In such cases, where data were inserted, the researcher had some options, such as using a neutral value.

Very little field editing was done for this study. This was a preliminary form of data editing which was undertaken by the researcher and fieldworkers during the data collection with a view to finding glaring omissions, clarifying responses that were logically or conceptually inconsistent (Churchill and Iacubucci, 2005). For example, if there were missing questionnaire pages, questionnaires were referred back to the respondent. In addition, to ensure consistency of treatment, it was best for the researcher to handle the editing of all completed questionnaires after the whole data collection process (Malhotra, 2010).

6.10.2.2 Data coding

Zikmund and Babin (2010) describe coding as the process of identifying and classifying each answer with a numerical score or other character symbol. Assigning numerical symbols permits the transfer of data from the questionnaire to the computer. Codes generally are considered to be numbered symbols; however, they are more broadly defined as rules for interpreting, classifying, and recording the data (Babin and Zikmund, 2016). Codes allow data to be processed in the computer.

For this purpose, firstly, all the variables were assigned names and coded for computer entry. Secondly, all the responses were coded to facilitate computer data input. Thirdly, once the data entry was completed, the negatively worded scale items were recorded and assigned new values. Fourthly, in order to obtain composite scores for items on a scale, target variables were computed. Fifthly, data files were carefully screened in order to minimise the data entry errors. In this connection, frequencies for each variable were checked in order to detect the out-of-range values, and values entered that were greater than 5 were rectified after reconciling with the questionnaires.

The next section discusses the data analysis methods employed in this study.

6.11 DATA ANALYSIS

The collected data were entered into an excel spreadsheet and then copied to the Statistical Package for Social Sciences (Version 24.0 for Windows) (SPSS24) programme, a statistical package used to code data and to run the statistical analysis. This study relies on a number of statistical data analysis methods. Given that the core of this study is to examine market,

psychological and social factors affecting organic purchase decision, consumption satisfaction and other post-purchase outcomes as delineated in the conceptual model, the data analyses included a host of statistical techniques. It is important to mention that the selection of data analysis techniques in this study was guided by the data analysis techniques used in previous pro-environmental studies. These are:

- Descriptive analysis;
- Factor analysis;
- Reliability and validity analysis;
- Correlation analysis; and
- Smart PLS-SEM based analysis.

In quantitative research, there is an ongoing debate regarding the use of either parametric or nonparametric statistical techniques (Dubihlela, 2012). A researcher can use parametric techniques only if the data were normally distributed, data were collected using a measurement scale, variance-covariance matrices were sampled from the same population variance-covariance matrix, and the sample size was determined considering the parametric techniques (Boomsma, 2000). It is argued that one should use parametric techniques if these assumptions hold true; otherwise nonparametric techniques should be used (Mendenhall and Reinmuth, 1982). One should use nonparametric techniques only if there is doubt about the assumptions underlying parametric techniques (Siegel and Castellan, 1988). Coakes and Steed (2001) argue that if the researcher reports violations of the distribution assumptions of parametric techniques then he or she should use nonparametric techniques.

Another aspect of the analysis was to check that the assumptions associated with different analysis procedures were not violated. An assumption is a condition that ensures that the statistical tests that the researcher is attempting to perform are viable (Field, 2013). The assumptions checked related to normality, detection of outliers, and linearity of the models. Normal distributed data reflects a bell-shaped curve representing the data. In this case the greatest frequency of scores is in the middle with smaller frequencies toward the extremes (Pallant, 2013). When the variation from the normal distribution is large, the assumption of normality is violated (Hair et al., 2014). Assessing normality entails an evaluation of the skewness and kurtosis of the data. Skewness of the data assesses symmetry or the balance of the

distribution (Malhotra, 2010). Kurtosis reflects the relative flatness or "peakedness" of the distribution with reference to normal distribution (Hair et al., 2014).

Fields (2013) argues that normality does not really matter when a large sample size is involved (more than 160). Basing his argument on the central limit theorem (Lumley et al., 2002), Fields (2013) concludes that as long as the sample size is big, normality should not be a problem. An outlier is an observation or score substantially different from the rest of the data (Fields, 2013:165). Outliers can therefore be detrimental to the multivariate analyses employed in a study. To detect outliers, Pallant's (2013) graphical approach of observation was applied. Histograms and box plots were used to graphically detect outliers. Once the outliers are spotted, it is important to evaluate how much the outlying respondents are likely to cause a problem. This entails comparing the 5 percent trimmed mean and the mean value. If these two means are substantially different, the outlying cases were removed from the data set. A total of five outlier cases were identified and removed from the study.

The last assumption checked is related to the linearity of the predicting model. This assumption ensures that the outcome or independent variable(s) is indeed linearly related to the predicting (independent) variables (Fields, 2013). A simple way to identify nonlinear relationships is to visually inspect scatter plots of the variables under scrutiny and detect the nonlinear patterns (Fields, 2013). An observation of the scatter plot of scores of variables included in the current model was akin to a roughly straight line, which suggested linearity.

6.11.1 Descriptive statistics

Descriptive statistics are the most elementary statistical forms of data analysis. As its name indicates, descriptive statistics describes the basic characteristics of a variable including central tendency, distribution and variability (Zikmund and Babin, 2010). In this study descriptive statistics include tabulations (frequency tables), mean, standard deviation, cross-tabulations. Frequency tables including frequencies and percentages were used to help describe the socio-demographic characteristics of organic food consumers. Means and standard deviations respectively provided information on the average and how spread out the continuous variables are.

6.11.2 Factor analysis

Factor analysis is an interdependent technique whose paramount aim is to outline the underlying structure among the variables in the analysis (Hair et al., 2014). Factor analysis is an interdependent technique in the sense that a whole set of mutually dependent relationships is examined (Malhotra, 2010). Thus, factor analysis offers tools for examining the underlying dimension of correlations among a large number of variables (items) by defining groups of variables called factors that are highly interrelated (Hair et al., 2014). Factor analysis can be accomplished either from an exploratory or from a confirmatory stance. Exploratory factor analysis (EFA) is appropriate in the early stage of the research, when the researcher is searching for underlying structure among a set of variables. In that case the EFA is useful for the reduction and summarisation of data (Malhotra, 2010). Confirmatory factor analysis (CFA) is appropriate when the researcher has preconceived ideas about the structure of the data, which are upheld by strong theoretical arguments from the extant literature. A confirmatory perspective of factor analysis was applied in this study.

6.11.2.1 Confirmatory factor analysis

CFA is used when the researcher has a theoretical knowledge of the underlying structure of the constructs, unlike EFA. The main purpose of the CFA is therefore to evaluate the extent to which the theoretical pattern of the factor loadings on a pre-determined construct represents the actual data (Hair et al., 2014). In the PLS-SEM procedure, the CFA alludes to measurement theory and fulfils the purpose of specifying how the constructs are structured (Malhotra, 2010). The steps followed in specifying the measurement model will be discussed in depth in the section dedicated to PLS-SEM (refer to section 6.12.3).

6.11.3 Introduction to Structural Equation Modelling (SEM)

SEM allows researchers to assess the overall fit of a model as well as test the structural model all together (Hashim, 2012). Using SEM does not only evaluate the hypothesised structural linkages among variables but the linkages that exist between a variable and its respective measures. SEM is a family of multivariate statistical techniques used to examine direct and indirect relationships between one or more independent latent variables (LVs) and one or more dependentLVs (Henseler, Ringle and Sarstedt,2015). SEM can be seen as a flexible modelling tool for

conducting many multivariate statistical analyses, including regression analysis, path analysis, factor analysis, canonical correlation analysis, and growth curve modelling (Urbach and Ahlemann, 2010).

Overall, there are two main approaches within SEM: a component-based approach such as partial least square (PLS-SEM) and a co-variance-based approach (CB-SEM) (Marcoulides, Chin and Saunders, 2009; Wetzels, Odekerken-Schroder andVan Oppen, 2009). These two approaches are different in terms of underlying statistical assumptions and the nature of fit statistic they produce (Hashim, 2012). CB-SEM uses the maximum likelihood (ML) function to minimise the differences between the sample covariance and those predicted by the theoretical model. The estimated parameters attempt to reproduce the observed values' co-variance matrix. When applying the ML function, the observed variables have to follow a normal distribution and observations must be independent of one another (Urbach and Ahlemann, 2010; Hair, Ringle and Sarstedt, 2011). On the other hand, PLS-SEM's main objective is to maximise the co-variance between the predictor latent variable and the dependent latent variable (Sosik, Kahai and Piovoso, 2009).

PLS uses least square estimation for single and multi-component models and for canonical correlation (Hair, Hult, Ringle and Sarstedt, 2017). The PLS approach avoids many of the restrictiveassumptions underlying ML techniques and ensures against improper solution and factor indeterminacy (Marcoulides et al., 2009). However, within the literature, PLS-SEM is viewed as a method that is less rigorous and not suitable for examining relationships between LVs (Rouse and Corbitt, 2008). Despite all of the critiques, recently PLS-SEM has been applied increasingly in marketing and other business disciplines (Henseler et al., 2009). Scholars are now accepting the PLS-SEM method as a more robust estimation of the structural model (Henseler et al., 2009). PLS-SEM is also viewed as an alternative method when CB-SEM distributional assumptions cannot be met (Hair et al., 2011). Furthermore, the informational and distributional demand required by CB-SEM is viewed as unrealistic for many fields of inquiry, especially in the social sciences (Urbach and Ahlemann, 2010). Hence, this study agrees with the stance of not viewing both statistical methods as a competitive statistical method; rather, it should be viewed as a complementary method (Sosik et al., 2009). Therefore, in deciding which statistical method

is suitable to use, this study follows the rules of thumb proposed by Hair et al. (2011) for selecting between CB-SEM and PLS-SEM.

6.11.3.1 Rules of thumbs for selecting PLS-SEM

Hair et al. (2014) assert that the selection between CB-SEM and PLS-SEM can be made based on a few factors such as research objective, types of measurement model specification, the modelling of structural model, data characteristics and model evaluation. In addition, Garson (2016) suggests five useful rules of thumb that can be used as guidance when selecting between PLS-SEM and CB-SEM. Hence understanding the assumptions underlying these statistical methods can help the researcher determine which statistical method is appropriate to use.

Firstly, the researcher has to identify the objective of conducting the researchwhen selecting between these two methods. CB-SEM is an appropriate method to use if the research objective is to test or confirm a theory (Hair et al., 2014). This is because when testing a theory it requires the ability to show how well a theoretical model fits the observed data(Henseler et al., 2009). According to these authors, CB-SEM is more appropriate for hard modelling where the aim is to minimise the co-variance matrix, which has been its strength. On the other hand, PLS-SEM is suitable when the research objective is for prediction and theory development (Garson, 2016). This is also known as soft modelling. In soft-modelling the focus is on identifying the best prediction of relationships between variables and the focus is on maximising the amount of covariance between LVs in order to increase the model interpretation (Sosik et al., 2009).

Secondly, the use of CB-SEM is limited only to research models that use reflective constructs. Although previous studies have used formative measures within the structural model, they usually lead to identification problems (Henseler et al., 2009). Further, the use of CB-SEM in handling both reflective and formative constructs is relatively complicated (Urbach andAhlemann, 2010). Meanwhile, PLS-SEM can be used to analyse a research model that consists of both reflective and formative constructs (Hair et al., 2017). Using PLS allows researchers to use either reflective, formative or the combination of both reflective and formative constructs at the same time(Henseler and Sarstedt, 2013).

Thirdly, there is a set of assumptions needed to be fulfilled before further analysis can be conducted using CB-SEM software. The assumptions involve the assessment of data multivariate normality, observation independence, and variable metric uniformity (Sosik et al., 2009). CB-SEM requires the data to have normal distribution and a large sample size. If one of the assumptions is violated, CB-SEM results will be highly imprecise (Hair et al., 2011): whereas, for PLS-SEM it is a more robust approach and can be used to analyse data with non-normality distribution.

Data normality when using PLS-SEM is not a demanded aspect because PLS uses calibration mechanisms, which transform any non-normal data into data that adheres to the central limit theorem (Chin, 1988). Finally, the PLS main objectivein terms of structural model evaluation is to test/predict the theoretical model that has been suggested based on the literature and not to test which alternate model fits the data better (Sosik et al., 2009). The residuals on manifest and latent variables are correlated in PLS; thus allowing PLS to "estimate" (Falk and Miller, 1992:10). Table 6.7 summarises the rules of thumb between selecting CB-SEM and PLS-SEM.

Table 6.7: Summary of the Rules of Thumb in selecting between CB-SEM and PLS-SEM

	Criteria to evaluate	CB-SEM	PLS-SEM
1	**Research goal**		
	• Predicting key target constructs		√
	• Theory testing, theory confirmation or comparison of alternative theories	√	
	• Exploratory of an extension of an existing structural theory		√
2	**Measurement model specification**		
	• If formative constructs are part of the structural model	√	√
	• If error terms require additional specification such as co-variation		
3	**Structural model**		
	• If a structural model is complex	√	√
	• If a structural model is non-recursive		
4	**Data characteristics and algorithm**		
	• Data meet distributional assumptions		√
	• Data did not meet distributional assumptions	√	√
	• Small sample size consideration	√	√
	• Large sample size consideration1	√	√
	• Non-normal distribution		√

	• Normal distribution		
5	**Model evaluation** • Use latent variable scores in subsequent analyses • Requires global goodness of fit criterion • Need to test for measurement model invariance	√ √	√

Source: Adapted from Hair, Ringle and Sarstedt (2011)

Based on the espoused rules of thumb, this study therefore adopts PLS-SEM as the statistical method to assess the research model, based on the following observations:

- The focus of the analysis in this study does not involve the measuring of model invariance. The focus of this study is on prediction factors related to members' continuous knowledge sharing intention. Hence, the use of latent variable (LVs) scores is important to examine the underlying relationship between the LVs.
- This study uses a large number of LVs and complex modelling of a research model. According to Henseler et al. (2009), PLS is suitable for large complex models with many latent variables. According to Urbach and Ahlemann (2010), a large complex model refers to a research model that has 100 constructs and 1,000 indicators.
- The focus of this study is to test the relationships according to prior theoretical knowledge. The ability of PLS-SEM to estimate the correlations between the residuals and assess their impacts on the model makes this technique the appropriate approach.

6.11.4 Partial Least Square (PLS)

According to Ghulami, Hamid and Zakaria (2014), Partial Least Square (PLS) was originated by an econometrician named Herman Wold in the '60s and '70s. PLS is a family of alternating least squares algorithms, which extend principal component and canonical correlation analysis (Henseler et al., 2009). Its path models are usually defined using two sets of linear equations known as the measurement model and structural model (Garson, 2016). The measurement model specifies the relationships between unobserved or latent variables (LV) whereas the outer model specifies the relationships between a LV and its manifest variables (Henseler, Dijkstra, Sarstedt, Ringle, Diamantopoulos, Straub, Ketchen, Hair, Hult and Calantone, 2014). The inner and outer model is sometimes also known as the structural and measurement model (Hair et al., 2014). The

PLS algorithm is essentially a sequence of regressions in terms of weight vectors (Henseler et al., 2009). The basic PLS algorithm involves the following three stages:

Stage one: Iterative estimation of LV scores consisting of a four-step iterative procedure that is repeated until convergence is obtained:

- Outer approximation of the LV scores;
- Estimation of inner weights;
- Inner approximation of the LV scores; and
- Estimation of the outer weights.

Stage two: Estimation of outer weights/loading and path coefficients.

Stage 3: Estimation of location parameters.

