



FACTORS THAT INFLUENCE CONSUMER ATTITUDE AND INTENTION TO PURCHASE
ORGANIC FOODS

by

MATSEKE BETTY MATHOPE

MASTER OF CONSUMER SCIENCE

MPLCS90

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: DR L. CHRISTIE

CO-SUPERVISOR: DR B. VAN DER WESTHUIZEN

27 February 2020

DECLARATION

Name: Matseke Betty Mathope

Student number: 62140876

Degree: Master of Consumer Science

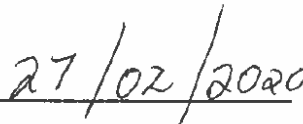
I declare that the above dissertation is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I submitted the dissertation to originality checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.



SIGNATURE



DATE

ACKNOWLEDGEMENTS

I would like to thank the following people for their invaluable support and unending encouragement that contributed towards the completion of this dissertation:

- My family, friends and colleagues for their support and encouragement to complete my studies.
- Dr Lorna Christie and Dr Bianca van der Westhuizen, my supervisor and co-supervisor respectively, who continually installed knowledge and guidance. I am further grateful for their encouragement, patience, and support throughout the dissertation.
- My parents and my kids for their kind love, encouragement, motivation and patience to never give up.
- My brother, Malesela Maupa, for his support, encouragements and willingness to assist in any matter.
- For all the respondents who volunteered to complete the questionnaires during data collection.
- Susan Swanepoel for reviewing my dissertation's language and grammar.

To you all, my sincere thanks and I wish you all strength in your endeavours – may people be as supportive, kind and helpful as you have been to me.

"TO GOD BE THE GLORY!!"

ABSTRACT

The South African Organic farming industry has indicated a stable increase in the production of organic products from insignificant informal sectors to a fast-growing formal sector. Although there is no documented evidence of the origins of the sector, it can be considered that the formalisation of the organic industry started in 1994 with the formation of Organic Agriculture Association of South Africa (OAASA). The expanding organic food sector is a current organisational change in food demand in South Africa. Therefore, it is becoming vital for food marketers to know consumer needs and demands for food in South Africa, particularly organic food, as consumer preferences sturdily affects the direction of the marketers' approach, in terms of what is in demand and consumed.

Accordingly, this research investigated the factors that influence consumer attitude towards organic food and how consumer attitude influences consumers' buying intentions. A non-experimental quantitative approach was employed to respond to the purpose and goals determined for the study. A survey was circulated to South African purchasers residing in the Gauteng Province, who were over the age of 18 years and liable for their own domestic food acquisitions. A total of 310 questionnaires were completed, but only 301 responses without errors were utilised for statistical analysis. Data collection was conducted by means of an in-store intercept approach and snowball sampling was applied to supplement the purposive sampling approach to achieve a statistically significant respondent sample.

In order to examine and understand the socioeconomic characteristics of the sample and further determine the type of respondents who took part in the research, descriptive statistical analysis was used for this current research. Furthermore, to meet the goals of the research, inferential statistical analysis was used to attain the description view of every recognised variable's performance of the participants.

The findings of this research firstly showed that product quality, subjective norms, health and environmental concerns had a positive influence on consumer attitude towards organic food. The analysis further indicated that health concerns had the strongest influence on the respondents' attitude for organic food, followed by product quality, then subjective norms. Surprisingly, environmental concerns showed no statistically significant influence on the consumers' attitudes towards the purchase of organic foods. Secondly, the results showed that the respondents had a favourable and positive attitude for organic food. The participants believed that organic food was

higher quality, healthier, safer, fresher and tastier than conventionally grown food. Thirdly, the results showed that even though the respondents considered price as a significant influence when purchasing food, and also considered organic foods to be expensive than conventional food products, they still intended to purchase more organic food. The results further showed that, though some respondents had access to organic food in the retail-stores where they regularly shop, other respondents still expressed difficulty in finding organic food products. However, this does not change their intent to purchase more organic food. Lastly, the results indicated that, although respondents had a great intent to buy organic food, this did not translate into actual purchase behaviour, because actual shopping behaviour of organic food was low, which reiterates the intention-behaviour gap. This means that, although the respondents had a strong intention to purchase organic foods, there are still hurdles which hindered them from making the actual buying of organic foods.

The intention-behaviour gap among consumers is mostly triggered by the inaccessibility of organic food products, consumers' lack of confidence in the trustworthiness of organic food certifications, and the high price of organic food. It is therefore advised that organic food sellers must aim to expand purchasers' awareness of organic food, in terms of what makes organic food distinctive from non-organic food and the justifications for high prices of these products, so they will be more prepared to buy organic food. Organic food traders and marketers must improve the accessibility of these foods by supplying them where it is convenient for purchasers to buy such products. It is also suggested that the South African government must put in place official certification and inspection programmes for organic food products to improve consumer confidence in certified organic food products. This current research can contribute by adding value to the literature on environmental sustainability in the perspective of a growing economy, specifically South Africa. The research further extends its contribution in assisting organic food producers, operations, sellers, government and regulatory institutions to further understand the factors that influence consumer attitude for organic food and consumers' buying intentions. This will enable the effective development of organic agricultural programmes (e.g. certification) and improve marketing campaigns that will motivate South Africans to select organic food products.

TABLE OF CONTENTS

CHAPTER 1.....	1
INTRODUCTION TO THE STUDY	1
1.1 BACKGROUND	1
1.2 PROBLEM STATEMENT	4
1.3 RESEARCH AIMS AND OBJECTIVES	5
1.4 RESEARCH METHODOLOGY.....	6
1.5 ORGANISATION OF THE DISSERTATION	7
CHAPTER 2.....	8
LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK	8
2.1 INTRODUCTION TO ORGANIC FOOD	8
2.2 HISTORY AND EVOLUTION OF THE ORGANIC FOOD SECTOR	11
2.3 BARRIERS TOWARD ORGANIC CONSUMPTION.....	15
2.3.1 Lack of availability.....	15
2.3.2 Lack of trust in and awareness of organic food.....	16
2.3.3 The price of organic food.....	19
2.3.4 Lack of information.....	20
2.3.5 Poor presentation.....	22
2.4 LITERATURE OVERVIEW TOWARDS A CONCEPTUAL FRAMEWORK.....	23
2.4.1 Consumer attitude.....	23
2.4.2 Factors that influence consumer attitude towards purchasing organic foods	25
2.4.2.1 Demographic factors	25
2.4.2.1a) Income	25
2.4.2.1b) Gender	26
2.4.2.2 Environmental concerns.....	28
2.4.2.3 Health concerns.....	29
2.4.2.3a) Organic farming methods to produce healthy foods	29
2.4.2.3b) Perceived health benefits.....	30
2.4.2.4 Product quality	31
2.4.2.5 Subjective norms	33
2.4.3 Attitudinal influences on purchase intention.....	34
2.4.4 Proposed conceptual framework	35
2.5 CHAPTER SUMMARY	38

CHAPTER 3.....	39
METHODOLOGY.....	39
3.1 RESEARCH APPROACH.....	39
3.2 RESEARCH DESIGN.....	40
3.3 DATA SOURCES.....	41
3.4 RESEARCH STRATEGY	42
3.5 DATA COLLECTION AND QUESTIONNAIRE DESIGN	43
3.6 SAMPLING	46
3.7 DATA ANALYSIS	47
3.8 QUALITY CRITERIA	50
3.8.1 Validity.....	50
3.8.2 Reliability	51
3.8.3 Ethical aspects related to the study	52
3.9 CHAPTER SUMMARY	53
CHAPTER 4.....	55
RESULTS AND DISCUSSION	55
4.1 SOCIO-DEMOGRAPHIC DETAILS OF RESPONDENTS.....	55
4.1.1 Gender, age and income of the respondents.....	55
4.1.2 Ethnic affiliation and marital status of the respondents.....	58
4.1.3 Employment status and education level of the respondents	60
4.1.4 Summary.....	62
4.2 ANALYSIS OF THE MEASUREMENT VARIABLES	62
4.2.1 Environmental concerns.....	62
4.2.2 Health concerns.....	65
4.2.3 Product quality	66
4.2.4 Subjective norms	68
4.2.5 Consumer attitude.....	70
4.2.6 Intention to purchase	73
4.2.7 Actual consumption behaviour	76
4.2.8 Shopping behaviour (a)	78
4.2.9 Shopping behaviour (b)	79
4.2.10 Summary.....	82
4.3 FINDINGS RELATED TO OBJECTIVES	82
4.3.1 Results pertaining to Objective 1	83

4.3.2	Results pertaining to Objective 2	86
4.3.3	Results pertaining to Objective 3	86
4.3.4	Results pertaining to Objective 4	87
4.4	CHAPTER SUMMARY	88
CHAPTER 5	89
CONCLUSION	89
5.1	INTRODUCTION	89
5.2	DEMOGRAPHIC PROFILE OF THE RESPONDENTS	90
5.3	PSYCHOGRAPHIC PROFILE OF THE RESPONDENTS	91
5.4	FACTORS THAT INFLUENCE CONSUMERS' ATTITUDES TOWARDS ORGANIC FOOD (RESEARCH OBJECTIVE 1)	92
5.5	CONSUMERS' ATTITUDES TOWARDS ORGANIC FOODS (RESEARCH OBJECTIVE 2)	98
5.6	CONSUMERS' INTENDED BUYER BEHAVIOUR OF ORGANIC FOOD (RESEARCH OBJECTIVE 3)	98
5.7	CONSUMERS' ACTUAL BUYER BEHAVIOUR OF ORGANIC FOOD PRODUCTS (RESEARCH OBJECTIVE 4)	99
5.8	SUMMARY OF THE MAIN RESEARCH FINDINGS.....	100
5.9	LIMITATIONS OF THE STUDY AND FURTHER RECOMMENDATIONS	101
5.10	CONTRIBUTION OF THE STUDY	103
5.11	CONCLUSION SUMMARY	104
REFERENCES	106
ANNEXURE A: QUESTIONNAIRE	124
ANNEXURE B: ETHICS APPROVAL LETTER.....		128
ANNEXURE C: EDITOR'S CERTIFICATE.....		130
ANNEXURE D: Turn it in (Similarity) Report		131

LIST OF FIGURES

FIGURE 2.1: Theory of planned behaviour (Ajzen, 1991)	36
FIGURE 2.2: Proposed schematic conceptual framework for the study	38
FIGURE 4.1: Respondents' gender profile	56
FIGURE 4.2: Respondents' age profile	57
FIGURE 4.3: Respondents' income profile.....	58
FIGURE 4.4: Respondents' ethnic affiliation.....	59
FIGURE 4.5: Respondents' marital status	60
FIGURE 4.6: Respondents' employment status.....	61
FIGURE 4.7: Assessment of respondents' level of education.....	61

LIST OF TABLES

TABLE 3.1: Summary of the research methodology followed in the current research study.....	53
TABLE 4.1: Descriptive statistics: predictor variable for <i>environmental concerns</i> (N=301).....	63
TABLE 4.2: Kaiser-Meyer-Olkin (KMO) and Bartlett’s test for <i>environmental concerns</i>	63
TABLE 4.3: Total variance explained for <i>environmental concerns</i>	64
TABLE 4.4: Component matrix for <i>environmental concerns</i>	64
TABLE 4.5: Descriptive statistics: predictor variable for <i>health concerns</i> (N=301).....	65
TABLE 4.6: Descriptive statistics: predictor variable for <i>product quality</i> (N=301).....	66
TABLE 4.7: Kaiser-Meyer-Olkin (KMO) and Bartlett’s test for <i>product quality</i>	67
TABLE 4.8: Total variance explained for <i>product quality</i>	67
TABLE 4.9: Component matrix for <i>product quality</i>	68
Table 4.10: Descriptive statistics: predictor variable for subjective norms (N=301).....	68
TABLE 4.11: Kaiser-Meyer-Olkin (KMO) and Bartlett’s test for <i>subjective norms</i>	69
TABLE 4.12: Total variance explained for <i>subjective norms</i>	70
TABLE 4.13: Component matrix for <i>subjective norms</i>	70
TABLE 4.14: Descriptive statistics: predictor variable for <i>consumer attitude</i> (N=301).....	71
TABLE 4.15: Kaiser-Meyer-Olkin (KMO) and Bartlett’s test for <i>consumer attitude</i>	71
TABLE 4.16: Total variance explained for <i>consumer attitude</i>	72
TABLE 4.17: Component matrix for <i>consumer attitude</i>	72
TABLE 4.18: Descriptive statistics: predictor variable for <i>intention to purchase</i> (N=301).....	73
TABLE 4.19: Kaiser-Meyer-Olkin (KMO) and Bartlett’s test for <i>intention to purchase</i>	74

TABLE 4.20: Total variance explained for <i>intention to purchase</i>	74
TABLE 4.21: Component matrix for <i>intention to purchase</i>	75
TABLE 4.22: Descriptive statistics: predictor variable for <i>actual consumption behaviour</i> (N=301). ..	76
TABLE 4.23: Kaiser-Meyer-Olkin and Bartlett’s test for <i>actual consumption behaviour</i>	77
TABLE 4.24: Total variance explained for <i>actual consumption behaviour</i>	78
TABLE 4.25: Component matrix for <i>actual consumption behaviour</i>	78
TABLE 4.26: Descriptive statistics: predictor variable for <i>shopping behaviour (a)</i>	79
TABLE 4.27: Descriptive statistics: predictor variable for <i>shopping behaviour (b)</i> (N=301).	80
TABLE 4.28: Component matrix for <i>shopping behaviour</i>	82
TABLE 4.29: Pearson’s correlation of different factors that influence consumers’ <i>attitude</i> towards organic foods	84
TABLE 4.30: Multiple stepwise regression of factors influencing consumers’ <i>attitude</i> towards organic food	85

CHAPTER 1

INTRODUCTION TO THE STUDY

Chapter 1 presents an overview of the research, which commences with a background on the concept of organic food, the growth and development of the organic food market. The chapter further presents the problem statement as well as the purpose of the study, along with the research aim and objectives. This is subsequently followed by a brief description of the research methodology and the chapter concludes with an organisation of the chapters to follow in the research thesis.

1.1 BACKGROUND

General awareness of organic food products amongst the community is growing. Furthermore, consumers' attitudes towards purchasing organic foods are favourable. (Basha, Mason, Shamsudin, Hussain & Salem, 2015). The awareness of organic products is globally growing responding to concerns with regards to conventional farming methods, food safety, animal welfare, human health and environmental concerns (Wee, Ariff, Zakuan, Tajudin, Ismail & Ishak 2014). Food industry and agricultural experts are in agreement that the organic food trend has not arrived at its peak yet and there is still a lot of global development possibilities in the organic food marketplace (Salleh, Ali, Harun, Jalil & Shahrudin, 2010).

Green or organic food, in general, can be defined as foods that are nutritious, safe for consumption, good in quality, produced through ecological improvement standards and are conscious about humane handling of animals (Saleki & Seyedsaleki, 2012); while a green or organic food consumer is described as a consumer that is conscious of and fascinated by ecological matters. Such consumers perceive and trust that all foodstuffs have an environmental influence, therefore, their initiative is to decrease, as much as probable, the harm that production unavoidably causes. They are prepared to alter their buying and eating behaviour to mirror an environmentally friendly manner and they are also prepared to pay high prices for such foods (Effendi, Ginting, Lubis & Fachruddin, 2015). Organic foods are consumable products that, in comparison to non-organic products, went through a smaller distance, are not gushed with chemicals, are yielded with ethical deliberations regarding animal and labour wellbeing, and should be produced by combining methods that promote recycling, environmental equilibrium and biodiversity (Eide, 2013). Organic food is yielded through approaches

that conform with official requirements of organic agribusiness, that promote ecological balance without using artificial chemicals, antibiotics or hormones and its make-up must harmonise with the regulations and principles concerning the quality of food (Yang, Al-Shaabab & Nguyen, 2014). In summary, food may be considered to be 'organic' if it does not have artificially synthesised fertilisers, insecticides and poultry feed additives (Reukkasaem & Sesananan, 2016; Eide, 2013; Ham, Pap & Bilandzic, 2016).

As human environmental concern increases, consumers have a tendency to pursue the 'green aspects' of foodstuffs, and their valuable properties on the terrain. Similarly, issues regarding healthy food consumption have become one of the major consumer concerns when buying goods, particularly when it comes to foodstuffs (Shashi, Kottala & Singh, 2015). Health and environmental concerns are seen as the leading influential power for consumers in buying organic food (Yang et al., 2014). Uma and Selvam (2016) state that the major positive aspects associated with organic foods are that they are safe and healthy to consume because these foods are grown in healthier soil. These authors further state that food patterns are rapidly changing and the accessibility of organically produced food in the market has resulted in a significant development in the economy worldwide, with more consumers starting to consider healthy food instead of conventional or processed foods, resulting in some instances in keenness to purchase organic foods. The authors further mention that attitudes and intentions of consumers have a significant part to play when buying organic food products, because these are considered to be forecasters of actual consumer purchasing behaviour.

South African household's food consumption changes as income increases with a growth in the economy. Awareness of environmental matters increases and, so too does the demand for organic food as more consumers choose to live healthier lifestyles (Mhlophe, 2016; Food Advisory Consumer Service, 2016). South Africa is developing in the direction of a liberalised economy. It is, therefore, anticipated that food preferences among South African households would differ within diverse demographic and socio-economic groups. This can also be as a result of a massive imbalance of wage distribution and inequality of capital flow amongst rustic and metropolitan parts of South Africa (Engel, 2008; Statistics South Africa, 2018). It is one of the highly unequal countries globally, with incomes being massively polarised. This third world country is also characterised by a high level of low intergenerational mobility and wealth inequality, which arise from the inequality of opportunities and high-income inequality for its citizens.

These discriminations are passed down from generation to generation, resulting in little transformation in the inequality phenomenon over a period of time and possibly even a worsening of the already bad situation (Statistics South Africa, 2018).

The organic food sector is developing in South Africa, which is a new feature in the recent organisational transformation of the food industry. Food industry (demands and needs) is mainly moved by the socioeconomic characteristics of a population and food purchasers are now more aware of food safety and becoming concerned about their wellbeing. Organic food products offer consumers a variety of attributes. Therefore, having knowledge about the characterisation of consumption of organic food and demand patterns will aid lawmakers in understanding the standards that consumers award to qualities such as food safety (e.g. insecticide residues free), processes (e.g. environmental impact of agricultural production methods) and nutrition, appearance and taste, packaging (Engel, 2008).

South Africa does not have a specific national regulation governing the organic food sector. The previously known Department of Agriculture, Forestry and Fisheries (DAFF) created draft legislation, namely, the 10th Draft of the National Policy on Organic Production. This draft legislation outlines the background, opportunities and challenges, and recommends policy options to encourage the improvement of the organic farming sector in South Africa. The policy is expected to guide the regulation of organic foods in South Africa, once finalised. However, acceptance of the policy by the industry and its implementation have been delayed since 2011. In the absence of official government regulations, in September 2017 the South African Organic Sector Organisation (SAOSO) published a voluntary domestic standard on organic cultivation and processing in South Africa (Bonsu & Sikuka, 2019).

The National Policy on Organic Production (South Africa. DAFF, 2011) states that the South African organic sector has an extensive past. South Africa is known to be amongst the initiator of the organisation known as the International Federation of Organic Movement. The worth of the organically produced food in South Africa was projected to be between R200 million and R400 million in 2005 already; however, less than half of the produce was certified (organic certification is a method of checking that the production process follows the organic production standards). Numerous produce such as organic fruits, wine and rooibos tea are the main products traded overseas and the South African local market place has grown speedily (Mhlophe, 2016). Inspection and certification of

organic farms in South Africa is carried out by both private domestic and international certification bodies (South Africa. DAFF, 2011). However, not all South African Organic agriculturalists are licensed (certified), although they implement organic farming standards. Many farmers have been implementing the standards of organic agricultural production for several years, without gaining acknowledgement for it. Some of these farmers do not have enough money to buy these production aids and several of these farmers are conscious of the disadvantages of these aids and the advantages of organic agricultural practices. The residual agricultural products are mainly sold by the village sellers or farmer's markets in the area (South Africa. DAFF, 2011).

According to Teng and Wang (2015), some factors may encourage an optimistic attitude for organic food consumption. These authors also mention that consumers that have decent information of organic farming and the associated organic food production procedures, are anticipated to be confident in recognising organically produced foods, which may optimistically influence their attitudes towards organic foods.

While extensive research on consumer attitudes and intention to buying organic food products has been conducted in Europe and in the United States of America (USA), studies related to consumer attitudes and buying intention of organic food products in South Africa is still minute (Du Toit & Crafford, 2003).

This study targets to play a part in closing this knowledge gap by studying the factors that influence the South African purchaser's attitude to buying organic foods. As part of the factors influencing consumers' attitude and intention to buy organic foods, this investigation also addresses issues that focus on consumers' intentions concerning the purchasing of organic foods and investigates actual buying behaviour of organic food.

1.2 PROBLEM STATEMENT

In recent years of increasing globalism and industrialisation, the human race around the globe is challenged with growing ecological issues. The increased production and consumption, in general, have contributed to serious degradation of the earth's natural resources, such as pollution of the air, land and water, and loss of biodiversity, resulting in climate change, ozone depletion, smog and other natural disasters. Furthermore, the increasing population poses a challenge of sustainability, including sustainable food production. During the past years, the growth in environmental

consciousness of consumers has been noticeable, and the concern about the environment moved from a fringe to a mainstream issue (Bee Lian, Safari & Mansori, 2016). Similarly, there has been a conscious effort among consumers to eat in a healthier manner. Finding an answer to both the environmental pollution as well as the drive for healthy food consumption has resulted in the proliferation of the organic food industry (Mhlophe, 2016).

In light of the fact that the international scientific literature illustrates that organic food products are more deep-rooted in developed countries and that there is less research conducted on organic foods in developing economies, such as South Africa, it is deemed essential to conduct research in a South African context to determine consumers' attitudes regarding organic food products and, ultimately, their intentions to buy such foods. The South African organic food industry is growing substantially, while a large portion of organic produce is still being exported (Bisschoff & Liebenberg, 2016); however, consensus has not been established regarding the influences that promote organic food purchases in South Africa. It is thus imperative to investigate the aspects that influence a consumer's attitude and their intention of buying organic food.

The conclusions of the research could be used to assist organic food producers, sellers, operations, and monitoring authority officials to recognise and appreciate the factors influencing the attitude of the consumers on organically produced food and to ultimately determine the buying intention of organic food consumers. This can enable the growth of organic agricultural programmes and initiatives, progress strategies and more effectively incorporate promotion approaches that will entice South African consumers to choose and consume organic food products. This knowledge/or undertaking might assist in putting together active sustainable practices within the agricultural sector, which is likely to reduce lack of income in the country by creating channels for making money and reduce unemployment while simultaneously promoting health-conscious consumers in South Africa.

1.3 RESEARCH AIMS AND OBJECTIVES

The aim of this study was to investigate the influential factors on consumer attitude towards organic food in the market and how consumers' attitudes influence their purchase intentions. The following objectives are therefore proposed:

Objective 1: To investigate which factors influence consumers' attitudes towards organic foods.

Objective 2: To investigate consumers' attitudes towards organic foods.

Objective 3: To determine consumers' intended buyer behaviour of organic foods.

Objective 4: To investigate consumers' actual buyer behaviour of organic food products.

1.4 RESEARCH METHODOLOGY

It is vital to apply a positivist research paradigm, which is descriptive in nature, with a quantitative research approach to implement the objectives and aim of this study. A survey was implemented to fulfil the descriptive method to be able to collect primary data. This research project employed a purposive sampling strategy, established on the criteria that the respondent had to be an adult (18 years of age or older) who resided in Gauteng, was responsible for his/her own food consumption decisions and should have bought organic food recently and/or in the past. The purposive sampling procedure was supplemented via snowball sampling to obtain a statistically significant sample. The questionnaire was pretested by sending it to five respondents who met the selection criteria, to make certain that queries on the questionnaire were clear and interpreted. The data were examined via descriptive and inferential statistics to gratify the aims and subsequent objectives of the study. The questionnaire was deemed adequate for the study and was therefore distributed as the final questionnaire to the respondents.

The proposal for this research was submitted to the vetting committee of the Department of Life and Consumer Sciences, University of South Africa (UNISA), for consent. This was followed by a submission to the UNISA College of Agriculture and Environmental Sciences (CAES) ethical committee for approval, before data collection took place.

Once the relevant permission was obtained, strict adherence to the ethical principles that should be employed while working with all potential respondents was applied throughout the entire study.

1.5 ORGANISATION OF THE DISSERTATION

This study is presented in the following five chapters:

Chapter 1 introduces the background to and outline of the current study in perspective to conceptualise organic food, the organic food markets' growth and its development around the world and, specifically, in South Africa. It also discusses and problematises the selected topic in general. This chapter continues with the problem statement, which then ends with the aim and subsequent research objectives for the project.

Chapter 2 openly reviews pertinent theories, philosophies and literature that were explored in past research and literature. From this past research studies, the conceptual framework for the current project is developed and explained, placing the study in context.

Chapter 3 provides the methodology used in this research. The chapter consists of research approach, design of the research presenting the research project plan, which is depicted along with the research strategy, data collection method, sampling and data analysis employed in this research project. Lastly, chapter 3 ends with the reliability, validity and ethical considerations of the current research study.

Chapter 4 describes the evaluation, assessment and discoveries of the project. The collected data for this research was firstly checked and examined to make sure it can be used for further analysis (descriptive and inferential analysis). The descriptive analysis covered the socioeconomic characteristics of the populace sample – defining the features of the sample population as South African organic food consumers in the Gauteng province – and showed a descriptive assessment of every psychographic variable's exhibition. Then followed inferential statistics which aims to address the objectives set out for the project.

Chapter 5 presents the discussion of the findings of the project and draws the conclusion of the research, which is followed by the subsequent generation of the theoretical contributions to the literature and states the practical suggestions of the project. The chapter also deliberates the limitations of the project, while generating `considerations and recommendations for further studies.

CHAPTER 2

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

This chapter presents a literature review of the concepts related to the study, set out in four sections. It commences with an introduction of the concept of organic food, followed by the history and evolution of organic food and then the barriers towards organic food consumption. The subsequent section discusses the consumer attitudes towards organic food and the different factors that can influence consumer attitudes. Based on the discussion in this chapter, the proposed research is generated.

2.1 INTRODUCTION TO ORGANIC FOOD

The recent trends in food demand reveal that the concept of food has experienced a fundamental change in current years. Moreover, consumers perceive food to play a significant part in the preservation of fitness, on psycho-physical wellbeing and in the inhibition of certain diseases, in addition to its nutritional and sensory properties. Therefore, food is not only consumed with the intention to satisfy hunger and for its nutritional value, but to also improve psychological/or physical wellbeing of consumers and prevent nutrition-related diseases (Azurra & Paola, 2009). According to Chaudhary and Bisai (2018), educated consumers are becoming extra conscious of their obligation to preserve the natural surroundings, which increase the popularity of “green” foods consumption in the food industry. Purchasers are consciously making environmentally friendly choices such as using biodegradable products to reduce their carbon footprints. Chaudhary and Bisai (2018) further mentions that buying organic food product offers a twofold advantage of improved wellbeing and a chance to contribute to ecological sustainability.

The need for organic food products has grown in South Africa as a result of a growth in consumer consciousness about their wellbeing and the responsibility of food in sustaining a healthy lifestyle (South Africa. DAFF, 2011). This consciousness is fuelled by concerns about current methods of agriculture, like the usage of chemicals to increase harvests and control pests (e.g. insecticides), which may cause significant health risks to people. Contrarily, consumers perceive certified organic commodities, which are free of the abovementioned chemicals, as harmless, healthier and of superior quality, as compared to non-organic food, regardless of the inconclusiveness of scientific proof to support these notions (South Africa. DAFF, 2011). According to Fynn-Green, Mason and

Giampiccoli (2019), organic food products which subsequently provides consumers with an alternative to conventional foods are now being sold in numerous superstores and fresh produce markets in South Africa.

Organic farming is an alternative agricultural system that sustains ecosystems, soil and people, and emphasises ecological defence and usage of natural agricultural techniques. Thus, this type of farming has to do with the entire technique that is employed to yield and distribute the agricultural produce, not only the final product. The whole organic farm cycle eliminates the usage of some external farming inputs such as insecticides, additives, veterinary drugs and fertilisers, and synthetic commodities like genetically modified organisms from production, processing, handling and delivery. For organic farmers to be able to maximise the long-standing wellbeing and efficiency of the ecological unit, improve the superiority of their products and care for the environment, they depend entirely on natural agricultural approaches and contemporary technical, environmental expertise. Supporters of organic approaches have confidence that it is a more maintainable and less harmful method to farming (Morgera, Bullón Caro & Marín Durán, 2012; Kataria, Krishna, Tyagi & Vashishat, 2019).

According to Bonti-Ankomah and Yiridoe (2006), concerns about human wellbeing, the environment, non-organic farming practices, food safety worries and animal welfare cares, has triggered a growing interest in organic food product worldwide. In Europe organic farming has been practised since the 1920s, at first in response to the industrialisation of farming (Torjusen, Lieblein, Wandel & Francis, 2001). At present, organically produced foods are some of the fastest developing sectors in the food marketplace, with excellent developments cooperatively in produce and trades volumes in numerous nations (Bee Lian et al., 2016). Sales volumes for manufacturing areas under organic farming has increased by 10% in composite yearly growth rate, in the last decade (Shashi et al., 2015).

According to Karthika and Senthilkumar (2019), the implementation of organic manufacturing and handling is significantly ascertained by marketplace needs. This is, therefore, mirrored in consumers' awareness of and satisfaction with organically produced foods. Factors such as health issues, quality, environmental sustainability, food safety, pressures from several stakeholders and consumer dissatisfaction with conventional food have imposed serious attentions on the organic food supply chain (Hughner, McDonagh, Prothero, Shultz & Stanton, 2007; Shashi et al., 2015). Environmental and ethical concerns in food manufacturing have been stated to be the most pertinent consumer

concerns. Ethical considerations include keeping high ethical standards regarding animals' innate nature, enhancing biological diversity and the necessity to work in support of a socially fair food system. Therefore, these concerns mirror a broader societal and environmental obligation in the whole production, processing, handling and supply of "green" foods (Torjusen et al., 2001). Organic farming has progressed from being an 'alternative' programme to a major enterprise for farming growth, predominantly in the European Union. General goals of organic farming incorporate the following:

1. To yield high quality food in adequate quantities,
2. To interrelate in a life-enhancing and constructive way with natural cycles and systems,
3. To make use of renewable resources in an organised production system as far as possible,
4. To preserve the genomic assortment of the manufacturing system and its surrounds, as well as the defence of wildlife habitats and plants,
5. To give all livestock decent living conditions, with concerns for the essential facets of their natural conduct,
6. To generate a melodious equilibrium between animal and husbandry produce, and
7. To advance towards a complete production, handling and supply chain that is mutually ecologically responsible and socially fair.

Several systems of organic processes of making fire and food have been in subsistence for a long time. These processes are recorded for diverse cultural groups worldwide and commonly considered as old-style systems of production (Torjusen et al., 2001). However, the usage of labels that refer to organic products with terms like 'natural' and 'eco-friendly' have come to be common, in recent times (Engel, 2008). Organic farming is an all-inclusive production management system that values the interaction between the natural environment and man. The difference between green farming and other ecological agricultural methods rest in constituted standards and accreditation processes which is largely aimed at marketing purposes (Institute of Natural Resources, 2008). Organic farming originated in an organic undertaking that commenced in the 19th century, which will be presented shortly in the following section.

2.2 HISTORY AND EVOLUTION OF THE ORGANIC FOOD SECTOR

Organic farming has its heritage in small communities' traditional agricultural practices globally. Therefore, farmers disseminated down the expertise of operative practices to succeeding generations (Morgera et al., 2012). Organic farming came to be more noticeable on a broader measure when consumers and farmers became worried that the quantity of chemicals consumed in animal and crop production could have a damaging outcome on the environs and for human wellbeing. It has, since then progressed into a more organised and consistent association and it is currently the firmest developing food division around the globe (Morgera et al., 2012).