This study used PLS for theory confirmation that suggests where relationships might or might not exist. It also suggests propositions for later testing (Sultana, Pearson, Henryksand Anisimova,2013). As an alternative to the more widely known covariance fitting approach exemplified bysoftware such as LISREL, EQS, COSAN, AMOS, and SEPATH), the PLS avoids twoserious problems: inadmissible solutions and factor indeterminacy (Chin, Marcolin, and Newsted, 2003).In particular, Sultana et al. (2013) state that PLS has the ability to model latent constructs underconditions of non-normality and with small to medium sample sizes.Hypothetical relationships were examined using structural equation modelling (SEM) based on the partial least squares (PLS).

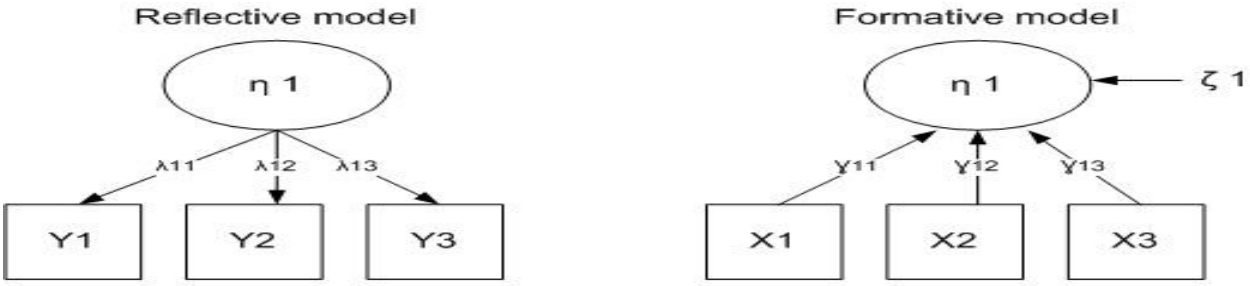
6.11.5 Reflective and Formative Constructs

Based on PLS literature, LV can be modelled using either formative or reflective indicators. Reflective constructs are viewed as a construct that is affected by the same underlying construct, which uses parallel measures that co-vary and measure the same underlying construct(Petter, Straub and Rai, 2007). For a reflective construct, the direction of causality is from the construct (i.e., LV) to the indicators, and changes in the underlying construct are hypothesised to cause changes in the indicators (Hashim, 2012). In reflective construct, the arrow direction points from LV to reflective indicators. Furthermore, indicators for a reflective construct should be consistent internally because all of the measures are assumed to be equally valid indicators of the underlying LV (Petter et al., 2007).

Formative construct,on the other hand,refers to constructs that have formative indicators, which are combined to give rise to the meaning of the LV (Hashim, 2012). Reflective construct in contrast to a formative construct assumes that the indicators have an impact on the underlying construct (Hashim, 2012). In a reflective construct, the group of indicators jointly determines the conceptual and empirical meaning of the construct. The direction of causality flows from indicators to LV (Urbach and Ahlemann, 2010). Figure 6.3 shows the differences of reflective and formative constructs.

According to Petter et al. (2007), internal consistency is important for a reflective construct. Thus, the uses of internal reliability measures are required to ensure the measures are reliable. In addition to that, a reflective construct should be uni-dimensional and if any measures are removed, it would not affect the content validity (Petter et al., 2007). On the other hand, formative indicators need not be correlated nor have high internal consistency and any changes in the formative measures will cause changes in the underlying construct (Ghulami et al., 2014). A formative construct causes the latent construct representing different dimensions of it (Garson, 2016). These observed variables are not assumed to be correlated with each other or to represent the same underlying dimension (Henseler et al., 2014).

Figure 6.3: The Diagrams of Reflective and Formative Constructs



Adopted from: Petter, Straub and Rai (2007)

Petter et al. (2007) suggest that for constructs using reflective measures, it is necessary to examine the loadings as they represent the correlation between the indicators and component scores. Meanwhile for those constructs with formative measures, the interpretation of formative indicators should be based on weight, as it provides information regarding the importance of each indicator in the formation of the component (Hashim, 2012). For this study, all LVs are

modelled as reflective measures. The causality flows of each LV are based on prior knowledge gathered during the literature review phase. Using prior knowledge to determine the causality flow is very important to avoid measurement model misspecification (Henseler et al., 2009).

6.11.6 Evaluating Measurement and Structural Models using Partial Least Square

The research model is assessed using a two-step process in this study: the assessment of the measurement model and the assessment of the structural model. The purpose of model validation in general is to determine whether both measurement and structural model fulfil the quality criteria for empirical work,as recommended by Urbach and Ahlemann (2010). The following subsections discuss the guidelines used in this study to assess both measurement and its structural model.

6.11.6.1 Measurement Model

Researchers are of the view that the validation of a reflective measurement model can be established by testing its internal consistency, indicator reliability, convergent validity and discriminant validity (Lewis, Templeton and Byrd, 2005; Hashim, 2012; Sultana et al., 2013).

6.11.6.1.1 Internal Consistency

Traditionally, a measurement item's internal consistency is evaluated using Cronbach's alpha as discussed under reliability analysis (see section 6.7.1). Constructs with high Cronbach values mean that the items within the construct have the same range and meaning (Cronbach, 1971). Using CA provides an estimate for the reliability based on indicator inter-correlations. However, within PLS, internal consistency is measured using Composite Reliability (CR) as recommended by Chin (1998). This is because even though both reliability estimates measure the same thing (internal consistency), CR takes into account that indicators have different loadings. Meanwhile Cronbach alpha provides a severe underestimation of the internal consistency reliability where it does not assume the equivalent among the measures and assuming all indicators are equally weighted (Hashim, 2012).Despite which particular reliability coefficient is applied, internal consistency reliability is considered satisfactory when the value exceeds the benchmark of 0.7 (Nunnally and Bernstein, 1994).

6.11.6.1.2 Indicator Reliability

Urbach and Ahlemann (2010) recommend that when assessing indicators' reliability, the researcher is evaluating the extent to which a variable or a set of variables is consistent with what it intends to measure. The reliability construct is independent of and calculated separately from other constructs. Based on the observations of Ghulami et al., (2014), indicator loadings should be significant at least at the 0.05 level and the loading must be greater than 0.7. This is because with the loading value at 0.70, an LV is said to be able to explain at least 50 percent of its indicator's variance. The significance of the indicator loadings can be tested using a resampling method such as bootstrapping or jack-knifing (Hashim, 2012). In addition, taking into consideration PLS characteristics of consistency at large, one should be careful when deciding to eliminate an indicator (Hensler et al., 2009). It makes sense to eliminate an indicator only when the indicator's reliability is low and the elimination of that indicator goes along with a substantial increase of CR (Petter et al., 2007).

6.11.6.1.3 Convergent Validity

As noted earlier under section 6.7.1, convergent validity involves the degree to which individual items reflect a construct converging in comparison to items measuring different constructs (Malhotra, 2010). Convergent validity when using PLS can be evaluated using the value of average variance extracted (AVE) (Urbach and Ahlemann, 2010). According to Fornell and Larcker (1981), sufficient convergent validity is achieved when the AVE value of a construct is at least 0.5.

6.11.6.1.4 Discriminant Validity

In contrast with convergent validity, discriminant validity tests whether the items do not unintentionally measure something else (McDaniel and Gates, 2008). Using PLS, two measures of discriminant validity are commonly used, which are: cross loading (Hair et al., 2017) and Fornell-Larcker's criterion (Henseler et al., 2015).

Cross-loading is obtained by correlating each LV's component scores with all of the other items (Hair et al., 2017). If each indicator's loading is higher for its designated construct compared to any other constructs, then it can be inferred that the different constructs' indicators are not interchangeable. Using Fornell-Larcker's criterion.On the other hand, requires an LV to share

more variance with its assigned indicators than with any other LV (Hashim, 2012). Thus, the AVE of each LV should be greater than the LV's highest squares correlation with any other LV. The summary of validity guidelines to assess a reflective measurement model is listed in Table 6.8.

Table 6.8: Summaries of Validity Guidelines for Assessing Reflective Measurement Model

	Validity Type	Criterion	Guidelines
1	Internal consistency	CR	CR > 0.7 (for exploratory study) CR > 0.8 (advance research) CR < 0.6—lack of reliability
2	Indicator reliability	Indicator loadings	Item's loading > 0.7 and significant at least at the 0.05 level
3	Convergent validity	AVE	AVE > 0.50
4	Discriminant validity	Cross loading (Correlations)	Item's loading of each indicator is highest for its designated construct. The square root of the AVE of a construct should be greater than the correlations between the construct and other constructs in the mode

Adapted: Hashim (2012)

In this study, the measurement model's validity is therefore satisfactory as:

- CR is greater than 0.8.
- Item's loading is greater than 0.7 and significant at least at the 0.05 level except for item PI which is image of organic food with 0.563.
- AVE value for each construct is larger than 0.50.
- Item's loading of each indicator is highest for its designated construct.
- The square root of the AVE of a construct is greater than the correlations between the construct and other constructs in the mode.

6.11.6.2 Structural Model

Validating the structural model helped the researcher to evaluate systematically whether the hypotheses expressed by the structural model are supported by the data, as suggested by Urbach and Ahlemann (2010). The structural model can only be analysed after the measurement model has been validated successfully (Chin, 1988). A structural model in PLS can be evaluated using coefficient of determination (R2), and path coefficients (Hashim, 2012).

The first important criterion for assessing the PLS structural model is to evaluate each endogenous LV's coefficient of determination (R2). R2 measures the relationship of an LV's explained variance to its total variance. According to Chin (1998), a value of R2 around 0.67 is considered substantial, values around 0.333 are average and values of 0.19 and lower are considered weak (Hair et al., 2014).

While by examining the path coefficient value, a researcher is able to know the strength of the relationship between two LVs. To examine the relationship between two LVs, the researcher should check the path coefficients, algebraic sign, magnitude and significance (Hensler et al., 2009). The path coefficients, according to Garson (2016), should exceed 0.100 to account for a certain impact within the model and be significant at least at the 0.05 level of significance. Table 4.9 summarises the guidelines to validate the structural model.

Table 6.9: Summaries of Validity Guidelines for Assessing Reflective Structural Model

	Validity Type	Criterion	Guidelines
1	Model validity	Coefficient of determination (R2)	0.67—substantial 0.333—moderate 0.190—weak
2		Path coefficients	Path coefficient must be at least 0.100 and at significance (at least 0.05)

Adapted: Hashim (2012)

In this study, the structural model is therefore evaluated using the following test:

- Coefficient of determination must be larger than 0.19.
- Path coefficient between LVs must be at least 0.1, follow the correct algebraic sign (in the case of this study - positive) and significant (at least 0.05).

6.12 ETHICAL CONSIDERATIONS

Ethics refers to the field of inquiry which ascertains what behaviours are considered appropriate under certain circumstances, as recommended by codes of ethical behaviour prescribed by society (Burns and Bush, 2010). Ethical issues arise at different stages of marketing research. Various codes of conduct are required when conducting a research (Burns and Bush, 2010; Bryman, 2012). This section of the study specifically deals with the issues that aroused during the course of conducting a survey.Some ethical principles applied in this study relate to informed consent, research integrity, anonymity and respect for the dignity of persons, non-maleficence and voluntary, Justice as well as beneficence.

6.12.1 Informed consent

The right to informed consent was held in great esteem when conducting the study. To ensure informed consent, the nature and purpose of the study was explained to the participants when distributing the questionnaires. Furthermore, a cover letter explaining its nature and the objective was attached to the front page of the questionnaire for respondents to read ontheir participation rights.

6.12.2 Research integrity

According to Burns and Bush (2010:93), research integrity has to do with conducting research that is consistent with accepted standards. Researchers can be tempted to falsify data, alter findings or withhold important information. The integrity of the present study was ensured by the involvement of academics in the process of analysing the data. Not only did the academic supervisors monitor the whole process, but also independent statisticians were involved throughout the research process.

6.12.3 Anonymity and respect for the dignity of persons

This involves protecting confidentiality of the participants and also an important operational expression of this principle. The identities of the respondents were protected during the process of data collection; in particular, the respondents were in no instances forced to disclose their names. The data aggregated without any reference to any particular respondent.

6.12.4 Non-maleficence and voluntary

This philosophical principle requires the researcher to ensure that no harm befalls research participants as a consequence of the research(Chauke, 2014). The researcher made sure that it was the participants' choice to take part in the study. The researcher reminded the respondents that the survey was completely voluntary and that they had all the right to withdraw from it at any time if they so wished.

6.12.5 Justice

In research, justice is a complex philosophical principle and in general, it requires that the researcher treat participants with fairness and equity during all its stages (Dubihlela, 2012). Mutual trust is an ethical issue (Tustin et al., 2010). The researcher must uphold standards of confidentiality and anonymity as promised to respondents. For this study, all the respondents were treated equally and professionally, observing mutual respect throughout the data collection process.

6.12.6 Beneficence

This principle requires the researcher to maximise the benefits that the research will afford to the participants in the research study (Dubihlela, 2012; Chauke, 2014). During the fieldwork, the researcher prioritised the fact that the research was not for researcher's direct financial benefit. Respondentswere advised that the data would be used only for academic purposes, and that the aggregated report would be available for their access at the University of Witwatersrand upon request. Conversations were intended to build mutual trust. Participants were reminded constantly by the researcher to ensure they did not divert into confrontations.

6.13 CONCLUSION

The aim of this chapter was to delineate the methodology followed to achieve the study'sobjectives. It adopted a positivist paradigm and quantitative data was collected in a survey targeted at organic food consumers. A convenience sampling method guided the survey. Data collection was accomplished by distributing printed questionnaires to the identified participants. After cleaning and screening the completed questionnaires, the final sample size comprised 612organic consumers in Gauteng province. In this study, a variety of data analyses were

utilised. However, the key statistical technique used to test the hypotheses was the PLS. Lastly, ethical considerations that were taken into consideration during the investigation were outlined and presented.

The next chapter presents, interprets and discusses the results obtained from the data analyses.

CHAPTER 7

DATA ANALYSISAND DISCUSSION OF THE EMPIRICAL FINDINGS

"Good statistical inference never strays very far from the data"

Brian Yandell

7.1 INTRODUCTION

The previous chapter presentsan overview of the methodology and research methods used in the study. It also provides a detailed description of the sample selection and composition as well as questionnaire design, layout and questions construction. The procedures followed in collecting, capturing, processing and analysing the data are also elaborated upon. In addition, statistical techniques applied to determine the reliability and validity of the research instrument of the study are provided. The current chapter presents and discusses the empirical results. Firstly, the research hypotheses posited are recapped. Secondly, the results from the data analyses are presented and discussed.

As proposed in Chapters one and five, fourteen hypotheses are formulated in this study and are recapped in Table 7.1.

Table 7.1: Hypotheses of this study

Hypotheses
H1: Price of organic food products has negative relationship with purchase decision.
H2: Distribution of organic food products is positively associated with purchase decision.
H3: Communication positively influences purchase decision of organic food products.
H4: The perception of organic food product attributes is positively associated with purchase decision.
H5: Environmental attitude towards organic food is positively associated with the purchase decision.
H6: Behavioural beliefs about organic food positively influence purchase decision.
H7: Perceived value enjoyed from organic food is positively associated with purchase decision.
H8: Overall image of organic food is positively associated with consumer purchase decision.
H9: Peer pressure positively influences organic food purchase decision.
H10: Family members positively influence organic food purchase decision.

H11: Consumer organic food purchase decision positively influences satisfaction.
H12: Consumer satisfaction of organic food products influences the willingness to pay the premium.
H13: Customer satisfaction is positively associated with repurchase intention.
H14: Consumer satisfaction with organic food consumption positivelyaffectsthe willingness to spread word-of-mouth.

7.2 DESCRIPTIVE STATISTCS

Prior to conducting the descriptive analysis, preliminary analyses were conducted to ensure that there was no violation of assumptions of normality, linearity and multicollinearity, and a screening process involving examination of missing data, unengaged responses and outliers was undertaken. Cases with more than 10% missing data in the questionnaire were deleted. The imputation method in SPSS used for replacing missing data was the median of nearby points. The descriptive tables and box plots retrieved from the SPSS output helped to detect and handle outliers. After screening and cleaning the data, the final sample size included 611organic consumers.

The following section provides an overview of the sample characteristics that have been used in the preliminary data analysis.

7.2.1 Demographic profile of the respondents

In section A of the questionnaire, respondents were asked to provide their biographical information. From the SPSS version 24, the outputs were retrieved and analysed. Information about respondents' gender, age group, racial group, highest education level, gross monthly income, and their characteristics such as knowledge of organic food, experience of organic food purchase as well as frequency of purchase are discussed here. The demographic profile of the respondents is presented in Table 7.2.

Table 7.2: Demographic characteristics of the sample

Category	Frequency	Percent
Gender		
Male	225	36,8
Female	386	63,2
Total	611	100,0

Category	Frequency	Percent
Age group		
18 – 23	67	11,0
24 – 29	104	17,0
30 – 35	132	21,6
36 – 41	149	24,4
42+	159	26,0
Total	611	100,0
Racial groups		
Black-African	155	25,4
White	280	45,8
Coloured	110	18,0
Indian	66	10,8
Total	611	100,0
Education level		
Primary School	31	5,1
Secondary school	61	10,0
College	275	45,0
University	244	39,9
Total	611	100,0
Monthly Income		
<R5000	49	8,0
5000 - 10000	115	18,8
10000 - 20000	251	41,1
20000 or more	196	32,1
Total	611	100,0
Organic food Knowledge		
<6 months	25	4,1
A year	65	10,6
3 years	154	25,2
5 years and above	367	60,1
Total	611	100,0
Purchase Organic food (experience)		
< 3 months	20	3,3
6 - 12 months	76	12,4
2 years	161	26,4
3 years and above	354	57,9
Total	611	100,0

Category	Frequency	Percent
Frequency of purchase of organic food		
At least once a week	205	33,6
At least once a month	370	60,6
Once half a year	28	4,6
Yearly	8	1,3
Total	611	100,0

Table7.2 reveals a very high percentage of female respondents (63.2%). The high gender differences could be that female respondents were more willing to participate in the study. In addition, prior studies on organic food (for example, Gracia and de Magistris, 2007; Van Loo, Caputo, Nayga Jr., Meullenet andRicke, 2011; Voon, Ngui and Agrawal, 2011; Bravo, Cordts, Schulze and Spiller, 2013), have found that females are keener to engage in pro-environmental behaviour more than males. In terms of age groups, half of the respondents (49.6%), within the ages of 18 and 35 were young adults falling in the Generation Y consumer cohort and half (50.4%) were adults of ages 36 to 40+. This indicates that both the young and adult consumers have embraced the consumption of organic food, especially as up to 93.2% frequently for at least ones a week or month. Up to 84.3 % of the respondents have used organic food for more thantwo years.

With regard to ethnicity, it can be noted from Table 2.2 that the respondents were more Whites (45.8%), followed by Black Africans (25.6%). This could reflect the percentage of people who visit the organic food market where the survey was conducted and who could be more concerned with healthy lifestyle as opposed to other racial groups. Another reason could be that the Bryanston organic market where data was collected is located within the White dominant residential area.

According to the study findings, the majority (84.9%) of respondents were well educated with college and university qualifications. There were also a considerable proportion of the respondents who have not exceeded high school (15.1%). This indicates that university graduates and non-university consumers understand the benefits of organic food and visit the markets for purchases. The up to 73.2% of respondents earning above R10, 000 should be reflecting the high percentage of university graduates visiting the organic food market. It was, however, impressive

that up to 26.8% of respondents earning between R5000 and R10000 and lower also visit the organic food market, thus indicating that even some lower income consumers ignore the perception that organic food is expensive and shop in the market.

7.2.2 Descriptive statistics of the constructs: Means and standard deviations

All the constructs in this study were measured using a five-point Likert scale, such that 1 and 2 denote the degree to which respondents strongly disagree and disagreed to the statements about the variables, 3 refer to a neutral choice and, 4 and 5 meant that respondents agree and strongly agreed to the statements respectively. Descriptive statistics of all the market, psychological and social variables, purchase decision, consumption satisfaction and other post-purchase outcomes obtained from the analysis are summarised in Table 7.3.

Table 7.3: Mean and standard deviation of constructs

Constructs	N	Mean	Std. Deviation
Price	611	3.60	.75
Distribution	611	3.51	.83
Communication	611	3.41	.88
Perception of Product attributes	611	4.00	.85
Environmental Attitude	611	4.12	.76
Behavioural beliefs	611	4.00	.78
Perceived Value	611	4.10	.79
Image of organic food	611	3.90	.72
Peer Influence	611	3.48	1.01
Family Influence	611	3.33	1.02
Purchase Decision	611	3.63	.93
Consumption Satisfaction	611	3.97	.76
Repurchase Intention	611	4.11	.74
Willingness to Pay	611	3.82	.88
Word of mouth (WoM)	611	3.96	.82

The descriptive statistics of the constructs show that all the constructs had a mean above the mid-point 3, thus indicating that respondents agreed with the statements.

7.2.2.1 Marketing factors

The marketing factors proposed to be affecting organic food included price perception, communication for awareness and distribution using a five-point scale.

- **Price perception**

Respondents were requested to give their perception regarding the price of organic food that affects their purchase decision. According to results in Table 7.3, the overall mean for price perception was found to be 3.60 with a standard deviation of 0.75. This shows that they fairly agreed to the statement.

- **Distribution**

This measured whether organic food is readily available and the supply in the market is consistent. Table 7.3 shows that the respondents fairly agreed with a mean value of 3.51and Standard deviation of 0.83.

- **Communication for awareness creation**

With regards to communication as a tool for awareness creation, respondents were requested to give their attitude regarding the availability of information and advertisements about organic food. According to Table 7.3, the mean score of 3.41and Standard deviation of 0.88 were recorded for this construct, indicating they fairly agreed about getting sufficient information from marketing communication about organic food. Yiridoe et al. (2005) also found that despite extensive media coverage on many issues, a large proportion of consumers appear to be either not informed at all or are inadequately informed about organic products and their specific qualities. According to a study conducted in Great Britain and Denmark.for example, the consumers stated that they would have more confidence in organic food if more information about how and where to get it were to be adequately provided or supplied on the packaging (Gottschalk and Leistner, 2013).

Even though the marketing communication and the other marketing factors did not seem to be having much influence on the respondents, the demand for environmentally friendly products such as organic foods has significantly increased. This could be due to an increasing awareness

on health, food safety and environmental concerns, mostly from health and environmental activists.

7.2.2.2 Psychological and social factors

Descriptive statistics of all the psychological and social factors obtained from the analysis are shown in Table 7.3. The respondents agreed to all the psychological factors measured with the means ranging from M = 3.90 and M = 4.12. For the social factors, the respondents fairly agreed to the influence of the social factors with its means ranging from M= 3.33 for family influence and M=3.48 for peer influence. Compared to the marketing and social factors, the psychological factors seem to be more important to the respondents with greater means.

7.2.2.4 Purchase decision

Organic food purchase decision was measured with five positive worded statements also using a five-point Likert scale. The overall mean as shown Table 7.3 was above 3, suggesting that respondents agreed to have purchased organic food with (Mean = 3.63, Std. Dev = 0.93).

7.2.2.5 Consumption Satisfaction

As was with purchase decision, consumption satisfaction had an overall mean above the scale mid-point 3, indicating that the respondents agreed with the statements with (Mean = 3.97; Std. Dev = 0.76). These results indicate that consumers are not only buying organic food, but they are deriving consumption satisfaction from it.

7.2.2.6 Post-purchase outcomes

The descriptive results presented in Table 7.4show that for the post-purchase outcomes measured, including repurchase intention, willingness to pay the price premium and spread positive word-of-mouth, the respondents agreed to all the statements measuring these constructs with M = 4.11, M = 3.82 and M= 3.96 respectively. This indicates that in addition to being price insensitive, the consumers in South Africa plan to not only continue with the purchase of organic food in the future but are willing to inform others about their good experience with the food.

7.2.3 Measurement of Data Normality

In measuring normality, Field (2013:172) points out that for a large sample size such as the one in this study, the central limit theorem stipulates that the assumption of normality has little effect on the analysis of data. Although the central theorem provides a studied theoretical background for the issue of normality in this study, the skewness and kurtosis of each item in the model are presented in the table below.

Table 7.4: Assessment of normality

Variables	N	Skewness	Kurtosis
MP1	611	-.895	.029
MP2	611	-.691	-.375
MP3	611	-.744	.275
MP4	611	.060	-.881
MP5	611	-1.133	1.242
MD1	611	-.653	-.431
MD2	611	-.452	-.574
MD3	611	-.370	-.737
MD4	611	-.467	-.453
MD5	611	-.422	-.675
MC1	611	-.392	-.941
MC2	611	-.330	-.869
MC3	611	-.415	-.777
MC4	611	-.096	-1.113
MC5	611	-.462	-.970
PP1	611	-.760	-.391
PP2	611	-1.032	.588
PP3	611	-.750	-.283
PP4	611	-1.242	1.317
PE1	611	-1.223	.995
PE2	611	-.775	.233
PE3	611	-1.141	1.125
PE4	611	-1.070	.616
PB1	611	-1.119	.801
PB2	611	-.606	-.535
PB3	611	-.999	.341
PB4	611	-1.000	.441
PV1	611	-1.166	1.164
PV2	611	-1.138	1.165
PV3	611	-1.084	.964
PV4	611	-1.214	.928
PV5	611	-1.165	.790

PI1	611	-1.245	1.629
PI2	611	-.848	.443
PI3	611	-.327	-.419
PI4	611	-.844	.558
SP1	611	-.774	-.177
SP2	611	-.471	-.813
SP3	611	-.384	-.869
SP4	611	-.354	-1.133
SF1	611	7.705	130.894
SF2	611	-.396	-.824
SF3	611	-.195	-1.026
SF4	611	-.436	-.952
PD1	611	-.650	-.496
PD2	611	-.576	-.523
PD3	611	-.696	-.305
PD4	611	-.598	-.510
PD5	611	-.790	-.034
CS1	611	-1.062	.878
CS2	611	-.937	.874
CS3	611	-.976	.803
CS4	611	-1.099	1.644
CS5	611	-1.074	1.172
RI1	611	-1.348	2.030
RI2	611	-1.293	1.814
RI3	611	-1.142	1.752
RI4	611	-1.236	1.242
WP1	611	-.956	.594
WP2	611	-.974	.501
WP3	611	-.931	.375
WP4	611	-.919	.390
WM1	611	-.980	.440
WM2	611	-1.161	1.345
WM3	611	-.973	.697
WM4	611	-1.015	.856

The value for skewness and kurtosis between -2 and +2 are considered acceptable to prove normal univariate distribution (Field, 2013). Table 7.4 indicates that overall, the items of the scales have satisfactory skewness and kurtosis values after removing item SF1 which had the above values of 7.705 and 130.894 for skewness and kurtosis respectively. With the removal of SF1, it can therefore be said confidently that the assumption of normality is met. Hashim (2012) suggests that the data is non-normal if about 80% of the data presented skewness and kurtosis above the recommended threshold of -3 to +3. Although the data was distributed normal in this

study, the conceptual model was complex. This thus required the use of SMART PLS to conduct the SEM.

7.3 MEASUREMENT MODEL ASSESSING RELIABILITY, VALIDITY AND MODEL FIT

As mentioned above, Smart PLS was used to assess the measurement and structural model for this study. This statistical programme assesses the psychometric properties of the measurement model and estimates the parameters of the structural model. Analysis of the measurement model (or outer model) is the first step of PLS analysis used to determine the appropriateness of the theatrically defined construct. The measurement model is examined to ensure the survey questionnaire determines the variables that were supposed to be measured, and simultaneously making sure that the instrument is reliable (Ghulami, Hamid and Zakaria, 2014). In this process, three things are evaluated: factor loadings to determine convergent validity, composite reliability (CR) to assess internal consistency reliability, and average variance extracted (AVE) in order to assess discriminant validity.

The following subsections present the findings for each of the analysis used to evaluate the validity and reliability measures of the measurement model for this study. The results are found in Table 7.5.

7.3.1 Reliability Assessment

Cronbach's alpha and Composite Reliability were used to assess the internal consistency (i.e. reliability) of the constructs and using the recommended cut-off value of 0.7, although 0.6 is permissible (Malhotra, 2011; Field, 2013).

Table 7.5: Reliability and convergent validity Assessment

Constructs	Items	Factor loadings	P-values	CR	Cronbach Alpha	AVE	Final number of items (and Initial number)
Organic food Consumption Satisfaction (CS)	CS1	0,826	***	0,906	0,869	0,659	5 (5)
	CS2	0,826	***				
	CS3	0,856	***				
	CS4	0,828	***				
	CS5	0,716	***				
Communication (MC)	MC1	0,911	***	0,935	0,907	0,781	4 (5)
	MC2	0,913	***				
	MC3	0,865	***				
	MC5	0,845	***				
Distribution (MD)	MD1	0,756	***	0,887	0,839	0,664	4 (5)
	MD2	0,814	***				
	MD4	0,832	***				
	MD5	0,852	***				
Behavioural beliefs (PB)	PB1	0,819	***	0,854	0,770	0,594	4 (4)
	PB2	0,673	***				
	PB3	0,780	***				
	PB4	0,803	***				
Purchase decision (PD)	PD1	0,796	***	0,912	0,879	0,674	5 (5)
	PD2	0,835	***				
	PD3	0,834	***				
	PD4	0,835	***				
	PD5	0,804	***				
Environmental attitude (PE)	PE1	0,783	***	0,886	0,829	0,660	4 (4)
	PE2	0,820	***				
	PE3	0,815	***				
	PE4	0,831	***				
Image of organic food (PI)	PI1	0,816	***	0,844	0,755	0,580	4 (4)
	PI2	0,563	***				
	PI3	0,812	***				
	PI4	0,821	***				
Perception of product attributes (PP)	PP1	0,820	***	0,873	0,807	0,632	4 (4)
	PP3	0,754	***				
	PP4	0,780	***				
Perceived value (PV)	PV1	0,763	***	0,899	0,862	0,642	4 (5)
	PV2	0,829	***				
	PV3	0,803	***				

	PV4	0,799	***				
	PV5	0,809	***				
Repurchase Intention (RI)	RI1	0,850	***	0,879	0,816	0,645	4 (4)
	RI2	0,830	***				
	RI3	0,781	***				
	RI4	0,747	***				
Family influence (SF)	SF1	0,400	***	0,835	0,748	0,576	4 (4)
	SF2	0,884	***				
	SF3	0,771	***				
	SF4	0,881	***				
Peer influence (SP)	SP1	0,839	***	0,877	0,829	0,642	4 (4)
	SP2	0,861	***				
	SP3	0,733	***				
	SP4	0,765	***				
Word of Mouth (WM)	WM1	0,834	***	0,900	0,851	0,691	4 (4)
	WM2	0,818	***				
	WM3	0,833	***				
	WM4	0,827	***				
Willingness to pay the price (WP)	WP1	0,828	***	0,906	0,862	0,707	4 (4)
	WP2	0,867	***				
	WP3	0,838	***				
	WP4	0,831	***				

Table 7.5 shows that the Cronbach alpha of each construct for this study ranges from 0.748 to 0.907, while CR ranges from 0.835 to 0.935, which largely meets the recommended criterion of 0.7 (Hair et al., 2014). Thus, the results indicate that the items used to represent the constructs have satisfactory internal consistency reliability.