According to Ihnatenko and Novak (2018), European and global practices of organic agriculture witnessed its positive results not only in the aspect of the realisation of its direct functions, but also in the development of rural economies and rural territories on the whole. Development of organic agriculture outgrowths provides additional employment in rural areas, new production perspectives for small farming economies, the rise of viability in rural communities, and other social benefits.

In the 19th era, in Europe, the organic program developed to offer an alternative to the ever-growing effects of industrialised farming and to encourage "a return to the natural order". The organic program latter in the future extended to Japan and America. Followers of the organic movement quoted the harmful effects of industrialised farming as a weakening in the rural areas and the decline of soil healthiness, owing to forever growing usage of inorganic fertilisers, which result in negative effects on human health. Therefore, supporters of organic agriculture appealed for the go back into the ecological directive and devoted to the well-recognised notion called "the *rule of return*". This rule emphasises that improving and maintaining the fertility and health of soil should be the central focus in going back to the natural directive (Engel, 2008).

The organic agricultural concept emerged before 1940 and was founded by Sir Albert Howard during 1873 to 1947. Howard was born and schooled in England; he guided farming research centres in India from 1905 to 1931 before he returned to England for good. Sir Albert Howard's agricultural research experience slowly advanced into the concept and a philosophy of organic agriculture that he endorsed in numerous books. F.H. King's book, *Farmers of Forty Centuries*, reinforced Howard's thinking on soil fecundity and the necessity to efficiently reuse discarded substances, together with

manure slush, on the farmland. Sir Albert Howard also established a composting system that turns out to be broadly adopted (Heckman, 2006).

In 1941, James Irvin Rodale, at the age of 43, came across Sir Albert Howard's literature. This changed the course of his life as he turns out to be one of the first supporters of ecological farming and making the term 'organic farming' popular in the USA. Rodale purchased a farm in Emmaus, Lehigh County in the USA, then began communicating about organic farming with Sir Albert Howard. This association led to James Irvin Rodale and Sir Albert Howard writing a book together named "*Organic Farming and Gardening*" (Engel, 2008). Robert, Rodale's son, held a wider understanding of ecological farming and was influential in initiating methods of organic farming, especially reformative farming and the "Low Input Sustainable Agriculture Program" (Engel, 2008; Lim Tung, 2018).

According to the latest Forschungs Institut für Biologischen Landbau (Research Institute of Organic Agriculture (FiBL)) study on authorised organic farming was conducted universal and at the close of 2014, information on organic farming were accessible in 172 countries (Willer & Lernoud, 2016). Organic farming covered 50.9 million hectares globally in 2015; Africa was the smallest regional producer, producing approximately 1.7 million hectares and the largest regional producer was Oceania, producing 22.8 million hectares. Africa is the smallest producer of organic products in the world which has certified organic farmhouses for domestic and international markets. Furthermore, a significant share of unofficial organic farmhouses only produces for local and subsistence markets in Africa. The main crops in Africa are olives, nuts, coffee, cocoa, cotton and oilseeds. There is a growing need for organically produced foods; therefore, there is a possible growth for organic farming in Africa, owing to consumer favourites in developed countries. Nonetheless, organic markets require high quality products and farmers has to fulfil the certification obligations (Lim Tung, 2018).

The third African Organic Conference, titled Attaining societal and commercial advancement by way of organic and environmental farming alternatives, was held in October 2015, where the African Organic Association, its associates, and investors met in Lagos, Nigeria. The meeting was facilitated by AfrOnet, the African Organic Umbrella Organisation and there were about 20 partners coming from 28 countries, of which 22 countries were from the African continent. Lagos' declaration requested for assistance from Environmental Organic Farming Initiative along with the 10-year strategic plan from the African states. The 2015-2025 strategic plan gives a farsighted objective for

the improvement of environmental organic farming of the African continent (Willer & Lernoud, 2016).

South Africa is one of the nations on the African continent that yield certified organically produced food. Like other African countries, South Africa also exports most produce due to the higher revenue from foreign exchange. South Africa sells to overseas regions like Europe a variety of food products like fresh fruits (e.g. to Netherland, Denmark, Germany) and vegetables (e.g. Germany) as stated by the Institute of Natural Resources (2008). Some developing small-scale farmers trade their organic products via the Fairtrade emblem. Regardless of the above-mentioned, the local market is also increasing with a mean of 30% annually but is confronted with trials of supply deficiencies (Institute of Natural Resources, 2008).

A working paper of the National Policy on Organic Production (South Africa. DAFF, 2011) declares that the organic sector in South Africa is significantly fragmented. There are 12 fragment organisations which stand for the agriculturalists (producers). Therefore, this results in numerous methods and views of what is considered the most excellent system in the industry, since there is no one organisation which represents all the needs of most green produces. The organic sector in South Africa is also undergoing institutionalisation, with the main divisions being the 'haves' and 'have nots', as well as the certification fundamentalists – the ones that believe the harmony of the industry will occur as soon as there are agreements, understanding and peace amongst the authorised organic sector participants and the ones who just practice green farming for their own benefits. The policy further emphasises that a single organisation will ensure the leadership of the sector if it accommodates the different organic agricultural ideologies (South Africa. DAFF, 2011).

Organic foods are not easily notable from conventional products at a glance; therefore, consumers depend totally on independent third-party certification, i.e. to the process according to which public or private certification bodies provide assurance that organic products have been produced and handled according to applicable standards. Organic criteria are used to signify what organic privilege a product represents and to convey that proof to the consumer. Certification, makes the organic market access easier, by giving organic farming a distinct uniqueness and increasing consumer trust in the system and product. Therefore, the organic label signifies conformance with preparation and production approaches compared to food labelled "green", "environmentally-friendly" or "free range". For farmers to be able to use the organic label, their operations must be inspected by a third-

party organisation, then obtain certification that the product conforms with the appropriate standards. Organic criteria characteristically include the use of only natural agricultural enhancers, protection of natural reserves, defence of the ecosystem and maintenance of biodiversity (Morgera et al., 2012).

Van Zyl (cited by The Institute of Natural Resources, 2008) reported in 2000, which was more than two decades ago, on several interviews conducted to determine the worth and extent of the South African organic sector. At the time it was estimated that there were between fifty and sixty organic producers that were certified and a further fifty to sixty organic producers that were not certified in South Africa with an estimated 700 ha land of certified organic producers and 1000 ha of uncertified produce. The author further, reported that the total profits were not easy to approximate, but one of the contributors stated that the profit could be estimated around R40 million with most of the products traded in the international market, largely to the European countries. While according to Parrott and Elzakker (cited by the Institute of Natural Resources, 2008), South Africa had 250 farms with 45 000 ha of certified land in 2003. Certified produce at first contained Rooibos tea, mangoes, spices, avocados, vegetables and herbs, but has now constantly grown to add in a variety of additional products. There is a large, underdeveloped, domestic marketplace with mainly premiums being paid for organically produced food stores such as Pick 'n Pay, and Woolworths which still trade sufficient amounts of organically produced food (Institute of Natural Resources, 2008).

Mahlanza, Mendes and Vink (2003) conducted a study in the Western Cape on organic wheat production. The authors discovered that the organic wheat tiny domestic marketplace is made up of buyers (consumers) that seeks "low cost community-type products". The yearly approximated cost of the organic sector in South Africa is around R70 million to R80 million with wholesome and fresh produce having the most (70%) sales of organically produced food. Consumers in South Africa buy green beverages and food in wholesalers and unauthorised market places like street vendors. Produce are also sold in small amounts from organic farmers at farm stands, and health shops. Some food service outlets (restaurants) are also buying green food product for meal preparation (Institute of Natural Resources, 2008).

The consumption of organically produced food is expected to grow in many European countries and in the developing economies of South Africa, Brazil, China and India (Willer & Yussefi, 2005). However, regardless of the growth of the organic foods sector and consumers' health concerns,

particularly in South Africa, there are several barriers that can deter consumers from buying and consuming organic food products. These barriers will be discussed in the following section.

2.3 BARRIERS TOWARD ORGANIC CONSUMPTION

Past research projects have discovered numerous aspects which hamper consumers from purchasing organic food, which include the following: a lack of accessibility of organic products, a lack of faith in and knowledge of organic food, the price of organic products in comparison to non-organic foods, a lack of knowledge of such foods, and poor presentation, such as the quantity of packaging used and unappealing demonstrates in stores (Stolz, Stolze, Hamm, Janssen & Ruto, 2011; Padel & Foster, 2005; Mkhize & Ellis, 2020; Hansmann, Baur, & Binder, 2020). These factors will be discussed in detail below.

2.3.1 Lack of availability

Availability relates to the level of ease or difficulty to purchase a specific product or service (Bee Lian et al., 2016). According to Sharma, Uprety and Phuyal (2016), availability points to the areas where consumers can purchase organic foods and nowadays organic foods are not only available through farms; additionally, they are distributed from specialised stores, department stores, restaurants and hotels, open markets and through personal selling. Consumers may have optimistic attitudes and a subsequent intention to buy organic food; however, availability remains a barrier to purchase such foods (Vermeir & Verbeke, 2006; Mkhize & Ellis, 2020) Lack of accessibility of organic food was mentioned as the main influence for not buying organic food in previous studies (Paul & Rana, 2012; Chiciudean, Harun, Ilea, Chiciudean, Arion, Ilies & Muresan 2019; Chekima, Chekima, & Chekima, 2019; Wekeza & Sibanda, 2019).

A study conducted by Essoussi and Zahaf (2008) on the process of decision making for organic food consumers in Canada showed that a third of the respondents believed that a shortage of organic food stores makes it difficult to access these foods to purchase. A majority of participants also mentioned that organic food was difficult to locate in smaller communities and other supermarkets but was easier in many other bigger city shops. The inadequate variety and smaller amount of organic food in smaller cities were also one of the concerns raised by respondents.

The fact that it is not easy to access organic foods often signifies a barrier to consumption, because the consumption of organically produced food rest on its availability in the markets, mainly in

superstores, followed by wet markets and specific organic stores (Chiciudean et al., 2019; Chekima et al., 2019; Hasan, Irfan, Shaari & Sharif, 2018). Organic food that is manufactured in South Africa are traded locally and in the international marketplaces. South African international markets where some of the organic food are traded is mainly in Europe, the Far East and USA trading food such as rooibos tea, vegetables, processed fruits, plant products, sugar, wine and essential oils. There is, however, also a strong but on the other hand, small domestic marketplace for organic food which has restricted prices on organic produce (South Africa. DAFF, 2011).

According to a survey carried out in South Africa by Vermeulen and Biénabe (2010), supermarkets are the main source where organic foods can be found, as indicated the large majority of sampled consumers, with only a small percentage of respondents who purchased organic food from farmers' markets. The consumers who frequented farmers' markets were dominated by consumers who were in a 'higher' income category, thus pointing to the high-class trait of farmers' markets in South Africa. However, a large percentage of consumers indicated a preparedness to buy from farmers' markets if the markets frequently occurred at convenient places, where they would then purchase organic food, once again indicating the difficulty in finding and accessing organic foods (Vermeulen & Biénabe, 2010).

Another research study in South Africa, conducted by Wekeza and Sibanda (2019), almost a decade later showed that the general feeling of the interviewed consumers was that organic foods are indeed still difficult to locate in the market. Most of the respondents pointed out that organic food selling is restricted only to certain retail outlets such as Woolworths, Pick 'n Pay, and Spar. Therefore, this outcome implies that organic foods are not easily available in the South African marketplace and only limited to certified retail outlets. These authors concluded that this finding suggests that restricted availability of organic foods on the market reduces their ease of access and thus curtails the buying intentions of consumers.

2.3.2 Lack of trust in and awareness of organic food

The second barrier to buying and consumption of organic foods can be stated as a lack of awareness and trust of such foods by consumers. Trust is the role of reliable information, which is a signal of safety or quality (Dumortier, Evans, Grebitus & Martin, 2017). Vega-Zamora, Torres-Ruiz and Parras-Rosa (2019) define trust as a strong conviction, confidence and belief that a product efficiently achieves its purpose, specific quality or assist in resolving a challenge, during selection making

process. Consumers who have trust in the product information offered are prepared to pay a premium price for the product because the information confirms certain aspects of organic foods that the consumer values (Dumortier et al., 2017).

Organic consumers' trust regarding what is presented in the marketplace is mainly about what the consumer sees on the product labelling, the use of organic standards and who is outlining/regulating this process and the authorisation (or certification) processes the products went through to be labelled organic food. The importance of labels is also emphasised by frequent buyers, stating that they consider buying these products a lot more when the product has a certified stamp or label on it. But a few regular consumers mentioned that even when there is a certified logo on the product, they still do not fully trust the certification process until they know who is the certification body that certified the product and what the processes of certification entailed (Essoussi & Zahaf, 2008).

Even though there is presently no precise legislature that pertains solely to organic produce in South Africa, there are policies and laws that pertain to the sale and production of organic food products (Lim Tung, 2016). It is important to note that, before products can be branded/traded as organic products, which is usually accompanied by a premium price, the products must follow organic production guidelines and must be translucent in all phases of production. Lim Tung (2016) further mentions that a label is used by most certification systems as a device to aid consumers to see products that meet certification standards. Consequently, consumers cannot be certain of the legitimacy of statements on labels when buying food in retail stores, when there is no lawful framework standardising the sale and production of organically produced food. Consumer trust in organic food is also built by requiring that food labelled as 'organic' include its standard logo or stipulate the certification body. Therefore, the establishment of a legislature concerning organically produced food will give credibility to its producers in the local and export market and official recognition to local organic produce. According to Chiciudean et al. (2019), mistrust in organic food labelling and certification is a significant barrier to the consumption of organic food. Besides the trust in labelling and certification, there is also a challenge of trust in the organic food itself, because of a lack of awareness and knowledge about production methods and technology, among others, that are associated to organic products. These authors further argue that the problem is that a low level of awareness on organic food generates doubt and, subsequently, fewer intentions of purchasing organic food.

Tung, Shih, Wei and Chen (2012) mention that it could be argued that, even though most consumers are worried about the overuse of insecticides, most of them do not necessarily want to pursue organic food consumption or pay a premium price, largely due to a mistrust in the frankness of the 'organic' label. They further mention that consumers are encouraged to buy organic food only when they have a stronger confidence in organic agriculture and are concerned about the use of insecticides. According to their study, trust in both organic farming methods and in product labelling are basically the important factors in influencing consumers' purchase behaviour. Therefore, mistrust is responsible for the irregularity among consumers' attitudes and purchasing behaviours regarding organically produced food.

A study conducted by Voon, Ngui and Agrawal (2011) concluded that the importance of the attractiveness of visible organic food attributes and trust in organic food claims reflect that customers prefer to avoid uncertainty. Noticeable organic food features and mistrust of organic food are some of the significant factors influencing consumers' purchase behaviour in other countries. Therefore, the higher tendency of consumers to keep away from uncertainties the more likely it will intensify the influence of these factors when making purchasing choices. Consumers are expected to depend greatly on product labelling, the repute of producers, the media and other visible features of organic food as assesses of quality and trustworthiness (Dumortier et al., 2017).

In the study conducted by Essoussi and Zahaf (2008), the results showed that there was unwillingness from regular consumers to buying organic food from retail outlets even when the labelling confirmed a product as "organic". These consumers mistrust the genuineness of that specific certification. Therefore, having confidence in foodstuffs as organic can rest on what certification process has been adopted and who has issued the label. Vega-Zamora et al. (2019) conducted a study on "communication for improving trust in organic foods". The results propose that the highly efficient combinations for developing trust are: the genuineness claim communicated by a producers' representative, the health claim put across by a skilled person, the elitist claim made by an expert and, finally, the social argument communicated by a public authority, using a demonstrative form of application in all four cases.

It still remains unclear whether South African consumers trust the certification process of organic foods in the country because it is technically done on a voluntary basis through self-regulation and therefore the component of trust may be an important factor in the decision-making process. The

following concept that will be discussed is that of the price of organically produced foods as a barrier to purchasing such foods.

2.3.3 The price of organic food

Price plays a significant and complex part in consumer assessment of products (Marian, 2014). Price barriers refer to the opinions of consumers on prices of organic food and their preparedness to purchase these products in spite of the premium prices. Price (monetary) barriers play the crucial hurdle to growing need for organically produced foods (Nguyen, Nguyen, Nguyen, Lobo & Vu, 2019). The organically produced food usually has premium prices as compared to non-organic produce and this plays a significant part in consumers' assessment of such products. The increase in price is prevalent for (at least) three reasons: (1) higher manufacturing costs than faced with conventional products; (2) variances in the relation levels of supply and demand; and (3) the fact that organic food products are regularly appreciated more by the consumer, to be prepared to pay premium price (Krystallis & Chrysohoidis, 2005; Wekeza & Sibanda, 2019). Therefore, generally, lower organic harvests are counterbalanced by higher producer prices. Therefore, farm gate prices (i.e. the price of the product at the farm, not including any separately charged delivery charge) are a vital determining factor of organic farmstead profitability (Bonti-Ankomah & Yiridoe, 2006). Standard price premiums vary according to product and from country to country (Bonti-Ankomah & Yiridoe, 2006). Consumers do seem to prefer organic food in general and this is because organic foods are 'health and certified products', as they do not contain chemicals. However, the high prices come first as one of the excuses consumers do not favour to purchase organic foods (Atalay, Olhan & Ataseven, 2019).

According to Hansen, Sørensen and Eriksen (2018) and Hwang and Chung (2019), some consumers vacillate between purchasing organic products due to the fact that organic food products are normally higher priced. High prices persist to restrain consumption of organic food by the average consumer, as it is complex to rationalise the high price, for the reason that the health gains attributed to organic food are very difficult to put a figure on (Shafie & Rennie, 2012). Therefore, the more transparent in the production of organic food and farm-gate price the more beneficial to the public to assist in accepting higher prices for organic foods, compared to its conventional counterparts (Shafie & Rennie, 2012; Lim Tung, 2018).

Balancing the production cost against the profit of organic food is a big challenge for the organic food industry. The sales of organic food products for the existing organic businesses are influenced by the

high production cost (Peng, 2010). Therefore, the major difficulty for organic businesses is to increase the sales volume in order to reduce the unit cost and increase profit. Peng (2010) also indicates that the other significant difficulty for the organic companies is to expand the local market share as domestic organic producers suffer as a result of a very small operation to effectively decrease the costs. Consumers will probably buy organic food if it was easily accessible and cost less or the same as conventional food. Organic consumption grows more when their price premium is lower than twenty per cent and resistance to purchase organic food increases as premiums increase. However, regular organic food purchasers are prepared to pay higher premiums than less frequent purchasing consumers (Institute of Natural Resources, 2008; Hwang & Chung, 2019).

A study by Wekeza and Sibanda (2019) showed mixed results with a reasonable quantity of consumers stating that they would keep on to buying organic foods, regardless of the premium price, while some remained uncertain. Nevertheless, the results showed that the consumer perception that organic foods have higher prices than regular foods is substantial and negatively related to the consumers' buying intentions for organic foods. These authors concluded that the noticeable premium price of organic foods had been the single excuse for consumers' failure to develop a positive buying intention because consumers want in return value for their money.

The research findings of Nguyen et al. (2019) reveal that consumer buying rate of recurrence of organic food is negatively influenced by price barriers. In particular, consumers recognise organic food as too expensive and that premium price signifies a hindrance in the buying behaviour, which is enlightened by the prevailing financial limitations of consumers in developing markets. Sharma and Singhvi (2018) also argue that high price persists in overpowering organic food consumption. The high perceived price of organic foods may be due to the consumer's lack of information regarding the food product, from the cost of production to the marketing costs involved. The barrier regarding the lack of information will be discussed in the section to follow.

2.3.4 Lack of information

The consumer's food choices is based primarily on knowledge and awareness the consumer has about the product (Vietoris, Kozelova, Mellen, Chrenekova, Potclan, Fikselová, Kopkas & Horská, 2016). Lack of information on organically produced food has been stated as a hurdle for buying more of these products for some consumers; therefore it is probable that low buying frequencies can be credited to the lack of knowledge regarding such products (Ham et al., 2016; Hasan et al., 2018).

Consumers have a tendency to have incomplete information of organic foods and the related manufacture methods and subsequently low understanding and confidence of consequences of their food purchasing choices (Vermeir & Verbeke, 2006; Teng & Wang, 2015).

Consumers will not consider buying organic foods if they lack the information and knowledge essential to generate trust in an organic food product; thus, inadequate information and knowledge of organically produced foods are considered a significant hurdle to purchasing organic foods. Limited information on organic foods leads to greater doubt on organic food choices (Teng & Wang, 2015).

Consumer knowledge on organic foods is a significant aspect to buying such foods because it signifies one of the most prominent instruments that consumers use to distinguish between the qualities of organic products and non-organic ones and to create optimistic attitudes and purchase intentions on these products (Gracia & De Magistris, 2007).

Sufficient and reliable labelling information could be a significant factor in the formation of consumer trust and positive attitudes towards organic foods, because labels can inform and educate the consumer about organic food products. Based on the fact that organic foods are quite an unusual concept in comparison to non-organic foods, giving reliable labelling data, by showing how organic products are grown, processed and handled, is vital to inspire consumer trust and optimistic attitudes to make informed purchasing choices (Wang, 2015).

Vermeulen and Biénabe (2010) state that, regardless of the evidence presented in their study, most of the sampled South African consumers in the middle and upper socioeconomic classes understand what the label 'organic' means; a lack of knowledge is still perceived as a major reason for not buying these products. The authors further mention that some consumers have quite a limited knowledge of food-related terms and logos, while there might be a somewhat better understanding among wealthier, more educated consumers.

According to a study conducted by Sangkumchaliang and Huang (2012), a significant factor that was discovered as a hurdle to the consumption of organic foods is consumer information. The authors further concluded that improved consumer knowledge of organic labelling and their trust in organic labels might be the most efficient method of improving the consumer's awareness of such products and thereby increasing its market share.

2.3.5 Poor presentation

Another barrier that prohibits the purchase and consumption of organic food is an aspect that closely relates to the availability of information, namely, the presentation of organic food products (Hasan et al., 2018). Branding of consumer foods in stores targets to bring about a substantial and distinguished market presence that draws and maintains constant organic consumers (Sharma et al., 2016). Therefore, clear and detailed product labelling, comprising of organic certification symbols, country of origin and nutritional value, are important in increasing consumers' trust in organically produced food (Bee Lian et al., 2016).

According to Solomon (2013), when buying organic food, in most instances, the visual difference between organic and conventionally produced products is rapidly evident. Organically produced foods are often visibly imperfect and come in different shapes and sizes while, conventionally produced products look relatively the same (within a category). This is because most conventionally produced (unprocessed or slightly processed) products are treated with a collection of growth-enhancement chemicals and are also usually exposed to sorting and selection standards, while organic produce is not, and therefore the imperfect or unusual shapes found in organic produce might discourage consumers from buying organic food due to the 'ugly' or 'irregular' appearance of such produce.

Additionally, Stolz et al. (2011) argue that product-specific information on organically produced food is very important for the reason that attributes that distinguish organic from non-organic products mostly relates to the method of production or processing. These credibility attributes are not completely visible to the consumers, which results in a purely uncertain understanding of what 'organic' means.

In order to mediate some of the barriers that consumers face when purchasing organic food products, communication is necessary. Marketing communication is important in influencing consumers' attitudes towards a product (Bee Lian et al., 2016). Adequate information communicated to consumers will increase their awareness and knowledge of the benefits of organic food (Lian, 2016) and might mediate the aforementioned negative factors affecting consumers' intended purchase and consumption decisions. The South African National Organic Production Policy (South Africa. DAFF, 2011) states the fact that the organic industry is not regulated in South Africa has resulted in consumers being flooded by a massive amount of communication about organically

produced food. The policy document further mentions that consumers are not always sure of the legitimacy of label statements when buying food in stores, which expose consumers to manipulation by dishonest traders. Reliable and reasonable label prerequisites for non-organic and organic foods will create an equal playground to increase the likelihood of consumers to make a knowledgeable decision using acceptable/reliable info.

2.4 LITERATURE OVERVIEW TOWARDS A CONCEPTUAL FRAMEWORK

To determine consumers' attitudes and intentions to purchase organic food products, it is important to understand the factors that influence such a consumer decision. This section is split into four segments. First, an overall consumer attitude is discussed, then trailed by aspects that influence consumer attitude towards organically produced foods. Consequently, the correlation among attitude and buying intention is examined, lastly, a conceptual framework is offered which draws attention to the relationship between the relevant concepts of the study, based on the arguments that will follow in the discussion below.

2.4.1 Consumer attitude

Attitude can be defined "as a psychosomatic pathway of assessing a particular entity with favour or disfavour and it has a tendency to carry on for a while, more so than occasionally" (Yang et al., 2014). According to Du Toit and Crafford (2003), attitude can be described as a studied predilection to act in a constantly positive or negative manner to a specific thing. Attitudes are normally measured by assessing a person's beliefs (Ajzen & Fishbein, 1975). An attitude is one of the key elements that influence people's intent to buy various products, in the sense that behaving or not behaving in a certain way depends on personal judgement. People should see the result of their evaluations and positively believe in them, which results in the desired attitude, stronger buying intent and finally the act of buying (Maichum, Parichatnon & Peng, 2017). In general, consumers who have favourable attitudes towards the buying of green products, including organic foods, tend to make actual purchases. The three antecedents of environmental concerns, food safety concerns and health concerns have been recognised as the most important determinants of attitudes towards organic food (Nguyen et al., 2019).

Attitude towards a certain behaviour refers to the level to which an individual has a positive or negative assessment of the actions in question". An attitude develops via experiences and might alter

after new experiences. The more optimistic the attitude is related to the behaviour, the sturdier will be a person's intention to perform a behaviour in deliberation (Tarkiainen & Sundqvist, 2005). Consumer behaviour encompasses the psychosomatic phases that the consumers undergo to identify their needs, acquiring means to meet these needs, gather knowledge and make buying decisions (Basha et al., 2015). Certain aspects allow for more favourable conditions in purchasing behaviour, such as favourable consumer attitudes.

Consumer preferences for the buying of product is based on the consumers' attitude and individual suitability of executing a behaviour. Attitude concerning a behaviour is founded on the expectancies and views regarding the aftereffects because of that behaviour (Tarkiainen & Sundqvist, 2005; Yang et al., 2014). Attitudes may influence purchasing behaviour in significant ways, affecting psychological processes such as perception, learning and thinking (Dumortier et al., 2017).

Intention is considered to be the "conative component of attitude", whereas behavioural intent means "to an individual's subjective likelihood of performing a certain behaviour". It is usually observed that an optimistic attitude for purchasing organically produced foods is correlated with a positive intention, based on beliefs regarding organic foods (Yang et al., 2014).

Several research studies have tried to comprehend the correlation between consumer attitude and the buying intentions of consumers by means of experimental research. Findings propose that a significant correlation subsists between attitude and purchase intentions. A study conducted by Honkanen, Verplanken and Olsen (2006) found an important relationship between attitude and intention to consume organic food. The results showed that environmental motivations were the greatest influence on attitudes, demonstrating the important function of environmental concerns in creating positive attitudes towards organic food consumption. This implies that the more consumers are conscious about ecological and rights of animals, the more they will have positive attitude towards organic food. The following section will explore the factors that may further promote the consumption of organic foods by discussing factors that influence attitude.

Basha and Lal (2019) also highlight that there is a positive relationship between consumer attitudes and consumer buying intentions. Health and lifestyle were also discovered to be amongst the utmost significant aspects that motivate consumer attitudes in the direction of organic food purchases. In a study conducted by Janssen (2018), the results revealed that attitudes for organically produced food

could only account for 50 percent of the variation of organic food consumptions. These findings verify that the attitude-behaviour gap exists in the marketplace for organic food. Fascinatingly, the assessment indicated that, regardless of the attitude-behaviour gap, attitudes towards organic food and organic food purchases were both motivated by the identical determining factor; on the other hand, the comparative significance of the determining factor varied, with three out of six determining factors of actual buying behaviour not completely intermediated by attitudes for organic products.

2.4.2 Factors that influence consumer attitude towards purchasing organic foods

There are numerous diverse aspects that are discovered to influence consumer attitude for organically produced food. The following section summarises and examines the influence of these factors on consumer attitude.

2.4.2.1 Demographic factors

Demographic factors are individual features that are employed to gather and assess information on individuals in a specified populace (Cant, Van Heerden and Ngambi, 2013). Typical demographic factors include age, gender, marital status, race, education, income and occupation. Based on the review of the existing literature, income and gender of the consumer were the demographic factors that had the most significant influence on purchasing of organic foods (Kataria et al., 2019; Paul & Rana, 2012; Dumortier et al., 2017).

2.4.2.1a) Income

As was previously discussed, price may be regarded as a barrier when purchasing organic foods. It is, therefore expected that the level of income of a household would be a determining factor regarding the demographic profile of organic consumers. Level of income directly affects the consumer's buying intension of organically produced food, and in turn, household size has an effect on the income level. Very big family units are sensitive to price and this can result in a decrease in the buying of organic products (Loon, Chei, Bhun & Lim, 2014). Income is a factor considered important for prompting the purchase of organic food, where households with a higher income buy organic produce more frequently (Paul & Rana, 2012). The number of people consuming organic food products rises with an increase in their incomes and the comparatively higher price of organic products has been the most important reason for customers not buying organic food products, which can especially hinder people in the lower income group. This can also make organic foods less attractive in comparison to

conventional products, when it comes to price or value for money. Consumers in the higher income group purchase organic food products more frequently than conventional food products (Kataria et al., 2019). According to Ahmed, Siwar, Ferdous Alam, Talib, Chamhuri and Idris (2019), affordability shapes the actual purchase behaviour; consumers' choices under budget constraints do not always reflect their real preferences. Due to the high price of organic food, people in the middle to lower income group may not be able to buy organic foods. Affordability is depicted by an individual's perception of the price of the product, a consumer's income, the provision for savings, family size and lifestyle.

Wealthier households are more likely to buy organic food because they can more easily afford the price premium of organic foods than lower income households (Dumortier et al., 2017; Loon et al., 2014; Li, Lee, Lin, Liu & Tsai, 2019). The income variable positively affects consumers' choices to buy organic vegetables specifically, instead of non-organic vegetables, which indicates that consumers with high incomes are more likely to buy organic vegetables (Slamet, Nakayasu & Bai, 2016).

Several studies suggest that an important relationship exists between income and purchase intentions. In a study conducted by Kataria et al. (2019), income was found to have an important effect on organic food buying behaviour. Li et al. (2019) found that a positive relationship exists between the level of consumption of organic food and the consumer's level of income. Even though a lot of consumers are conscious of the health benefits of organic food consumption, consumers still do not buy organic food not only because they are expensive but also due to lack of availability, as compared to the non-organic food that is both less expensive and easily accessible. Atalay, Olhan and Ataseven (2019) argue that, for families with higher income levels, having children is a great factor in purchasing organic food. However, these authors concluded that one of the reasons for a low level of organic food consumption is that consumers find product prices high and have insufficient knowledge about organic foods.

2.4.2.1b) Gender

Gender is essentially a range of attributes and features pertaining to all human beings. Gender further entails a selection of behaviour differentiating between masculinity and femininity. Actually, persons categorise various responsibilities in the community on the ground of their gender (Fazeli, Golmakani, Taghipour & Shakeri, 2015). There are some differences in the behaviour and buying intents for organically produced foods amongst man and woman buyers. Gender is also considered

among the factors affecting organic food preference. Women tend to purchase more organic food products when compared to their male counterparts (Paul & Rana, 2012; Atalay et al., 2019). A reason for this might be that women are identified to have a higher degree of health consciousness when compared to men. They are also seen as innovators for change towards healthier diets, due to their important roles in shaping a family diet (Lockie, Lyons, Lawrence & Mummery, 2002).

Aygen (2012) indicates that women perceive organic food as better quality and more tasty than men do and purchase organic products more often than their male counterparts. Yiridoe, Bonti-Ankomah and Martin (2005) further mention that women are also seen as more health-conscious and concerned about the consequences of chemical residues and preservatives in the production of conventional food items. Women are generally also more committed to the consumption of unprocessed foods, have higher environmental values and an interest in the fairness of paying a premium for environmentally friendly food products (Shafie & Rennie, 2012). Women consider organic food as more important than conventional foods and subsequently include it in their purchases (Paul & Rana, 2012), more so than men.