7.3.2 Validity Assessment

Validity can be assessed using convergent and discriminant validities.

7.3.2.1 Convergent validity

Convergent validity is obtained when factor loadings are above 0.5, although 0.4 or close to 0.4 is sometimes permissible (Hair et al., 2011).Based on the analysis, Table 7.5 reveals that all items in the measurement model exhibited loadings above or equal to Hair et al.'s (2014) recommended cut-off of 0.5 and 0.4. All the items are significantly loaded to their respective constructs at the level of 0.001.

It should be noted that the price construct is absent in Table 7.5. Following the factor loadings criteria, the price construct was removed from the dataset because it did not meet the requirements. Most of the item loadings for this construct were below the recommended threshold of 0.5 or even 0.4 with (MP1= 0.177; MP2= 0.193; MP3= 0.318). Even though the items (MP4= 0.474 and MP5= 0.691) were within the threshold, they were not considered because, according to Henseler, Ringle and Sarstedt (2015), each construct should have at least three measuring items. In addition, one item each was removed from communication (MC4) and distribution (MD3) respectively for low loadings.

In addition to factor a loading, convergent validity was also assessed by examining the average variance extracted (AVE) values. Convergent validity in this regard is obtained when constructs have an average variance extracted (AVE) value of at least 0.5 or more (Hair et al., 2014). Table 7.5 shows that all constructs have AVE ranging from 0.576 to 0.781, which exceeded the recommended threshold value of 0.5. This and factor loadings confirm that all the constructs retained had satisfactory convergent validities. This indicates that all the items in the constructs retained converged towards the concept measured by the constructs.

7.3.2.2 Correlation matrix measuring discriminant validity (done with the HTMT approach)

In this study, the measurement model's discriminant validity was assessed by using Fornell and Larcker's (1981) criterion. As discussed in chapter six, a measurement model has discriminant validity when 1) the square root of the AVE exceeds the correlations between the measure and all other measures, and 2) the indicators' loadings are higher against their respective construct compared to other constructs. Thus, to determine the first assessment of measurement model's discriminant validity, the AVE value of each construct is generated using the SmartPLS algorithm function. Then the square roots of AVE are calculated manually. The results are presented in the form of a correlation matrix and presented in Table 7.6.

Table 7.6: Correlation matrix

	BB	MC	MD	EA	SF	CS	PD	PI	SP	PV	PP	RI	WTP	WoM
BB														
MC	0,126													
MD	0,142	0,285												
EA	0,672	0,141	0,133											
SF	0,396	0,322	0,295	0,198										
CS	0,650	0,162	0,226	0,422	0,393									
PD	0,606	0,198	0,185	0,407	0,450	0,753								
PI	0,640	0,295	0,261	0,390	0,495	0,726	0,586							
SP	0,329	0,354	0,288	0,246	0,601	0,429	0,338	0,545						
PV	0,799	0,176	0,141	0,606	0,428	0,726	0,633	0,736	0,423					
PP	0,627	0,146	0,116	0,643	0,301	0,604	0,544	0,587	0,355	0,713				
RI	0,718	0,168	0,225	0,571	0,403	0,875	0,751	0,702	0,403	0,773	0,661			
WTP	0,510	0,217	0,268	0,421	0,429	0,711	0,792	0,625	0,414	0,637	0,490	0,737		
WOM	0,600	0,213	0,252	0,516	0,493	0,728	0,707	0,601	0,479	0,697	0,497	0,757	0,751	

**** Significant correlation at the level of p< 0.001*

Note: *Diagonals represent the square root of the AVE. Other entries represent the correlations coefficient between the constructs.BB= Behavioural beliefs; MC= Communication; MD= Distribution; EA= Environmental Attitude; SF = Family Influence; CS= Consumption satisfaction; PD= Purchase Decision; PI= Image of organic food; SP= Peer Influence; PV= Perceived Value; PP= Product Attributes; RI= Repurchase Intention; WTP= Willingness to pay the price; WoM= Word of Mouth.*

Based on the results in Table 7.6, all square roots of AVE exceeded the off-diagonal elements in their corresponding row and column. All values are below 0.90(Henseler, Ringle and Sarstedt, 2015) so, discriminant validity is established. Overall, the reliability and validity tests conducted on the measurement model are satisfactory. This is an indicator that the measurement model for this study is valid and fit to be used to estimate parameters in the structural model.

7.3.3 Model Fit

When SmartPLS is used to conduct SEM, the model fit is calculated using the formula, √[(average AVE) x average of R^2values] (Henseler & Sarstedt, 2013).The AVE values for this study are found in Table 7.5. The average of (0,659 + 0,781 + 0,664 + 0,594 + 0,674 + 0,660 + 0,580 + 0,632 + 0,642 + 0,645 + 0,576 + 0,642 + 0,691 + 0,707/14) =0.653. The average of R^2(0,438 + 0,419 + 0,551 + 0,380 + 0,393/5) = 0.436. Thus, √[0.659 x 0.436]= 0.534. Following

Henseler and Sarstedt's (2013) recommendation that the goodness-of-fit (GoF) should be greater than or equal to 0.3., the GoF of 0.534 obtained the current data shows that there was good fit with the model.

7.4 Structural Model

As explained in chapter six, the weights or path coefficients of the relationships are examined and tested for their significance through t-values obtained from the bootstrapping method. Also, the coefficient of determination, R squared for dependent variables are assessed in order to find the amount of variance explained in each construct, which are described by the model.

7.4.1 Variance Explained of the Dependent Constructs (R^2)

The R^2 value indicates the amount of variance in dependent variables that is explained by the independent variables. Thus, a larger R^2 value increases the predictive ability of the structural model. In this study, SmartPLS algorithm function was used to obtain the R^2values, while the SmartPLS bootstrapping function was used to generate or calculate the t-statistics values in order to assess the Goodness of Fit. With the bootstrapping, a run was done with 5000 subsamples, according to Hair's et al. (2014) recommendation. The results of the R^2 values of the dependent variables are shown in Table 7.7 and the result of the structural model is presented in Figure 7.1.

Table 7.7: Variance Explained of the Dependent Constructs (R2)

Variables	R Square	R Square Adjusted
Organic food consumption satisfaction	0,438	0,437
Organic food purchase decision	0,419	0,410
Repurchase intention	0,551	0,550
Willingness to pay price premium	0,380	0,379
Word of mouth	0,393	0,392

Note: *Goodness of Fit; Square root of R^2 (0.436) * AVE (0.653) = 0,534*

Figure 7.1: Results of Structural Model

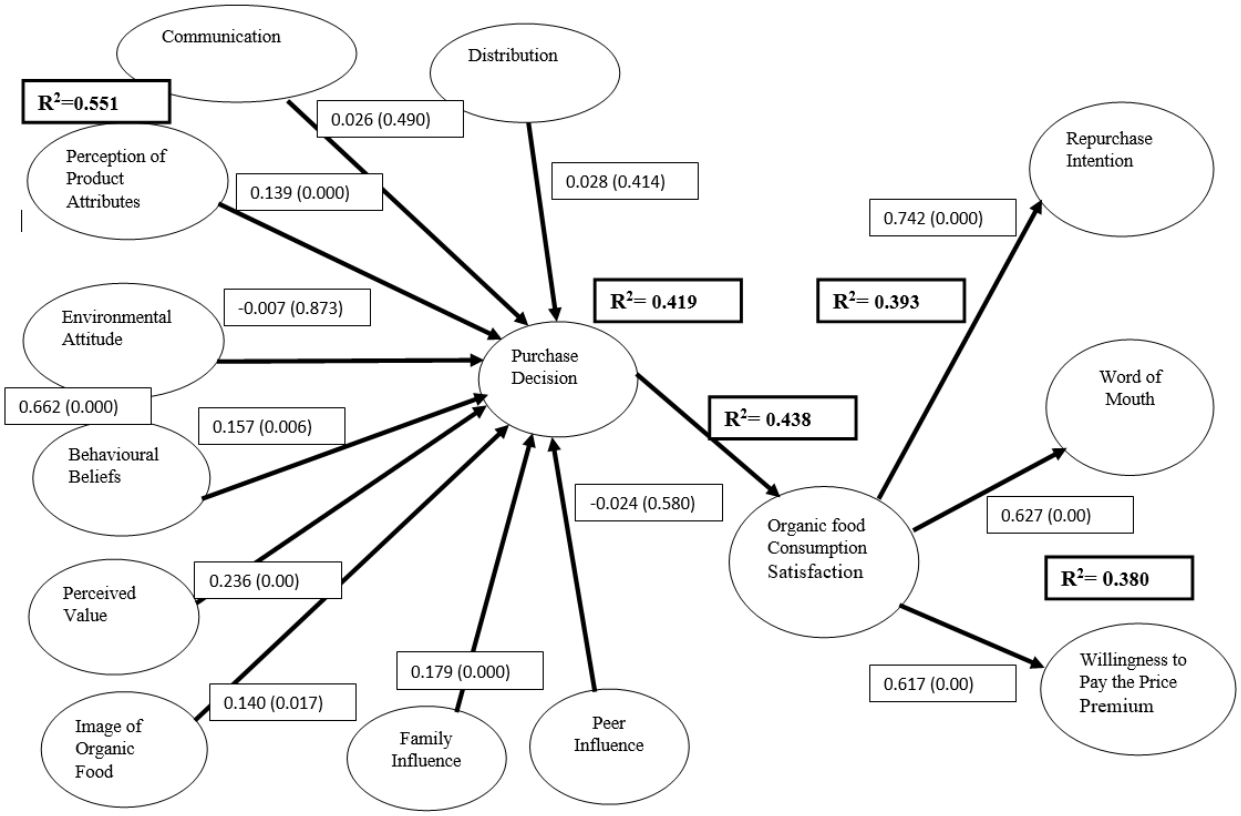


Table 7.7 and Figure 7.1, reveal that the marketing factors (distribution and communication), psychological factors (perception of product attributes, environmental attitude, behavioural beliefs, perceived value and overall image), and social factors (peer pressure and family influence) are able to explain 42% of the variance in organic food purchase decision. This explanatory power is substantial, especially in a context of consumer behaviour (Hair, Hult, Ringle and Sarstedt, 2017). With psychological or personal factors making much of the contribution (53%) (see Figure 7.2) to the 42% of variance explained of the purchase decision, this study supports Khuong and Duyen's (2016) finding, which showed that personal factors explained 42% of consumer purchase decision in Vietnam. The extent to which each of the marketing, psychological and social factors explains the purchase decision in this study is provided in Figure 7.2.

Figure 7.2: The impact of Grouped marketing, psychological and social factors on the outcomes

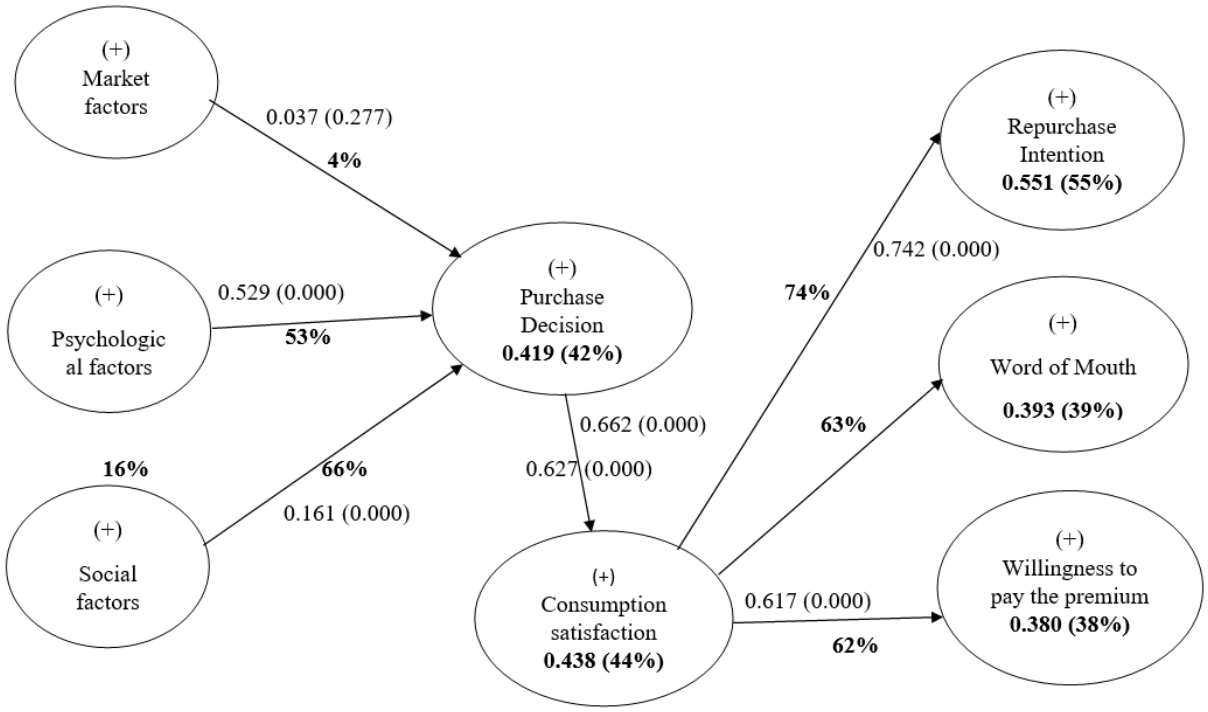


Figure 7.2 shows that of the 42% variance explained by all three grouped factors of organic food purchase decision, psychological factors contributed 53% towards explaining organic food purchase decision. Meanwhile 16% of the variance is explained by social factors, while market factors only explained 4% of the purchase decision. It is not surprising that psychological factors have more predicting power considering that they have been studied considerably and mostly found in various models including TPB. Regarding social factors (family and peer), there is contradictory empirical finding on pro-environmental behaviour especially on organic food. Although the influence of family on purchase decision was found to be positive in this study and is supported by the literature, the same cannot be said about peer influence. Regarding peer influence, the study finding is supported by Irawan and Darmayanti's (2009) findings on the factors affecting green purchasing behaviour of university students in Jakarta. In their findings, the impact of social influence focusing on peer pressure on green purchasing behaviour was rejected.

The importance of social norms which included family and friends for environmentally responsible behaviour was investigated by Aertsens et al. (2009). These authors found that

family influence plays a key role in influencing organic food purchase decision. In this context, organic food consumption, Chen (2007); Dean, Raats and Shepherd (2008) also found a significant positive relation between family influence and consumers' intention to purchase organic food. Gotschi, Vogel and Lindenthal (2007) found that for Austrian consumers, primary socialisation (norms and values), learnt at home, have a significant influence on purchase decision towards organic food, while secondary socialisation (school environment) has less impact. This further validates this study's findings for both constructs of social influence. Primary socialisation, which refers to family influence was found to positively influence organic food consumption while secondary socialisation, which relate to peer or friends influence has less impact of organic food purchasing decision.

The low impact of market factors (4%) can be attributed to the fact that marketers are not doing enough to promote and supply organic products. It is not surprising because the scope for marketing organic food in South Africa is vast and still not yet explored to its full potential. Organic food marketers can gain from these findings by incorporating the insights gained from this study while strategising their marketing plan.