Numerous studies show that females are more entranced in organic food product than males, are more regular buyers than males and, overall, have a more positive attitude towards organic food (Aygen, 2012; Atalay et al., 2019; Fynn-Green et al., 2019; Wekeza & Sibanda, 2019). Other studies have supported these conclusions and added that many organic food consumers are vegan or vegetarian, aim to support local farmers, are not price-conscious, along with harbouring a mistrust in large corporations (Paul & Rana, 2012; Essoussi & Zahaf, 2008). A study by Sharma and Singhvi (2018) indicated that women have a positive attitude towards organic food and perceive consumption of organic food to be a healthier food option. The authors further mention that the women in their study recognised the organic food consumption as a healthier choice and were also eager to find out more information about the product and compare product labels when they are selecting healthy food. A study that offered a slightly new and interesting finding, as compared to other previous studies, was conducted by Urena, Bernabeu and Olmeda (2008) to investigate in what way gender influences consumers' selection to pay for organic food. The findings established that females had a more favourable attitude than man, conditional to their standard of living. Though, males were more prepared to pay high prices for organic food.

2.4.2.2 Environmental concerns

Although income and gender are regarded as the most influential aspects that affect a positive attitude regarding organic foods, founded on the consumer's demographic profile, these two factors are not the only concepts that influence consumer attitude towards organic foods. In today's trend of growing globalism and industrialisation, the world is facing increasing environmental issues with the rapid expansion of production. Therefore, consumption has contributed to serious detrimental circumstances regarding aspects such as air, land and water pollution, biodiversity, climate change, ozone depletion, smog and other natural disasters (Lian, 2016).

Environmental concern denotes the level at which individuals are conscious of challenges with regards to the environment and assist the endeavors to resolve them or show the preparedness to participate directly to their resolution (Maichum et al., 2017). In general, consumers who are worried about the environment tend to develop positive ecological attitudes, express a readiness to pay more for eco-friendly products and exhibit pro-environmental behaviour (Nguyen et al., 2019). Lian (2016) and Kataria et al. (2019) further allude that, in the past decades, there has been a progressive growth in the environmental consciousness of consumers has moved from an unconventional to a conventional issue. Increased environmental concern might be due to a higher level of education, which has raised the need for organic food products. Increased food adulteration and pollution are also forcing consumers to purchase more organic food products. Ethical consumers have emerged and their main concerns are buying products which are not harmful to the environment and society. Consumers have become dissatisfied with conventional food products which were produced by adopting intensive and often harmful agricultural methods. As a result, the popularity of organic produce has increased as it adopts environmentally friendly methods of production (Basha et al., 2015).

The notion of environmentally friendly purchasing behaviour, such as organically produced foods, looks like it is increasing in motion and has been positively received by customers in numerous countries (Bisschoff & Liebenberg, 2016). Ecological consciousness has been recognized and considered expansively in the previous years (Kaufmann, Panni, & Orphanidou, 2012). Even though numerous consumers are aware of and worried about ecological sustainability, that doesn't all times influence consumers to show a pro-ecological behaviour (Bisschoff & Liebenberg, 2016). None the less, consumers are increasingly becoming more environmentally conscious and more prepared to

contribute to protecting the environment via any means, resulting in a more favourable attitude towards organic food because organic farming is environmentally friendly (Basha et al., 2015).

According to a study conducted by Voon et al. (2011), the ever-growing ecological consciousness reflects the increasingly wealthy customers. Improved entry to international interaction and communication channels, together with a growing educational level of middle-class consumers, has led to an increase in consumer's consciousness of ecological issues and these have driven a greater preparedness to adopt more environmentally friendly lifestyles. Li et al. (2019) and Atalay et al. (2019) also indicate that environmental and animal welfare concerns are related to a greater preparedness of consumers to pay for organic food products.

A study conducted by Kar, Meena, and Madhav Patnaik (2018) also showed that most consumers were concerned about the environmental risks of cloned and organic animal food products. Even though environmental consciousness is overshadowed by health concerns, during purchasing decision making for organic food, the consumer is largely interested in spending their money on food that is connected to an ethical attitude, because it gives them a sense of doing the right thing for the environment and for themselves.

2.4.2.3 Health concerns

A third key factor that influences consumers' attitudes and their intentions to purchase organic food products is that of consumers' health concerns, which relates to their lifestyle choices.

2.4.2.3a) *Organic farming methods to produce healthy foods*

Health can be defined "as a state of complete emotional, physical, psychological and social wellbeing and not just the non-existence of illness or disorder" (WHO, 1948). There are numerous issues that might impinge on an individual's well-being like illness, exterior and interior ecological issues, such as medicine and food consumption. As a result, customers can grow to be careful in their food choice. Health is a significant aspect in the decision-making process of the consumer (Wandel & Bugge, 1997; Magnusson, Arvola, Koivisto Hursti, Åberg & Sjöden, 2001), which may influence consumers' decisions to rather purchase organic food products versus conventional food products (Fynn-Green et al., 2019).

Organic food is produced using natural farming methods and as such have reduced contamination from the soil and groundwater, because chemical pesticides and fertilisers, which may be harmful to

the environment, are not used (Hassan, Yee & Ray, 2015). This implies that organic foods may be considered a healthy food option, not only to the environment but also regarding human consumption, due to the lack of chemicals and other synthetic residues on or in these food products.

People's opinions are that organically produced foods contain more nutritional value and are healthier as compared to non-organic food and are yielded naturally, with no use of destructive chemicals, which leads to positive consumer attitudes for organically produced foods (Aertsens, Verbeke, Mondelaers & Van Huylenbroeck, 2009). In addition, organic agriculture is recognised as safe in comparison to non-organic or industrial agriculture. In unison, this aspect might also lead to a positive attitude for organically produced foods. Health consciousness signifies the level of concern of people about their wellbeing; therefore, it can be utilised to learn about the consumer's attitude towards organically produced foods (Chu, 2018).

Health concerns were discovered to be amongst the most significant factors that motivate consumers' attitudes in the direction of organic food purchases (Basha & Lal, 2019). Wekeza and Sibanda (2019) and Sana, Latif, Ahmad, Jafar, Pervez, Ahmed and Xu (2018) also concluded that health concerns are considered to be the main influencing factor for consumers to pay premium prices for organic food products. According to the study conducted by Chu (2018), the results showed that health consciousness has shown to influence consumer attitude and buying intention towards organic foods. The more aware consumers are about their wellbeing, the more experience or information they acquire, and the more positive their personal views are concerning the value of using organic foods, the more positive their attitudes will become.

2.4.2.3b) Perceived health benefits

Health concerns or consciousness reflect people's opinions on health matters and their willingness to take measures to preserve their wellbeing. There is an increase in consumer consciousness about their wellbeing, safety and nutritional value of their food. Most consumers believe that organically produced foods are healthier because they are more nutritious and are free from chemicals as compared to non-organic food (Nguyen et al., 2019). Consumers are generally becoming more conscious and aware of their wellbeing and are inspired to enhance or uphold their wellbeing and quality of life (Basha et al., 2015). These consumers are more likely to engage themselves in healthy behaviours to avoid ill health (Sharma et al., 2016), which may include the consumption of organic foods. According to a study conducted by Essoussi and Zahaf (2008), health was mentioned as the

major goal for purchasing organic food, by the regular consumers who claimed that the benefits of these products outweigh the costs. The overall benefits of these products include perceived nutrient content, environmentally friendly technology and packaging materials, which is what consumers seek from foods like organically produced food (Paul & Rana, 2012). The primary reason for the consumption of organic food is health benefits, even though there is no concrete proof that these products are more nutritious or better for human health (Vietoris et al., 2016; McEachern & McClean, 2005; Bai, Wang & Gong, 2019; Sana et al., 2018).

Though there is no definite indication that organically produced foods are nutritious than non-organic foods, consumers recognise foods branded as organic to be more nutritious and healthier than non-organic food. Marketers should be cautious when claiming health benefits to motivate consumers to purchase organic food because of the lack of evidence for this assumption (Honkanen et al., 2006).

Studies conducted by Salleh et al. (2010) and Fynn-Green et al. (2019) indicate that health consciousness depicts the sturdiest relationship with consumer intention in buying organic food products, as compared to environmental concern factors. Basha et al. (2015) also mention that today's life is becoming very competitive and demanding and the consumer hardly has time for physical activities but at the same time is highly exposed to diseases. This may then result in concern about their health and place a greater emphasis on their subsequent food choices in order to maintain a healthy standard of living. A health concern, therefore, influences consumer attitude towards organic food consumption. Consumers' attitudes towards organic food and their preparedness to pay premium prices were indeed explored by Mohamed, Chymis and Shelaby (2012), where a health-conscious lifestyle was found to be the foremost motivating factor of organic food purchases, reflected in the positive association of attitudes towards organic foods.

2.4.2.4 Product quality

Product quality can be defined as a distinct trait, characteristics or features of a product which contribute to its ability to meet a given standard. Quality refers to the value for money and product quality refers to value for money, and usually, organic food consumers are more concerned about the quality of the product and less sensitive to price (Basha et al. 2015). Price is "regarded as the financial expense required to obtain a product" (Lee, 2016). Perceived price is an assessment by the consumers of whether the price is high or low relative to the product in question because most

consumers often forget the actual prices of products, whilst objective price is the actual price paid to obtain a product (Lee, 2016). Quality is frequently correlated with observation of features, such as appearance, food texture, nutritional value and smell. Consumers are more worried about reflectional features which indicate the healthiness and safety of the product and these features reflect health, ethical and environmental matters (Prentice, Chen & Wang, 2019).

According to Basha and Lal (2019), product quality is a challenging theory to explain, because the subject of the measurement of organic products has a tendency to be unclear and blurry. Nevertheless, these authors define product quality – for the purposes of their study – “as the value for money that consumers believe they receive when buying the organically produced food” and, in this regard, when an individual pay more for products they anticipate superior quality products. Organic food fit into this class, as they normally cost more than conventional products.

Consumers recognise price as an indicator of product quality and not only as a cost for acquisition; this demonstrates an optimistic correlation among quality and price because the consumer has a tendency to construe high prices as a good quality indicator. (Doležalová, Pícha, Navrátil, Veselá & Švec, 2016).

According to Doležalová et al. (2016), organic food consumers are less price-sensitive, they significantly more often state that quality is the main criterion for their purchasing decision-making or they look for an acceptable quality-price ratio. Food quality is a stimulus that influences customers' attitudes towards organic food which, in turn, increase their willingness to revisit and consume organic food (Konuk, 2019). Organic food quality and taste play a major role in persuading customers to consume organic food (Shahshi et al., 2015).

A study that offered an interesting and contradicting finding to the aforementioned studies were conducted by Wekeza and Sibanda (2019), who found that the perceived taste and quality of organic food products were statistically significant but negatively influenced consumer purchase intention. The researcher concluded that this specific discovery was unexpected and warranted further research to understand more of the intricacies around the consumer buying intention of organic foods in South Africa. Regardless of the direction of influence between product quality and organic food consumption, the abovementioned study by Wekeza and Sibanda (2019) still confirms that

product quality can be seen as a factor that influences consumers' attitudes towards their intention of purchasing and consuming organic foods.

2.4.2.5 Subjective norms

Subjective norms can be defined as societal pressure on a person to perform or not perform a specific behaviour like those experienced by friends and family (Schwartz, 1973). These are normality viewpoints and expectancies that an important referent or particular group, have from an individual (Yang et al., 2014). Subjective norms refer to societal pressure from others for a person to act in a certain way and their enthusiasm to obey those person's opinions (Saleki & Seyedsaleki, 2012). According to Basha and Lal (2019), subjective norms are predominantly significant in nations or areas where there is a high occurrence of social relations, where folks have a tendency to shadow a particular group trailblazer who then influences that group in the direction of certain actions and behaviours. Numerous organisations employ some kind of reference person(s) or brand representatives that will inspire the consumer to buy their products, and this is applicable to organic food and non-organic food products.

Consumers' purchase intentions of organic foods may also be influenced by people who are important to the consumer, i.e. reference groups. If consumers believe that their reference groups consider organic foods as good, they will have greater intentions to purchase organic foods (Yang et al., 2014). Consumers that intensely endorse conformism have a tendency to keep away from going against societal beliefs; henceforth, they are prone to obey subjective norms correlated with consumption of organically produced food. Fundamentally, consumers robustly obey the kindness significance of purchasing organic foods yielded locally as these goods uphold local production (Van Huy, Chi, Lobo, Nguyen & Long, 2019).

According to research conducted by Voon et al. (2011), the important influence of subjective norms on the readiness to pay shows the high authority aloofness discrimination of some groups. Therefore, consumers are prone to be persuaded by the guidance or views of important individuals in their lives, especially the ones they respect. Moreover, Malaysia is an extremely collective population and consumers have a habit to adapt to the consumption selections of important persons. This suggests that those individuals that consumers have respect for can persuade them both aggressively via their counsel or views, also inactively, via their behaviours. Preparedness to conform through others could

describe an influential intent to purchase organic food, irrespective of not having overpoweringly optimistic attitudes towards sustainable foods (Vermeir & Verbeke, 2006).

Tarkiainen and Sundqvist (2005) found a significant positive relationship between organic food usage, attitudes and subjective norms. In relation to attitude, the authors found that subjective norm has an optimistic effect on consumer attitude in favour of organically produced food. This is allied with the studies by Bamberg and Moser (2007) and Basha and Lal (2019), who also discovered that subjective norms play a most important role in affording a positive influence for the buying of organic products. A study conducted by Li and Xin (2015) also concluded that there is a strong relationship between consumers' social norms and the organic food purchase intentions of young Chinese people.

According to Kataria et al. (2019), an effect of subjective norms was also found to be significant in the consumer's attitude towards buying organic food products. The effect of subjective norms on attitudes is generally seen in certain behaviours that involve ethics in decision making and hence we can also associate buying organic foods with an ethical decision, involving environmental protection and animal welfare. A study with interesting results was conducted by Ahmed et al. (2019), showing that subjective norms also have a significant positive impact on willingness to pay for organic foods.

2.4.3 Attitudinal influences on purchase intention

Attitudes towards behaviour play a part in the level an individual holds a wanted or unwanted belief evaluation in question (Ajzen, cited in Saleki, Seyedsaleki & Rahimi, 2012:279). When a consumer has a more desired attitude towards a behaviour, then an individual tends to behave in harmony with the well-thought-out behaviour (Saleki et al., 2012). There is an optimistic correlation amongst attitude, consumer's intention to buy, and the actual buying of organically produced food. Therefore, when a consumer has an optimistic attitude towards organically produced food, grounded on belief and evaluation, it leads to the purchase of organic food since it is regarded as favourable for them (Suprpto & Wijaya, 2012; Bee Lian et al., 2016).

Organic consumptions are optimistically correlated to intent to buy together with (perceived) behavioural control. In turn, intentions are motivated by the attitude (subjective and personal), (perceived) behavioural control and subjective norms. Standards are significant steady influences for behaviour because they take care of more mental objectives towards which behaviour is intended for (Aertsens et al., 2009). A person's attitude and subjective norm towards a behaviour will influence

their intention to execute a behaviour, meaning that this intention is considered to be the direct determining factor of the succeeding behaviour. Therefore, a consumers' attitude towards the purchase of organically produced food has a positive influence on their intention to buy organic food (Shashi et al., 2015).

Honkanen et al. (2006) conducted a study on moral standards and motivations as influences for organic food selection. This study showed that environmentally conscious consumers have the tendency to create intentions to purchase organically produced food; as a result, making them a regular consumer sector for organic food sellers. The findings of the study indicate that sellers of organic foods could interest two phases of sections in the faith pyramid in their interactions: the moral conviction phase or the attitude phase. This suggests that the need for organic foods can be increased either by attracting the overall moral and environmental convictions or by pleasing attitudinal convictions, built on the features of organic foods (Honkanen et al., 2006). Furthermore, the study by Tarkiainen and Sundqvist (2005) concluded that consumer attitude for buying organic food and the intention to purchase organic food has a significant positive relationship. The aforementioned has therefore led to the development of the proposed conceptual framework for the current research project.

2.4.4 Proposed conceptual framework

The proposed conceptual framework for this research states that consumer attitude towards buying organic food products is strongly influenced by different variables, namely, demographic factors, with the sub-factors of income and gender, as well as factors such as health concerns, environmental concerns, product quality and subjective norms. Researchers such as Ajzen and Fishbein (1975; 1980) have widely applied the *Theory of Planned Behaviour* (TPB) to explain organic product consumption behaviour. The TPB identifies behavioural intention as a critical antecedent of actual individual behaviour. The TPB is an expectancy-value model of attitude-behaviour relationships (Conner & Armitage, 1998), which has been widely accepted by most social psychologists to understand and predict human behaviour. A general rule is that the stronger the intention to engage in behaviour, the more likely should be its performance. By using this model, people's behaviour can be predicted through three components: attitudes, subjective norms and perceived behaviour control (PBC). Attitudes refer to the degree to which performance of the behaviour is positively or negatively valued. Subjective norms refer to the social pressure you receive from people around you and people

that are important to you in your life. And perceived behavioural control refers to whether it is easy or difficult to perform the particular behaviour. According to Ajzen (1991), the TPB gives a helpful conceptual outline for dealing with the complications of individual societal conduct. This theory integrates some of the most important conceptions in the societal and interactive disciplines, and it describes these conceptions in a way that allows expectation and comprehending specific actions in stipulated circumstances. The attitudes towards the behaviour, perceived control over the behaviour, and subjective norms with respect to the behaviour are frequently discovered to foresee behaviour intentions with a great level of precision. Figure 2.1 depicts the TPB in the form of a structural diagram.

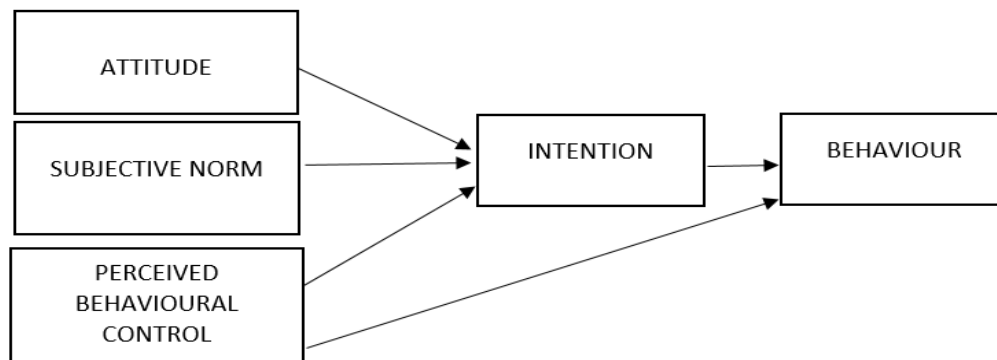


FIGURE 2.1: Theory of planned behaviour (Ajzen, 1991)

The correlation between behavioural intentions and actual behaviour assumes that people try to make realistic decisions grounded on the information accessible to them. Consequently, an individual’s behavioural intention to execute (or not to execute) a behaviour is the instant determining factor of that person’s actual behaviour (Ajzen & Fishbein 1980; Teng & Wang 2015). Attitude towards the behaviour influences a consumer’s intention to buy the product. Attitude is seen to determine the final decisions in the consumer’s buying behaviour (Teng & Wang, 2015). Therefore, intention to buy a product may be considered as the best predictor of actual behaviour (Basha et al., 2015).

The TPB has always been utilised in the area of food choice, especially concerning organic food choice (Aertsens et al., 2009). Even though the TPB has been applied successfully as a framework to understand consumer decision regarding organic foods, in order to identify factors that determine people’s behaviour in environmental activism and to help many researchers in other areas, there are

many scientists in various research fields arguing that other variables should be added to increase the predictive utility of the model. In fact, the TPB has recently been criticised for overlooking other constructs (Yazdanpanah & Forouzani, 2015). This study has added other factors that influence attitude (income, gender, environmental concerns, health concerns and product quality) and actual purchase in the original TPB model to make up for this shortcoming. Additionally, because health-conscious consumers, who are concerned with the environmental consequences of their consumption choices, and due to the fact that organic foods are indeed becoming more available to the consumer, it is assumed that all consumers have control over their consumption choice of organic foods, and therefore perceived behavioural control has been omitted from the conceptual model.

Consequently, based on the significance of attitude in consumer buying decisions, a conceptual framework for this study is proposed. The proposed framework was adapted from previous studies, mainly from the studies of Basha et al. (2015) and Paul and Rana (2012), who believe that consumer attitude towards purchasing organic food products is strongly influenced by the following variables: demographic variables, environmental concerns, health concerns, product quality and subjective norms. Inclusion of other factors that influence attitude (income, gender, environmental concerns, health concerns and product quality) and actual purchase in the TPB has been done in many studies, and there is an increasing number of related studies which show that these aforementioned factors can significantly influence people's intention towards organic food purchases (Basha & Lal, 2019; Bee Lian et al., 2016; Fynn-Green et al., 2019; Kataria et al., 2019; Nguyen et al., 2019; Wekeza & Sibanda, 2019). The conceptual framework is reflected in Figure 2.2, which shows that consumer attitude is influenced by six factors, namely, income, gender, environmental concerns, health concerns, product quality and subjective norms. Consumer attitude then influences the consumer's intention to purchase, which will, in turn, determine the actual purchase of organic foods.

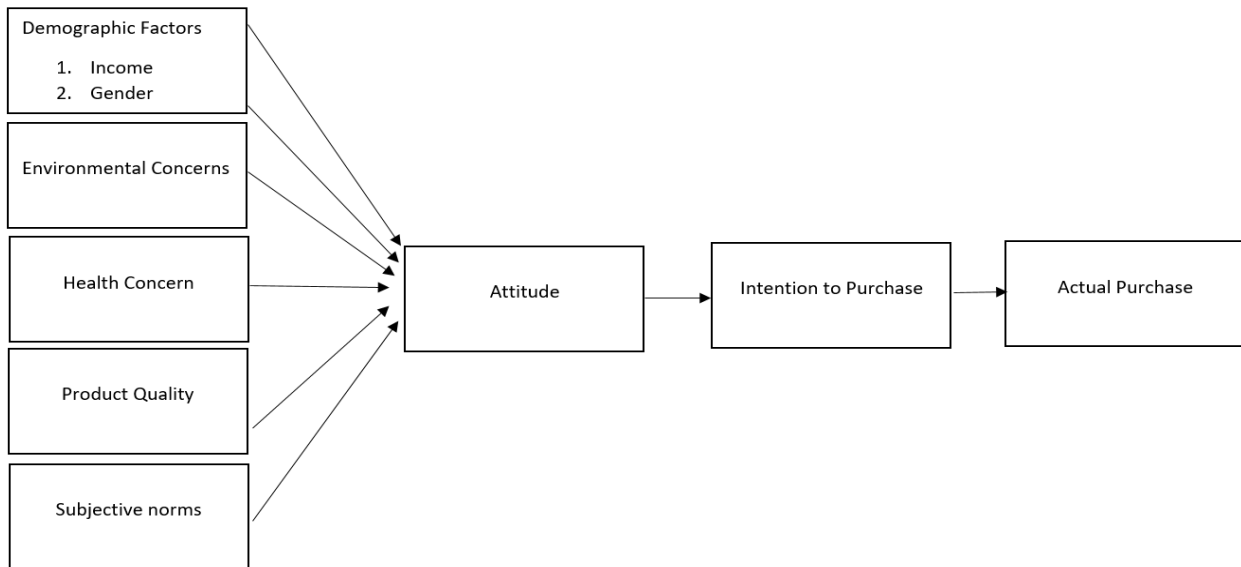


FIGURE 2.2: Proposed schematic conceptual framework for the study

As mentioned in Chapter 1, the purpose of this research study was to examine the factors that influence consumer attitude in the direction of organic food in the marketplace and how a consumer’s attitude, in turn, influences their purchase intention. It is therefore argued that the conceptual framework in Figure 2.2 should assist in determining the aim and objectives of the study.

2.5 CHAPTER SUMMARY

Chapter 2 conferred a review of the previous and appropriate literature on the study of factors that influence consumer attitude towards organic food in the marketplace and how a consumer’s attitude affects his/her buying intention. The chapter highlighted an overview of the literature pertaining to organic food from a national and an international viewpoint. The literature review mainly addressed the history and evolution of organic food consumption, barriers towards organic food consumption and further introduced the proposed conceptual framework and related objectives that guided the study. The TPB was presented as the basis for the research framework of the study. The TPB was used because of its rational outline, precise method, and confirmed reliability and valid dependability from earlier research studies offered but was adapted for the purpose of the current research project. The next chapter discusses the method used in the research study.

CHAPTER 3

METHODOLOGY

Chapter 3 introduces the methods that was used in the current investigation and gives an explanation for the most suitable options used in investigating the proposed aim and objectives identified for the study. This chapter presents information on the methodological approach used for this research project. It is made up of the research approach, research design, data sources, research strategy, data collection method, data analysing method and quality criteria of the research.

3.1 RESEARCH APPROACH

Before starting a research study, it is important to take into consideration the research paradigm the study will outline. A research paradigm is an approach or a research prototype for performing an investigation that has been validated and put into practice by the research community for several years. The research paradigm can further be referred to as the strategy of the investigation project which contains all the activities that will be employed in the research and which defines the comprehensive approaches for the collection of data, analysis of data and interpretation (Creswell, 2014). The two basic research approaches are quantitative and qualitative research and the third approach is a mixed (both quantitative and qualitative) approach. *Induction* is defined as a method of gathering data that will be analysed using statistically-based methods (i.e. moving from the specific to the general), while *deduction* is a development of theories that helps in understanding societal experiences in a natural situation, giving prominence to meaning, experiences and opinions of the participants (i.e. starts with the general and finishes with the specific). Opinion on the basis of laws, rules or other extensively recognised values, are best communicated deductively, while opinions grounded on experience or observation are best articulated inductively (Soiferman, 2010). The deductive researcher “works from the ‘top down’, work from a concept to propositions (objectives) to information to add to or challenge the concept”. Contrary, the inductive researcher works from the “bottom-up, by means of the respondents’ opinions in shaping bigger subjects and originate a concept interrelating the subjects”(Creswell & Plano Clark, 2007). This study will follow the deductive research approach.

Quantitative research highlights quantification in terms of collecting and analysing of data (Yang et al., 2014). It permits the researcher to gather numerical information from big samples, then to be measured in a statistical method (Creswell, 2009). A big sample size ensures credibility and the possibility to generalise the findings to a wider population (Bryman & Bell, 2007; Yang et al., 2014). A quantitative research approach is valuable because it permits the researcher to quantify unbiased data, concentrate on alternatives, involve numerous participants, gather statistical information using various tools and utilise statistical techniques to analyse the data. Moreover, the little interaction amongst the investigator and the participates safeguards neutrality as well as prevents researcher partiality (Leung, 2015).

Therefore, reiterating that a quantitative approach is more suitable in this research project, firstly, the research attempted to reach many South African consumers through a questionnaire. Secondly, the objective of this study was to examine the factors that influence consumer attitude towards organic food in the marketplace and the way in which the respondents' attitudes influence their purchase intentions. Furthermore, the study gathered empirical data by collecting information from a questionnaire to test the current theory, rather than generalising a new theory. From this viewpoint, a quantitative (deductive) method was deemed suitable.

3.2 RESEARCH DESIGN

The design of the research sets a foundation of how the research will be executed. The design stipulates guiding principles of how data will be collected and analysed (Bryman & Bell, 2007; Yin, 2009). A decent research design guarantees substance of experiential facts, therefore, assist the investigators to answer research questions within restrained time and with little resources (Yang et al., 2014; Ghauri & Grønhaug, 2005).

The problem statement, research aim, and research objectives require a specific research design. A research design addresses significant issues about the study, like objectives, locality and nature of the study, the degree of interference by the researcher, time limit and component of the examination. Research designs, nevertheless, may vary from easy to complex, dependent on the type of the research and the precise objective expressed for investigation (Khawaja, HaimHilman, & Kumar, 2012).

The current research project used primary data and therefore required collection of data to be conducted. Data collection methods are different for different research projects; some research projects may demand opinion (observations); others may depend on reviews (surveys), or minor (secondary) information. Certain projects may require non-experiments or indeed experiments, where based on the results of the experiment, the objectives of the research projects will be achieved. Therefore, the design of the research lay down the bounds of the research project, specifying whether it needs to be descriptive, explanatory (or causal) or predictive (Bryman & Bell, 2007). The current study employed a descriptive research design, in the form of a survey to collect the primary data to address the objectives of the study.

An expressive study provides comprehensive information on occurrences or conditions which is investigated (Bryman & Bell, 2007). The aim of the descriptive study is to express the analysis of occurrences, persons and circumstances (Saunders, Lewis & Thornhill, 2009). It is used to answer the questions such as *what, who, when, where, and how*. The basic aim with a descriptive design, in a quantitative study is to examine interactions amongst diverse alternatives. The populations must be clearly defined in order to gather and assess the views and behaviour of the sample (Dhawan, 2010). Therefore, a survey research design in the form of a questionnaire as a data-gathering technique was considered appropriate for the current study.

The aim of this study was to conduct a survey with various adult consumers (older than 18 years of age), living in the Gauteng Province in South Africa, who are responsible for their own domestic or household food purchases. The survey approach used in this research was to gather primary data, which are descriptive. The data collection was carried out by collecting information in the form of a questionnaire regarding the factors that influence consumers' attitudes towards organic food products and their subsequent intention to purchase organic foods. Diverse dimensions were formed to evaluate each theoretic concept and the population sample was also quantified. Consequently, this research was categorised as a descriptive design which makes an effort to investigate the relationship between different variables.

3.3 DATA SOURCES

Data is one of the most important aspects of any research study. There are two sources of data collection techniques, primary and secondary data sources (Khalid et al., 2013). Primary data refers

to original data that has been collected with a specific purpose in mind. The investigator collects the reliable, authentic and objective data first hand from the original source with the aim to resolve a specific difficulty (Bryman & Bell, 2007). Gathering primary data has its disadvantages such as high-cost process and a risk of inaccurate feed-backs from participants (Yin, 2009). Nevertheless, primary data collection was fitting for this research project, because it required current, authentic and objective data to address the aim and objectives of the study (Ghauri & Grønhaug, 2005; Bryman & Bell, 2007).

For this study, primary data were gathered, firstly to upsurge the reliability of the research results because all the information were specifically gathered and tailor-made to the research aim and objectives. The questionnaire that collected the primary data was, however, based on secondary data, namely the extensive literature review that revealed the key concepts to be measured in the study. Secondly, primary data were collected because this research was deductive research, and data from the original source is anticipated to be most applicable.

3.4 RESEARCH STRATEGY

A research strategy is important for the formulation of a respectable research design. It enables the process for the researcher to collect data, thus answering the research aim and objectives, because it describes the overall pathway and channel of the research, as well as the design of the processes that consequently occurs (Gray 2009; Yin 2009). Research strategies can be applied into five different methods which include: survey, experiment, history, case study and archival analysis (Yin 2009). A survey is a method of collecting data using a designed questionnaire with the desire to collect information about a well-defined issue or a situation from the defined population. This approach is beneficial for gathering information in a restricted period of time and a limited budget (Bryman & Bell, 2007). Survey research is widely used for primary data collection (Kotler, 2001) and its reputation is on account of its possible promptness, flexibility and low costs (Peng, 2010).

A survey design is a popular method in quantitative studies and aids the researcher to attain data and facts from a targeted population living in the surroundings, who are relevant to the nature of the research and eager to share their views and thoughts. Additionally, the research survey is used to provide a researcher with information to describe the respondent's attitude, behaviour or habits through the use of formulated questions that will be statistically analysed and interpreted (Khalid et

al., 2013). For the current study, the survey method was selected as the most appropriate approach to use to analyse the attitude and behaviour of the respondents to address the specific objectives and aim of the research.