In terms of the explanatory power of the organic food purchase decision in the current study, and as presented in Figure 1 and 2, it explained 44% of the variance in consumption satisfaction. On the other hand, consumption satisfaction explained 55% of the variance in repurchase intention, 39% in word of mouth and 38% in consumers' willingness to pay the price premium. The explanatory power, expressed in R^2 for the continuous model constructs (i.e., purchase decision and satisfaction) as well as repurchase intention, word-of-mouth and willingness to pay the price premium constructs, are comparable to prior findings in the literature (Alamsyah and Angliawati, 2015; Kordshouli, Ebrahimi and Bouzanjani, 2015; Lam et al., 2016; Liang, 2016). For example, Alamsyah and Angliawati (2015) in their study of buying behaviour of organic vegetable products found that purchase decision is associated with satisfaction. Kordshouli et al. (2015) found that green satisfaction is associated with-word-of mouth advertising in their study. Liang (2016) also found that organic food consumption satisfaction is linked to willingness to pay the price premium, while Lam et al. (2016) found that satisfaction influences green re-purchase intention of green products. Generally, it can be concluded that the hypothesised model substantially explained each of the endogenous constructs.

7.4.2 Path Coefficients

Using the SmartPLS algorithm output and as stated before, the relationships between independent and dependent variables were examined. With SmartPLS t-statistics for all paths are generated using the SmartPLS bootstrapping functionin order to test the significant level. Based on the t-statistics output, the significant level of each relationship is determined. Using the results from the path assessment, the acceptance or rejection of the proposed hypotheses is determined. Table 7.8 presents the path coefficients, observed t-statistics, and p-values for all hypothesised path.

Table 7.8: The path coefficients, observed t-statistics, and p-values for all hypothesised

Independent Variables	**DependentVariable**	**Path Coefficient**	**T - Value**	**P - Value**
Distribution→		0.028	0.816	0.414
Communication→		0.026	0.691	0.490
Product attributes→		0.139	3.553	0.000
Environmental attitude →	Purchase	-0.007	0.160	0.873
Behavioural beliefs→	Decision	0.157	2.750	0.006
Perceived value→	**(R^2= 0.419)**	0.236	3.892	0.000
Image of organic food→		0.140	2.379	0.017
Family influence→		0.179	4.690	0.000
Peer influence→		-0.024	0.554	0.580
Purchase Decision →	Consumption satisfaction **(R^2= 0.438)**	0.662	24.672	0.000
Organic food consumption satisfaction →	Repurchase intention **(R^2 = 0.551)**	0.742	30.524	0.000
Organic food consumption satisfaction →	Willingness to pay price premium **(R^2 =0.380)**	0.617	19.640	0.000
Organic food consumption satisfaction →	Word of Mouth **(R^2 = 0.393)**	0.627	20.718	0.000

From Table 7.8, it appears that the regression paths (in bold) between product attributes and purchase decision (β = 0.419, $p < 0.000$), behavioural beliefs, perceived value, image of organic food, family influence and purchase decision (β = 0.419, $p > 0.006$; 0.000; 0.017 and 0.000) respectively are statistically significant and predictors of purchase decision of organic food.

Purchase decision and consumption satisfaction (β = -0.438, $p > 0.000$), consumption satisfaction and repurchase intention (β = 0.551, $p > 0.000$), consumption satisfaction and willingness to pay price premium (β = 0.380, $p < 0.0010$), and satisfaction and word of mouth (β = 0.393, $p < 0.05$) are statistically significant.

The structural model also shows that the constructs, distribution (β = 0.419, $p < 0.414$), communication (β = 0.419, $p < 0.490$), environmental attitude (β = 0.419, $p < 0.873$) and peer influence (β = 0.419, $p < 0.580$) are not significantly significant.

7.4.3 Results of the Tested Hypotheses

After deleting price, because of poor items-to-factor loadings thirteen hypotheses were tested. The assessment of the path model (refer to Figure 7.1 and Table 7.8) show that all proposed hypotheses were supported with the exception of hypotheses H1, H2, H4 and hypothesis H8. The supported hypotheses were significant at least at the 95% and 99% confidence levels and all had positive relationships as hypothesised. For the significant relationships, the path coefficient values (β) ranged from 0.139 to 0.662.Table 7.9 summarises the hypotheses that were supported and not supported.

Table 7.9: Supported and Non-supported Hypotheses

	Hypothesis statement	Decision
H2	Distribution of organic food products is positively associated with purchase decision.	**Not supported**
H3	Communication positively influences purchase decision of organic food products.	**Not supported**
H4	The perception of organic food product attributes is positively associated with purchase decision.	**Supported**
H5	Environmental attitude towards organic food is positively associated with the purchase decision.	**Not supported**
H6	Behavioural beliefs about organic food positively influence purchase decision.	**Supported**
H7	Perceived value enjoyed from organic food is positively associated with	**Supported**

	purchase decision.	
H8	Overall image of organic food is positively associated with consumer purchase decision.	**Supported**
H9	Peer pressure positively influences organic food purchase decision.	**Not supported**
H10	Family members positively influence organic food purchase decision.	**Supported**
H11	Consumer organic food purchase decision positively influences satisfaction.	**Supported**
H12	Consumer satisfaction of organic food products influences the willingness to pay the premium.	**Supported**
H13	Customer satisfaction is positively associated with repurchase intention.	**Supported**
H14	Consumer satisfaction with organic food consumption positively affects the willingness to spread word-of-mouth.	**Supported**

The results in Table 7.9 are discussed in the next section.

7.4.3.1 Discussions on testing the hypotheses

H2: Distribution of organic food products is positively associated with purchase decision

The supply of organic food in the market by retailers and organic food stores create the convenience and facilitate organic consumers to make purchase decisions. Even though Yiridoe et al.'s (2005) model anda number of other green marketing studies (Marian, Chrysochou, Krystallis and Thøgersen, 2014; Hamzaoui-Essoussiand Zahaf, 2014; Gunasundari and Sathiya, 2016)that suggest a relationship between organic food distribution and purchase decision, this study did not support the relationship in South Africa with ($\beta = 0.028$, $p < 0.414$).

The reason for the insignificant relationship could be attributed to the fact that the distribution of organic food in South Africa is not yet a widely distributed product on the supermarket shelves in South Africa. Consumers go to specialised markets to buy them and do not expect to commonly find them.

H3: Communication positively influences purchase decision of organic food products

The results indicate that even though there was a positive relationship as proposed, it was not significant with ($\beta = 0.026$, $p < 0.490$). This finding did not support Hussain et al.'s (2014) and Sultan et al.'s 2014) findings. For example, in Australia (Canberra), Sultan et al. (2014)

mentioned that awareness and knowledge about organically produced foods are critical in the consumer purchase decisions. This could not have significant in South Africa, because there are rarely adverts on organic food. With increased health consciousness, especially for the middle class and upper income consumers who mostly visit the organic food market where this study was conducted, consumers may be getting their information about organic food from word-of-mouth communication or health magazines and publications in South Africa. It would, however, be good to investigate where awareness of organic food is found.

H4: The perception of organic food product attributes is positively associated with purchase decision

A consumer's choice in favour of organic is made by comparing a bundle of observable and unobservable characteristics of organic food products (Hemmerling, Hamm and Spiller, 2015).The PLS results in Table 7.8 show apositive and statistically significant relationship between perceived product attributes and purchase decision with ($\beta = 0.139$, $p < 0.000$), indicating that H3 is supported. Stemming mainly from Yiridoe et al.'s (2005) model of factors affecting organic food purchase decision, product attribute has been found to be the determinant of organic food purchase decision. This result is consistent with other prior studies (Pearson et al., 2007; Cerjak, et al., 2010), which found a positive and significant relationship between the two constructs. In investigating the influence of product attributeson consumer purchase decision in Nigeria, for example, Akpoyomare, Adeosun and Ganiyu (2012) found that perceived product attributes explained 40.83% of the respondents' purchase decision.

H5: Environmental attitude towards organic food is positively associated with the purchase decision

According to the results in Figure 7.1 and Table 7.8, the effect of environmental attitude on organic foodpurchase decision was surprisingly negative and not statistically significant with ($\beta = -0.007$, $p < 0.873$). This finding therefore does not support studies that have reported a positive and significant relationship between environmental attitude and pro-environmental behaviour such as purchase decision (Tilikidou, 2007; Vicente-Molina et al., 2013). Cottrell (2003), however, also found a negative relationship between these two constructs. Other studies revealed

a weak relationship between attitudes and pro-environmental behaviour (Milfont and Duckitt, 2010).

The association between the environmental attitude and purchase decision can either depend on the product category, or it could stem from the altitude-behaviour problem that Ajzen (1991) found, whereby there needs to be a mediator before attitudes translate to behaviour. That mediator, according to TPB, could be purchase intention, subjective norm or perceived behavioural control. For example, on investigating the impact of environmental altitude on the decision to purchase, Esmaeilpour and Bahmiary (2017) found that environmental attitude of customers has significant and positive impact on green purchasing decision if mediated by caring for green products and environmental concerns. The negative relationship in this study could be indicative of the fact that consumers in South Africa are buying organic food for individualistic reasons and not about the environment at all.

H6: Behavioural beliefs about organic food positively influence purchase decision

Table 7.8 indicates that there is a positive and statistically significant relationship between behavioural beliefs and purchase decision with ($\beta = 0.157$, $p < 0.006$).This implies that positive behavioural belief about what organic food can do to the buyer increases the decision to purchase. As stated in chapter five under section 5.4.2.3, behavioural beliefs are shaped by health and ecological benefits (Magistris and Gracia, 2008) that are associated with these food products, which increases organic food purchase decision.

Deriving from the Aertsens et al.'s (2009) improved TPB model, the effect of behavioural beliefs on purchase decision is empirically validated by several prior studies in the domain of pro-environmental behaviour (e.g. Magistris and Gracia, 2008; Lee and Goudeau, 2014). Other studies such as that conducted by Zagata (2012)have also acknowledged this relationship but then went a step further and suggested a positive and direct effect of consumer beliefs on behavioural intention and purchase decision of organic food.

H7: Perceived value enjoyed from organic food is positively associated with purchase decision

With regards to how perceived valueaffects purchase decision, it was evident from Table 7.8 that perceived value positively and significantly affects organic food purchase decision with (β = 0.236; *p*>0.000).This means that despite the general perception that organic foodsare more expensive, consumers would still buy them because they feel the benefits they get form the food is worth the price.

The effect of perceived value on purchase decision seems to be conclusive in the literature as studies have corroborated this finding (Zhuang et al., 2010). Based on Aertsens et al.'s (2009).A test of the improved TPB model, for example, found that perceived value was the predictor of purchase decision of organic food in Canada. Other empirically TPB-based studies have discovered similar results when assessing this relation in the domain of pro-environmental behaviour (Zhuang et al., 2010; Yee, San and Khoon, 2011).

H8: Overall image of organic food is positively associated with consumer purchase decision

In this study, the overall image of organic food reflects a whole range of value, quality and affective impressions, conceptions and apprehensions towards organic food in the customers' memory, which has been found to correlate with the sustainability, eco-friendliness and even selfish altruism by some authors. These drive favourable behavioural intentions (see, for example, Lee et al., 2010). In line with this prediction, and as presented in Figure 7.1 and Table 7.8, the current study found that overall imageof organic food positively influences purchase decision (β = 0.140, p < 0.017). This finding means that the stronger an individual favourably feels about organic food for various reasons, the higher their chances of making a purchase decision.

This relationship supports Han and Kim (2010) recommendation that overall image plays an important role in predicting purchase behaviour. In the context of pro-environmental behaviour andits various aspects and product categories in green marketing, many researchershave identified the significance of overall image in customers' decision-making processes (see e.g., Ryu et al., 2007; Han et al., 2009; Chen, 2010; Han and Kim, 2010; Doszhanov and Ahmad, 2015). The current study thus supports these findings.

H9: Peer pressure positively influences organic food purchase decision

As a social factor or a possible element of subjective norm, which is commonly suggested as one of the predictors of behavioural intention in the traditional TPB, this study added peer influence as a possible determinant of purchase decision. The results compiled in Figure 7.1 and Table 7.8 show that there is no positive and statistically significant relationshipbetween peer pressure and purchase decision (β = -0.024, $p < 0.580$). This result, therefore, does not support Voon et al.'s (2011) finding, who found in Malaysia that consumers are likely to be influenced by the advice or opinions of significant others, particularly those whom they highly regard .Furthermore, as South Africa is not a highly collectivist society, consumers tend not to conform to the consumption choices of significant others.In addition to positive altitude which stems from appealing to various values satisfied by organic food, Aertsens et al. (2009) also found that subjective norms also contribute in determining organic food purchase and consumption. The negative and insignificant peer and organic food purchase decision relationship found in the current study could be due to the fact that the consumers are more driven by personal norms and health concerns than any hedonic, social or symbolic values when they make organic food purchase decision.

H10: Family members positively influence organic food purchase decision

Family influence in this study is regarded as an important reference group that may encourage consumer attitudes to act or not act towards organic food consumption. Figure 7.1 and Table 7.8 revealed a positive and statistically significant relationship between family influence and purchase decision with (β = 0.179, $p < 0.000$). This means that an individual can make a purchase decision toward organic food drive by what family members tell them or are doing themselves. This is a key finding that raises important implications for marketers who aim to change household attitudes toward organic food consumption.

Prior research found similar results (Aertsens et al., 2009;Johnson, 2014; Wiese and Kruger, 2016).For example, in exploring the environmental behaviouralactionsin different scenarios, Li and Xin (2015) found that there is a positive and significant relationship between family influence and purchase behaviour of young Chinese consumers. Thisrelationship was also demonstrated by Rieferand Hamm (2008) in a survey involving Germanconsumers. Also, Teng

and Wang (2015) in their study involving 693 respondents revealed that family members shapes decisions toward pro-environmental behaviour such as purchasing organic food. This study finding supports the aforementioned studies.

H11: Consumer organic food purchase decision positively influences satisfaction

In this study, satisfaction reflects the meeting of consumers' expectations from the consumption and usage of organic food. It is evident from Table 7.8 and Figure 7.1 that the respondents were highly satisfied with their decision to purchase and consume organic food with ($\beta = 0.662$, $p < 0.000$). In the context of pro-environmental behaviour, there is also evidence that a consumer's satisfaction with their purchase decision is associated with stronger consumption satisfaction (Darke et al., 2010; Chang and Kukar-Kinney, 2011; Mishra, 2017). In addition, Heitmann et al. (2007) assert that purchase decision satisfaction is determined by the consumer's achievement of choice goals, such as high choice confidence, low anticipated regret, and low evaluation costs. Thus, this study supports these findings.

H12: Consumer satisfaction of organic food products influences the willingness to pay the premium

The results presented in Table 7.8 indicate that consumption satisfaction has a positive and statistically significant relationship with willingness to pay the price premium ($\beta = 0.617$, $p < 0.001$). This suggests that even when the price of organic food is not just something perceived, but actually higher than conventional food, consumers will not mind paying the price premium when they are satisfied with their consumption of the food. Figure 7.2 also indicates that the consumption satisfaction explained 62% of the variance of consumers' willingness to pay the price premium. Stemming from the proposed Biophilia hypothesis, satisfaction fitted well into the proposed conceptual model explaining organic food consumption.

These findings are consistent with several prior studies in the domain of pro-environmental behaviour in the sense that satisfaction is a direct predictor of willingness to pay more for organic food products (Homburg et al., 2005; Luo and Homburg, 2007; Cotes-Torres eta al., 2012; Mishra, 2017). Looking at the percentage of variance explained for the behaviour, it appears that results vary across studies, depending on product category. For example, Meier-

Ploeger and Woodward (1999) in Germany reported that satisfaction explained 52% of the variance of the respondents' willingness to pay more for organic fruits and vegetables and 39% percent variance explained for grain products in Pouratashi's (2012) study. It can be said that with a good number of organic products category, consumption satisfaction is generally a good predictor of the willingness to pay higher prices.

H13: Customer satisfaction is positively associated with repurchase intention

As can be seen in Table 7.8 there is a positive and strong statistically significant relationship between organic food consumption satisfaction and repurchase intention ($\beta = 0.742$, $p < 0.000$). This result implies that the consumer satisfaction that emanatedfrom organic food consumptioncan increase the intention to repurchase organic food products again. Lam, Lau and Cheung (2016) corroborate these findings, although the strength of the relationship for the current study is stronger than that of Lam et al.'s (2016) which had ($\beta = 0.18$, $p < 0.00$). In addition, Figure 7.2 shows that consumer satisfaction explained up to 74% variance of the respondents' re-purchase behaviour. This finding echoes prior researches (Rahman et al., 2014; Lee and Yun, 2015; De Toni et al., 2017) who recognised the significance of satisfaction in promoting customer repurchase behaviour.Thus, this study supports these findings in the area of pro-environmental behaviour focusing on organic food.

H14: Consumer satisfaction with organic food consumption positively affects the willingness to spread word-of-mouth

With organic food inherently having more implicit than explicit benefits, customers rely heavily on the advice and suggestions from others who have used or experienced the products. The results in Table 7.8 and Figure 7.1 show that there is a significant and positive relationship between organic food consumption satisfaction and willingness to spread word of mouth ($\beta = 0.627$, $p < 0.000$). This means that the greater the satisfaction with organic food consumption, the greater the willingness to spread positive word-of-mouth among consumers. If organic food products provide quality, value and benefits as expected or even exceeds the consumers' expectation, consumers will consider recommending the product to others.

This finding is similar to Lam, Lau and Cheung's (2016) empirical study on responsible environmental behaviour in Hong Kong, which focused on Bonaqua bottled water produced by

Coca-Cola. Also, Cotes-Torres et al. (2012) reported that the high level of organic food consumption satisfaction increases customers' positive feedback or word-of-mouth.In observing the conceptual model, satisfaction (stemming from Biophilia hypothesis) and word-of-mouthfitted well when integrated into the TPB.

Overall and beyond the market, psychological and social factors studied yield insights into explaining purchase direct effects of many psychological and social factors on purchase decision, when the effect of market factors is weak or has no effect at all. This could be attributed to many factors, as explained on the sections under each hypothesis. These results corroborate the importance of market factors (distribution and communication); psychological factors (product attributes, environmental attitude, behavioural beliefs, perceived value and overall image) and social factors (family and peer pressure) in the formation of decision to purchase organic food.

7.5 CONCLUSION

This chapter presents and discusses the results obtained from the statistical analysis of this study's data. SmartPLS was used to examine the extent to which market, psychological and social factors affect purchase decision of organic food, how the decision determined consumption satisfaction and how the satisfaction in turn impacted on other post-purchase outcomes, including repurchase intention, willingness to pay the price premium and willingness to spread word-of-mouth. The chapter started by presenting the descriptive statistics which comprised means, demographic profile and characteristics of respondents. Preliminary analyses included the assessment of model fit, reliability and validity of the instruments used to measure the constructs.A number of observations were made from the analysis conducted on the measurement and structural model.

First, the structural model demonstrates satisfactory reliability and validity measures after few weak items were removed. In terms of internal consistency, all constructs have composite reliability values more than 0.7. All item loadings are greater than recommended 0.5 and 0.4 and are significant at the level of 0.001, demonstrating indicator reliability. The measurement model also demonstrated satisfactory convergent and discriminant validity by having AVE value greater than 0.50 except where justification was provided; all manifest variables loaded on their respective latent variable and the square roots of AVE for each construct are greater than its inter-correlation.

Second, the validation of the structural model demonstrates satisfactory results. The R^2in terms of the explanatory power of the predictor constructs were substantial with a value of 40% and above,which is satisfactory, especially in a context of consumer behaviour (Henseler, Ringle and Sarstedt, 2015). Moreover, nine out of thirteen proposed hypotheses within the structural model were supported and mostly at 99% or 0.01 confidence level. Beyond the market, psychological and social factors studied had the greatest explanatory power of organic food purchase decision. This supports previous findings.

The next chapter discusses the practical and theoretical implications of this study, and make recommendations and concluding remarks.

CHAPTER 8
CONCLUSION AND RECOMMENDATIONS

8.1 INTRODUTION

The primary objective of this research was to examine market, psychological and social factors affecting organic food purchase decision and other post purchase outcomes. The preceding chapter presents and discusses the results obtained from the data analyses. This concluding chapter commences by providing an overview of the study. Thereafter, the key findings and conclusions are presented, followed by recommendations on how purchase decision organic food can be enhanced through the findings obtained on the market and socio-its psychological factors. The chapter continues by highlighting the theoretical and practical contributions of the study. Limitations of the study and suggestions for future research areasare discussed before presenting final concluding remarks.

8.2 OVERVIEW OF THE STUDY'S OBJECTIVES AND THE EXTENT OF ITS ACHIEVMENT

8.2.1 Overview of the main objective

Even though is there is inadequate supply of organic food globally, including in South Africa, its demand is increasing. As with every consumer behaviour, understanding the various reasons why consumers demand, purchase and are satisfied with organic food is complex.While models and theories provide important explanations on why consumers demand and purchase organic products, their facts are fragmented, lacking an integration of all organic food consumption determinants or model. The fragmented models in some cases provide contradictory findings (Bravo et al., 2013; Karatu and Mat, 2014). For better comprehension, this study has integrated the diverse factors empirically found as drivers of organic food purchase and consumption into a conceptual model, which has market, psychological as well as social determinants of organic food purchase and consumption.

Specifically, the main aim of this present study was to examine market, psychological and social factors affecting organic food purchase decision, consumption satisfaction and other post-purchase outcomes such as repurchase intention, willingness to pay a pricepremium as well as

spreading word-of-mouth. The next sections details the theoretical and empirical objectives and reports on how they were achieved.

8.2.2 The achievement of theoretical objectives

- **To study and report on the organic food supply and demand globally, in Africa and South Africa.**

This objective was achieved in chapter two from the literature review, which found that organic food was an element of green consumption. Globally, the organic food market is growing with its worth currently standing at approximately 80 billion US Dollars as of 2014 (Asif et al., 2018). There are estimates that in the future, global growth of organic food would be between 10 to 50% annually, which growth rate will depend on the country (Willer and Lernoud, 2016). The largest organic food markets are North America and Europe with 90% of total organic food consumption. In Europe, the European Union is actively promoting the growth of the organic sector and 95% of total global retail sales of organic food products occur in the European Union (Anderson et al., 2006). The bulk of these sales come from the former EU 15 countries, notably United Kingdom, Germany, Italy and France (Trade Information Brief, 2014; Sahota, 2015). The main market channels of distribution are specialists and supermarkets for organic food products (Organic Monitor, 2015).

Regarding the supply and demand for organic produce, retailers are the main suppliers of organic food in most European countries and are stimulating the demand for organic produce (Stopes, 2016). Organic food products are sold to grocery retailers such as supermarkets, departmental stores and discount stores, natural food and health stores and directly from the farms (Engel, 2008). The increasing consumer demand in these markets are a result of growing awareness of the nutritional value of food, health and food safety, controversy surrounding the introduction of foods containing genetically modified organisms and the impact of agricultural production methods on the environment.

In Asia, the organic market size is US $4.4 billion, while the leading countries are China, Japan and South Korea (Organic Monitor, 2015). Some other countries including Singapore, Taiwan and Philippines are following as producers and importers of organic food in this region. The growing demand of organic food in the local markets in these countries is endorsed by the

government in terms of the labelling of organic products (ITC, 2011). In addition, the following factors are notably the driving force behind the demand of organic food in Asia:

- strong cultural pull towards healthy eating;
- growth of local organic certification bodies;
- increased public concern about food safety;
- rising per capita income levels; and
- spread of supermarkets.

In addition, a spate of food contamination incidents across the region has reduced consumers' confidence in food safety. This has increased their awareness about the benefits of consuming organically grown products. While there is high potential for the demand of organic food in Asia, factors such as high/ divergent price premiums levied on organic products, confusion among consumers about what is an organic product are constraining the region's supposed organic food market growth.

In America (North America and Latin), the organic food market is growing at a rate of 11.5% yearly (FiBL, 2015).The organic market size in North America is estimated at US$35 billion and the leading country is USA(Organic Monitor, 2015).The demand for organic food in this region is stimulated by a change in consumers' preferences for healthy lifestyles. This is not surprising, considering that especially large retailers, such as Kmart are promoting a good healthy life. As reported in chapter two, two-thirds of US consumers reported to be using organic products and 27% report being regular (weekly) users (The Hartman Group, 2013). 62 percent of the consumers buy organic products from natural product stores (International Trade Centre, 2013), 31 percent is from supermarkets and hypermarkets and seven percent through clubs, food box systems and food service outlets (FiBL, 2015; Sahota, 2015).

In Latin America, the retail sales in 2007 was $ 100 000 USD and the leading courtiers are Brazil, Argentina, Bolivia and Peru (Willer and Yussefi, 2007; Engel, 2008). This region is the main exporter of organic products. The region exports a range of organic products including coffee and cocoa beans, bananas, fresh/dried vegetables, sugar, grains and meat (FiBL, 2015).

In Oceania, growth in the organic industry has been strongly influenced by rapidly growing overseas demand. This region covers countries such as Australia, New Zealand, and island states like Fiji, Papua New Guinea, Tonga and Vanuatu. The export sales across all organic product categories in 2014 were approximately $340 million USD (The Australian Organic Market Report, 2014). Retailers, supermarkets and organic stores are the main suppliers of organic food and the demand growing due to healthy lifestyles of consumers.

In Africa, a low demand for organic food is due to low income levels, long distance to large markets and the insufficient availability of markets was reported (FiBL, 2015). As the region is a net exporter of organic products it can be deduced that South Africa and Egypt are the region's largest exporters. Countries such as Kenya, Uganda and Tanzania are also improving in terms of organic food market, but at a slower pace (Willer and Yussefi, 2007). Well established retailers and supermarkets are the main suppliers of organic food and the demand is growing at a fast rate due to consumers' perception of organic food attributes.

In South Africa, organic food producers supply mainly 95 percent for the export market (Van Biljon, 2013). South Africa has historically been one of the leading consumers of certified organic produce in Africa (Willer and Yussefi, 2008), although the production is relatively small. South Africa exports product range includesfruits such as deciduous fruit, citrus fruit, blueberries and raspberries. The main export market for these products is Europe (Willer and Lernoud, 2015). Big players in retailing are the major suppliers of organic food such as Pick´n Pay, Shoprite-Checkers and Woolworths. Organic and natural markets including Bryanston market in Sandton and Neighbourgoods Market in Braamfontein (Johannesburg), Boeremark Market in Bloemfontein, Greyton Saturday Morning Market in the Western Cape among others, also supply these food products to the public.

As eluded to in chapter two, the organic food supply in South Africa faces several challenges. The limiting factor in the South African organic sector is supply rather than demand as documented in other green literature (for example, Engel, 2008; Erasmus, 2008; Kelly and Metelerkamp, 2015). According to a rerport in the Farmers Weekly (2008), the low supply of locally produced organic products in South Africa is the main restriction for market. While supermarkets increasingly seek to feature organic foodstuffs on their shelves, "demand far

exceeds the supply". Meanwhile, retailers assert that the availability of suitable organic suppliers is a key priority in expanding their organic range. Another challenge inhibiting growth of organic food market is inconsistency of supply, which Pick 'n Pay ascribed to the lower yields of organic farming compared to conventional agriculture.

As the call for healthy lifestyle of South Africans grows, organic food demand is expected to continue and increase. The rise in consumers' demand for organic foods stems from a change in consumers' value system, which affects their preferences - the so-called "emotional" factors combined with an increase in their disposable income. Firstly, consumers are motivated to "go-organic" because of the concerns that conventional food is laced with chemicals which are detrimental to their health. Also, medical studies suggest that certain food allergies are aggravated by eating specific chemicals in food. As consumers become increasingly health conscious, the perception that eating food that is closer to its natural state improves one's health, physical appearance and longevity gains public sentiment. Therefore, consumers' decision to eat organic products is seen as a way of improving one's health and controlling specific dietary and allergy conditions. Secondly, consumers' purchasing decisions are being influenced by the belief that every person in society has a shared responsibility to create a cleaner environment. This has increased the demand for organic goods as they become more affordable. Selling a greater quantity of cheaper goods has increased farmers' profitability and as a result they could plough their excess profits into improving their function throughout the value-chain. This has allowed farmers to produce better quality at a lower cost and thus their goods could be sold at a lower price without affecting their margins.

- **To review literature on the various underlying theories and models explaining how psychological, market and social factors impact on organic food purchase decision**

It has been suggested throughout the years that there are different theories explaining consumer behaviours (Zagata, 2012), which originates from social sciences of psychology, economics, and sociology. While some theories focus on the influence of variables in marketing, others emphasise the influences of external elements like advertisements, physical product differentiation, promotion, packaging, and retail, availability, direct selling, point of sale display, etc. (Saleki and Seyedsaleki, 2012). The selection of common socio-psychological theories and

models that have been specifically used to understand pro-environmental consumer behaviour was suggested by Jackson (2005) and Morris et al. (2012) as indicated in Chapter five under Table 5.1. A close inspection of this table reveals that these theories and model are not only intertwined, but also revolve around similar socio-psychological variables, such as social influences, attitudes, intentions, norms, values or beliefs. More so, the theories indicate two overriding lines of research, namely, the rational (individualistic) approach and the moral (altruistic) approach, as suggested by Sawitri, Hadiyanto and Hadi (2014).

The key theories embedded in the individualistic approach are the TRA (Fishbein and Ajzen, 1975), the TPB (Ajzen, 1991), behavioural reasoning theory (Westaby, 2005), protection motivation theory (Rogers, 1975), and similar theories, which deal with psychological variables including beliefs, attitudes, subjective norms and perceived behaviour controls. Nonetheless, evidence from the past proves that the TPB has been used in numerous organic food studies (Tarkiainen and Sundqvist, 2005; Vermeir and Verbeke, 2006; Vermeir and Verbeke, 2008; Arvola, Vassallo, Dean, Lampila, Saba, Lähteenmäki and Shepherd, 2008; Aertsens, et al., 2009; Yazdanpanah and Forouzani, 2015).

This study utilised the TPB in understanding how market, psychological and social variables influence purchase decision of organic food. Eide (2013) asserts that rational theories are based upon the assumption that consumers conduct a cost-benefit analysis in their decision-making. The basic tenet of the individualistic approach is that human behaviour is motivated by the desire to maximise the expected benefits for personal interests. TPB added that perceived behavioural control regarding organic products as one of the beneficial elements could be the perceived higher price. This could limit the purchases of the product. Considering its merits and demerits discussed in chapter three, TPB was integrated with other models to understand drivers of organic food purchase decision in this study.

Regarding moral based theories (altruistic approach), the moral-based theories evaluate consumers' consideration of moral implications of their decision-making process (Eide, 2013). The altruistic or collectivistic approach is premised on the fact that people prioritise collective interests over their personal interests (López-Mosquera and Sánchez, 2012). These theories, of course, only have application value where moral considerations come into play such as with regards to purchasing organic food. Green consumption is considered a form of altruistic

behaviour in so far as individuals have to relinquish personal benefits for the sake of collective wellbeing (Sawitri et al., 2015). There are fewer theories that are morally based. The first two theories are also related to each other, as the first is presented as an extension of the latter. To explain pro-environmental behaviour, the altruistic approach is mainly crystallised by the NAM (Schwartz and Howard, 1981), or deriving from models such as the Value-Belief-Norm theory (VBN) (Stern, 2000), and the Biophilia Hypothesis (Wilson, 1984). VBN considers altruistic considerations as measures to predict behaviour.