3.5 DATA COLLECTION AND QUESTIONNAIRE DESIGN

Data collection is a process of collecting or gathering information from a relevant source on a specific variable to answer the objectives of the research and analyse the findings (Bryman & Bell, 2007). It is vital to define the way in which data will be collected and how it will be analysed because the incorrect data might have an undesirable impact on the research results (Paul & Rana, 2012; Bryman & Bell, 2007). Saunders, Lewis and Thornhill (2000) state that questionnaires can be used for descriptive or explanatory research. “A questionnaire is used to identify and describe variability towards attitudes and views (descriptive), as well as to inspect and interpret the relationships between variables (explanatory)”. The questionnaire consists of the following main elements: cover letter, the instructions of how to answer the questions and the main body which consist of the actual questions and answer options, created to gather data from a defined population address the objective of the study (Tustin, Ligthelm, Martins & Van Wyk, 2005).

A questionnaire was chosen for this research project because of its practicality in that it has the ability to reach numerous participants and to get detailed, primary data. The questionnaire was aimed to deal with the vital questions about the factors that influence consumer attitude, intention to purchase and actual consumer behaviour regarding organic food. The following section will discuss the questionnaire employed for the survey in more detail. The questionnaire was divided into seven sections which are described as follows (refer to Annexure A for the questionnaire):

Section A: Demographic variables. Nine questions were presented to determine the respondents’ demographic profile, which encompassed their income, age, gender, race, education level, marital status, employment status, geographic location and number of people per household.

Section B: Environmental concerns. This section consisted of three questions, which used the 5-point Likert scale adapted from Zikmund, Babin, Carr and Griffin (2009) and aimed to measure the respondents’ concerns for the wellbeing of the environment. The scale had five answer choices where 1 represented, “strongly disagree” while 5 represented “strongly agree”, and 3 representing “neutral”.

Section C: Health concerns. Three questions, which used dichotomous scale adapted from Cooper and Schindler (2003), which aimed to measure the health concerns of the respondents. It incorporated the consumer's perceived beliefs regarding the nutrient content, harmful chemicals content and the general food safety of organic food. A Dichotomous scale was used to measure three variables indicator which had two answer choices, where 1 represented "Yes" and 2 represented "No".

Section D: Product quality. This section had four questions, which used a dichotomous scale adapted from Cooper and Schindler (2003). This aimed to measure if consumers perceived organic food as of a 'higher quality', which will positively influence purchasing intentions. The four-variable indicators were measured on a dichotomous scale with 1 representing 'Yes' and 2 representing 'No'.

Section E: Subjective norms. This section consisted of three questions which used the dichotomous scale adapted from (Cooper & Schindler, 2003), aimed to measure the influence of subjective norms on the purchase behaviour of the respondent. A dichotomous scale was used to measure three variables indicators which had two answer choices, where 1 represented "Yes" and 2 represented "No".

Section F: Consumer attitude. This section consisted of five questions, which used the dichotomous scale adapted from (Cooper & Schindler, 2003), and aimed to measure if a positive attitude of consumers towards organic food will positively influence their intention to purchase organic foods. The five variable indicators were measured on a dichotomous scale, with 1 representing 'Yes' and 2 representing 'No'.

Section G: Intention to purchase. This section consisted of six questions based on a dichotomous scale and aimed to measure the respondents' intention to purchase organic food. The six variable indicators were measured on a dichotomous scale with 1 representing 'Yes' and 2 representing 'No'.

Section H: Actual consumption behaviour. This section consisted of six questions based on a 5-point Likert scale, and aimed to measure the respondents' actual buyer behaviour regarding organic food consumption. The scale had five answer choices where 1 represented the extreme negative point (strongly disagree), 5 represented the extreme positive point (strongly agree) and 3 representing a neutral point (neutral) for actual consumption behaviour.

Section I: Shopping behaviour (a). This section had one question that consisted of six indicators which was measured on a 5-point Likert scale, aimed to measure the actual shopping behaviour of the respondents. The scale had five answer choices where 1 represented the extreme negative point (not at all/never) while 5 represented the extreme positive point (always/daily).

Section J: Shopping behaviour (b). This section had two questions where the first question was measured on a 3-point rating scale, aimed to measure the actual shopping behaviour of the respondents. The second question was measured by selecting the only option that represented the respondent's opinion. The scale range varied from 1, representing the least preferred and 3, representing the most preferred option.

The questionnaire was kept as short as possible and the design simple and clear so that participants could complete the questionnaire as easily as possible. The text layout and the use of descriptions were made as simple as possible to reduce the response errors.

Pretesting the questionnaire is a reliable process to get ready for the real information gathering (Ghauri & Grønhaug, 2005; Yin, 2009). The purpose of pretesting the data collection instrument is to scrutinise if the questions are understandable, appropriate and sensitive. This step, will ensure that a questionnaire is polished and the basis for processing the data collection is arranged (Ghauri & Grønhaug, 2005).

According to Grimm (2010), pretesting a questionnaire is a vital phase in quantitative (survey) study and it is an essential phase in making sure mistakes that are related to quantitative survey study are decreased. Pretesting assists in improving the superiority of information considerably. Pre-testing must be conducted on a minute sample of participants from the specified populace. After piloting/debriefing sessions of the questionnaire, the participants were requested to answer a sequence of quizzes concerning the questionnaire and method of gathering data. Grimm (2010) further alludes that piloting sessions makes it easier to pick up any technical hitches on the design of the survey, like the vagueness of statements, sensitive questions, misconstruction of queries, lack of ability to respond queries and other numerous complications that have a lot to do with the survey. Pretesting also affords a chance to provide comments to ensure that the researcher follows a suitable procedure and objectivity of information gathering.

For this study, the questionnaire was pretested by sending it to five respondents who met the selection criteria (i.e. had the knowledge on organic foods, resides in Gauteng, were over the age of 18 years and liable for their own domestic food acquisitions), to confirm the questions were comprehensible and interpreted in an appropriate way. According to Yang et al. (2014), by pretesting the questionnaire, any and all ambiguous questions can be revised, and this will assist in providing reliable data that will address the objectives of the study. However, the pretesting of the questionnaire did not yield any changes to be made, and therefore, the questionnaire was used as-is.

3.6 SAMPLING

Sampling is a process of selecting a number of individuals for the research that represents a specific population (Yates, 2004). The population “refers to the larger group of individuals who have similar attributes”. A population can represent a nation, a region, organisation or a group of individuals (Bryman & Bell, 2007; Yang et al., 2014). According to Taherdoost (2016), “taking a subset from a chosen population, i.e. the sampling frame or entire population, is called sampling”. The author further mentions that sampling can be applied to make propositions about a population or to make generalisations relative to an existing concept. Sampling methods can be separated into two categories – probability (or random) sampling and non- probability (or non-random sampling).

Bryman and Bell (2007) and Saunders et al. (2009), as well as Taherdoost (2016), describe purposive sampling (also referred to as judgement sampling) as a non-probability sampling method where the researchers depend on their own considered opinion during the selection of participants for the research project. Purposive sampling requires researcher to use his personal judgment to choose cases that he/she thinks will best answer his/her research questions and meet his/her research objectives (Khalid et al., 2013). Goodman (2011) describes snowball sampling as a procedure with the intention of approximating the societal construction statistically in a specific populace of pursuit.

This study, therefore, made use of a purposive sampling strategy, based on the criterion that the respondent were adult consumers who were 18 years of age and older, living in the Gauteng Province in South Africa and responsible for their own domestic or household food purchases. In order to receive a statistically significant sample, the sampling procedure had to be supplemented by snowball sampling. Prospective respondents were approached outside of food retail outlets that sold organic

food products. These outlets were situated in the densely populated province of Gauteng, where organic foods are commonly available. The in-store intercept approach took place in urban spaces of these stores selling organic produce. After consent was given to participate in the study, a hardcopy questionnaire was given to the potential respondent for self-completion and was collected immediately afterwards. An electronic version of the questionnaire was also available, should the respondents rather choose to complete the questionnaire electronically. The electronic version of the questionnaire was the exact duplicate of the hardcopy, with the only difference being in the mode of delivery. All the questionnaires that included responses not adhering to the inclusion criteria were discarded. In order to receive an adequate sample, snowball sampling was included simultaneously with the in-store intercept approach, whereby the respondents were asked to refer any potential consumers, who may also participate in the project, to do so.

3.7 DATA ANALYSIS

Data analysis “is a process of reviewing, evaluating, transforming and modelling the data in a proper manner with the aim of discovering useful information to make conclusions” (Creswell, 2014). After collecting and screening the information, data analysis methods should be selected for further investigation (Yin, 2009). Mathematical formulae and PC software are the two methods used to analyse quantitative data (Bryman & Bell, 2007). Because raw data has no meaning without application of suitable statistical methods, data analysis could also be referred to as the process of turning meaningless/unusable data into a meaningful/usable data to be able to draw findings from the data. Data analysis includes the following steps: data coding, inserting and describing data by means of suitable statistical approaches (Neuman, 2014). Thus, for the current research, after data gathering and screening, usable questionnaires were entered into a spreadsheet and the responses coded in order to comprehend the meaning of the data (Creswell, 2014).

For the current research project, the following analysis methods were applied: frequency analysis, descriptive analysis, factor analysis and multiple regression analysis. Firstly, descriptive statistics were employed for the demographic and psychographic data analysis. Descriptive statistics is a process used to summarise, organise and simplify data and present basic measurements such as frequency and frequency distribution, median, mean, standard deviation, skewness and kurtosis (Hinkle, Wiersma & Jurs, 1994). Frequency analysis describes the data of the respondents by showing the information on a number of occurrences of each response chosen by the respondents, for

example, the gender, age and income of the respondents. The median value of each variable shows the average score of the response of all respondents, for a data set, it may be thought of as "the middle" value (Aaker, Kumar, Day & Leone, 2011). According to Bryman and Bell (2007), reliability refers to the consistency of the response or scores in a research instrument. It is important to note that a theory can be evaluated by formulating questions and multiple-item measure on the basis that quantities will be combined to give an overall score. It is, therefore, extremely vital to make sure these indicators refer to the same thing. Secondly, this research used descriptive statistics to show the aspects that are influential to consumers' attitudes which will then affect the buying intentions of organic food. Thirdly, exploratory factor analysis (EFA) was done to evaluate and verify specific discriminant and validity aspects, also test their appropriateness of data competency. EFA is a factor analysis technique used to uncover complex patterns within the factor structures of models. Therefore, EFA is used to uncover the factors that influence variables and further examine which variable indicators should be assembled collectively to create a variable predictor (Kline, 2015; George & Mallery, 2019). Factor analysis condenses a huge set of variables to a smaller, easily controllable quantity of components or factors. It summarises the fundamental designs of association and observing for clusters of strongly correlated elements (Pallant, 2003). The variable indicators for this study were prior clustered in specific predictor variables, e.g. V11, V12 and V13 variable indicators.

For this research, IBM SPSS version 25 software was used to conduct EFA. The initial phase, when executing an EFA, is data assessment for the suitability for factor analysis. This phase includes examining the association matrix for coefficients of 0.3 and higher and determining the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) and Bartlett's test of sphericity. The KMO test is a degree of how suitable the data is for factor analysis. The test calculates the sampling suitability for every adjustable in the pattern and for the whole pattern (George & Mallery, 2019). Furthermore, Bartlett's test of sphericity must be significant ($p < .05$) for the factor analysis to be deemed suitable. The KMO index ranges from 0 to 1, with 0.6 suggested as the minimum value for a good factor analysis (Pallant, 2003; Mazzocchi, 2008). The second phase in performing the EFA is to conduct factor extraction that includes establishing the lowest amount of factors which may be utilised to effectively signify the correlations between the group of variables (Annis, 2006; George & Mallery, 2019). For this study, the eigenvalue (or Kaiser's criterion) was used. Only factors with an eigenvalue of 1.0 or more are retained for further investigation to use this rule, (Annis, 2006; Pallant, 2003). The third step when

performing EFA is to conduct a factor rotation, if necessary, and interpretation. This shows the design of loading in a way that is simpler to understand. This involves each of the variables loading strongly on one component and each component being represented by a number of strong loading variables. SPSS uses the Kaiser criterion where it retains all components with eigenvalues above 1 as a default and the cut-off is above 0.4 (Pallant, 2003).

Lastly, multiple regression analysis was used for the current research to explore the relationships between consumer attitude (dependent variable) and environmental concerns, health concerns, product quality and subjective norms (independent variables or predictors). Linear regression analysis is a statistical technique used to learn about the relationship between an independent variable and dependent variable (Bryman & Bell, 2007). The beta value (β -value) indicates just how sturdy every single independent variable affects the dependent variable, whilst the significance level is applied to establish if a proposition is allowed or disallowed. If its value (P-value) is greater than 0.05, the proposition is then disallowed. With regards to the adjusted R-squared (R^2), it represents the percentage that the dependent variable can be described by independent variables (Bryman & Bell, 2007). Multiple regression analysis is a more complex expansion of association and is employed when one intends to investigate the prognostic capability of a collection of independent variables on one uninterrupted dependent measure. Various forms of multiple regressions consent you to make a comparison of the predictive abilities of certain independent variables and to locate the finest collection of variables to forecast a dependent variable (Pallant, 2003).

Multiple regression analyses can be applied in three main ways: stepwise, standard or simultaneous, and hierarchical or sequential. Stepwise regression was applied for this study because it considers each single variable before entering it in the model (Annis, 2006; George & Mallery, 2019). The stepwise regression starts by adding the variable that shows the highest bivariate correlation with the dependent variable. Then the partial correlation of all remaining potential independent variables is explored and the explanatory variable with the highest partial correlation coefficients enters the model. After the re-estimation of the two variables, the decision whether to keep the second variable is based on the increase of the F-value or other goodness-of-fit statistics like the adjusted R-squared, information criteria. If such an increase is not significant, then the second (following) variable will not be included in the model. Otherwise, the second (following) variable stays in the model and the process continues for the inclusion of the third (following) variable (Pallant, 2003; Mazzocchi, 2008).

3.8 QUALITY CRITERIA

Research quality of a study can be evaluated by using validity and reliability. Roughly, validity refers to whether an instrument actually measures what it is designed to measure, and reliability is the consistency of the instrument's measurements (Knekta, Runyon, & Eddy, 2019). These concepts will be discussed in more detail in the sections to follow.

3.8.1 Validity

Validity refers to how good a research instrument can be able to measure whatever it intends to measure. *Content validity* ensures that a measure consists of a sufficient and illustrative collection of elements to encompass a theory that is being evaluated. The content validity could also be guaranteed by specialists' concurrence (Sekaran, 2003; Khawaja, Hilman, & Dileep Kumar, 2012). For the current study, content validity was warranted by developing a questionnaire to reach the objectives of the study. Furthermore, the questionnaire covered specific constructs relating to each of the objectives to be studied. Therefore, related literature was reviewed to gain knowledge on the aspects that would ensure demonstrative coverage of the construct (Al-shaaban & Nguyen, 2014; Basha et al, 2015; Dumortier et al, 2017; Lian, 2016; Saleki & Seyedsaleki, 2012). The questions in the questionnaire were constructed in such a way that they relate to and answer the research objectives.

Construct validity is an evaluation of exactly how good an operative description could evaluate a theory (Bryman & Bell, 2011). This requirement is attained by the valuation of Pearson's correlation. If this value (r-value) is larger than 0.8, it signifies a much sturdy correlation amongst two variables. If the p-value is smaller than 0.05, we throw out the worthless proposition that there is no dissimilarity amongst the propositions and establish that a noteworthy variation does exist. This means that the p-value below 0.05 is significant and a p-value over 0.05 is not significant (Malhotra & Birks, 2003). Construct validity additionally comprises of discriminant and convergent validity, which were all were measured for the current study. *Criterion validity* measures how well one measure predicts the outcome of another measure (Malhotra & Birks, 2003; Bryman & Bell, 2007; Aaker et al., 2011; Yang et al., 2014). For the current study, the questionnaire was partially based on established questionnaires to ensure the validity of this research. The remaining questions were developed from the relevant literature (Al-shaaban & Nguyen, 2014; Basha et al., 2015; Tison, 2012) and presented to academics that had professional experience in this field, who were asked to examine the instrument (questionnaire). By carrying out this, it assisted the investigator to make

enhancements and improve some of the questions before pretesting the questionnaire. Then five prospective respondents examined the questionnaire and provided some observations. The respondents were also asked if the instructions and the formulation of the questions were plain and simple to comprehend. The questionnaire was deemed adequate and no further changes were made.

For the current study, factor analysis was implemented mainly to answer the following objective: Objective 1 (Factors that influences consumers' attitudes towards organic foods.), objective 2 (Consumers' attitudes towards organic foods.), objective 3 (Consumers' intended buyer behaviour of organic foods.) and objective 4 (Consumers' actual buyer behaviour of organic food products. Factor analysis is used to identify clusters of inter-correlated variables that have adequate common attributes to justify their existence in a factor (predictor variable) (Pallant, 2003). Thus, this research study assessed construct validity using discriminant and convergent validity, through the application of EFA techniques.

3.8.2 Reliability

Reliability is a measure of consistency when a testing procedure is repeated. Theoretically, reliability can be defined as the ratio between the true variance in the construct among the participating respondents and the observed variance as measured by the measurement instrument (Knekta et al., 2019). Reliability not only require item responses to be consistent across constructs, but also that it should be stable over time. In the current study the questionnaire, gives the same data every time it is used, and a difference in the results is simply due to variations in the subject being measured, it is considered internally consistent and is therefore reliable *Internal reliability* describes uniformity amongst two indicators, wherein the respondent's score of an individual indicator is correlated with their score on the other (Bryman & Bell 2007; Yang et al., 2014; Tison, 2012). Furthermore, to ensure reliability of the questionnaire, a pre-test was conducted with the help of five respondents who fit the inclusion criteria of the study. The pre-test was the first round to evaluate the measuring instrument (i.e. questionnaire) on a small sample population; this helped the researcher to identify potential problems with the design. Another way that reliability was warranted in this study was by using an established and tested questionnaire from the relevant previous research studies (Al-shaaban & Nguyen, 2014; Basha et al., 2015).

3.8.3 Ethical aspects related to the study

Research ethics refer to the ethical standards regulating research, from the beginning throughout to the end and publication of findings and past the study itself (Neuman, 2014). This collection of moral conduct standards presents guidelines and behaviour expectancies in circumstances relating to investigational matters or participants, guarantors, other investigators, helpers and academics. These regulations furthermore operate as a benchmark on which an investigator must assess their behaviour. The aim of this study was to investigate factors that influence consumers' attitudes and intentions to purchase organic foods in Gauteng. Consequently, the investigator needed to cogitate certain moral factors which could arise throughout the progression of the research, which involved human respondents. The aim of ethical consideration of a project is to conduct research that is necessary and beneficial to the community at large. The consideration of ethical practices while undertaking a study can be summarised in one statement, i.e. the avoidance of harm. Firstly, the proposal for this research was submitted to the vetting committee of UNISA's Department of Life and Consumer Sciences for approval. This was followed by the submission of the proposal to the UNISA College of Agriculture and Environmental Sciences (CAES) ethical committee for approval (approval number: 2018/CAES/088) before data collection took place.

Once permission to partake in the research project was received from potential respondents, consideration was given to the ethical principles that should be employed while working with all respondents of the study. The objective of the research was expounded to respondents both verbally and in a cover letter before completing the questionnaire. Commencement of completing the questionnaire only occurred after informed consent was awarded for doing so. According to Perrault and Keating (2018), informed consent is the method of notifying respondents on the probable dangers of the investigation project and getting their concurrence to participate in the research project, and is also a universal moral constituent of research concerning humanoid matters. Because some of the data were collected electronically, the researcher explained to respondents the measures that would be implemented to ensure confidentiality. Privacy of respondents is very important to moral investigation exercise in the societal study. Anywhere probable, academics/investigators target to guarantee respondents that all exertion will be effected to make certain that the information they make available will not be tracked down backwards to them in news, demonstrations and other methods of broadcasting (Crow & Wiles, 2008). A few factors had to be considered when asking the prospective respondents to take part in the research study:

- Firstly, the respondents were enlightened about the objectives of the research;
- Secondly, the respondents were informed that participation was voluntary, and that they should be willing to give time to answer the questionnaire;
- Thirdly, participants were guaranteed that their distinctiveness would be kept unidentified, that their information would be treated with confidentiality and that they were allowed to pull out at any time without penalty or giving a reason for doing so.

Respondents were assured that the information provided would remain confidential and only be used for academic purposes. The respondents were also assured that there were no incorrect answers to the questions (Schiffman & Kanuk, 2009).

3.9 CHAPTER SUMMARY

This chapter presented the methods utilised for the current study to efficiently achieve the objectives of the research. The chapter explained and argued why the quantitative, non-experimental, descriptive design was selected as the most appropriate research design for the study. The approach that was used to gather data was also discussed, with the exact details on how the questionnaire was formulated and used. The chapter also addressed the descriptive and inferential statistical approaches used to analyse the data. Lastly, in conclusion, chapter 3 addressed the argument of the reliability, validity and ethical considerations that had to be measured for the research project. The method allowed the investigator to examine the accumulated information and make findings from the observations. A summary of the methodology of the research is presented in Table 3.1 below.

TABLE 3.1: Summary of the research methodology followed in the current research study

Research methodology	Employed in the study
Research approach	Quantitative
Research design	Descriptive
Data sources	Primary
Research strategy	Survey
Data collection method	Questionnaire
Sampling	<ul style="list-style-type: none"> • Purposive sampling • Snowball sampling

Research methodology	Employed in the study
Data analysis method	<ul style="list-style-type: none"> • Frequencies • Descriptive statistics • Exploratory factor analysis • Stepwise regression
Criteria	<ul style="list-style-type: none"> • Validity • Reliability • Ethical considerations

A comprehensive presentation of the findings of the current research can be obtained in the next chapter.

CHAPTER 4

RESULTS AND DISCUSSION

Chapter 4 presents and deliberate the findings of the study. Descriptive data analysis was selected as a suitable method to determine and analyse the socio-demographic details of the respondents and to attain a descriptive view of every identified psychographic variable's performance. The inferential statistics were then presented in order to meet the objectives and aims of the project.

4.1 SOCIO-DEMOGRAPHIC DETAILS OF RESPONDENTS

This section presents the findings and descriptive analysis of the demographic data collected from the respondents. The data from the collected questionnaires were initially assessed to ensure that the information was indeed satisfactory (all questions answered) and free of errors. A total of 400 questionnaires were disseminated to potential respondents, both in hard copy format as well as electronically. A total of 310 were completed and returned. Of these completed questionnaires, 301 were considered appropriate for statistical analysis, with nine being discarded on the basis that they were incomplete. The demographic profile of the sample population is presented below.

4.1.1 Gender, age and income of the respondents

This section presents the gender, age and income outline of the respondents who contributed to this research, which is portrayed by means of a frequency and percentage distribution. Figure 4.1 visually exhibits the information regarding the gender of the respondents. Of the 301 respondents who participated in this study, men accounted for 32% (n = 96) whilst female respondents represented 68% (n = 205), showing that the sample favoured female consumers. According to Gabriel (2007), literature has shown that women are generally more accessible than men for market research purposes and this is most likely the reason for the majority of female responses in the sample. Several previous studies have profiled the typical organic food consumer as being female, who buys in large quantities and shops more frequently than men (Paul & Rana, 2012). Female consumers are also more likely to be the one in the household to do the food purchasing (Paul & Rana, 2012; Atalay et al., 2019), which was one of the inclusion criteria of the current study, and which could also explain the majority of female respondents in the current study.

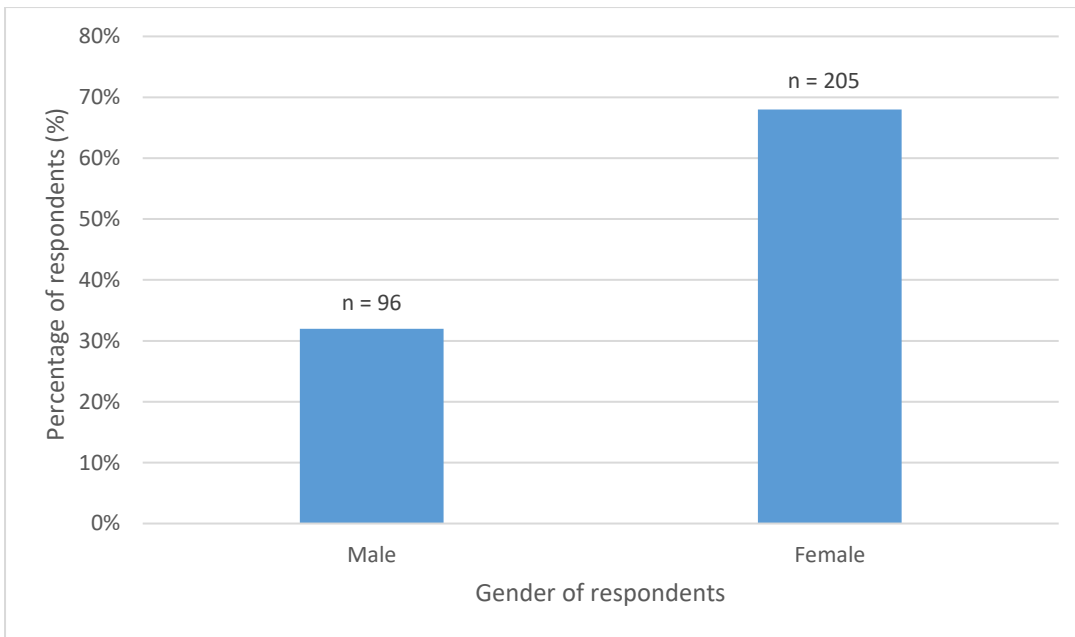


FIGURE 4.1: Respondents’ gender profile (n=301).

The age profile of the respondents who took part in this research is reflected in Figure 4.2. The results show that most of the respondents (41%, n = 124) were aged between 30–39 years and a third (33%, n = 98) aged between 18–29 years, while 20% (n = 59) were between the ages of 40–59 years. A group of consumers who are born in the same era and have similar experiences is referred to as an age cohort. Some examples of age cohorts are Baby Boomers (born between 1946 and 1964), Generation X (born between 1965 and 1985) and Generation Y (born between 1986 and 2002) (Solomon, 2010). The majority of the respondents formed part of Generation X (34–54 years old) and Generation Y (17–33 years old) cohorts. Literature states that the green or organic food consumer tends to be a younger consumer (Pearson, Henryks, Sultan & Anisimova, 2013; Essoussi & Zahaf, 2008), which is in line with what was reported in the current research as well. There were no respondents over the age of 70 years who participated in this study.

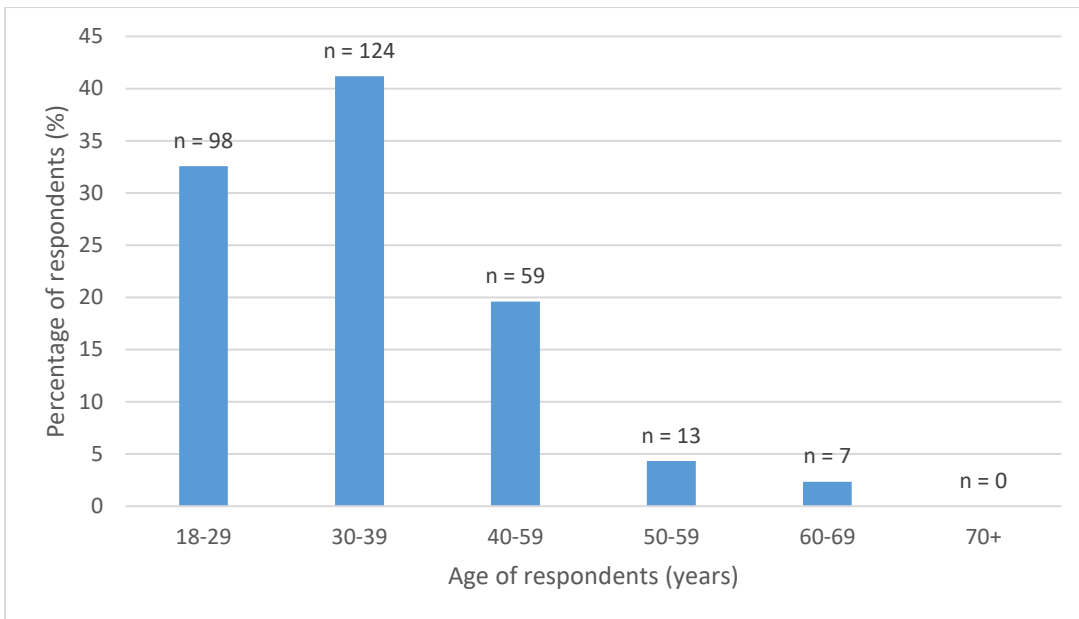


FIGURE 4.2: Respondents’ age profile (n=301).

For the current study, the respondents’ income was grouped into earnings of less than R20 000, earnings between R20 000 and R40 000, earnings between R40 001 and R60 000, earnings between R60 001 and R80 000, earnings between R80 001 and R100 000 and, lastly, earnings of more than R100 000 as a household income per month, which is aligned with Stats SA (2019). The results in Figure 4.3 show that 31% (n = 92) of the respondents earned less than R20 000 per month, while 27% (n = 80) earned between R20 000 and R40 000, 20% (n = 59) earned between R40 001 and R60 000, 11% (n = 34) of the respondents earning an income within R60 001–R80 000, while 4% (n = 13) earned between R80 001 and R100 000 per month and the income of rest of the respondents, namely (n = 23) 8%, exceeded the amount of R100 000 per month.

This result shows that better income earners (respondents who earn from R40 001 to more than R100 001 per month) constituted about 43% of the respondents. When bearing in mind the demographic representation of purchasers, income is one more influence deemed significant for motivating the buying of organic food, where households with higher income buy organic products more regularly (Loureiro, McCluskey & Mittlehammer, 2001; Govindnasamy & Italia, cited in Paul & Rana 2012; Kataria et al., 2019). Stats SA (2019) found that over the past ten years, the average annual household income for all households in South Africa more than doubled. The current study’s demographics is an indicator of the higher income South African consumer in general (Average salary in South Africa, 2019), but the respondents decreased as the income categories increased, indicating

that there were not many extremely wealthy respondents, however, the majority of the respondents can indeed be regarded as well-off consumers in the context of South Africa.

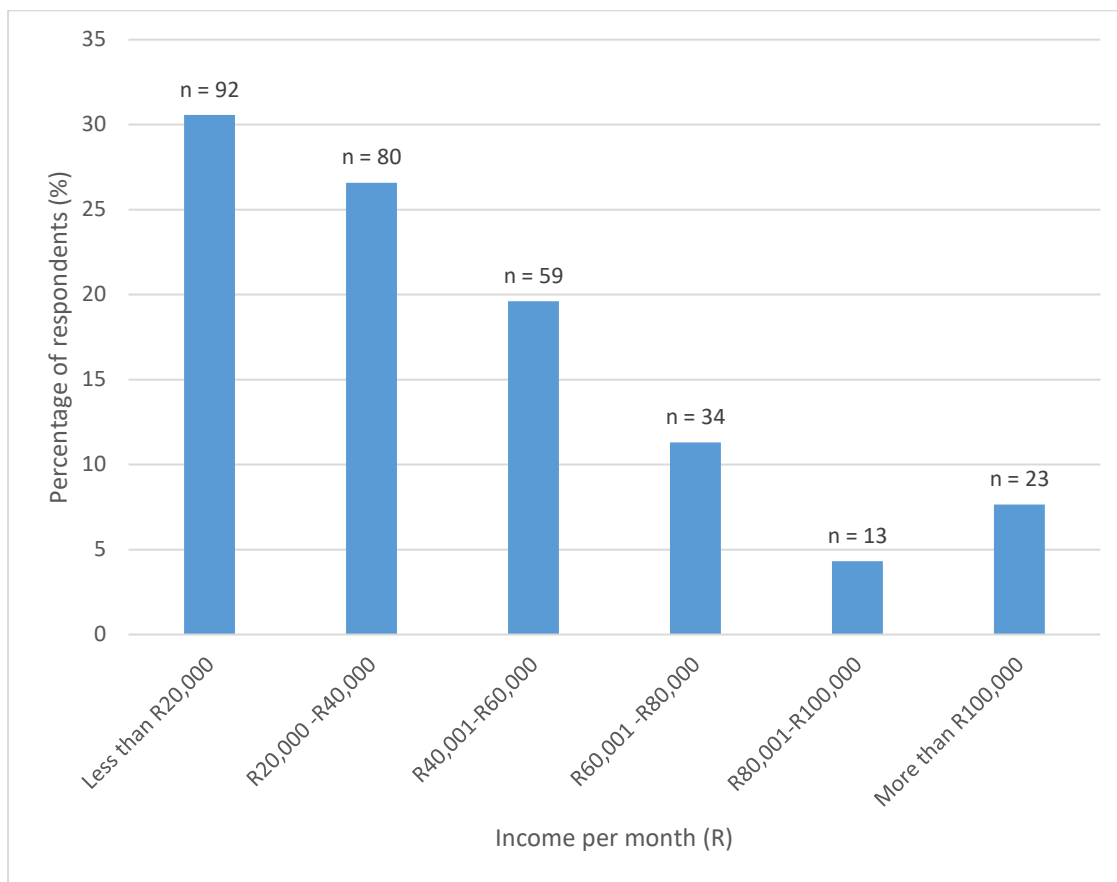


FIGURE 4.3: Respondents' income profile (n=301).