The VBN theory was introduced in order to develop a conceptual framework to predict individual conservationist action (Stern 2000). The consideration to purchase may lead the consumer to take upon themselves several distinctive forms of pro-environmental behaviour. The Norm-Activation Theory (NAT) (Schwartz 1977) has been used to explain the way an environmental concern is transformed into behaviour. The theory presents norms as external factors predicting environmental behaviour. The behaviour may be influenced through personal and subjective norms (social influence) (Eide, 2013). Matthies et al.'s (2012) study shows that both the subjective norm of parents as well as the activation of personal norms through communication of the problem influenced children's behaviour. The Norm-Activation theory has been applied to the extended Value-Belief-Norm theory as the final antecedent of behaviour (Sawitri et al., 2015).

The Biophilia Hypothesis (Wilson 1984) suggests that we gain the most satisfaction from processes that mimic the nature of life on many levels, be they cognitive or emotional. These core values are defined as biospheric (concern for the planet), altruistic (concern for the wellbeing of others) and egoistic (concern for one self). However, there are, according to Stern (2000), evidence that traditional values have a negative correlation with pro-environmental behaviour. Thus, in line with what the Biophilia Hypothesis theory proposes, it, in addition to the TPB, guided the proposed theoretical framework of this study explaining purchase decision of organic food.

In addition, Yiridoe, Bonti-Ankomah and Martin (2005) and Aertsens, Verbeke, Mondelaers and Huylenbroeck (2009) models were used to understand organic food purchase decision as discussed in both Chapter one and three of this study, Yiridoe et al. (2005) recommend the

consolidation of the diverse factors empirically found as drivers of organic food purchase and consumption, discussed in chapter three. These factors were consolidated into personal/psychological, health-related, market, environmental, social and demographic factors driving organic food purchase decision and consumption. These factors were derived from different theories including TPB, TRA, VBN as well as NAM.

Aertsens et al. (2009) on the other hand linked Schwartz' values theory and the TPB to understand personal and moral factors affecting organic food purchase intention and behaviour. Aertsens et al.'s (2009) report that when marketers appeal to values, such as "security", "hedonism", "universalism", "benevolence", "stimulation", "self-direction" and "conformity", consumers will have favourable attitude towards organic food consumption. In addition to this positive attitude, the personal norm, subjective norm and perceived behavioural control can also impact on the purchase of organic food.

- **To review literature on the extent consumers are satisfied with the consumption of organic food and how the satisfaction affects other post-purchase outcomes, such as willingness to pay a price premium, share word-of-mouth and repurchase intention**

It has been suggested in the green environment that consumer satisfaction with the purchase decision process is essential in evaluating organic food products performance. When organic food provides a pleasurable level of fulfilment and emotional response to a consumer it is often referred to as satisfaction (Mohaydin, Chand, Aziz, Bashir and Irfan, 2017). There are many elements which attract consumer interest in organic food (Kumar 2017). These include food quality, food safety, price satisfaction, availability (shop location), packaging, human health and environmental protection along with sensory attributes such as nutritive value, taste, freshness and appearance all influence organic food consumer satisfaction (Shafiea and Rennie, 2012).

The literature suggests that consumers are satisfied because organic food promotes a balance of human, other living organisms and the nature (Mohaydin et al., 2017), and promotes no artificial preservatives and best maintains the originality of food (Kumar 2017). This prevents excess use of harmful ingredients and thereby ensures health, thus providing pleasurable fulfilment to consumers (Kalaiselvi, 2017). If the perceived organic product performance does not meet customer expectations, the likely result is dissatisfaction (Ramesh and Divya, 2015).

The formation of satisfaction needs to be understood in order to evaluate customers' purchase decision of organic food. Organic food satisfaction also includes cognitive and emotional evaluation of both the food and the providers (Jakpar et al., 2012). Organic food consumption satisfaction leads to several outcomes as explained in Chapter 5 including product attachment, commitment, loyalty, repurchase intention, willingness to spread word-of-mouth and pay the price premium.

- **To develop a conceptual model which delineates how market, psychological and social factors affect organic food purchase decision, satisfaction and post-purchase outcomes, such as willingness to pay a price premium, share word-of-mouth and repurchase intention**

The conceptual model was developed by integrating Yiridoe et al. (2005) and Aertsens et al.'s (2009) models as well as the Biophilia hypotheses and TPB theories. The resultant model is in chapter five (see Figure 5.1). It was empirically tested and the results are in chapter seven,with details of the results summarised in the following section.

8.2.3 The achievement of empirical objectives

The empirical objectives, as set out in the first chapterare the following:

- to investigate the influence of price, distribution and communication (market factors) on organic food purchase decision;
- to assess the extent to which consumer perception of organic product attributes, environmental attitude, behavioural beliefs, perceived value and overall image (psychological factors) influence organic food purchase decision;
- to determine whether peer group and family (social factors) influence organic food purchase decision;
- to assess the extent to which consumers' organic food purchase decision affect their consumption satisfaction; and
- to examine the relationships between consumer satisfaction with organic food purchase and other post-purchase outcomes, such as willingness to pay a price premium, share word-of-mouth and repurchase intention.

These objectives were formulated into hypotheses as delineated in the conceptual model, empirically tested. The results, which are in chapter seven are summarised in the next section.

8.2.3.1 The influence of market factors on organic purchase decision

The findings presented in section 7.2.2.1 and 7.4.1 of chapter seven discuss the extent to which market factors influence organic food purchase decision. Before examining the impact of the market factors, respondents' perception regarding the price, distribution and communication of organic food was assessed. According to results in Table 7.4, the respondents agreed that all the three elements of the marketing mix mattered to them with (M= 3.60), (M=3.51) and (M=3.41) for price, distribution and communication. Price and distribution perceptions were, however, rated higher. Price was deleted from the analyses because it did not meet the reliability requirement.

In terms of the marketing mix predictive power, the marketing factors explainedonly 4% of organic food purchase decision even though none of the elements significantly affected purchase decision. This could be either because consumers purchase organic food from personal health motivations or attributed to the view that marketers are not doing enough to rightly price, create awareness and distribute organic good.

8.2.3.2 The extent to which psychological factors affect organic food purchase decision

The study found that organic food purchase decision is explained mostly by an individual's attitude toward the environment, perceived value of organic food, perception of product attributes,behavioural beliefs as well as the image of organic food product. The environmental attitude played no significant role in influencing purchase decision although its mean value (M=4.12) showed a high degree of agreement amongst the respondents on this variable. Asif, Xuhui, Nasiri and Ayyub (2018) also found no association between environmental concern and purchase intention.

Out of all the psychological factors that impacted on purchase decision, perceived value made the greatest impact. This value is in terms of the health and environmental benefits the consumers get from organic food compared to the price they pay for it. Perceived value should

have purchase intention because it is a good predictor of positive product attitude (Pickett-Baker and Ozaki, 2008).

Behavioural beliefs associated with organic food wasfound to be the second strongestpredictor of organic food purchase decision. Thesebeliefs, which are usually beliefs about organic food attributes, healthiness and that buying it is the right thing to do, are also the building blocks of attitudes towards the product. South Africans did not only agree (M=4.0) to believing in the benefits of organic food and the act of buying it, but the beliefs were strong enough to affect their purchase decision.

The perception of organic product attributes and overall image had equal impact on purchase decision with (β =0.139) and (β = 0.140)respectively. It is worthwhile noting that the perceptions held of organic food are important elements that are required for the body, such as vitamins, protein and other health-giving properties. These should haveresulted in a significant relationship between perception of the product attributes and purchase decision and areconsistent with prior organic food studies (see, for example, Yiridoe et al., 2005; Mondelaers, Verbeke and Van Huylenbroeck, 2009; Schuldt and Schwarz, 2010).The South African respondents were also found to hold a good overall image of organic food, which significantly affects their purchase decision. In terms of its overall image, it was also interesting to find that South Africans agreed to having an overall good image of organic food with (M = 3.90), which positively had an impact on purchase decision.Considering thatfew or limited studies were conducted on the overall image of organic food, the addition of this constructinto the TPB modelcan improve the extent to which TPB predicts behaviour.

Overall, the effect of the psychological determinants (perceived value, perceived product attributes, behavioural beliefs, environmental attitudesand overall image of organic food product) explained up to 53% of organic food purchase decision. This is a strong predictive power considering that 40% is considered goodin consumer behaviour studies (Henseler et al., 2015).

8.2.3.3 The influence of social factors on organic food purchase decision

As depicted in the proposed conceptual model in Figure 5.2, the impact of social factors on organicfood purchase decision were also examined. The peer and family influence based on the

organic literature were the two most used factors related to subjective norms.Regarding peer influence (refer to Table 7.4), respondents showed a level of agreement with the statements, with a mean score of 3.48. This factor surprising had a negative and insignificant impact (-0.024; 0.580)onpurchase decision even though this relationship has been found in the literature and empirical findings been found to be positive (Niu, 2013; Johnson, 2015). The reason could be that since most South Africans tend to buy organic food for private and a healthy eating lifestyle as the EPOPA (2006) Report mentioned, they don't need the views and approval from peers.

Family influence was the social factor, which impactedon purchasing decision. This could have been as a result of the fact that family members as opposed to peers could more likely care about members' health and talk about food choices.Both the peer and familysocial factors overall explained 16% of organic food purchase decision. Whether the decision affected consumption satisfaction is discussed next.

8.2.3.4 The extent to which organic food purchase decision influences consumption satisfaction

Consumer satisfaction with the decision to purchase organic food was considered an outcome. Proposed from the biophilia hypotheses, prior research has shown that people associate happiness and pleasure with the consumption of organic food (Apaolaza, Hartmann, D'Souza and López, 2018).It was thus important to find out what happens once consumers have made their purchase decisions. The observed relationship between purchase decision and consumption satisfaction revealed a positive and significant association. Purchase decision explained44% of the consumers' satisfaction with organic food. With thisconsumption satisfaction, it was expected that it willlead to other post purchase outcomes as summarised below.

8.2.3.5 The extent to which organic food consumption satisfaction influences repurchase intention, willingness to pay a price premium and willingness to spread word-of-mouth

Repurchase intention

The findings revealed that there was a positive and significant relationship between consumption satisfaction and repurchase intention. Consumer satisfaction explained55% of organic food

repurchase intention. This shows how important satisfaction is in overall organic food consumption behaviour.

Willingness to spread word-of-mouth

The findings of this study revealed that consumption satisfaction had a significant and positive relationship with word-of-mouth. Consumption satisfaction with organic food explained 39% of consumers' willingness to spread word-of-mouth. This confirms the suggestion in the literature that satisfaction is an influential factor toward positive word-of-mouth (Koller et al., 2011).

Willingness to pay the price premium

As depicted in Figure 7.2, organic food consumption satisfaction and willingness to pay the price premium are statistically associated. It is evident from the results in Figure 7.1 and 7.2 that satisfaction influences willingness to pay higher prices which retailers sometimes charge for organic food. Consumption satisfaction explained 38% of consumers' willingness to pay the price premium. There is mechanism in the literature through which satisfaction enhances profitability, which is related to pricing (Cotes-Torres et al., 2012). In addition, some researchers reveal that satisfied customers, which was the case for this study with (m=3.97), are willing to pay premium prices (Homburg et al., 2005).

These findings provide germane insights for marketers in their bid to foster organic food consumption habits in South Africa and the world as a whole. From the foregoing findings, relevant recommendations can be provided to guide marketers and retailers, decision and policy makers to find ways of enhancing organic food purchase decision which is associated strongly with environmental issues.

8.5 CONTRIBUTIONS OF THE STUDY TO THEORY AND PRACTICE

The theoretical and practical contributions are detailed in the subsections below.

8.5.1 Theoretical contributions

This study proposed and empirically tested a conceptual model that integrated Aertsens et al.'s 2009 improved TPB model and Yiridoe et al.'s (2005) models that examinemarket, psychological and social factors affecting organic food purchase decision. In addition,

consumption satisfaction was also incorporated as an outcome of purchase decision stemming from Biophilia Hypotheses. The study also contributes by assessing the extent to which consumption satisfaction drives marketing related outcomes, such as repurchase intention, willingness to pay a price premium and willingness to spread word-of-mouth.The uniqueness of this model is its holistic stance that posits five psychological variables, three market variables and two social variables directly impacting on purchase decision. Given that the model testing process provided evidence of high levels of reliability and validity and could explain up to 42% of purchase decision, it can be used as a basis for future research in other emerging countries.

Prior studies into the factors have been fragmented and contradictory results have emerged from various cultures. There was, therefore, a call to consolidate the various factors (Yiridoe et al., 2005) and to rank the importance of the factors in different cultures (Squires et al., 2001). By so doing, this study has revealed levers that can help to reduce the intention-behaviour gap. The resultant conceptual model proposed in this study will not only improve the consumer behaviour model related to organic food, but researchers studying consumer behaviour for other product categories can use the model. This study's conceptual model will also improve the popularly used TPB by incorporating important consumer behaviour and marketing constructs, such as the perception of product attributes, consumer satisfaction, overall image and the three post-purchase outcomes. This is particularly important for marketers to get more useful insights into the antecedents and the outcomes of purchase decision, especially as the post-purchase outcomes are missing in the consumer behaviour and TPB models.

The empirical testing of the model will provide important insights to consumer researchers and practitioners as to the important factors driving organic food purchase decision and satisfaction in South Africa. This is particularly important because the EPOPA (2006) report shows that information, especially academic information on organic food demand and purchase, is lacking in Africa.This study will contribute to the existing literature on green consumerism in a South African setting, especially as studies on the relationships between South African consumers' market, psychological and social factors are still lacking in the country.

This study also contributes significantly to the field of social marketing which is still nascent in developing countries like South Africa (Truong, 2014). The practical deployment of social

marketing initiatives in Africa has been criticised for the lack of extensive consumer research to support the formulation of strategies (Donovan, 2011). This social marketing study offers a concrete case study to enhance and promote best practices in the social marketing field in Africa, more especially South Africa.

8.5.2 Practical contributions

In aneffort to respond to a concrete organic food consumption challenge, this study has made significant practical contributions, discussed in the details below.

Retailer chains, such as Pick'nPay, Shoprite–Checkers and Woolworths and their extensive networks are putting much effort into promote the distribution and consumption of their certified organic produce in South Africa (EPOPA, 2006:14). The EPOPA report indicates that despite these efforts, a good number of South African consumers may not only be still ignorant of the importance and affordability of organic, but retail outlets face competition from local farmers' markets and health shops who sell a mixture of "organically grown but not certified" food products. With the least impact that marketing mix factors make on purchase decision as revealed in this study, the retailers should improve their efforts to inform and make their organic food items available. Section 8.7providespractical recommendations for retailers to implement successful strategies for better market share, sales and sustainable behaviour change.

In addition, the need to improve awareness of the benefits of organic food purchase and consumption, marketers will also need to use their persuasion platforms tofosterhealthy lifestyle and environmental protection habits in South Africa, given that green consumerism is a topical phenomenon in contemporary consumer culture.This will help solve a social dilemma, whichPetrescu and Petrescu-Mag (2015) assert as a situation in which consumers experience a conflict between their individual interests and collective interests.

Knowing more about what motivates consumers to purchase and be satisfied with organic food will help marketers create the correct communication and advertising strategies to strengthen sustainable behaviours and stimulate their development for further environmental benefits. This study does not only provide this much needed informationbut indicates the extent to which market of organic food is sustainable from this study's measurement of future repurchase

intention, willingness to pay a premium and to share word-of-mouth. This would guide the marketers' appropriate allocation of their promotion and distribution budgets.

This study would also be useful for businesses and marketers because it would provide insights into green market potentials and help them target green consumers of organic food in South Africa and Africa as a whole.

8.6 LIMITATIONS OF THE STUDY AND RECOMMENDATIONS FOR FUTURE RESEARCH

In assessing the findings of this study, it should be noted that the study is by no means without limitations, which offer avenues for future research. These limitations and associated areas for future research are discussedbelow.

Thefirstlimitation was the fact that the study was confined to only consumers around the Johannesburg area of Gauteng province, where consumers are more educated and employed. Studies show that more educated and high-income earners tend to be more informed and health and environmentally conscious(Gunasundari and Sathiya, 2016; Gumber and Rana, 2017; Mishra, 2017). Whether the findings of this study might apply to less affluent provinces or geographical areas needs further study. Doing so would help increase the external validity of findings. Another limitation is related to the research methodology employed. A survey using self-administrated questionnaires was employed in this study. While the use of self-reporting may rightly gauge the market and social factors driving organic food consumption, the report on the psychological drivers may need implicit studies or experimental methods.

The third limitation relates to the fact that the study was cross-sectional in nature. This means that findings reported relate to only a particular point in time. To some extent, applying a cross-sectional design implies that the study has focused on reported organic food purchase decision instead of emphasising observed changes in organic food purchase behaviour over time. Future research can apply a longitudinal survey and/or observation research focusing on uncovering factors affecting organic food purchase decision over a long period of time. For example, researchers can track the frequency of purchase should marketers increase their distribution and improve on their prices.

Furthermore, the proposed model incorporated some and not all of the market, psychological and social variables affecting purchase decision. Future research could incorporate other factors which may affect purchase decision of organic food. At the moment, the following recommendations are made to improve organic food purchase protection.

8.7 RECOMMENDATIONS TO INCREASE ORGANIC FOOD PURCHASE

This study offers relevant insights to promote pro-environmental behaviour through organic food consumptionby uncovering the market, psychological and social factorsaffecting purchase decision and accompanying marketing-related outcomes. The recommendations proposed in this section are primarily addressed to social marketers and decision makers and marketing practitioners in the organic food sector.

The results of this study revealed that psychological factors are key variables that shape the organic food purchase decision. Not only are perception of product attributes, perceived value, behavioural beliefs and image central factors in the mechanism explaining organic food consumptionbut they have a strong impact on purchase decision. The findings point to the need to place emphasis on how to enhance organic food consumption. According to the conceptual model developed in this study, this can be achieved through improving a positive environmental attitude, communication to create awareness,, distribution and peer influence, which had little or no impact on the decision to purchase organic food.

Considering the importance of an environmental attitude and the fact that some consumers have not developed the attitude to be environmentally friendly, it is essential to focus on ways of not only developing positive attitude, but to also change negative attitudes into positive ones. Efforts aimed at changing negative attitudes into positive attitudes need to include social communication around the benefits that can be drawn from pro-environmental behaviour. It seems that organic food consumption behaviour is more personal to consumers than the wellbeing of the environment.The positive influence that consumers' perceptions of the benefits associated with organic food consumption have on environmental attitude is widely acknowledged in the literature(e.g.Basha and Shamsudin, 2017; Chung, 2017).While some of the benefits of pro-environmental behaviour (organic food consumption) accrue to society at large, others have a direct effect on the individual. Social marketers need to ensure that they touch on both types of

benefits so as to maximise potential impact. Consumers need to know that it is in not only in society's interest but also in the interest of the self to purchase organic food.Basha and Shamsudin(2017) found that personal self-interest is of more significant impact on energy saving behaviours than social interests.

Given that market factors were found to have insignificant impact on purchase decision, social marketers should ensure that there is communication in the form of advertising, promotion and other communication mix regarding organic food benefits and availability for awareness creation. It is evident from the findings that marketers are not doing enough in terms of promoting or advertising organic food, which may lead to consumers to notice the influence of these marketing communication mediums on their purchase decision. Also, emphasis should be placed on the distribution of organic food to ensure that the availability of organic food products is available at the point of purchase as well as in many areas preferred by consumers. Social marketers should take advantage of the opportunity identified in this study by placing more emphasis on the market factors which may enhance organic food consumption. As discussed in chapter five, these marketing elements may reduce the intention-behaviour gap(Thøgersen, Zhou and Huang, 2015; Van Doorn and Verhoef, 2015).

Efforts should also be made to improve social influence on organic food purchase decision. As reported in the findings in chapter seven, family influence was found to have a significant impact on organic purchase decision. When other family members are active in pro-environmental behaviour by purchasing organic food, this can result in changes in the perception of everybody within the family to engage in organic food consumption in general,which include taking further action to do so. The change in self-perception is likely to encourage members in the family to take more significant steps toward organic food purchase decision(Apaolaza et al., 2018). By helping each other in organic food purchase decision may result in the whole family being fully committed in organic food purchase actions(Al-Swidi, Huque, Hafeez and Shariff, 2014). The findings in chapter seven suggest that organic food consumers are not influenced by their peers, friends or people around their circle. In order to improve peer influence, marketers should first place more emphasis on changing consumers' perceptions of organic food, after which opinion leaders and even celebrities could be used to influence decision-making regarding its purchase.

The social norm approach is a very useful strategy which offers strong motivational foundations for social marketing initiatives designed for organic food consumers (Lee and Kotler, 2016). Riefer and Hamm (2008) maintain that people adopt some behaviours simply because the majority of people or other family members view them as the right thing to do. Organic food marketers' interventions should depict organic food purchase as the "normal or common thing to do". From a strategic standpoint, marketers should focus more on the influence of midstream forces. These may be as many as significant others, including family members, neighbours, friends (including friends in social media), church leaders, and other social leaders.

In practice, marketers and retailers can provide feedback on the benefits drawn from organic food consumption of consumers that are successfully using organic food products so as to spur more organic food purchase actions. Another practical action is to encourage consumers to engage in peer-to-peer dialogue about the possible benefits and gains organic food offers. With the increasing use of social media such as Facebook, Twitter or YouTube, peer-to-peer dialogue can be conducted on these digital platforms. For this purpose, well-known and well-respected people (celebrity endorsement) can also be involved to influence organic food purchase decision through various social media and other communication mediums such as television advertising and billboards.

Having looked at recommendations for enhancing organic food consumption, the next section discusses the theoretical and practical contributions of this study.

8.8 CONCLUDING REMARKS

The purpose of this study was to examine the market, psychological and social factors affecting organic food purchase decision, consumption satisfaction and other post purchase outcomes such as repurchase intention, willingness to pay a price premium and willingness to spread word of mouth. Using a survey that involved 611 organic consumers in Gauteng province of South Africa, the study proposed and tested a conceptual model that integrated Aertsens et al.'s 2009 improved TPB model and Yiridoe et al.'s (2005) model, the Biophilia Hypotheses to understand organic food purchase decision and post-purchase marketing-related outcomes. It made theoretical contributions by developing and testing the integrated conceptual model and therefore improving the understanding of consumer behaviour in the green consumption area. Practical

contributions are also made by exposing areas where marketers and policy makers could improve their efforts in encouraging green consumption.

The study opens up avenues for future research to expand the findings obtained and deal with the few limitations associated with it. While the factors driving organic food purchase can be useful in promoting and increasing demand for the products, corresponding efforts should be made to increase the inadequate supply in South Africa and other parts of the globe.

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ANNEXURES

Annexure 1: Questionnaire

University of the Witwatersrand



Participant Information Sheet

Good day Madam/Sir

I am Difference Chauke, a student at the University of Witwatersrand. I am conducting a research project titled, "***Marketing and Socio-Psychological factors affecting organic food purchase decision and other post-purchase outcomes in South Africa*** for an award of a Doctor of Philosophy (PhD) in marketing. The study will examine your views on the marketing (e.g., price and distribution), social (peers and family) and psychological (e.g., attitude and perception), which may impact on your decision to purchase organic food. There will be no wrong or right answers.

You are therefore invited to please participate in the study. It will take about 10 to 15 minutes of your time to respond. Please note that your involvement is completely voluntary and your refusal to participate will not result in any penalty. I assure you that the survey data are only for academic research and won't be used for any commercial purpose. All information collected will be anonymous and responses will be kept confidential. You can refuse to answer any questions that you are not comfortable with and can withdraw at any time you wish to.

Once completed, the study will be available online at www.wits.ac.za. Please note that by completing the accompanying questionnaire, you are agreeing to participate in the research.

Should you have any questions, please e-mail me on xitshembhisoc@vut.ac.za(072 283 1388) or contact the HREC office with 0117171277 ormy PromoterDr Helen Duh at helen.duh@wits.ac.za

I thank you for your time and effort in completing the questionnaire enclosed.

SURVEY QUESTIONNAIRE

Please complete all sections of the questionnaire and answer the questions honestly.

SECTION A: BIOGRAPHICAL INFORMATION OF THE RESPONDENTS

This section seeks background information about you. This information will be used for research purposes only. Please indicate your answer by crossing **(x)** to the appropriate block.

A1. Indicate your gender

Male	1	Female	2

A2. Age: please indicate the age group to which you belong

18-23	1	24-29	2	30-35	3	36-41	4	42 +	5

A3.Ethnicity/Race: Please specify:

Black	1	White	2	Coloured	3	Indian	4

A4. Educational status

Secondary school	1	College	2	Undergraduate	3	Postgraduate	4

A5. Monthly Income scale

<R5000	1	5000-10000	2	10000-20000	3	20000 or more	4

A6. How long have you known organic food (Knowledge)?

<6 months	1	A year	2	3 years	3	5 years & above	4

A7. How long have you purchased organic food (Experience)?

<3 months	1	6-12 months	2	2 years	3	3 years & above	4

A8. How often do you purchase organic food (Frequency)?

At least once/ week	1	At least once/month	2	Once half a year	3	Yearly	4

SECTION B: MARKET FACTORS

Please indicate the extent to which you agree or disagree with the following statements by circling your chosen number.

1	2	3	4	5
Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree

Price

MP1	The prices of organic food are high.	1	2	3	4	5
MP2	Organic food is expensive compared to conventional food.	1	2	3	4	5
MP3	I am comfortable with the price for organic food.	1	2	3	4	5
MP4	It is important to me to get the best price when I buy organic food.	1	2	3	4	5
MP5	I am willing to pay the price for organic food	1	2	3	4	5

Distribution

MD1	Organic food products arereadily available.	1	2	3	4	5
MD2	The supply of organic food in the market is consistent	1	2	3	4	5
MD3	There are limited organic food market or retail stores in the country.	1	2	3	4	5
MD4	A variety of organic food is available for selection.	1	2	3	4	5
MD5	I can find organic food, whenever I need it	1	2	3	4	5

Communication

MC1	Information is availableabout organic food in the country.	1	2	3	4	5
MC2	Information about organic food benefits is available in the country	1	2	3	4	5
MC3	Organic food stores advertise about organic food.	1	2	3	4	5
MC4	I do not know enough about organic food.	1	2	3	4	5
MC5	I knew about organic food from ads and promotional activities	1	2	3	4	5

SECTION C: PSYCHOLOGICAL FACTORS

Perception of product attributes

PP1	Organic food is free from genetic modifications.	1	2	3	4	5
PP2	Organic food does not contain additives and artificial flavouring.	1	2	3	4	5
PP3	Organic food is free from pesticides.	1	2	3	4	5
PP4	I feel I am getting higher quality food with organic products.	1	2	3	4	5

Environmental Attitude

PE1	Using organic foodpromotes green living.	1	2	3	4	5
PE2	I am more environmentally concerned.	1	2	3	4	5
PE3	It is very important to raise environmental awareness.	1	2	3	4	5

PE4	Environmental protection issues are important to me.	1	2	3	4	5

Behavioural beliefs

PB1	When I buy organic food, I feel that I am doing something positive for my health.	1	2	3	4	5
PB2	I get worried and concernedwhen I am unable to buy organic food.	1	2	3	4	5
PB3	I feel organic food have some influence on my overall health.	1	2	3	4	5
PB4	In the long-run, people who buy organic food stay healthy.	1	2	3	4	5

Perceived Value

PV1	Buying organic food is environmentally beneficial	1	2	3	4	5
PV2	I purchase organic food because it is an healthier option	1	2	3	4	5
PV3	If everyone eats organic food, they will be healthy.	1	2	3	4	5
PV4	Organic food products are an important part of my life.	1	2	3	4	5
PV5	The benefits of organic food are worth the price.	1	2	3	4	5

Image

PI1	I generally have positive image of organic food	1	2	3	4	5
PI2	Organic food is reputable for its health benefits	1	2	3	4	5
PI3	People who buy organic food are admired	1	2	3	4	5
PI4	Overall, I consider that organic food have a favourable image such that I would alwaysbuy it.	1	2	3	4	5

SECTION D: SOCIAL FACTORS

Peer Influence

SP1	I often share information regardingorganic food with my friends.	1	2	3	4	5
SP2	I often buy organic food with myfriends.	1	2	3	4	5
SP3	I am being influenced by my friends to start buying organic food	1	2	3	4	5
SP4	I learn so much about organic foodfrom my friends.	1	2	3	4	5

Family influence

SF1	The approval of my partner or family is important to me when buying organic products.	1	2	3	4	5

SF2	My family expect me to choose organic food.	1	2	3	4	5
SF3	I am being influenced to buy organic food because of my family.	1	2	3	4	5
SF4	My family recommends organic food products to me.	1	2	3	4	5

SECTION E: ORGANIC FOOD PURCHASE DECISION

PD1	I would be willing to travel extra distance to purchase organic food.	1	2	3	4	5
PD2	I would be willing to visit several different stores to look for and purchase organic food.	1	2	3	4	5
PD3	I feel that organic food is worth the extra effort that may have to put to purchase it.	1	2	3	4	5
PD4	I would consider changing grocery stores if they do not sell organic food.	1	2	3	4	5
PD5	I have made up my mind to purchase organic food whenever I find it	1	2	3	4	5

SECTION F: ORGANIC FOOD CONSUMPTION SATISFACTION

CS1	Compared to conventional food, I am satisfied with organic food.	1	2	3	4	5
CS2	I am satisfied with my decision to be consuming organic food	1	2	3	4	5
CS3	Consuming organic food makes me happy	1	2	3	4	5
CS4	I am pleased that I am an organic food consumer	1	2	3	4	5
CS5	I am relatively satisfied with my consumption of organic food.	1	2	3	4	5

SECTION G: POST-PURCHASE OUTCOMES

Repurchase intention

RI1	I am willing to buy organic foodagain in future.	1	2	3	4	5
RI2	I intent to continue purchasing organic food on a regular basis.	1	2	3	4	5
RI3	I do not plan to stop buyingorganic food.	1	2	3	4	5
RI4	It is likely that I will continue purchasing organic food in the future.	1	2	3	4	5

Willingness to pay the price premium

WP1	I'm willing to pay for organic food even though it is somewhat more expensive.	1	2	3	4	5
WP2	I'm willing to buy organic food because the benefits	1	2	3	4	5

	outweigh the cost.					
WP3	Buying organic food is the right thing to do even if they cost more.	1	2	3	4	5
WP4	I would still buy organic food even though conventional alternatives are cheaper.	1	2	3	4	5

Section GC: Word of mouth

WM1	I encourage my friends and relatives to buy organic food.	1	2	3	4	5
WM2	I say positive things about organic food, especially as it is environmentally-friendly.	1	2	3	4	5
WM3	If someone is looking for healthy and tasty food, Igenerally advise him/her to buy organic food products.	1	2	3	4	5
WM4	I have recommended organic food to friends and acquaintances.	1	2	3	4	5

Thank you for taking your time to participate in the study!