4.1.2 Ethnic affiliation and marital status of the respondents

This section presents data about the ethnic affiliation and marital status of the respondents who participated in this study. Figure 4.4 shows the ethnic affiliation of the respondents, which illustrates that 67% (n = 203) of the sample were African, followed by 22%, (n = 67) white respondents, then coloured respondents with 5% (n = 15) and, equal to the coloured respondents with 5% (n = 16), were Indian consumers. The results are in line with a research project led by Anvar and Venter (2014), which discovered that African consumers (black people), consisting largely of Generation Y South Africans, do display positive green buying intentions. Additionally, a study conducted by Vermeulen and Biénabe (2010) revealed that there were no significant differences in the ethnic comparisons of organic purchases in South Africa among different racial groups. With the aforementioned in mind, the current sample does seem to somewhat represent the general consumer population in South Africa, as indicated in the South African Population Groups by Statistics South Africa (2019), which

shows that black people represent the majority of the South African population with 41 million (79%), followed by coloured people 4,6 million (9%), then white people 4,5 million (9%), Indian/Asian 1,29 million (2%) and, lastly, other which is only 280 thousand (0.5%).

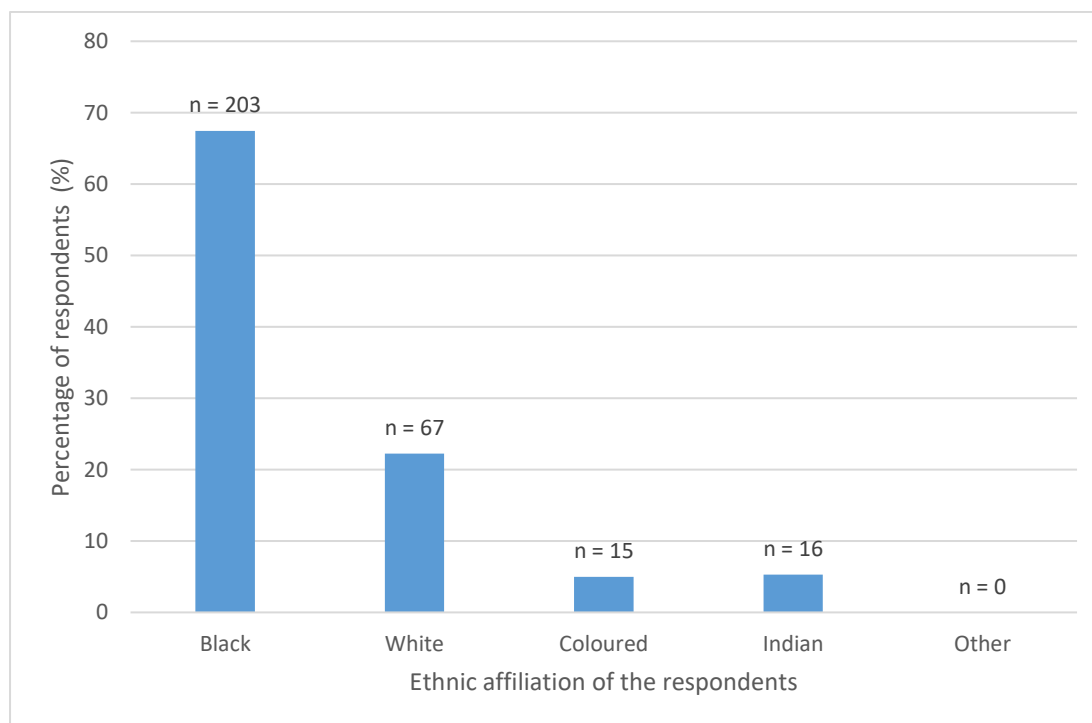


FIGURE 4.4: Respondents' ethnic affiliation (n=301).

The results regarding the marital status of the respondents, as presented in Figure 4.5, reveal that 50% of the respondents were married/living with a partner, 45% were single, 5% divorced and no one indicated that they were widowed. According to Statistics South Africa (2018), 40% of working South Africans are married. In the current research, married couples and companions (living together) were classified into the same group for the reason that it implied that another individual's demands had to be well-thought-of throughout the food purchasing decisions for the household. A study conducted by Ahmad and Juhdi (2010) revealed that most organic food buyers were married with children. However, due to the age of the current respondents, i.e. Generation Y and Generation X, the unmarried status of the sample population might be explained because people now tend to get married later in life (Howell, 2012).

The sample, therefore, had approximately an even distribution of people who shop for food products for themselves only, along with people who have to consider a partner while shopping for food products. Therefore, it is thought-provoking to notice from previous research that consumers

without a spouse does not necessarily follow the generally accepted organic food consumer demographic profile (Loureiro et al., 2001; Paul & Rana, 2012), which might aid in offering new insights into the demographic data of organic food consumers in South Africa, should the results of the current study reveal such findings.

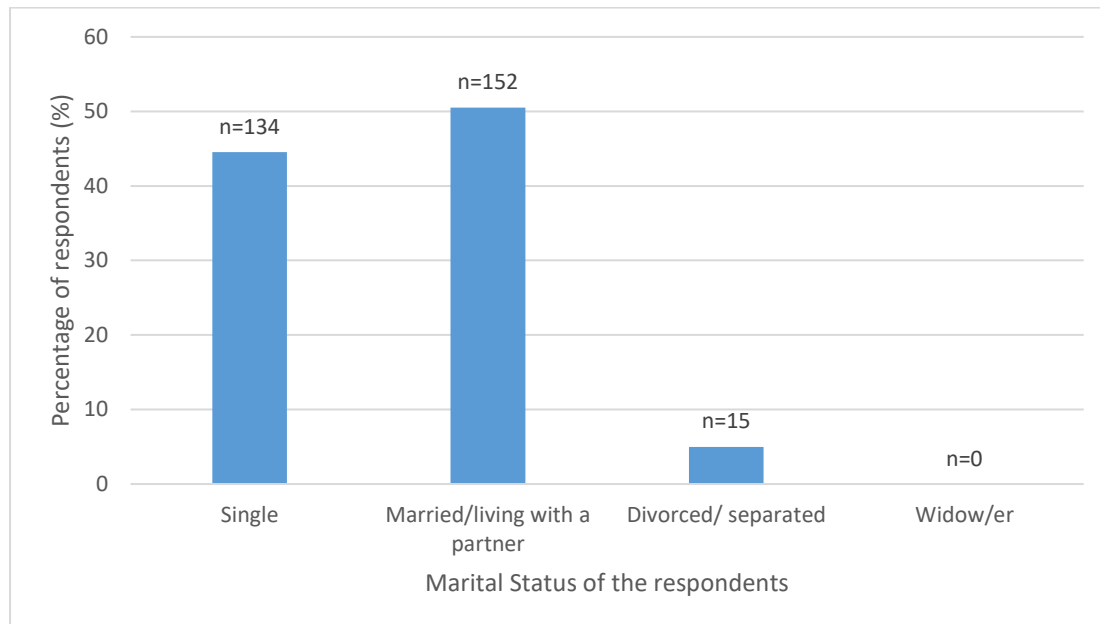


FIGURE 4.5: Respondents' marital status (n=301).

4.1.3 Employment status and education level of the respondents

Figure 4.6 reflects the respondents' status of employment. The results indicate that the vast majority of respondents were employed, namely 86% (n = 258), while the remainder of 14% (n = 43) were unemployed. Previous research discovered that organic food consumption behaviour is associated with wealthy consumers (Loureiro et al., 2001; Govindasamy & Italia, cited in Paul & Rana 2012); however, this was not specifically measured in the current study.

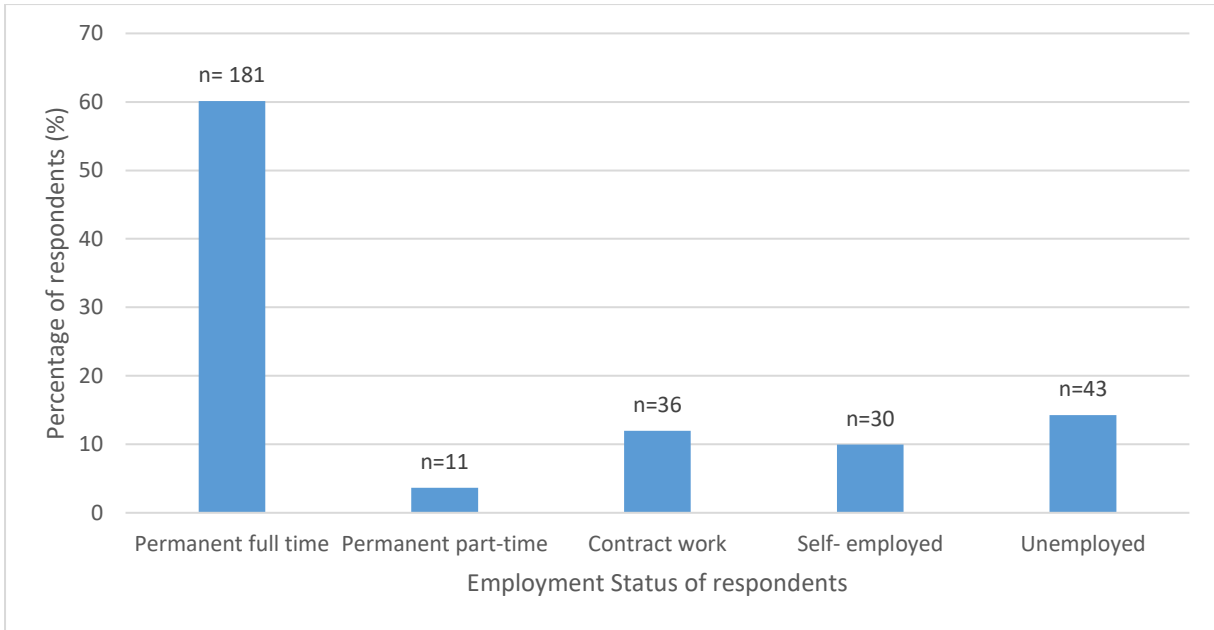


FIGURE 4.6: Respondents' employment status (n=301).

The data revealed that once again, the vast majority of respondents were well educated, where 82% (n = 246) of the respondent had a degree and/or a diploma. Only 17% (n = 51) of the respondents had a matric/Grade 12 certificate and the remaining 1% (n = 4) had less than matric/Grade 12, in other words not finishing high school. Previous research has discovered that green consumption behaviour is also associated with well-educated consumers (Loureiro et al. 2001; Govindasamy & Italia, cited in Paul & Rana, 2012), and therefore the profile of the current study's sample may also coincide with such results. The results are presented in Figure 4.7.

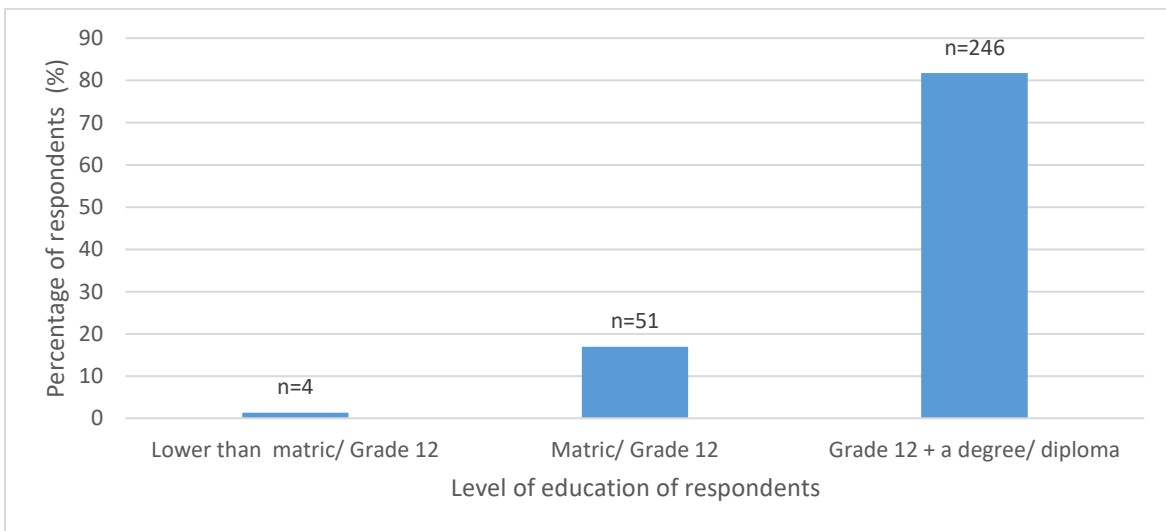


FIGURE 4.7: Assessment of respondents' level of education (n=301).

4.1.4 Summary

Demographic attributes that were analysed for the study include, age, gender, marital status, monthly domestic income, ethnic affiliation, the level of education and employment status of the various respondents. The respondent sample came from 301 willing grownups (18 years of age or older) who were responsible for their own food consumption decisions and had purchased organic food products in the past. The results indicated that the majority of respondents belonged to Generation X (41%), were educated (82%), black (67%), employed (86%), female (68%) consumers, with a better income and living in the Gauteng province in South Africa. In general, the descriptive results are in line with other literature pertaining to the current topic and population descriptors, apart from only about half of the respondents being married.

4.2 ANALYSIS OF THE MEASUREMENT VARIABLES

The current section intends to analyse and define the psychographic measurement variables' occurrence in the study. Accordingly, environmental concerns, health concerns, product quality, subjective norms, consumer attitude, actual consumption behaviour and shopping behaviour were individually described and analysed. The evaluation involves showing the expressive measurements and inferential statistics of the average (mean) and standard deviation (\pm SD) estimates of each variable indicator developed, come from the findings attained from the survey, per section.

4.2.1 Environmental concerns

Environmental concerns comprised of three variable indicators gauged on a 5-point Likert scale, varying from 1, indicating strongly disagree to 5, indicating strongly agree and a neutral value of 3, which were aimed to measure the respondents' concern for the wellbeing of the environment. As showed in Table 4.1, the median value for every environmental concern variable indicator was at 4.00, indicating a positive response in terms of agreement.

The median value of 4.00 for the overall environmental concerns indicates that the respondents agreed that it is important that the food they eat is produced and packaged in an environmentally friendly way and should be less harmful to the environment.

TABLE 4.1: Descriptive statistics: predictor variable for *environmental concerns* (N=301).

Variable number	Questionnaire statement	Median	±SD
V11	To me, it is important that the food I usually eat has been produced in an environmental-friendly way	4.00	0.89
V12	To me, it is important that the food I usually eat is packaged in environmental-friendly materials	4.00	0.85
V13	To me, organic foods are less harmful to the environment than non-organic	4.00	0.97
Average:		4.00	0.91

SD: standard deviation

This result concurs with previous studies, which revealed that purchasers are progressively becoming more environmentally conscious and more prepared to participate to defending the ecosystem via various means, including buying more organic food, due to the fact that organic farming is considered as being environmentally friendly (Basha et al., 2015; Nguyen et al., 2019; Atalay et al., 2019).

When conducting the EFA on the data, it was clear that one factor emerged. This can be seen upon scrutinising the tables and figures below. As reflected in Table 4.2, the KMO measure of sampling adequacy is a favourable measure at 0.678, thus showing sample suitability. Moreover, Bartlett’s test of sphericity value shown a chi-square total of 331.35, which is significant at ≤ 0.001 , additionally specifying that there were acceptable relationships amongst the variables involved in the analysis. Therefore, it is concluded that construct validity was obtained.

TABLE 4.2: Kaiser-Meyer-Olkin (KMO) and Bartlett’s test for *environmental concerns*.

Kaiser-Meyer-Olkin measure of sampling adequacy		0.678
Bartlett’s test of sphericity	Approx. chi-square	331.35
	Df	3
	Sig.	0.001

df: degrees of freedom represent how many values involved in a calculation are allowed to vary

Table 4.3 reflects the total variance explained, which shows that only the first component recorded eigenvalues above 1 (2.179). This component explains a total of 72.65 % of the variance.

TABLE 4.3: Total variance explained for *environmental concerns*.

Initial eigenvalues				Extraction sum of squared	
Component	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.18	72.65	72.65	2.18	72.65
2	0.54	18.07	90.71		
3	0.28	9.29	100.00		

Applying no rotation resulted in each set of the variables loading strongly on only one or two components, and each of the component(s) being represented by a number of strong loading variables. SPSS uses the Kaiser criterion (retain all components with eigenvalues above 1) as the default and the cut-off is above .4 (Pallant, 2003).

For the section regarding *environmental concerns*, the component matrix (Table 4.4) shows that all variables loaded closer to 1 (V11 = 0.89, V12 = 0.88 and V13 = 0.78) and lower than 0.40; therefore, all three variables can be seen as loading on only one factor named environmental concerns. This result, together with the median value shown in Table 4.1, further indicates that the respondents agreed that it is important that the food they eat is produced and packaged in an environmentally friendly manner, which positively agrees with previous studies that alluded to a progressive increase in the environmental consciousness of consumers (Bee Lian et al., 2016; Kar et al., 2018).

TABLE 4.4: Component matrix for *environmental concerns*

	Component 1
V11	0.89
V12	0.88
V13	0.78

4.2.2 Health concerns

Three variable indicators were presented which were aimed to measure the *health concerns* of the respondents, incorporating the consumer’s perceived beliefs regarding the nutrient content, harmful chemicals content and the general food safety of organic food. The three variable indicators were measured on a dichotomous scale with 1 representing ‘Yes’ and 2 representing ‘No’. As reflected in Table 4.5, the median value for each *health concern* variable indicator was at 1.00, indicating a positive response for these predictor variables.

TABLE 4.5: Descriptive statistics: predictor variable for *health concerns* (N=301).

Variable number	Questionnaire statement	Median	±SD
V14	Do you believe that organic foods are healthier than non-organic?	1.00	0.29
V15	Do you think organic food contains more nutrients than non-organic food?	1.00	0.40
V16	Do you believe that organic food contains no harmful chemicals?	1.00	0.47
Average:		1.00	0.39

SD: standard deviation

The average median value of 1.00 indicates that most respondents believed that organic food is healthier and contains more nutrients than non-organic food, even though there is currently no literature to irrevocably prove that organic foods are more nutritious than non-organic food (Vietoris et al., 2016; Sana et al., 2018). In addition, the respondents also believed that organic food contains no harmful chemicals, which also correlates with previous research which mentions that organic food is considered as a healthy food option, due to the lack of chemicals and other synthetic residues on or in the food product (Hassan et al., 2015; Aertsens et al., 2009; Chu, 2018).

The factor analysis showed that the KMO measure of sampling adequacy is not favourable at 0.540. However, Bartlett’s test of sphericity showed a chi-square total of 82.166, which is significant at ≤ 0.001 , demonstrating that there were satisfactory associations amongst the variables involved in

the analysis. Therefore, it is concluded that factor analysis is appropriate and construct validity was confirmed.

4.2.3 Product quality

Product quality consisted of four questions that sought to measure the influence of product quality on consumer attitude and purchasing intentions of organic food. The four variable indicators were measured on a dichotomous scale with 1 representing ‘Yes’ and 2 representing ‘No’. As shown in Table 4.6, the median value for all product quality variable indicators was at 1.00, which indicated a positive response for this predictor variable.

TABLE 4.6: Descriptive statistics: predictor variable for *product quality* (N=301).

Variable number	Questionnaire statement	Median	±SD
V17	Are you concerned with the quality of the food you eat?	1.00	0.26
V18	Do you think that organic foods are generally better in terms of quality than non-organic food products?	1.00	0.33
V19	Do you think that organic foods have more sensorial appeal (better smell, texture, colour, taste, etc.) than non-organic food products?	1.00	0.44
V20	Organic foods are of high quality.	1.00	0.33
Average:		1.00	0.37

SD: standard deviation

The average median value of 1.00 for *product quality* indicates that the respondents were concerned with the quality of food they eat, and they thought organic foods is generally better in terms of quality, with more sensorial appeal (better smell, texture, colour, taste etc.) than non-organic food products. These positive results concur with previous studies which found that organic food purchasers are generally more quality-sensitive than other consumers (Doležalová et al., 2016; Konuk, 2019).

Table 4.7 shows that the KMO measure of sampling adequacy is a favourable 0.645, thus showing sample suitability. Furthermore, Bartlett’s test of sphericity value showed a chi-square total of 155.151, which is significant at ≤ 0.001 , further demonstrating that there were acceptable associations amongst the variables included in the analysis. Therefore, it is concluded that factor analysis is appropriate and construct validity is confirmed.

TABLE 4.7: Kaiser-Meyer-Olkin (KMO) and Bartlett’s test for *product quality*

Kaiser-Meyer-Olkin measure of sampling adequacy		0.65
Bartlett’s test of sphericity	Approx. chi-square	155.15
	Df	6
	Sig.	0.001

df: degrees of freedom represent how many values involved in a calculation are allowed to vary

Table 4.8 reflects the total variance explained for *product quality*, which shows that only the first component recorded eigenvalues above 1 (1.88). This component explains nearly half of the variance for component 1 with a total of 46.87%.

TABLE 4.8: Total variance explained for *product quality*

Initial eigenvalues				Extraction sum of squared	
Component	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.88	46.87	46.87	1.88	46.87
2	0.94	23.59	70.46		
3	0.71	17.64	88.11		
4	0.48	11.89	100.00		

The component matrix of Table 4.9 shows that all variables loaded closer to 1 (V17 = 0.50, V18 = 0.79, V19 = 0.57 and V20 = 0.82) and higher than 0.400, therefore all variables can be seen as loading on a single factor named product quality. This analysis further indicates that the respondents were concerned about the quality of the food they eat. In line with previous empirical research (Konuk, 2019; Shashi et al., 2015; Stolz et al., 2011), the findings further reveal that the respondents thought

that organic food is indeed higher in quality and does have more sensorial appeal than non-organic food.

A study conducted by Shashi et al. (2015) concluded that organic food quality and taste plays a significant role in persuading customers to purchase and consume organic foods. Moreover, the study conducted by Stolz et al. (2011) showed that organic food consumers “are willing to pay higher prices for higher food quality”, and organic foods are indeed associated with higher quality foods.

TABLE 4.9: Component matrix for *product quality*

	Component 1
V17	0.50
V18	0.79
V19	0.57
V20	0.82

4.2.4 Subjective norms

Subjective norms consisted of three questions aiming to measure the influence of subjective norms relating to the attitude and purchase intention of the respondent. The three variable indicators were measured on a dichotomous scale with 1 representing ‘Yes’ and 2 representing ‘No’. As reflected in Table 4.10, the median for all subjective norm variable indicators were at 1.00, indicating a positive response for this predictor variable.

Table 4.10: Descriptive statistics: predictor variable for subjective norms (N=301)

Variable number	Questionnaire statement	Median	±SD
V21	Does your family or even your close friends eat organic food regularly?	1.00	0.49
V22	Do the people who are close to you recommend organic food to you?	1.00	0.49
V23	Given the public opinion, do you think people consider organic food better than non-organic?	1.00	0.47
Average:		1.00	0.46

SD: standard deviation

The average median value of 1.00 for the *subjective norms* variable indicator shows that the respondents agreed that several persons who are significant to them and whose views they value when it comes to decisions making about which food to consume, do suggest organic food to them. Table 4.11 shows that the KMO measure of sampling adequacy is a favourable 0.51, thereby showing sample appropriateness. Moreover, Bartlett’s test of sphericity value showed a chi-square total of 25.52, which is significant at ≤ 0.001 , further demonstrating that there were acceptable associations amongst the variables included in the analysis. Therefore, it is concluded that the factor analysis is appropriate and construct validity is confirmed.

TABLE 4.11: Kaiser-Meyer-Olkin (KMO) and Bartlett’s test for *subjective norms*

Kaiser-Meyer-Olkin measure of sampling adequacy		0.510
Bartlett’s test of sphericity	Approx. chi-square	25.524
	df	3
	Sig.	0.001

df = degrees of freedom represent how many values involved in a calculation are allowed to vary

Table 4.12 reflects the total variance explained, which shows that only the first component recorded eigenvalues above 1 (1.303). This component explains just less than half (43.447%) of the variance for component 1.

TABLE 4.12: Total variance explained for *subjective norms*

Initial eigenvalues				Extraction sum of squared	
Component	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.30	43.45	43.44	1.30	43.45
2	0.97	32.40	75.51		
3	0.72	24.15	100.00		

The component matrix (Table 4.13) shows that all variables loaded closer to 1 (V21 = 0.71, V22 = 0.79, and V23 = 0.43) and higher than 0.400; therefore, all variables can be seen as loading on one factor named subjective norms. This analysis further indicates that the respondents agreed that their family and close friends consume and recommend organic food to them. This analysis is aligned with previous research that found that consumers' behaviours are indeed motivated by the guidance or views of important persons in their lives, predominantly the ones which they highly respect (Voon et al., 2011; Basha & Lal, 2019).

TABLE 4.13: Component matrix for *subjective norms*

	Component 1
V21	0.71
V22	0.79
V23	0.43

4.2.5 Consumer attitude

Consumer attitude consisted of five questions that aimed to measure if a positive attitude of purchasers towards organic food will optimistically influence their intent to purchase organic foods. The five variable indicators were gauged on a dichotomous scale with 1 representing 'Yes' and 2 representing 'No'. As shown in Table 4.14, the median value for all *consumer attitude* variable indicators was at 1.00, demonstrating a positive response for this predictor variable.

TABLE 4.14: Descriptive statistics: predictor variable for *consumer attitude* (N=301).

Variable number	Questionnaire statement	Median	±SD
V24	Organic food is higher in quality than conventionally grown.	1.00	0.36
V25	Organic food is healthier than conventionally grown.	1.00	0.37
V26	Organic food is safer than conventionally grown.	1.00	0.35
V27	Organic food is fresher than conventionally grown.	1.00	0.42
V28	Organic food is tastier than conventionally grown.	1.00	0.44
Average:		1.00	0.39

SD: standard deviation

The median value of 1.00 for *consumer attitude* demonstrates that the participant could probably have an enjoyable, favourable, desirable and optimistic attitude for organic food. The respondents believe that organic food is higher in quality, healthier, safer, fresher and tastier than conventionally grown food. As reflected in Table 4.15, the KMO measure of sampling adequacy is a favourable 0.812, thus showing sample suitability. Moreover, Bartlett’s test of sphericity value shown a chi-square total of 376.893, which is significant at ≤ 0.001 , further demonstrating that there were satisfactory associations amongst the variables included in the analysis and the EFA could be completed and construct validity was confirmed.

TABLE 4.15: Kaiser-Meyer-Olkin (KMO) and Bartlett’s test for *consumer attitude*

Kaiser-Meyer-Olkin measure of sampling adequacy		0.81
Bartlett’s test of sphericity	Approx. chi-square	376.89
	Df	10
	Sig.	0.001

df: degrees of freedom represent how many values involved in a calculation are allowed to vary

Table 4.16 reflects the total variance explained, which shows that only the first component recorded eigenvalues above 1 (2.68). This component explains a total of 46.87% of the variance for component 1.

TABLE 4.16: Total variance explained for *consumer attitude*

Initial eigenvalues				Extraction sum of squared	
Component	Total	% of Variance	Cumulative %	Total	% of Variance
1	2.68	53.52	53.52	2.68	53.52
2	0.76	15.19	68.70		
3	0.61	12.25	80.96		
4	0.49	9.89	90.84		
5	0.46	9.16	100.00		

The component matrix as presented in Table 4.17 shows that all variables loaded closer to 1 (V24 = 0.80, V25 = 0.75, V26 = 0.75, V27 = 0.68 and V28 = 0.67) and higher than 0.400, therefore all five variables can be seen as loading on one factor named consumer attitude. This analysis further suggests that the participant had a positive attitude towards organic food. This result is supported by earlier research that discovered that purchasers with positive attitudes towards organic food, purchase organic food for the reason that they consider such foods to be beneficial to their health (Suprpto & Wijaya, 2012; Bee Lian et al., 2016; Basha & Lal, 2019).

TABLE 4.17: Component matrix for *consumer attitude*

	Component 1
V24	0.80
V25	0.75
V26	0.75
V27	0.68
V28	0.67

4.2.6 Intention to purchase

Intention to purchase consisted of six questions aimed to measure the respondents' intention to purchase organic food. The six variable indicators were measured on a dichotomous scale with 1 representing 'Yes' and 2 representing 'No'. As indicated in Table 4.18, the median value for every *intention to purchase* variable indicator was at 1.00 for V29, at 1.00 for V30, at 1.00 for V31, at 2.00 for V32, at 1.00 for V33 and at 1.00 for V34, demonstrating a positive response for this predictor variable.

TABLE 4.18: Descriptive statistics: predictor variable for *intention to purchase* (N=301).

Variable number	Questionnaire statement	Median	±SD
V29	When buying food, do you consider the price as an important factor?	1.00	0.39
V30	Do you consider organic food products as being more expensive than conventional food products?	1.00	0.39
V31	Do you find organic food in the stores where you usually shop?	1.00	0.47
V32	Do you find it difficult of find organic food products?	2.00	0.50
V33	Are you willing to buy organic food products?	1.00	0.27
V34	Would you buy more organic food if it was cheaper?	1.00	0.22
Average:		1.16	0.37

SD: standard deviation

The average median value of 1.16 for *intention to purchase* indicates that, even though the respondents considered price as an important factor when buying food and also considered organic foods as being more expensive than conventional food products, they were still willing to purchase organic food. The results also show that, although some respondents found organic food in the stores where they usually shop, other respondents still found it difficult to find organic food products. This therefore, still confirms the issue of availability concerning organic foods as a barrier to such purchases.

Table 4.19 illustrates that the KMO measure of sampling adequacy is a favourable 0.506, thus indicating sample adequacy. Moreover, Bartlett’s test of sphericity value reflected a chi-square total of 10.270, which is not significant because the p-value is at 0.114, demonstrating that there were no satisfactory associations amongst the variables involved in the analysis.

TABLE 4.19: Kaiser-Meyer-Olkin (KMO) and Bartlett’s test for *intention to purchase*

Kaiser-Meyer-Olkin measure of sampling adequacy		0.51
Bartlett’s test of sphericity	Approx. chi-square	10.27
	df	6
	Sig.	0.114

df: degrees of freedom represent how many values involved in a calculation are allowed to vary

Table 4.20 reflects the total variance explained, which shows that only component 1 and 2 recorded eigenvalues above 1 (1.18 and 1.06, respectively). These components explain i.e. more than 50% in total of 29.49% and 26.59% of the variance for component 1 and 2, respectively, therefore, components 3 and 4 are extracted.

TABLE 4.20: Total variance explained for *intention to purchase*

Component	Initial eigenvalues			Extraction sum of squared	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	1.18	29.49	29.49	1.18	29.49
2	1.06	26.59	56.08	1.06	26.59
3	0.92	22.95	79.03		
4	0.84	20.97	100.00		

The component matrix in Table 4.21 shows that, when conducting the EFA, it became clear that certain variables did not load well on the components. It was therefore decided to remove some of the variables in a systematic manner to see whether the loadings improved. The variables with the lowest loadings were removed in ascending order, one by one. The findings were scrutinised after each variable was removed to see if the loadings improved. Firstly, V32 was removed to see if the loadings will improve. However, the loadings were still unsatisfactory and, therefore, V30 was also

removed. The remaining four variables were calculated again and two factors (V33 and V34) for component 1 and one factor (V29) for component 2 emerged, as can be seen in Table 4.21.

The two factors for component 1 concerned the respondent’s willingness to buy organic foods if the price was lower and one factor which loaded separately on component 2 related to the importance of the price of organic food to the respondents. This analysis indicates that the respondents considered price as an important factor when buying food and would be willing to buy more organic food if such foods were cheaper. These results are aligned with previous studies that report that high prices persists to inhibit organic food purchase by average consumers and it is complex to vindicate the high prices for the reason that the fitness gains are often difficult to quantify (Shafie & Rennie, 2012). However, a study conducted by Mohamed et al. (2012) showed results conflicting with this study and concluded that health-conscious organic consumers were prepared to pay a premium price for superior quality organic foods. Therefore, taking into consideration the demographic profile of the respondents of this current study, the better income earners were more than 60% of the respondents. Although the average respondent could indeed be regarded as well-off, the wealth of the respondents decreased as the income categories increased, indicating that there were few extremely wealthy respondents. This can then explain why the respondents considered price as an important factor when buying food. Because income is a factor considered important for influencing the purchase of organic food, where wealthier households are more likely to purchase organic food because they can more easily afford the price premium of organic foods than lower income households (Dumortier et al., 2017).

TABLE 4.21: Component matrix for *intention to purchase*

	Component 1	Component 2
V29	0.11	0.80
V31	0.44	0.55
V33	0.71	0.14
V34	0.69	0.34

4.2.7 Actual consumption behaviour

The *actual consumption behaviour* section consisted of six questions aimed to measure the respondents' actual consumption behaviour regarding organic food consumption. The six variable indicators were gauged on a 5-point Likert scale. The scale range varied from 1, indicating the extreme negative point (strongly disagree) to 5, representing the extreme positive point (Strongly Agree) and lastly 3, representing a neutral point (neutral) for *actual consumption behaviour*. As reflected in Table 4.22, the median value for each *actual consumption behaviour* variable indicator averaged at 3.67 for all the variables, indicating a slight positive response for this predictor variable.

TABLE 4.22: Descriptive statistics: predictor variable for *actual consumption behaviour* (N=301).

Variable number	Questionnaire statement	Median	±SD
V35	I purchase organic food	3.00	0.97
V36	I purchase organic food on a regular basis	3.00	1.00
V37	I intend to continue to purchase organic food	4.00	0.95
V38	I plan to increase the amount of organic food I purchase	4.00	0.98
V39	I plan to start purchasing different types of organic food products	4.00	0.97
V40	I intend to continue purchasing organic products on a regular basis	4.00	1.03
Average:		3.67	0.98

SD: standard deviation

This positive response indicates that some respondents do agree that they purchase organic food and that they also at that times did or wished to purchase such foods more. This result further indicates that even though the respondents had an intention to purchase organic food they still displayed low actual shopping behaviour thereof, which shows an intention-behaviour gap. Lack of confidence and trust in the South African organic food product may be one of the reasons for low actual shopping behaviour of the respondents, as was found by Essoussi and Zahaf (2008), who mention that there was reluctance from some regular consumers to purchase organic food from grocery stores even when labels confirmed a product as organic. The reason for this reluctance was

that these consumers doubted the authenticity of the certification of the products. The authors further mention that it still remains unclear whether South African consumers trust the certification process of organic foods in the country because it is technically done on a voluntary basis through self-regulation. Because there is no formal regulatory system that all organic producers and retailers should conform to, the component of trust in this voluntary system may be regarded as an extremely important factor in the decision-making process.

As reflected in Table 4.23, the KMO measure of sampling adequacy is a favourable 0.85, thus indicating sample appropriateness. Moreover, Bartlett’s test of sphericity value showed a chi-square total of 1372.857, which is significant at ≤ 0.001 , further demonstrating that there were satisfactory associations amongst the variables involved in the analysis and the EFA could be completed and construct validity was confirmed.

TABLE 4.23: Kaiser-Meyer-Olkin and Bartlett’s test for *actual consumption behaviour*

Kaiser-Meyer-Olkin measure of sampling adequacy		0.852
Bartlett’s test of sphericity	Approx. chi-square	1372.857
	Df	15
	Sig.	0.001

df: degrees of freedom represent how many values involved in a calculation are allowed to vary

Table 4.24 reflects the total variance explained, which shows that only one component recorded eigenvalues above 1 (4.13). This component explains less than half of the variance for component 1, with a total of 68.87%.

TABLE 4.24: Total variance explained for *actual consumption behaviour*

Initial eigenvalues				Extraction sum of squared	
Component	Total	% of Variance	Cumulative %	Total	% of Variance
1	4.13	68.87	68.87	4.13	68.87
2	0.95	15.79	84.65		
3	0.32	5.31	89.97		
4	0.23	3.89	93.86		
5	0.20	3.26	97.11		
6	0.17	2.89	100.00		

The component matrix in Table 4.25 shows that all variables loaded closer to 1 (V35 = 0.79, V36 = 0.74, V37 = 0.86, V38 = 0.86, V39 = 0.82 and V40 = 0.90) and higher than 0.400, therefore all variables can be seen as loading on one factor named actual consumption behaviour.

TABLE 4.25: Component matrix for *actual consumption behaviour*

	Component 1
V35	0.79
V36	0.74
V37	0.86
V38	0.86
V39	0.82
V40	0.90

4.2.8 Shopping behaviour (a)

Shopping behaviour consisted of three questions and was divided into two sections; the questions were aimed to measure the respondents' (consumers') shopping behaviour regarding organic food consumption. The first section had one question that comprised of six variable indicators which were gauged on a 5-point Likert scale. The scale range varied from 1, indicating the extreme negative point (not at all/never) to 5, indicating the extreme positive point (always/daily). As reflected in Table 4.26,

the median value for the variable indicator ranged from 2 to 3 for *shopping behaviour (a)*, indicating that the respondents sometimes if not often shop at the retail shops mentioned below.

TABLE 4.26: Descriptive statistics: predictor variable for *shopping behaviour (a)*

Variable number	Questionnaire statement	Median	±SD
<i>Indicate how often you shop at the following retail shops.</i>			
V41	Pick n Pay	3.00	1.11
V42	Checkers	2.00	1.20
V43	Woolworths	2.00	1.20
V44	Food Lover's Market	2.00	1.17
V45	Spar	3.00	1.17
V46	Farmers' markets	2.00	1.06
Average:		2.33	1.13

SD: standard deviation

The median value of 3.00 for V41 and V45 indicates that the respondents often (once a week) shopped at Pick 'n Pay and Spar for their organic food. Other respondents would sometimes (a few times/month) shop at Checkers, Woolworths, Food Lover's Market and/or at farmers' markets. This indicates that, for the respondents, there was not merely one store at which to purchase organic food products, but rather that the respondents purchased from a variety of retail outlets. The least favourable option was, however, that of the farmers' markets. This agrees with the study conducted in Cape Town by Du Toit and Crafford (2003), who concluded that a lot of purchasers bought their organic food only from a particular seller; the consumers further indicated that the place of purchase was important and that accessibility was a priority. The authors further mention that the consumers also assumed that organic food purchased from a particular retail store had fewer discolorations in comparison to the products from farmers' markets.

4.2.9 Shopping behaviour (b)

The second section which measured the respondents' shopping behaviour had two sub-sections (section A & B) and a total of three questions; the questions were aimed to measure the respondents' actual shopping behaviour of organic food. The first question in this section had two questions where *shopping behaviour (b)* was measured using a 3-point Likert scale which varied from 1, representing

the least preferred to 3, representing the most preferred. *Shopping behaviour (b)* was measured by selecting only one option that represented the respondents' opinion on the price premium they were willing to pay for organic food products. As reflected in Table 4.27, the median value for the variable indicators ranged from 1.00 to 3.00 for shopping behaviour of specific food products, indicating a positive response (i.e. 3) for vegetables, fruits & (i.e. 2) meat and a negative response for dairy & cooked food. The second sub-section reflected a median value of 2.00, indicating a positive response on their willingness to pay for just over 25% price premiums for organic food. The results are aligned with previous studies because, according to the Institute of Natural Resources (2008), South Africa mainly produces organic vegetables and fruits for the domestic market; therefore customers will buy what is available in the shops. Vermeir and Verbeke (2006) also mention that many consumers are willing to purchase organic food; however, availability remains a barrier to purchase such foods.

TABLE 4.27: Descriptive statistics: predictor variable for *shopping behaviour (b)* (N=301).

Variable number	Questionnaire statement	Median	±SD
What kind of organic food do you buy? Order your preference from 1 to 3: (1=less preferred and 3=most preferred)			
V47	Vegetables?	3.00	0.61
V48	Fruit?	3.00	0.66
V49	Dairy products?	2.00	0.72
V50	Cooked food?	1.00	0.72
V51	Meat?	2.00	0.80
How much would you pay for organic foods above of what you would pay for non-organic (price premium)? Select one option that indicates your opinion?			
V52	0 Up to 25% 26%–50% 51%–75% 76%–100% More than 100%	2.00	1.20
Average:		2.17	0.79

Section B of the shopping behaviour, EFA was conducted to understand the type of organic food the respondents buy the most and further find out the willingness of the respondents to pay for pay for these foods. The KMO measure of sampling adequacy was a favourable 0.64, thus indicating sample suitability. Furthermore, Bartlett's test of sphericity value reflected a chi-square total of 321.49, which is significant at ≤ 0.001 , further demonstrating that there were satisfactory associations amongst the variables involved in the analysis.

The total variance explained showed that two components recorded eigenvalues above 1 (2.24 and 1.24, respectively). These two components explain a total of 37.29% and 20.59% of the variance for component 1 and 2, respectively, with a combined percentage of 57.88%.

The component matrix in Table 4.28 shows that, although two components are evident when scrutinising of the data, Variable 47 loaded on both components; however, the loading on the second component was negative (-0.63), and due to the strong, positive loading (0.68) on the first component, this variable can be seen as rather falling into the first component, as opposed to the second. V48 also loaded on the two components, where the first component loaded positive (0.74) and the second component loaded negative (-0.53) and was therefore also regarded as the first component.

Although V49 and V50 also loaded on both components, with a value greater than 0.40 in both instances, the loading was higher on component 1, and therefore it can be seen as the variables belonging to component 1. Variable 51 and 52 only loaded with a value of greater than 0.40 on component 1 (0.62 and 0.43), and therefore the loading on the second component (0.38 and 0.39) can be disregarded. It is clear that all the variables loaded stronger on the single component 1; therefore, it can be concluded that mainly component 1 emerged. Therefore, this result, together with the median value shown in Table 4.30, further indicates that the respondents showed evidence of positive behaviour towards purchasing organic food; however, availability and the high price of organic foods remain barriers for actual purchase (Vermeir & Verbeke, 2006). Moreover, the results of the current study show that respondents had a high intention to purchase organic food and low actual shopping behaviour, which shows an intention-behaviour gap. The intention-behaviour gap is when consumers make clear decisions to change their behaviour but do not follow through on their

decisions, which may be as a result of barriers like availability, price, a lack of trust, poor presentation etc. (Carrington, Neville & Whitwell, 2014; Chiciudean et al., 2019; Chekima et al., 2019).

TABLE 4.28: Component matrix for *shopping behaviour*

	Component 1	Component 2
V47	0.68	-0.63
V48	0.74	-0.53
V49	0.62	0.31
V50	0.53	0.41
V51	0.62	0.38
V52	0.43	0.39

4.2.10 Summary

The frequency analyses, descriptive analyses and factor analyses of the measurement variables were performed in order to complete the respective research objectives set for the current research. Environmental concerns, health concerns, product quality, subjective norms, consumer attitude, actual consumption behaviour and shopping behaviour are the variables that were individually described and analysed. The assessment conducted involved descriptive statistics of the mean and standard deviation (\pm SD) values of each variable indicator, obtained from the results obtained from the questionnaire per section. The SPSS software was also used to conduct EFA. EFA was conducted by firstly calculating the KMO sampling adequacy and Bartlett’s test of sphericity; secondly the factor extraction was conducted using the eigenvalue (or Kaiser’s criterion) and, thirdly, the factor rotation was conducted which presented the pattern of loading. The results showed that there were satisfactory associations between some variables to conduct EFA and these results will further be discussed in detail in the next section.

4.3 FINDINGS RELATED TO OBJECTIVES

This section presents the findings related to the aim and objectives of the study. The aim of this research was to investigate the factors that influence consumer attitude towards organically produced food in the marketplace and how consumer attitude affects consumers’ buying intentions.

Therefore, the research objectives for this study included: (i) investigation of factors that influence consumers' attitudes towards organic foods, (ii) consumers' attitudes towards organic foods, (iii) consumers' intended buyer behaviour of organic foods and (iv) consumers' actual buyer behaviour of organic food products. The following section will discuss the results obtained per research objective.

4.3.1 Results pertaining to Objective 1

The first research objective set for this study was to investigate factors which influence consumers' attitudes towards organic foods. This objective was addressed in section 4.2. of this chapter where the median value of health concerns, product quality and subjective norms showed that these factors that make up the respondent's attitude were positive. Meaning that, the more conscious consumers are of their health, product quality, and/or more positively they are influenced by their family/friends' beliefs regarding the benefits of consuming organic food, the more positive their attitude towards organic foods should be. In order to answer Objective 1, multiple regression was done. Multiple regression is an arithmetical instrument which permits you to analyse how numerous self-reliant variables are correlated to a reliant variable (Mazzocchi, 2008). Therefore, when you have recognised how these numerous variables correlate to the reliant variable, the information about all of the independent variables can be used to generate stronger and more precise projections about why things are the way they are (Pallant, 2011).

The current study used stepwise multiple regression to evaluate the information for Objective 1 because it considers each single variable before entering it in the model (Yong & Pearce, 2013). It starts by adding the variable that shows the highest bivariate correlation with the reliant variable. Then the partial correlation of all remaining potential independent variables is explored and the explanatory variable with the highest partial correlation coefficients enters the model. After the model is re-estimated with two explanatory variables, the decision whether to keep the second one is based on the increase of the F-value. The F-value is the variability explained by the regression model with two variables, compared to the one with a single explanatory variable. If the increase in the F-value (or adjusted r-square, information criteria) is not significant, then the second variable is not included in the model. Moreover, at each step the process may drop one of the variables included in the model if the model without that variable does not show a significant decrease in the F-value (or any other targeted stepwise criterion) (Mazzocchi, 2008).

Table 4.29 shows the results of the multiple regression analysis using Pearson’s correlation. Pearson’s correlation coefficient is the statistical test which evaluates the statistical correlation, or connotation, amongst two incessant variables. It is acknowledged as the most excellent method of gauging the association between variables of appeal for the reason that it is grounded on the technique of covariance (Pallant, 2003). The closer the correlation value is to 1, the stronger the tendency, and the closer the correlation value to 0, the weaker is that tendency. If the p-value is less than 0.05, the null hypothesis is rejected, namely that there is no difference between the means and it can be concluded that a significant difference does exist (George & Mallery, 2019).

The analysis shows that three models were tested (only the third is shown here), with the three variables that met the entry requirement included in the final equation (*health concerns, product quality and subjective norms*). One variable did not meet the entry requirement (*environmental concerns*). The r-value of the entered variable, that is, *health concerns*, indicates a moderate correlation with attitude ($r = 0.49$) followed by *product quality* ($r = 0.47$), then *subjective norms* ($r = 0.27$). *Environmental concerns* ($r = -0.10$) indicated a weaker correlation in relation to attitude. This means that *environmental concerns* had a weak relationship with *attitude*. This result is meaningful and slightly surprising because organic food consumption is related to a concern for the environment (Nguyen et al., 2019). However, the findings in the current research align with a previous study that was conducted by Bisschoff and Liebenberg (2016), who found that, though numerous individuals are aware of and worried about environmental sustainability, this does not at all times influence them to demonstrate pro-environmental conduct, which translates to the buying and use of organic foods in this particular instance.

TABLE 4.29: Pearson’s correlation of different factors that influence consumers’ *attitude* towards organic foods

Dependent Variable	Predictor Variable			
	Environmental concerns	Health concerns	Product quality	Subjective norms
Attitude	$r = -0.10$	$r = 0.49$	$r = 0.47$	$r = 0.27$
	$p = 0.04$	$p = \leq 0.001$	$p = \leq 0.001$	$p = \leq 0.001$

As reflected in Table 4.30, the multiple regression shows a substantial correlation between the three predictor variables and the dependent variable *attitude*. The R-squared (R^2) value indicates that about 35% of the variance in *attitude* is explained by the three predictor variables. The beta (β) value indicates the relative influence of the entered variable, that is, *health concerns* had the greatest influence on *attitude* ($\beta = 0.38$) followed by *product quality* ($\beta = 0.37$) and then *subjective norms* ($\beta = 0.12$). The direction of influence for all three are positive. The results clearly show that *health concerns* had the greatest influence on the respondents' attitudes towards organic food.

TABLE 4.30: Multiple stepwise regression of factors influencing consumers' *attitude* towards organic food

Dependent Variable: Attitude				
R Squared (R^2)	0.35			
Adjusted R^2	0.34			
Predictor Variable	Beta (β)	(95 % Confidence interval)		p-value
Health concerns	0.38	0.27	0.49	≤ 0.001
Product quality	0.37	0.24	0.51	≤ 0.001
Subjective norms	0.12	0.03	0.21	≤ 0.01

The median value of health concerns in section 4.2, as well as the multiple regression analysis clearly show that *health concerns* had the greatest influence on the respondents' attitudes towards organic food, followed by *product quality* and then *subjective norms*. *Environmental concerns* showed the least influence on consumers' attitudes towards the purchasing of organic foods. These results are aligned with previous studies. A study conducted by Yang et al. (2014) on consumer attitude and purchase intention for organic food concluded that health consciousness was verified to have an effect on consumer attitude towards organic food. The authors further mentioned that, in contrast, environmental concern did not appear to have an obvious influence on consumer attitude and their hypothesis in this regard was rejected. Salleh et al. (2010) also state that their results showed that health concerns show the sturdiest correlation with consumer attitude in purchasing organic food products, as compared to the environmental concern factor. They further mention that it can then be argued that consumers who are progressively worried about ecological matters do not always show this in their decisions when making a purchase of (organic) foods. A study on consumer attitude

towards organic food conducted by Basha et al. (2015) also concluded that health concerns positively motivate the purchase intention of organic food, as opposed to environmental concerns. According to Konuk (2019), food quality attributes such as taste, shape, and appearance of food as a stimulus may influence customers' internal evaluations, which in turn increase their willingness to purchase organic food.

4.3.2 Results pertaining to Objective 2

The second research objective set for this study was to investigate consumers' attitudes toward organic foods. This objective was addressed in section 4.2.5 where the descriptive analysis and EFA (i.e. the KMO, Bartlett's test and component matrix) of consumers' attitudes showed that the respondents believed organic food to be higher in quality, healthier, safer, fresher and tastier than conventionally grown food. The results of the analysis indicated that the respondents had positive attitudes towards organic food. Anvar and Venter (2014) mentioned that, according to Ajzen's theory of planned behaviour, consumers' beliefs also form attitudes, which are translated into intentions and behaviour. The authors further concluded that the correlation between attitude and behaviour showed positive results, which clarifies that the more optimistic a person's attitude towards green products, the more likely they will buy organic foods.

4.3.3 Results pertaining to Objective 3

The third research objective set for this study was to determine consumers' intended buyer behaviour of organic foods. Objective 3 was answered in section 4.2.6 on the *intention to purchase* organic food, which indicates that, even though the respondents considered price as an important factor when buying food and also considered organic foods as being more expensive than conventional food products, they were still willing to buy more organic food. The results also showed that, although some respondents found organic food in the stores where they usually shop, other respondents still found it difficult to locate organic food products. The median value of V33 (*Are you willing to buy organic food products?*) was 1.00, as shown in Table 4.18, which further confirms the respondents' intentions to buy organic food. Furthermore, V34 (*Would you buy more organic food if it was cheaper?*) was 1.00, as shown in Table 4.18, also demonstrating that the respondents would buy more organic food if it was cheaper. These results indicate that the respondents showed a positive attitude towards organic food, therefore intending to buy more organic foods in future. This agrees with the study conducted by Tarkiainen and Sundqvist (2005), which resolved that there is a

substantial positive relationship among the attitude towards purchasing organic food and the intention to purchase. There is a positive relationship between consumers' attitudes and consumers' intentions to purchase organic food. Previous studies confirmed that consumers with a positive attitude towards organic food, based on belief and evaluation, led to their purchasing of organic food (Bee Lian et al., 2016; Saleki et al., 2012; Suprpto & Wijaya, 2012; Basha & Lal, 2019).

4.3.4 Results pertaining to Objective 4

The fourth research objective set for this study was to investigate consumers' actual buyer behaviour of organic food products. Although the results in section 4.3.3 on intention to purchase indicated that the respondents had a positive attitude towards organic food and intended to buy more organic foods, the current study went further to investigate the consumers' actual shopping behaviour and not merely to validate their intention to purchase. Objective 4 was answered in section 4.2.7 which assessed and analysed respondents' shopping behaviour of organic food products. The results showed a neutral response to the shopping behaviour of organic food. The neutral response indicates that the respondents neither agreed nor disagreed that they purchased more organic food at the time of the survey or would like to do so in the future.

This result shows that respondents had a high intention to purchase organic food but neutral actual shopping behaviour, which shows an intention-behaviour gap. The intention-behaviour gap is the phenomenon where people develop explicit decisions to change their behaviour but do not take the necessary action to translate intention to actual behaviour (Carrington et al., 2014). This result concurs with previous studies that show that growth in the demand for organic products is expected in many European countries and the emerging economies of Brazil, South Africa, India and China, but regardless of the growth of the organic food industry and consumers' health concerns, specifically in South Africa, there are several barriers that can deter consumers from purchasing organic food products. These barriers include a lack of accessibility of organic food, a lack of trust in and awareness of organic food, the price of organic products in comparison with non-organic products, a lack of information about such foods, and poor presentation, such as the amount of packaging used and uninviting displays in stores (Stolz et al., 2011; Willer & Yussefi, 2005; Paul & Rana, 2012; Vermeir & Verbeke, 2006; Padel & Foster, 2005; Vega-Zamora et al., 2019).

4.4 CHAPTER SUMMARY

The objective of this research was to investigate the factors that influence consumer attitude towards organic food in the marketplace and how consumers' attitudes affect their buying intentions. Chapter 4 depicted the findings from the demographic profile of the sample, as well as the descriptive analyses and inferential data analyses performed in order to complete the respective research objectives set for the current study. The final chapter will draw conclusions, present the implications of the results, address the limitations of the current research project and make recommendations for future research in the field.

CHAPTER 5

CONCLUSION

The previous chapter demonstrated the descriptive statistical analysis to examine the socio-demographic details of the sample population and attain a descriptive view of every acknowledged psychographic variable's functioning, followed by the presentation of the inferential statistics to meet the aim and objectives of the research study. Chapter 5 provides the conclusion of the investigation that was attained from the analysis and description of the data. Lastly, the chapter also addresses the research limitations and stipulates recommendations for future research.

5.1 INTRODUCTION

Results of this study were discussed in the previous chapter, in line with the aim of the study, and objectives set out in the first chapter of the thesis. The purpose of this study was to explore the factors that influence the purchaser attitude for organically produced foods in the marketplace and how consumers' attitudes influence their purchase intentions. Understanding the factors that influence the consumer in making these decisions is important in that one can ultimately alter these factors and thereby increase purchase and consumption of organic foods in order to aid environmental sustainability and consumer health (Idda et al., 2008).

In summary, the revision of literature in the second chapter of the dissertation showed that several authors agree that attention of organic food is growing globally in reaction to worries about conventional farming methods' impact on the environment, food safety and human health concerns and animal welfare considerations (Bee Lian et al., 2016; Azurra & Paola, 2009; Morgera et al., 2012; Shashi et al., 2015). Consumers in South Africa are turning out to be more aware of food safety, and more conscious of their health; therefore, increasing their organic food consumption, which is in line with worldwide consumer trends. South Africa produces certified organic products, but most products are, however, traded overseas because of elevated profits from foreign exchange rates. Some developing small-scale farmers in South Africa trade their organic products using the Fairtrade logo. Bearing in mind the above mentioned, the local market is increasing more or less at 30% per annum, but then again it is confronted with troubles of supply shortages (Institute of Natural Resources, 2008). The organic sector is greatly fragmented in South Africa. There is not a single

organisation which represents the interests of most organic farmers, and the organic sector in South Africa is also in a phase of institutionalisation (South Africa. DAFF, 2011).

Furthermore, the literature review showed that, although there is an expected growth in many European countries and in developing countries like South Africa, China and India, there is numerous stumbling block that can inhibit or discourage purchasers from buying organic food, which was discussed in detail in Chapter 2 (Willer & Yussefi, 2005; Stolz et al., 2011; Padel & Foster, 2005). The literature review also highlighted numerous different factors discovered to have an optimistic influence on consumer attitude for purchases of organic food; therefore, for this research project, a few factors were assessed and analysed by conducting a questionnaire survey.

Because of the quantitative makeup of the research, a descriptive research design was used to accomplish the aim and objective of the study, where information was gathered using purposive sampling, which was supplemented by snowball sampling to obtain a statistically significant sample. The respondents, who were adult (18 years of age or older) consumers residing in Gauteng, were presented with a questionnaire, and the data were analysed by means of descriptive and inferential statistics. The data collected via a questionnaire were used, to present the demographic and the psychographic profile of the respondents, statements were given on either a Likert or a dichotomous scale to determine the influential factors on the respondents' attitudes towards organic food and how their attitudes influenced their purchase intention and ultimately, their actual shopping behaviour (Chapter 3 and Chapter 4).

The last chapter in the research study concludes by summing up the psychographic and demographic outcomes of the research. Then, concludes with vital findings of the research relating to objectives of the study. Lastly, the limitations of the study were presented with the recommendations for future research.

5.2 DEMOGRAPHIC PROFILE OF THE RESPONDENTS

For the current study a purposive sampling method was employed, which was supplemented with snowball sampling to reach a statistically significant sample. Therefore, the findings are sample-specific restricted to the sample of this study and cannot be portrayed on a more overall bigger South African population. Respondents were South Africans, residing in the Gauteng Province, who were 18 years and older, and who were responsible for their domestic or household food purchases. The

majority of the respondent were between 20 to 39 years of age. This means that most of the respondents formed part of Generation Y, born between 1986 and 2002, and Generation X, born between 1965 and 1985. A majority of the respondents had a matric certificate and a post-matric qualification, which was a sign that they were well educated and would most likely have green consumption behaviour, as alluded to by the general green consumer profile described in different research studies. Half of the respondents were married (50%), while the majority were female (68%) and better income earners (43%), implying that most of the respondents would be motivated to take part in green or organic purchasing behaviour, as suggested by the literature.

5.3 PSYCHOGRAPHIC PROFILE OF THE RESPONDENTS

Consumers' environmental concerns can have an impact on their food choices because these consumers are most probable to buy food which are not harmful to the environment and several respondents, in the present study, indicated that it is vital that the food they consume has been yielded and packaged in an eco-friendly manner. The findings also indicate that on average about 60% of participants believed that organic food is less harmful to the environment than conventional foods. The respondents' preference for food that is produced and packaged in an environmentally friendly way, may be explained by their dissatisfaction with conventional food, which is produced by adopting intensive and often harmful agricultural methods. The growing globalism and industrialisation cause an increase in environmental issues such as air, land and water pollution and ozone depletion, with the increase of conventional production (Lian, 2016).

Conversely, the results also indicated that on average about 83% respondents believed that organic food is healthier and contains more nutrients than non-organic food products. The respondents also believed that organic food contains no harmful chemicals. These respondents' beliefs may be due to the fact that organic food is produced through natural farming methods where chemical pesticides and fertilisers, which may be responsible for such harmful components, are not used, though there is no explicit proof that organic foods are healthier than non-organic products in terms of the nutrient content of the various types of foods (Honkanen et al., 2006).

The psychographic results of this study further showed that on average about 65% respondents were concerned with the quality of the food they eat; they also thought organic foods are generally better in terms of quality and have more sensorial appeal (better taste, smell, colour, texture) than non-

organic food products. This result concurs with Saleki and Seyedsaleki (2012), who state that green or organic foods, in general, refer to foods that are of fine quality and safe to consume. Product quality refers to value for money; therefore price is generally perceived by the consumer as an indicator of product quality (Basha et al., 2015), which explains the respondents' belief that organic foods are of higher quality than conventional food. According to Doležalová et al. (2016), organic purchasers are generally slightly more quality-sensitive than other consumers and are not willing to compromise on quality in favour of a lower price. The aforementioned results, therefore, serve to affirm the demographic profile of the organic food consumer, as represented by the current study.

The findings additionally indicated that on average about 70% of the respondents agreed that their family and close friends eat organic food regularly and recommended organic food to them. Consumers are likely to be converted by advice or opinions of significant others, predominantly those whom they hold in high regard. This implies that their reference groups can influence consumers through both their opinions or advice, also through their individual behaviour (Vermeir & Verbeke, 2006). As indicated in the aforementioned, if the respondents' family and close friends consume organic food and recommend organic food to them, this will most likely influence the respondents' decision-making process to such a point where these consumers will then also purchase and consume organic foods.

5.4 FACTORS THAT INFLUENCE CONSUMERS' ATTITUDES TOWARDS ORGANIC FOOD (RESEARCH OBJECTIVE 1)

The first research objective was to investigate the factors that influence consumers' attitudes towards organic food. Based on the review of the existing literature, numerous diverse factors were discovered to be influential to consumer attitude for organic food. For the purpose of this study, only a few factors were assessed and analysed to determine their influence on consumer attitude towards organic food. Factors assessed and analysed for research Objective 1 included demographic factors (income and gender), environmental concerns, health concerns, product quality and subjective norms, as presented in the conceptual framework for the present research.

- *The influence of household income on consumer attitude towards organic food*

Income is a factor considered significant for influencing the buying of organic food, where consumers with a higher household income purchase organic food more frequently. The income variable has a positive influence on consumers' choices to purchase organic foods instead of non-organic foods, which means that wealthier households are more likely to purchase organic food since they can more easily afford the price of organic food than lower income households (Paul & Rana, 2012; Slamet et al., 2016; Dumortier et al., 2017). For this research study, it was concluded that the respondents who, coincidentally had a high income in a particular household, also had a positive influence on consumer attitude towards organic food.

Furthermore, EFA shown in section 4.2 revealed that all five attitude variable indicators loaded closer to 1 and higher than 0.400, therefore all five variables can be seen as loaded on one factor. Inferential statistical analysis indicated that consumer attitude additionally displayed a significantly positive effect; it can therefore be concluded that the respondents who generally had a better income in the current research project have an optimistic attitude for organic food.

- *The influence of consumers' gender on their attitude towards organic food*

Women are identified to have a higher health consciousness compared to men and are seen as innovators for change towards healthier diets, given their important roles in shaping a family diet. Women are generally also more committed to the consumption of natural foods, have stronger environmental values and an interest in the fairness of paying a premium price for environmentally friendly food products (Lockie et al., 2002; Paul & Rana, 2012).

- *The influence of consumers' environmental concerns on their attitude towards organic food*

Environmental concern is basically a positive attitude towards protecting the environment, which is an essential factor in influencing the consumers to alter their behaviour to be environmentally friendly (Hansla, Gamble, Juliusson & Garling, 2008). Consumers have become dissatisfied with conventional food products, which are produced by using intensive and often harmful agricultural methods. As a result, the popularity of organic produce increased as it adopts environmental-friendly methods of production (Lian, 2016). The results discussed in Chapter 4 showed that consumers had a concern for the environment. The high median value of environmental concerns indicates that

respondents, on average, agreed that it is important that the food they eat has been produced and packaged in an environmentally friendly manner. In addition, the respondents believed that organic foods are less harmful to the environment than non-organic foods.

Furthermore, inferential data analysis was conducted where the EFA for environmental concerns, as shown in section 4.2, revealed that all three variable indicators loaded closer to 1 and higher than 0.400 therefore, all three variables can be seen as loaded on one factor named environmental concerns. Therefore, the median value and the inferential statistical analysis concluded that the respondents agreed that it is important that the food they eat is produced and packaged in an environmentally friendly manner (Yong & Pearce, 2013). This result concurs with the literature review that indicated that, with the increase in environmental consciousness of consumers, they are more willing to contribute to protecting the environment, resulting in a favourable attitude towards organic food, as organic farming is environmentally friendly (Basha et al., 2015; Bee Lian et al., 2016; Voon et al., 2011; Bisschoff & Liebenberg, 2016). Environmental concern did however not load significantly onto the regression analysis and therefore environmental concern did not have a significant influence on attitude.

- *The influence of consumers' health concerns on their attitudes towards organic food*

Today's life is getting very competitive and challenging and the average consumer barely has time for physical activities, but at the same time, they are highly exposed to diseases (Basha et al., 2015). This may then result in concerns about their health and it places a greater emphasis on their subsequent food choices to stay healthy. A health concern, therefore, influences consumer attitude toward organic food consumption (Salleh et al., 2010; Basha et al., 2015; Paul & Rana, 2012). Health is defined as state of complete mental, social and physical well-being and as a means for living a complete life (WHO, 1948). It refers not only to the non-existence of illness, but the capability to recover and bounce back from illness and other problems (Nguyen, 2011). According to Magnusson et al. (2001), there are many factors that can affect a person's health such as food consumption, sickness, internal and external environmental factors. Consumers are generally becoming more conscious and worried about their state of health and are inspired to better or maintain their well-being (Basha et al., 2015). According to the results discussed in Chapter 4, health consciousness had a positive influence on organic food attitudes according to multiple regression.

The median value reported of the three variable indicators showed that most respondents believed that organic food is healthier and contains more nutrients than non-organic food. Furthermore, inferential data analysis was conducted where the EFA for health concerns, shown in section 4.2, revealed that all three variable indicators loaded closer to 1 and higher than 0.400, therefore all the variables can be seen as loaded on one factor named health concerns. Therefore, the median value and statistical analysis indicated that the respondents believed that organic foods are healthier than non-organic foods and contain no harmful chemicals (Yong & Pearce, 2013). This corresponds with several previous studies which concluded that health concerns were found to be *the* motivating factor of organic purchases and it is reflected in the positive association of attitude towards organic food (Mohamed et al., 2012; Salleh et al., 2010; Vietoris et al., 2016; Essoussi & Zahaf, 2008).

Other literature sources have also indicated that, even though there is no definite evidence that organic foods are more nourishing than non-organic foods, purchasers recognize foods marked as organic to be more nutritious than non-organic foods (Vietoris et al., 2016; McEachern & McClean, 2005; Sana et al., 2018). Thus, sellers must be cautious when claiming health benefits to motivate consumers to buy organic food because of the lack of evidence for this assumption (Honkanen et al., 2006; Vietoris et al., 2016).

- *The influence of product quality on consumers' attitudes towards organic food*

The food product quality is a subject of many debates, which resulted in different definitions of this term. The description of food quality is constantly altering. In the beginning, it was characterised by quantifiable or assessable factors. These days the all-inclusive approach to the question of quality is turning out to be more and more predominant (Rembiałkowska, Załęcka, Badowski & Ploeger, 2012). Consumers see price not only as of the cost of purchase but also as an indicator of product quality, which demonstrates a positive relationship between price and quality, as consumers tend to interpret a high price as an indicator of good quality (Doležalová et al., 2016). The regression analysis of the data collected for this study indicated that respondents' perceptions of organic food as "a higher quality food" positively influenced their attitudes towards organic foods.

The descriptive assessment of the four variable indicators were measured on a dichotomous scale with 1 representing 'Yes' and 2 representing 'No'. The average median value of 1.00 for *product quality* indicates that the respondents were concerned with the quality of the food they eat, and they

thought organic food is generally better in terms of quality, with a better sensorial appeal (better smell, texture, colour, and taste.) than non-organic food products.

Furthermore, inferential data analysis was conducted where, the multiple regression showed a substantial correlation between the three predictor variables and the dependent variable **attitude**. The results evidently showed that *health concerns* had the greatest influence on the respondents' attitudes towards organic food. Therefore, the median value of health concerns in section 4.2, as well as the multiple regression showed that *health concerns* had the greatest influence on the respondents' attitudes towards organic food, followed by *product quality* and then *subjective norms* (Yong & Pearce, 2013). These results are aligned with previous studies, (Yang et al., 2014; Salleh et al., 2010; Basha et al., 2015; Konuk, 2019) that also exposed that health concerns shows the sturdiest correlation with consumer attitude in purchasing organic food products, as compared to the environmental concern factor.

- *The influence of subjective norms on consumers' attitudes towards organic food*

Subjective norms "are the apparent societal demands of persons who are significant to an individual, that have an influence on their decision making to execute or not to execute a specific behaviour" (Schwartz, 1973). These subjective norms are expectations that groups or significant referents have on an individual (Voon et al., 2011; Yang et al., 2014). The substantial influence of subjective norms on preparedness to pay reflects high-power remoteness principles. As previously stated, consumers are for that reason expected to be manipulated by the views or guidance of important people in their lives, mainly the ones they highly respect (Voon et al., 2011; Vermeir & Verbeke 2006). The results of the regression analysis in Chapter 4 showed that subjective norms do exert a positive influence on attitudes towards organic food.

The descriptive evaluation of *subjective norms* involved the evaluation of three variable indicators, measured on a dichotomous scale which had two answer choices, where 1 represented "Yes" and 2 represented "No". The average median value of 1.00 for the *subjective norms* variable indicator shows that the respondents agreed that individuals that are significant to them and whose views they respect with regards to decisions making about the type of food to consume, do recommend organic food to them. Furthermore, inferential data analysis was conducted where the component matrix for environmental concerns, shown in section 4.2, revealed that all three variable indicators

loaded closer to 1 and higher than 0.400, therefore all four variables can be seen as loaded on one factor. Consequently, it is determined that when a respondent has a positive subjective norm regarding organically produced food, the more likely they will have the intention to buy organic foods. It is therefore concluded that the respondents were collectivist in nature, meaning that they had a stronger need to conform to the consumption choices of significant others (Voon et al., 2011) and were vulnerable to interpersonal influences and reputation, which are worried about others' appraisal.

Tarkiainen and Sundqvist (as cited in Saleki et al., 2012:280) found a "significant positive method association for organic food usage through attitudes and subjective norms". In relation to attitude, the authors found that subjective norms hold a positive effect on consumer attitude towards organically produced food. This corresponds with the research by Bamberg and Moser (2007) who also claimed an effect of social norms on consumer attitude.

This study also used stepwise multiple regression to further analyse the data for Objective 1 as it considers every single variable before entering it in the model. The results showed that health concerns, product quality and subjective norms have a positive effect on the respondents' attitudes towards organic foods; however, environmental concerns did not have a significant influence on the respondents' attitudes towards organic food. This result is meaningful because it aligns with a previous study that was conducted by Bisschoff and Liebenberg (2016), reporting that, even though many people are aware of and worried about environmental sustainability, this does not always influence them to participate in pro-environmental behaviour. Stated differently, although the respondents did indeed have the opinion that organic foods are much more beneficial to the environment and that they did care for the environment, care for the environment did not translate into organic food purchases.

Furthermore, as reflected in Table 4.30, the multiple regression shows a significant correlation between the three predictor variables and the dependent variable **attitude**. The beta (β) value indicated the relative influence of the entered variable, that is, *health concerns* had the greatest influence on attitude ($\beta=0.38$), followed by *product quality* ($\beta=0.37$) and then *subjective norms* ($\beta=0.12$). The direction of influence for all three is positive. The results clearly show that health concerns had the utmost influence on the participants' attitudes for organic food. These results coincide with the earlier research that indicated that health concerns represent the sturdiest

correlation with consumer intention to buy organic food in comparison to environmental concern factor (Salleh et al., 2010), which was indeed surprising. A study on consumer attitude towards organic food conducted by Basha et al. (2015) also concluded that health concerns positively motivate the purchase intentions of organic food.

5.5 CONSUMERS' ATTITUDES TOWARDS ORGANIC FOODS (RESEARCH OBJECTIVE 2)

The second objective set for the current project was to investigate consumers' attitudes towards organic foods. Attitude towards a behaviour refers to the degree to which a person has a positive or negative valuation or assessment of the behaviour in question. An attitude develops through involvements and can change when new experiences are attained. The more positive the attitude is related to a behaviour, the sturdier is the consumer's intention to accomplish the behaviour in deliberation (Tarkiainen & Sundqvist, 2005).

The descriptive performance of consumers' attitudes included the evaluation of five indicator variables measured on a dichotomous scale which had two answer choices, where 1 represented "Yes" and 2 represented "No". The average median value of 1.00 for consumer attitude shows that the respondents would most likely have a positive attitude towards organic food. The respondents believed that organic food is higher in quality, healthier, safer, fresher and tastier than conventionally grown food. The mean factor score indicated that the respondents had a positive attitude towards organic food, which is aligned with previous studies that found that a positive attitude of consumers towards organic food, based on belief and evaluation, leads to the purchase of organic food because it is considered beneficial for them (Suprpto & Wijaya, 2012; Bee Lian et al., 2016).

5.6 CONSUMERS' INTENDED BUYER BEHAVIOUR OF ORGANIC FOOD (RESEARCH OBJECTIVE 3)

The third objective set for the current study was to determine consumers' intended buyer behaviour for organic foods. According to previous studies like that of Aertsens et al. (2009), organic food consumptions are positively correlated to intentions of buying in grouping with (perceived) behavioural control. Intentions are, in turn, motivated by attitude (personal and subjective), norms and (perceived) behavioural control. Suprpto and Wijaya, (2012) as well as Bee Lian et al. (2016), mention that there is a positive relationship between consumers' intentions to purchase, their attitudes and the actual purchase of organic food. The authors further concluded that consumers with positive attitudes towards organic food, based on belief and evaluation, will purchase organic

food because it is considered beneficial for them, which is also proposed in the conceptual framework of the current study (Figure 2.2). For the current research study, the collected data were assessed and analysed to determine the intention of consumers to purchase organic food.

The descriptive performance of *intention to purchase* included the assessment of six variable indicators, which were measured on a dichotomous scale with 1 representing 'Yes' and 2 representing 'No'. The average median value of 1.16 for *intention to purchase* indicates that, even though the respondents considered price as an important factor when buying food and also considered organic foods as being more expensive than conventional food products, they still intended to buy organic food (Yong & Pearce, 2013). The results further show that, although some respondents found organic food in the stores where they usually shop, other respondents still found it difficult to locate organic food products. This, however, still did not change their positive, albeit slight, intention to buy more organic food.

Descriptive statistics indicated that the respondents considered price as an important factor when buying food and would be prepared to buy more organic food if it was cheaper. This result is aligned with previous studies reporting that premium price continues to hold back organic food consumption by the average consumer, and it is complicated to justify the premium because the health benefits are often difficult to quantify (Shafie & Rennie, 2012). There is a positive relationship between consumer attitude and consumer intention to purchase organic food. Consumers with positive attitudes towards organic food, based on belief and evaluation, lead to the purchase of organic food (Bee Lian et al., 2016; Saleki et al., 2012; Suprpto & Wijaya, 2012). Although the respondents could be regarded as consumers with better income, the price still remained a barrier to the purchase and consumption of organic foods, as can be seen in Objective 4.

5.7 CONSUMERS' ACTUAL BUYER BEHAVIOUR OF ORGANIC FOOD PRODUCTS (RESEARCH OBJECTIVE 4)

The last objective of the current study was to investigate consumers' actual buyer behaviour of organic food products. The relationship between consumer intention and actual behaviour assumes that people try to make logical choices grounded on the proof accessible to them. Consequently, an individual's intention to execute (or not to execute) a specific behaviour is the direct determining factor of that individual's actual behaviour (Ajzen & Fishbein 1980, Teng & Wang 2015).

The actual consumption behaviour involved the evaluation of six variable indicators which were evaluated on a 5-point rating scale. The median value for each actual buyer behaviour variable indicator averaged at 3.67 for all the variables, signifying a slight positive response for this predictor variable. This response indicates that the respondents were positive about the actual purchase of organic foods, meaning that they agreed that they purchased or intended to purchase more (or less) organic food at the time or in the future. This result shows that respondents had a high intention to purchase organic food and displayed low actual shopping behaviour thereof, which shows an intention-behaviour gap. The intention-behaviour gap is the phenomenon where people develop explicit decisions to change their behaviour but do not take action (Carrington et al., 2014). This result concurs with previous studies indicating that, even though growth in the demand for organic products is expected in many European countries and the emerging economies of Brazil, South Africa, India and China, regardless of the growth of the organic food industry and consumers' health concerns, especially in South Africa, there are several barriers that can deter consumers from purchasing organic food products. These barriers include a lack of availability of organic products, a lack of trust in and awareness of organic food, the price of organic products in comparison to conventional products, a lack of information about such foods, and poor presentation, such as the amount of packaging used and unappealing displays in stores (Stolz et al., 2011; Willer & Yussefi, 2005; Paul & Rana, 2012; Vermeir & Verbeke, 2006; Padel & Foster, 2005).

5.8 SUMMARY OF THE MAIN RESEARCH FINDINGS

This segment gives the summation of the major findings obtained throughout the assessment and evaluation of the objectives and purpose of the study that was discussed earlier. The initial four findings resulted straight from the research goals set for the study, whereas the remnants are additional findings, that were revealed unintentionally throughout the researches.

Firstly, it was found that health concerns, product quality and subjective norms, but not environmental concerns, have a positive effect on consumer attitude towards organic food. The results show that health concerns had the greatest influence on the respondents' attitudes towards organic food, followed by product quality, then subjective norms. Environmental concerns showed the least influence on the consumers' attitudes towards organic foods.

Secondly, it was found that the respondents had a positive and favourable attitude towards organic food. The respondents (organic food consumers) believed that organically produced food is high in quality, is healthier, safer, fresher and tastier than conventionally grown food.

Thirdly, it was found that, even though the respondents considered price as an important factor when buying food and considered organic foods as being more expensive than conventional food products, they still intended to buy more organic food. The results also further show that, although some respondents found organic food in the stores where they usually shop, other respondents still found it difficult to find organic food products, but this still did not change their intention to buy more organic food.

Fourthly, it was found that, although the respondents had a strong intention to purchase organic food, this did not translate into actual purchase behaviour as the results showed a low measure of actual shopping behaviour, which points to an intention-behaviour gap. This means that, although the respondents had a high intention to purchase organic food, there are strong barriers that hinder them from making the actual purchase of organic foods.

The fifth research finding discovered that these respondents (Gauteng consumers) were collectivist in their character; that is, the respondents had social pressure to engage and comply with group behaviour. This means that the respondents were, therefore, more likely to be influenced by the advice or opinions of significant others. The finding was supported when *subjective norms* showed a strong influence on consumer attitude towards organic food.

Lastly, the demographic profile and the respondents' characteristics as consumers who intend to purchase organic foods confirmed that they most generally fit into Generation Y and X cohorts, black, women, well-educated and working, and will probably purchase organic food. Additional findings reveal that the marital status of respondents did not conform to the general demographic profile of the organic consumer. In regard to the above research findings, the next segment discusses the limitations of the current research study.

5.9 LIMITATIONS OF THE STUDY AND FURTHER RECOMMENDATIONS

It is imperative to take notice of the fact that no research study is lacking limitations. Hence, it is essential to present and discuss the limitations of the current research study. The following

limitations set a basis for future research to take into consideration. This section deliberates the restrictions with regards to theoretical and methodological approaches the researcher used.

The first limitation arises from the sampling method used, namely, purposive and snowball sampling. Because of resource and time restrictions, the investigator sought to find a specific sample (300 respondents) population in South Africa using an in-store intercept approach, supplemented with snowball sampling. In respect of that, the conclusions of the study cannot be general to the whole South African populace. Therefore, it is recommended that a bigger, more representative sample could be used to cover more regions or provinces in order to gain data that can be generalised. This implies that, to efficiently achieve the conclusions to best signify the overall South African residents, it could be beneficial for future studies to implement a random and/or quota sampling method. Although it might be expensive and time-consuming, this could be achieved by establishing an electronic questionnaire to have pre-determined quota conditions or to be distributed via a random selection of respondents.

A second limitation is founded on the research design because, the present study was quantitative. Quantitative research intends to generalise the results to the populace and there is a low level of involvement between researcher and respondents since such research deals with several respondents (Leung, 2015). Therefore, it is suggested that a qualitative method must also be employed in a forthcoming investigation to collect more in-depth data about this specific topic. In consideration of the abovementioned sampling limitation, it would be important to integrate a dialogue with numerous respondents, symbolic of the sampled share, past completion of the electronic questionnaires, on a pre-defined period of time, to completely comprehend a phenomenon such as consumers' perceptions, intention and consumption of organic food. A mixed approach (i.e. qualitative and quantitative) is, therefore, suggested to achieve a comprehensive constituent to establish a more incorporating view of the status quo.

A third limitation of this study is that time restrictions and limited monetary resources constrained the sample size and extent of the study. It was, however, not the purpose of this study to generalise the findings to the South African population at large, but to gather information about the consumer within the current research project.

A fourth limitation was that the concepts being measured were limited to the most significant factors, as identified by previous research. It could be of worth to take into consideration examining other organic psychographic variables which have proven to demonstrate substantial results in respect of consumer attitude and behavioural intention. Such additional aspects should aim to expand on the original framework of the TPB (Figure 2.1) to include more factors for statistical testing via structural equation modelling.

5.10 CONTRIBUTION OF THE STUDY

The findings of the research will assist in expressing strong market communication in order to stimulate positive behaviour towards organic food consumption in South Africa. As most research to date has been conducted in developed countries and little within the South African context, there might be some demographic differences in organic food acceptance and consumption behaviour of a developing economy such as South Africa (Ahmad & Juhdi, 2010).

Furthermore, the findings of this study will help facilitate the development of suitable strategies aiming to modify and optimistically change consumer attitude for organic food, since the mission for sellers is to study the consumer attitude and ways it can be persuaded. Marketing researchers have always shown interest in the subject of consumer attitude because consumer attitude is a significant factor in fruitful marketing operations (Solomon et al., cited in Yang et al., 2014; Armstrong, Kotler, Harker & Brennan, 2009). Therefore, the findings of this study will help marketers to understand consumer attitude and how it is positively or negatively influenced in relation to organic foods.

This study will also contribute to the body of literature in confirming the intention-behaviour gap by recognising the respondents' positive attitudes, but lack of actual consumption behaviour. Therefore, the most important aspect in relation to the promotion of organic food purchase and consumption practices is in emphasising the need to investigate this intention-behaviour gap, which can then facilitate overcoming the identified barriers to promote the consumption of organic foods.

The findings of the research demonstrate that consumers possess a vastly optimistic attitude toward organic food. Nevertheless, strong buying intent does not always lead to buying behaviour. The intention-behaviour gap amongst purchasers is largely triggered by the premium price of organic products, consumers' mistrust of the constancy of organic food accreditations, and the lack of accessibility of organic food. Therefore, the researcher suggests that organic food sellers to upsurge

consumers' knowledge of organic food. The marketer should inform purchasers about the rationale for charging premium prices in some cases and clarify what causes organic foods to be distinct from non-organic food. This might aid the consumer to understand the prices and assist them to pay such a price. Organic food sellers should improve the accessibility of their products by supplying their produce to vegetable markets, super-markets and organic food speciality stores. They could also trade their product online to attend to consumers' demands. To further promote organic food acquisitions and utilisation, organic food sellers can take the lead of trading in networks such as supermarkets and vegetable markets, as the important practice for consumers to be aware of a new food product is by spending time in these places.

This study will be beneficial not only to the continent, but to the international market as well, in providing the perspective of a developing economy. The study was conducted in the Gauteng Province, which is the economic hub of the country, with various outlets available to the consumer for the purchase of organic produce. Furthermore, as the country's most populated province, a diverse range of people reside in Gauteng, differing in level of education, race, income and/or pro-environmental consumer behaviour (Bisschoff & Liebenberg, 2016). It was, therefore, imperative to undertake such a study in a setting that caters to diverse populations and where organic food products are indeed available to the consumer.

5.11 CONCLUSION SUMMARY

The conclusion chapter excellently laid out the research by clearly deliberating the findings attained in respects of the objectives set for the present study. A summary of the major findings and drawn conclusions were presented. Theoretical and practical implications were discussed, based on these findings and recommendations were made. The aim of the study was to investigate the factors that influence consumer attitude towards organic food in the market and how consumers' attitudes influence their purchase intention.

Therefore, the results of this study regarding the abovementioned influences of consumer attitude for organically produced food showed that the respondents agreed that it is important that the food they eat is produced and packaged in an environmentally friendly manner, indicating a concern for the environment. The respondents showed a positive attitude towards organic foods because such foods are produced and packaged in an environmentally friendly manner. The results also showed

that the respondents were concerned about their health, the quality of the product and that they were influenced by the opinions of their close friends and family, whom they hold in high regard.

The statistical analysis further indicated that health concerns had the greatest influence on the respondents' attitudes towards organic food, followed by product quality and subjective norms. Environmental concerns, surprisingly, had the least influence on consumer attitude towards organic food. The results further showed that, although the respondents indicated intentions to buy organic food, this did not always translate into actual purchases. This study, therefore, confirms research results which indicate that, regardless of the growth of the organic food industry and consumers' health concerns, especially in South Africa, there are several existing barriers that deter consumers from purchasing and consuming organic food products.

REFERENCES

- AAKER, D., KUMAR, V., DAY, G. S., & LEONE, R. P. (2011). *Marketing research*, (10th edition). Hoboken, NJ: John Wiley.
- AERTSENS, J., VERBEKE, W., MONDELAERS, K., & VAN HUYLENBROECK, G. (2009). Personal determinants of organic food consumption: A review. *British Food Journal*, 111(10), 1140–1167. <https://doi.org/10.1108/00070700910992961>
- AHMAD, S. T. B., & JUHDI, N. (2010). Organic food: a study on demographic characteristics and factors influencing purchase intentions among consumers in Klang Valley, Malaysia. *International Journal of Business and Management*, 5(2), 105-118. http://irep.iium.edu.my/2882/1/ONLINE_VERSION_ORGANIC_IJBM.pdf
- AHMED, S., SIWAR, C., FERDOUS ALAM, A. S. A., TALIB, B. A., CHAMHURI, N., & IDRIS, N. D. M. (2019). Determinants of willingness to pay towards Malaysian organic food. *International Journal of Recent Technology and Engineering*, 7(6), 1086–1090.
- AJZEN, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- AJZEN, I., & FISHBEIN, M. (1975). *Belief, attitude, intention and behaviour: an introduction to theory and research*. Reading, MA: Addison-Wesley. p.480.
- AJZEN, I., & FISHBEIN, M. (1980). *Understanding attitudes and predicting social behaviour*. Upper Saddle River, NJ: Prentice-Hall.
- ANNIS, I. E. (2006). Statistics in market research. *The American Statistician*, 60(4), 345. <https://doi.org/10.1198/tas.2006.s63>
- ANVAR, M., & VENTER, M. (2014). Attitudes and purchase behaviour of green products among Generation Y consumers in South Africa. *Mediterranean Journal of Social Sciences*, 5(21), 183–194. <https://doi.org/10.5901/mjss.2014.v5n21p183>
- ARMSTRONG, G., KOTLER, P., HARKER, M., & BRENNAN, R. (2009). *Marketing: An introduction*, (2nd edition). Harlow: Prentice Hall.

- ATALAY, C., OLHAN, E., & ATASEVEN, Y. (2019). Factors affecting organic food consumption: A case study of Ankara. *Journal of Environmental Protection and Ecology*, 20(1), 196–205.
- AVERAGE salary in South Africa (2019). Retrieved from <http://www.salaryexplorer.com/salary-survey.php?loc=201&loctype=1>
- AYGEN, F. G. (2012). Attitudes and behaviour of Turkish consumers with respect to organic foods. *International Journal of Business and Social Science*, 3(18), 262–274.
- AZURRA, A., & PAOLA, P. (2009). *Consumers' behaviours and attitudes toward healthy food products: The case of organic and functional foods*. Paper prepared for presentation at the 113th EAAE Seminar A Resilient European Food Industry and Food Chain in a Challenging World, Chania, Crete, 3-6 September. Pp.1–14. Retrieved from <http://ageconsearch.umn.edu/bitstream/57661/2/Annunziata.pdf>
- BAI, L., WANG, M., & GONG, S. (2019). Understanding the antecedents of organic food purchases: The important roles of beliefs, subjective norms, and identity expressiveness. *Sustainability (Switzerland)*, 11(11) 3045. <https://doi.org/10.3390/su11113045>
- BAMBERG, S., & MOSER, G. (2007). Twenty years after Hines, Hungerford, and Tomera: a new meta-analysis of psycho-social determinants of pro-environmental behaviour. *Journal of Environmental Psychology*, 27(1), 14–25.
- BASHA, M. B., & LAL, D. (2019). Indian consumers' attitudes towards purchasing organically produced foods: An empirical study. *Journal of Cleaner Production*, 215, 99–111. <https://doi.org/10.1016/j.jclepro.2018.12.098>
- BASHA, M. B., MASON, C., SHAMSUDIN, M. F., HUSSAIN, H. I., & SALEM, M. A. (2015). Consumers attitude towards organic food. *Procedia Economics and Finance*, 31, 444–452. [https://doi.org/10.1016/S2212-5671\(15\)01219-8](https://doi.org/10.1016/S2212-5671(15)01219-8)
- BEE LIAN, S., SAFARI, M., & MANSORI, S. (2016). The marketing stimuli factors influencing consumers' attitudes to purchase organic food. *International Journal of Business and Management*, 11(10), 109. <https://doi.org/10.5539/ijbm.v11n10p109>

- BISSCHOFF, C. A., & LIEBENBERG, P. (2016). *Identifying factors that influence green purchasing behaviour in South Africa*. Paper presented at the Conference of the Society for Marketing Advances, Atlanta, Georgia, November 2016. Retrieved from <https://www.researchgate.net/publication/312472152>
- BONSU, K., & SIKUKA, W. (2019). *South Africa - Republic of growing trade opportunities for U.S. and South African organic food*. GAIN Report No. SA 1903. Retrieved from https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Growing%20Trade%20Opportunities%20for%20U.S.%20and%20South%20African%20Organic%20Food%20_Pretoria_South%20Africa%20-%20Republic%20of_2-27-2019
- BONTI-ANKOMAH, S., & YIRIDOE, E. K. (2006). *Organic and conventional food: a literature review of the economics of consumer perceptions and preferences*. Final report submitted to the Organic Agriculture Centre of Canada, Nova Scotia. (APRIL 2006), 1–40. Retrieved from https://www.researchgate.net/publication/229051543_Organic_and_conventional_food_A_literature_review_of_the_economics_of_consumer_perceptions_and_preferences
- BRYMAN, A., & BELL, E. (2007). *Business research methods*, (2nd edition). New York: Oxford University Press.
- CANT, M. C., VAN HEERDEN, C. H., & NGAMBI, H. C. (Eds). (2013). *Marketing management*, (2nd edition). Claremont: Juta.
- CARRINGTON, M. J., NEVILLE, B. A., & WHITWELL, G. J. (2014). Lost in translation: Exploring the ethical consumer intention–behaviour gap. *Journal of Business Research*, 67(1), 2759–2767. <https://doi.org/10.1016/j.jbusres.2012.09.022>
- CHAUDHARY, R., & BISAI, S. (2018). Factors influencing green purchase behaviour of millennials in India. *Management of Environmental Quality: An International Journal*, 29(5), 798–812. <https://doi.org/10.1108/MEQ-02-2018-0023>
- CHEKIMA, B., CHEKIMA, K., & CHEKIMA, K. (2019). Understanding factors underlying actual consumption of organic food: The moderating effect of future orientation. *Food Quality and Preference*, 74(June), 49–58. <https://doi.org/10.1016/j.foodqual.2018.12.010>

- CHICIUDEAN, G. O., HARUN, R., ILEA, M., CHICIUDEAN, D. I., ARION, F. H., ILIES, G., & MURESAN, I. C. (2019). Organic food consumers and purchase intention: A case study in Romania. *Agronomy*, 9(3), 145. <https://doi.org/10.3390/agronomy9030145>
- CHU, K. M. (2018). Mediating influences of attitude on internal and external factors influencing consumers' intention to purchase organic foods in China. *Sustainability (Switzerland)*, 10(12), 4690. <https://doi.org/10.3390/su10124690>
- CONNER, M., & ARMITAGE, C. J. (1998). Extending the theory of planned behaviour: a review and avenues for further research. *Journal of Applied Social Psychology*, 28(15) 1429–1464.
- COOPER, D. R., & SCHINDLER, P. S. (2003). *Business research methods* (8th edition). Boston, MA: McGraw-Hill Irwin.
- CRESWELL, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd edition). Thousand Oaks, CA: Sage.
- CRESWELL, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th edition). Thousand Oaks, CA: Sage.
- CRESWELL, J. W., & PLANO CLARK, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- CROW, G., & WILES, R. (2008). Managing anonymity and confidentiality in social research: the case of visual data in community research. NCRM Working Paper Series 8/08. Retrieved from http://eprints.ncrm.ac.uk/459/1/0808_managing%2520anonymity%2520and%2520confidentiality.pdf
- DHAWAN, D. (2010). *Research methodology for business and management studies*. Delhi, India: Swastik.
- DOLEŽALOVÁ, H., PÍCHA, K., NAVRÁTIL, J., VESELÁ, M., & ŠVEC, R. (2016). Perception of quality in decision making regarding purchase of organic food. *Quality - Access to Success*, 17, 153, 86-91 (August).

- DU TOIT, L., & CRAFFORD, S. (2003). Beliefs and purchasing practices of Cape Town consumers regarding organically produced food. *Journal of Family Ecology and Consumer Sciences /Tydskrif vir Gesinsekologie en Verbruikerswetenskappe*, 31(1), 1-11.
<https://doi.org/10.4314/jfec.v31i1.52830>
- DUMORTIER, J., EVANS, K. S., GREBITUS, C., & MARTIN, P. A. (2017). The influence of trust and attitudes on the purchase frequency of organic produce. *Journal of International Food & Agribusiness Marketing*, 29(1), 46-69. <https://doi.org/10.1080/08974438.2016.1266565>
- EFFENDI, I., GINTING, P., LUBIS, A. N., & FACHRUDDIN, K. A. (2015). Analysis of consumer behaviour of organic food in North Sumatra Province, Indonesia. *Journal of Business and Management*, 4(1), 44–58. <https://doi.org/10.12735/jbm.v4i1p44>
- EIDE, B. (2013). Consumer behaviour theories – purchasing organic food. Thesis submitted to Aarhus University, Aarhus, Denmark.
- ENGEL, W. E. (2008). Determinants of consumer willingness to pay for organic food in South Africa. Master's dissertation, University of Pretoria, Pretoria.
- ESSOUSSI, L. H., & ZAHAF, M. (2008). Decision making process of community organic food consumers: An exploratory study. *Journal of Consumer Marketing*, 25(2), 95–104.
<https://doi.org/10.1108/07363760810858837>
- FAZELI, E., GOLMAKANI, N., TAGHIPOUR, A., & SHAKERI, M. T. (2015). The relationship between demographic factors and gender role attitudes in women referring to Mashhad Health Care Centres in 2014. *Journal of Midwifery and Reproductive Health*, 3(1), 276–284. Retrieved from
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1008.8729&rep=rep1&type=pdf>
- FOOD ADVISORY CONSUMER SERVICE (FACS). 2016. *Organic food: Food facts*. Retrieved from <https://foodfacts.org.za/organic-food/>
- FYNN-GREEN, G., MASON, R. B., & GIAMPICCOLI, A. (2019). Factors that influence perceptions and purchasing of organic produce by South African consumers: A literature review.

International Journal of Customer Relationship Marketing and Management, 10(2), 61–76.

<https://doi.org/10.4018/IJCRMM.2019040104>

- GABRIEL, A. B. (2007). Measuring the effectiveness of generic advertising: an analysis of the sugar generic marketing campaign. MBL dissertation. Graduate School of Business Leadership, University of South Africa, Pretoria.
- GEORGE, D., & MALLERY, P. (2019). *IBM SPSS statistics 25 step by step: A simple guide and reference*, (15th edition). New York, NY: Routledge.
- GHAURI, P. N., & GRØNHAUG, K. (2005). *Research methods in business studies: a practical guide*, (3rd edition). Harlow, UK: Pearson Education.
- GOODMAN, L. A. (2011). On respondent-driven sampling and snowball sampling in hard-to-reach populations and snowball sampling not in hard-to-reach populations. In: LIAO, T. F. (Ed.). *Sociological methodology*, vol. 41. Hoboken, NJ: Wiley-Blackwell.
- GRACIA, A., & DE MAGISTRIS, T. (2007). Organic food product purchase behaviour: A pilot study for urban consumers in the south of Italy. *Spanish Journal of Agricultural Research*, 5(4), 439–451. [DOI: 10.5424/sjar/2007054-5356](https://doi.org/10.5424/sjar/2007054-5356)
- GRIMM, P. (2010). Pretesting a questionnaire. In: *Wiley international encyclopaedia of marketing*. New York, NY: Wiley. DOI: <https://doi.org/10.1002/9781444316568.wiem02051>
- HAM, M., PAP, A., & BILANDZIC, K. (2016). *Perceived barriers for buying organic food products*. Paper presented at the 18th International Scientific Conference on Economic and Social Development – “Building Resilient Society”, Zagreb, December 2016. Retrieved from <https://www.researchgate.net/publication/311589436>
- HANSEN, T., SØRENSEN, M. I., & ERIKSEN, M.-L. R. (2018). How the interplay between consumer motivations and values influences organic food identity and behaviour. *Food Policy*, 74(October 2017), 39–52. <https://doi.org/10.1016/j.foodpol.2017.11.003>
- HANSLA, A., GAMBLE, A., JULIUSSON, A., & GARLING, T. (2008). Psychological determinants of attitude towards and willingness to pay for green electricity. *Energy Policy*, 36(2), 768–774. <https://doi.org/10.1016/j.enpol.2007.10.027>

- HANSMANN, R., BAUR, I., & BINDER, C. R. (2020). Increasing organic food consumption : An integrating model of drivers and barriers. *Journal of Cleaner Production*, 275, 123058. <https://doi.org/10.1016/j.jclepro.2020.123058>
- HASAN, A., IRFAN, R., SHAARI, Z. H., & SHARIF, M. A. M. (2018). Consumers' perception of barriers affecting green purchase behaviour: Instrument assessment. *SHS Web of Conferences*, 56, article no. 02008. <https://doi.org/10.1051/shsconf/20185602008>
- HASSAN, S. H., YEE, L. W., & RAY, K. J. (2015). Purchasing intention towards organic food among Generation Y in Malaysia. *Journal of Agribusiness Marketing*, 7, 16-32 (December 2015). Retrieved from https://www.researchgate.net/publication/299486217_Purchasing_Intention_towards_Organic_Food_among_Generation_Y_in_Malaysia
- HECKMAN, J. (2006). A history of organic farming: Transitions from Sir Albert Howard's War in the Soil to USDA National Organic Program. *Renewable Agriculture and Food Systems*, 21, 143-150. DOI:10.1079/RAF2005126.
- HINKLE, D. E., WIERSMA, W., & JURIS, S. G. (1994). *Applied statistics for the behavioural sciences*, (3rd edition). Boston, MA: Houghton Mifflin.
- HONKANEN, P., VERPLANKEN, B., & OLSEN, S. O. (2006). Ethical values and motives driving organic food choice. *Journal of Consumer Behaviour*, 5(5), 420–430. <https://doi.org/10.1002/cb.190>
- HOWELL, R. (2012). Market segmentation: the importance of age cohorts. *Neumann Business Review*, Retrieved from <https://pdfs.semanticscholar.org/55bc/0e9a11ef01b346c96a09b9000146bf167b90.pdf>
- HUGHNER, S., MCDONAGH, P., PROTHERO, A., SHULTZ II, C. J., & STANTON, J. (2007). Who are organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behaviour*, 6, 1-17. DOI: [10.1002/ch.210](https://doi.org/10.1002/ch.210)
- HWANG, J., & CHUNG, J.-E. (2019). What drives consumers to certain retailers for organic food purchase: The role of fit for consumers' retail store preference. *Journal of Retailing and*

Consumer Services, 47(March 2109), 293–306.

<https://doi.org/10.1016/j.iretconser.2018.12.005>

IDDA, L., MADAU, F. A., & PULINA, P. (2008). *The motivational profile of organic food consumers: a survey of specialized stores customers in Italy*. Paper presented at the 12th Congress of the European Association of Agricultural Economists – EAAE 2008, 1–10. Retrieved from

https://orgprints.org/14143/1/EAAE_950.pdf

IHNATENKO, M., & NOVAK, N. (2018). Development of regional programs for the development of agrarian enterprises with organic production on the basis of the European and international experience. *Baltic Journal of Economic Studies*, 4(4), 126–133.

<https://doi.org/10.30525/2256-0742/2018-4-4-126-133>

INSTITUTE OF NATURAL RESOURCES. (2008). *Trade and Industry Chamber study to develop a value chain strategy for sustainable development and growth of organic agriculture*. Report No: IR285. Scottsville: Institute of Natural Resources. Retrieved from

https://www.ifoam.bio/sites/default/files/page/files/study_to_develop_a_value_chain_strategy_for_sustainable_development_and_growth_of_organic_agriculture.pdf

JANSSEN, M. (2018). Determinants of organic food purchases: Evidence from household panel data. *Food Quality and Preference*, 68(September), 19–28.

<https://doi.org/10.1016/j.foodqual.2018.02.002>

KAR, P., MEENA, H. R., & MADHAV PATNAIK, N. (2018). Factors influencing consumers purchase intention towards organic and cloned animal food products. *International Journal of Current Microbiology and Applied Sciences*, 7(1), 1–9. <https://doi.org/10.20546/ijcmas.2018.701.001>

KARTHIKA, R., & SENTHILKUMAR, K. (2019). Factors influencing and purchase intention of organic food products in Dharmapuri town. *The Research Journal of Social Sciences*, 10(6), 18–24.

KATARIA, Y. S., KRISHNA, H. G., TYAGI, V. K., & VASHISHAT, T. (2019). Consumer buying behaviour of organic food products in India through the lens of planned behaviour theory. *Research Journal of Humanities and Social Sciences*, 10(1), 60-67. <https://doi.org/10.5958/2321-5828.2019.00011.1>

- KAUFMANN, H. R., PANNI, M. F., & ORPHANIDOU, Y. (2012). Factors affecting consumers' green buying behaviour: an integrated conceptual framework. *Amfiteatru Economic Journal*, 14(31), 50–69.
- KHAWAJA, K., HILMAN, H., & DILEEP KUMAR, M. (2012). Get along with quantitative research process. *International Journal of Research in Management* 2(2) (March), 15-29. Retrieved from <https://www.researchgate.net/publication/259359212>
- KLINE, R. B. (2015). *Principles and practice of structural equation modelling*, (4th edition). London: Guilford.
- KNEKTA, E., RUNYON, C., & EDDY, S. (2019). One size doesn't fit all: Using factor analysis to gather validity evidence when using surveys in your research. *CBE Life Sciences Education*, 18(1), 1–17. <https://doi.org/10.1187/cbe.18-04-0064>
- KONUK, F. A. (2019). The influence of perceived food quality, price fairness, perceived value and satisfaction on customers' revisit and word-of-mouth intentions towards organic food restaurants. *Journal of Retailing and Consumer Services*, 50(September), 103–110. <https://doi.org/10.1016/j.jretconser.2019.05.005>
- KOTLER, P. (2001). *Marketing management*, (10th edition). Toronto: Pearson Education Canada.
- KRYSTALLIS, A., & CHRYSOHOIDIS, G. (2005). Consumers' willingness to pay for organic food: Factors that affect it and variation per organic product type. *British Food Journal*, 107(5), 320–343. <https://doi.org/10.1108/00070700510596901>
- LEE, H-J. (2016). The driving role of consumers' perceived credence attributes in organic food purchase decisions: A comparison of two groups of consumers. *Food Quality and Preference*, 54(July), 141–151. <https://doi.org/10.1016/j.foodqual.2016.07.011>
- LEUNG, L. (2015). Validity, reliability, and generalizability in qualitative research. *Journal of Family Medicine and Primary Care*, 4(3), 324–327. DOI: 10.4103/2249-4863.161306
- LI, R., LEE, H. Y., LIN, Y. T., LIU, C. W., & TSAI, P. F. (2019). Consumers' willingness to pay for organic foods in China: Bibliometric review for an emerging literature. *International Journal of*

Environmental Research and Public Health, 16(10), 1713.

<https://doi.org/10.3390/ijerph16101713>

LI, X., & XIN, Y. (2015). Factors influencing organic food purchase of young Chinese consumers. Master's dissertation. Uppsala University, Department of Business Studies, Uppsala.

<https://pdfs.semanticscholar.org/006b/c6d2907cae02dc4bf35d772ba91a2201aca9.pdf>

LIM TUNG, O. J. (2016). Organic food certification in South Africa: a private sector mechanism in need of state regulation? *Potchefstroom Electronic Law Journal*, 19(1), 1-48.

<https://doi.org/10.17159/1727-3781/2016/v19n0a584>

LIM TUNG, O. J. (2018). African organic product standards for the African continent? Prospects and limitations. *Potchefstroom Electronic Law Journal*, 21 (January).

<https://doi.org/10.17159/1727-3781/2018/v21i0a4308>

LOCKIE, S., LYONS, K., LAWRENCE, G., & MUMMERY, K. (2002). Eating 'green': Motivations behind organic food consumption in Australia. *Sociologia Ruralis*, 42(1), 23–40.

<https://doi.org/10.1111/1467-9523.00200>

LOON, L. C., CHEI, T. Y., BHUN, Y. C., & LIM, Y. W. (2014). Explaining consumer attitudes and purchase intentions toward organic products: contribution from consumer psychographic characteristics. Universiti Tunku Abdul Rahman. (Research report). Retrieved from

<https://pdfs.semanticscholar.org/4db9/bcf857962617881d0e8c917df05e88cea690.pdf>

LOUREIRO, M., MCCLUSKEY, J., & MITTLEHAMMER, R. (2001). Assessing consumer preferences for organic, eco-labeled, and regular apples. *Journal of Agricultural and Resource Economics*, 26(2), 404-416.

MAGNUSSON, M. K., ARVOLA, A., KOIVISTO HURSTI, U.-K., ÅBERG, L., & SJÖDÉN, P.-O. (2001). Attitudes towards organic foods among Swedish consumers. *British Food Journal*, 103(3), 209–227.

MAHLANZA, B., MENDES, E., & VINK, N. (2003). Comparative advantage of organic wheat production in the Western Cape. *Agrekon*, 42(2), 144–162.

<https://doi.org/10.1080/03031853.2003.9523617>

- MAICHUM, K., PARICHATNON, S., & PENG, K.-C. (2017). The influence of environmental concern and environmental attitude on purchase intention towards green products: a case study of young consumers in Thailand. *International Journal of Business Marketing and Management*, 2(3), 2456–4559. Retrieved from www.ijbmm.com
- MALHOTRA, N. K., & BIRKS, D. F. (2003). *Marketing research: an applied approach*, (2nd edition). New York: Pearson.
- MARIAN, L. (2014). 'Organic' and other product attributes: consumer perceptions and buying behaviour regarding organic food products. PhD thesis. Aarhus University, Denmark.
- MAZZOCCHI, M. (2008). *Statistics for marketing and consumer research*, Los Angeles, CA: Sage.
- MCEACHERN, M. G., & MCCLEAN, P. (2005). Organic purchasing motivations and attitudes: are they ethical? *International Journal of Consumer Studies*, 26(2) (June), 85–92.
- MHLOPHE, B. (2016). Consumer purchase intentions towards organic food: Insights from South Africa. *Business & Social Sciences Journal (BSSJ)*, 1(1), 1–32.
<https://doi.org/10.26831/bssj.2016.1.1.1-32>
- MOHAMED, M. A., CHYMIS, A., & SHELABY, A. A. (2012). Determinants of organic food consumption in Egypt. *International Journal of Economics and Business Modelling*, 3(3), 183–191.
Retrieved from https://bioinfopublication.org/files/articles/3_3_1_IJEBM.pdf
- MORGERA, E., BULLÓN CARO, C., & MARÍN DURÁN, G. (2012). *Organic agriculture and the law*. Rome: Food and Agriculture Organization of the United Nations.
- NEUMAN, W. L. (2014). *Social research methods: Qualitative and quantitative approaches*, (7th edition). Harlow, UK: Pearson.
- NGUYEN, H. V., NGUYEN, N., NGUYEN, B. K., LOBO, A., & VU, P. A. (2019). Organic food purchases in an emerging market: The influence of consumers' personal factors and green marketing practices of food stores. *International Journal of Environmental Research and Public Health*, 16(6) 1037. <https://doi.org/10.3390/ijerph16061037>

- NGUYEN, P. T. (2011). A comparative study of the intention to buy organic food between consumers in northern and southern Vietnam. *AU-GSB e-Journal*, 4(2), 100-111. <http://www.assumptionjournal.au.edu/index.php/AU-GSB/article/view/503/452>
- PADEL, S., & FOSTER, C. (2005). Exploring the gap between attitudes and behaviour: understanding why consumers buy or do not buy organic food. *British Food Journal*, 107(8), 606-625. <https://doi.org/10.1108/00070700510611002>
- PALLANT, J. (2003). *SPSS survival manual: A step by step guide to data analysis using SPSS for Windows (Versions 10 and 11)*. Maidenhead: Open University Press.
- PAUL, J., & RANA, J. (2012). Consumer behaviour and purchase intention for organic food. *Journal of Consumer Marketing*, 29(6), 412–422. <https://doi.org/10.1108/07363761211259223>
- PEARSON, D., HENRYKS, J., SULTAN, P., & ANISIMOVA, T. (2013). Organic food: Exploring purchase frequency to explain consumer behaviour. *Journal of Organic Systems*, 8(2), 50–63. <https://www.organic-systems.org/journal/82/8206.pdf>
- PENG, F. (2010). Organic food market segmentation in China. Bachelor's thesis. JAMK University of Applied Sciences, Jyväskylä, Finland. Retrieved from <https://www.theseus.fi/bitstream/handle/10024/24114/Organic%20food%20market%20segmentation%20in%20China%20final.pdf?sequence=1&isAllowed=y>
- PERRAULT, E. K., & KEATING, D. M. (2018). Seeking ways to inform the uninformed: improving the informed consent process in online social science research. *Journal of Empirical Research on Human Research Ethics*, 13(1), 50–60. <https://doi.org/10.1177/1556264617738846>
- PRENTICE, C., CHEN, J., & WANG, X. (2019). The influence of product and personal attributes on organic food marketing. *Journal of Retailing and Consumer Services*, 46(January), 70–78. <https://doi.org/10.1016/j.jretconser.2017.10.020>
- REMBIAŁKOWSKA, E., ZAŁĘCKA, A., BADOWSKI, M., & PLOEGER, A. (2012). The quality of organically produced food. In: KONVALINA, P. (Ed.). *Organic farming and food production*, pp. 1585 [n.p.]: InTechOpen. DOI: 10.5772/54525

- REUKKASAEM, L., & SESANANAN, M. (2016). The factors affecting decisions to purchase rice and consumer perception of organic rice in Bangkok, Thailand. *International Journal of Advances in Agricultural and Environmental Engineering*, 4(1), 6-11.
<https://doi.org/10.15242/ijaaee.c0117028>
- MKHIZE, S., & ELLIS, D. (2020). Creativity in marketing communication to overcome barriers to organic produce purchases: The case of a developing nation. *Journal of Cleaner Production*, 242, 118415. <https://doi.org/10.1016/j.jclepro.2019.118415>
- SALEKI, Z. S., & SEYEDSALEKI, S. M. (2012). The main factors influencing purchase behaviour of organic products in Malaysia. *Interdisciplinary Journal of Contemporary Research in Business*, 4(1), 98–116. Retrieved from <https://journal-archieves18.webs.com/98-116.pdf>
- SALEKI, Z. S., SEYEDSALEKI, S. M., & RAHIMI, M. R. (2012). Organic food purchasing behaviour in Iran. *International Journal of Business and Social Science*, 3(13), 278-285. Retrieved from www.ijbssnet.com/view.php
- SALLEH, M. M., ALI, S. M., HARUN, E. H., JALIL, M. A., & SHAHARUDIN, M. R. (2010). Consumer's perception and purchase intentions towards organic food products: exploring attitude among academician. *Canadian Social Science*, 6(6), 119–129. Retrieved from www.cscanada.net
https://www.academia.edu/32083967/Consumers_Perception_and_Purchase_Intentions_Towards_Organic_Food_Products_Exploring_Attitude_Among_Academician
- SANA, U., LATIF, W. U., AHMAD, W., JAFAR, M. S., PERVEZ, M., AHMED, N., & XU, X.-R. (2018). Willingness-to-pay for organic food in Pakistan: The effect of motivational factors and mediated role of attitude. *DEStech Transactions on Economics, Business and Management*, (ECED), pp. 368-381. <https://doi.org/10.12783/dtem/eced2018/23996>
- SANGKUMCHALIANG, P., & HUANG, W.-C. (2012). Consumers' perceptions and attitudes of organic food products in northern Thailand. *International Food and Agribusiness Management Review*, 15(1), 87–102. Retrieved from <https://www.ifama.org/resources/Documents/v15i1/Sangkumchaliang-Huang.pdf>

- SAUNDERS, M. N. K., LEWIS, P., & THORNHILL, A. (2000). *Research methods for business students*. Harlow: Financial Times/Prentice Hall.
- SAUNDERS, M. N. K., LEWIS, P., & THORNHILL, A. (2009). *Research methods for business students*, (5th edition). Essex: Pearson Education.
- SCHIFFMAN, L. G., & KANUK, L. L. (2009). *Consumer behaviour*, (9th edition). Upper Saddle River, NJ: Pearson Education.
- SEKARAN, U. (2003). *Research methods for business: a skill-building approach*, (4th edition). New York: John Wiley.
- SHAFIE, F. A., & RENNIE, D. (2012). Consumer perceptions towards organic food. *Procedia - Social and Behavioural Sciences*, 49, 360–367. <https://doi.org/10.1016/j.sbspro.2012.07.034>
- SHARMA, N., & SINGHVI, R. (2018). Consumers perception and behaviour towards organic food: A systematic review of literature. *Journal of Pharmacognosy and Phytochemistry*, 7(2), 2152–2155. <https://pdfs.semanticscholar.org/2108/b8c07410fb4ba3437f36cbd256afbf1baba1.pdf>
- SHARMA, P., UPRETY, P., & PHUYAL, R. K. (2016). An analysis of consumer's purchase behaviour on organic foods in Kathmandu Valley. *Advances in Economics and Business Management*, 3(5) (April-June), 514-526.
- SHASHI, KOTTALA, S. Y., & SINGH, R. (2015). A review of sustainability, deterrents, personal values, attitudes and purchase intentions in the organic food supply chain. *Pacific Science Review B: Humanities and Social Sciences*, 1(3), 114–123. <https://doi.org/10.1016/j.psrb.2016.09.003>
- SLAMET, A. S., NAKAYASU, A., & BAI, H. (2016). The determinants of organic vegetable purchasing in Jabodetabek Region, Indonesia. *Foods*, 5(4) 85 (December). <https://doi.org/10.3390/foods5040085>
- SOIFERMAN, L. K. (2010). *Compare and contrast inductive and deductive research approaches*. [n.p.]: ERIC Clearinghouse. [eBook] eric.ed.gov.
- SOLOMON, M. R. (2010). *Consumer behaviour: buying, having, and being*, (9th edition). Boston, MA: Pearson.

- SOLOMON, Z. (2013). Organic vs. non-organic: What's the difference? *Food Safety News*, 29 August. Retrieved from <https://www.foodsafetynews.com/2013/08/organic-vs-non-organic-whats-the-difference/>
- SOUTH AFRICA. DEPARTMENT OF AGRICULTURE, FORESTRY & FISHERIES (DAFF). (2011). National policy on organic production. Confidential discussion paper. Retrieved from <https://www.nda.agric.za/doaDev/sideMenu/plantProduction/doc/National%20Organic%20%20Production%20Policy%20Draft%2010.pdf>
- STATISTICS SOUTH AFRICA. (2019). *Overcoming poverty and inequality in South Africa: an assessment of drivers, constraints and opportunities*. Washington, DC: International Bank for Reconstruction and Development / The World Bank. <http://documents.worldbank.org/curated/en/530481521735906534/pdf/124521-REV-OUO-South-Africa-Poverty-and-Inequality-Assessment-Report-2018-FINAL-WEB.pdf>
- STOLZ, H., STOLZE, M., HAMM, U., JANSSEN, M., & RUTO, E. (2011). Consumer attitudes towards organic versus conventional food with specific quality attributes. *NJAS - Wageningen Journal of Life Sciences*, 58(3–4), 67–72. <https://doi.org/10.1016/j.njas.2010.10.002>
- SUPRAPTO, B., & WIJAYA, T. (2012). Model of consumer's buying intention towards organic food: a study among mothers in Indonesian. *International Proceedings of Economics Development and Research*, 29, 173–180. <http://www.ipedr.com/vol29/32-CEBMM2012-Q10005.pdf>
- SCHWARTZ, S.H. (1973), "Normative explanations of helping behaviour: a critique, proposal, and empirical test", *Journal of Experimental Social Psychology*, Vol. 9 No 4, pp. 349-364.
- TAHERDOOST, H. (2016). Sampling methods in research methodology; How to choose a sampling technique for research. *International Journal of Academic Research in Management*, 5(2), 18-27. <https://doi.org/10.2139/ssrn.3205035>
- TARKIAINEN, A., & SUNDQVIST, S. (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *British Food Journal*, 107(11), 808–822. <https://doi.org/10.1108/00070700510629760>

- TENG, C.-C., & WANG, Y. M. (2015). Decisional factors driving organic food consumption: Generation of consumer purchase intentions. *British Food Journal*, 117(3), 1066–1081. <https://doi.org/10.1108/BFJ-12-2013-0361>
- TISON, A. (2012). A study of organic food consumers' knowledge, attitudes and behavior regarding labor in organic farms. *Nature.Berkeley.Edu*, 1–26. Retrieved from http://nature.berkeley.edu/espm/classes/es196/projects/2012final/TisonA_2012.pdf
- TORJUSEN, H., LIEBLEIN, G., WANDEL, M., & FRANCIS, C. A. (2001). Food system orientation and quality perception among consumers and producers of organic food in Hedmark County, Norway. *Food Quality and Preference*, 12(3), 207–216.
- TUNG, S.-J., SHIH, C.-., WEI, S., & CHEN, Y.-H. (2012). Attitudinal inconsistency toward organic food in relation to purchasing intention and behaviour: An illustration of Taiwan consumers. *British Food Journal*, 114(7), 997–1015. <https://doi.org/10.1108/00070701211241581>
- TUSTIN, D. H., LIGTHELM, A., MARTINS, J. H., & VAN WYK, H. de J. (2005). *Marketing research in practice*. Pretoria: UNISA Press.
- UMA, R., & SELVAM, V. (2016). Customer attitudinal and perceptions towards purchasing organic food products: A critical review of literature from 2005 to 2015. *International Journal of Applied Business and Economic Research*, 14(10), 7183–7201.
- URENA, F., BERNABEU, R., & OLMEDA, M. (2008). Women, men and organic food: differences in their attitudes and willingness to pay: a Spanish case study. *International Journal of Consumer Studies*, 32(1), 18-26.
- VAN HUY, L., CHI, M. T. T., LOBO, A., NGUYEN, N., & LONG, P. H. (2019). Effective segmentation of organic food consumers in Vietnam using food-related lifestyles. *Sustainability (Switzerland)*, 11(5), 1237. <https://doi.org/10.3390/su11051237>
- VEGA-ZAMORA, M., TORRES-RUIZ, F. J., & PARRAS-ROSA, M. (2019). Towards sustainable consumption: Keys to communication for improving trust in organic foods. *Journal of Cleaner Production*, 216, 511–519. <https://doi.org/10.1016/j.jclepro.2018.12.129>

- VERMEIR, I., & VERBEKE, W. (2006). Sustainable food consumption: Exploring the consumer “attitude – behavioural intention” gap. *Journal of Agricultural and Environmental Ethics*, 19(2), 169–194. [HTTPS://DOI.ORG/10.1007/S10806-005-5485-3](https://doi.org/10.1007/S10806-005-5485-3)
- VERMEULEN, H., & BIÉNABE, E. (2010). Food quality behaviour, perceptions and knowledge of South African consumers - a focus on middle and upper socio-economic groups. Task report for the National Agricultural Marketing Council (NAMC). <https://www.namc.co.za/wp-content/uploads/2017/09/Food-Quality-Report.pdf>
- VIETORIS, V., KOZELOVÁ, D., MELLE, M., CHRENEKOVÁ, M., POTCLAN, J. E., FIKSELOVÁ, M., KOPKAS, P., & HORSKÁ, E. (2016). Analysis of consumer’s preferences at organic food purchase in Romania. *Polish Journal of Food and Nutrition Sciences*, 66(2), 139–146. <https://doi.org/10.1515/pjfn-2015-0028>
- VOON, J. P., NGUI, K. S., & AGRAWAL, A. (2011). Determinants of willingness to purchase organic food: An exploratory study using structural equation modelling. *International Food and Agribusiness Management Review*, 14(2), 103–120.
- WANDEL, M., & BUGGE, A. (1997). Environmental concern in consumer evaluation of food quality. *Food Quality and Preference*, 8(1), 19–26. [https://doi.org/10.1016/S0950-3293\(96\)00004-3](https://doi.org/10.1016/S0950-3293(96)00004-3)
- WEE, C. S., ARIFF, M., ZAKUAN, N., TAJUDIN, M., ISMAIL, K., & ISHAK, N. (2014). Consumers perception, purchase intention and actual purchase behaviour of organic food products. *Review of Integrative Business and Economics Research*, 3(2), 378-397. <https://zamaros.net/Consumer%20Research%20-%20organic%20food.pdf>
- WEKEZA, S. V., & SIBANDA, M. (2019). Factors influencing consumer purchase intentions of organically grown products in Shelly Centre, Port Shepstone, South Africa. *International Journal of Environmental Research and Public Health*, 16(6), 956. <https://doi.org/10.3390/ijerph16060956>
- WILLER, H., & LERNOUD, J. (2016). *The world of organic agriculture: Statistics and Emerging Trends 2016*, (17th edition). [n.p.]: Research Institute of Organic Agriculture (FiBL) and IFOAM – Organics International.

- WILLER, H., & YUSSEFI, M. (2005). *The world of organic agriculture: Statistics and emerging trends 2005*. Bonn: International Federation of Organic Agriculture Movements. Retrieved from <https://orgprints.org/4297/1/1365-world-of-organic-agriculture.pdf>
- WORLD HEALTH ORGANISATION <https://www.who.int/15/07/2020>
- YANG, M., AL-SHAABAN, S., & NGUYEN, T. B. (2014). Consumer attitude and purchase intention towards organic food: A quantitative study of China. Master's dissertation. Linnæus University, Växjö, Sweden. <http://www.diva-portal.org/smash/get/diva2:723474/FULLTEXT01.pdf>
- YATES, S. (2004). *Doing social science research*. Thousand Oaks, CA: Sage.
- YAZDANPANA, M., & FOROUZANI, M. (2015). Application of the Theory of Planned Behaviour to predict Iranian students' intention to purchase organic food. *Journal of Cleaner Production*, 107, 342–352. <https://doi.org/10.1016/j.jclepro.2015.02.071>
- YIN, R. K. (2009). *Case study research: Design and methods*, (4th edition). London: Sage.
- YIRIDOE, E. K., BONTI-ANKOMAH, S., & MARTIN, R. C. (2005). Comparison of consumer perceptions and preference toward organic versus conventionally produced foods: A review and update of the literature. *Renewable Agriculture and Food Systems*, 20(4), 193-205. <https://doi.org/10.1079/RAF2005113>
- YONG, A. G., & PEARCE, S. (2013). Tutorials in Quantitative Methods for Psychology. *A Beginner's Guide to Factor Analysis: Focusing on Exploratory Factor Analysis*, 9(2), 79–94. <https://doi.org/10.20982/tqmp.09.2.p079>
- ZIKMUND, W. G., BABIN, B. J., CARR, J. C., & GRIFFIN, M. (2009). *Business research methods*, (8th edition). Mason, OH: South-Western/ Cengage Learning.

ANNEXURE A: QUESTIONNAIRE



INVESTIGATING FACTORS THAT INFLUENCE CONSUMER ATTITUDE AND INTENTION TO PURCHASE ORGANIC FOODS

My name is Betty Mathope and I am a postgraduate Masters student at UNISA, majoring in Consumer Sciences. For my Thesis, I aim to investigate factors that influence consumer attitude and intention to purchase organic foods. Your support and participation will enable me to conduct the study and will be greatly appreciated. This survey includes 4 pages, with a series of short questions. Your participation is anonymous and voluntary, and the information provided will be handled with strict confidentiality. Please read the following 4-page questionnaire and complete the questions with care. This should not take more than 15 minutes of your time. There are no wrong answers and your opinion is highly valued. If you would like to get more information, please feel free to email me at betty.mathope@yahoo.com or contact Ms Lorna Christie (supervisor) at chrisl@unisa.ac.za / 011 471 2811

Thank you for your kind support in this regard.

For office use only

Respondent number	V1											
SECTION A: DEMOGRAPHICS										For office use only		
1	What is your gender?		Male			1	Female			2	V2	
2	What is your age?		Years								V3	
	20-29	1	30-39	2	40-59	3	50-59	4	60-69	5	70+	6
3	What is your approximate total monthly HOUSEHOLD income (NOT individual income)?		Rands								V4	
	Less than R20,000	1	R20,000 - R40,000	2	R40,000- R60,000	3	R60,000 - R80,000	4	R80,000- R100,000	5	More than R100,000	6
4	Please indicate your ethnic affiliation											
	Black	1	White	2	Coloured	3	Indian	4	Other	5	V5	
5	What is your highest level of education?											
	Lower than matric/ Grade 12								1	V6		
	Matric/ Grade 12								2			
	Grade 12 + a degree/ diploma								3			
6	Please indicate your marital status											
	Single								1	V7		
	Married/living with a partner								2			
	Divorced/ separated								3			
	Widow/er								4			
7	Please indicate your employment status											
	Permanent full time								1	V8		
	Permanent part time								2			
	Contract work								3			
	Self- employed								4			
	Unemployed								5			
8	Please indicate the number of people residing in your home											
9	In which town/city do you reside?											
											V10	

Section B: Environmental concerns <i>Please choose the option that best describes your level of agreement</i>		<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>	<i>For office use only</i>	
1	To me, it is important that the food I usually eat has been produced in an environmental friendly way	1	2	3	4	5	V11	
2	To me, it is important that the food I usually eat is packaged in environmental friendly materials	1	2	3	4	5	V12	
3	To me, organic foods are less harmful to the environment than non-organic	1	2	3	4	5	V13	

Section C: Health concerns <i>Please choose Yes or No for the following questions.</i>		<i>Yes</i>	<i>No</i>	<i>For office use only</i>	
1	Do you believe that organic foods are healthier than non-organic?	1	2	V14	
2	Do you think organic food contains more nutrients than no-organic food?	1	2	V15	
3	Do you believe that organic food contains no harmful chemicals?	1	2	V16	

Section D: Product quality <i>Please choose Yes or No for the following questions.</i>		<i>Yes</i>	<i>No</i>	<i>For office use only</i>	
1	Are you concerned with the quality of the food you eat?	1	2	V17	
2	Do you think that organic foods are generally better in terms of quality than non-organic food products?	1	2	V18	
3	Do you think that organic foods have more sensorial appeal (better smell, texture, colour, taste, etc.) than non-organic food products?	1	2	V19	
4	Organic foods are of high quality.	1	2	V20	

Section E: Subjective norm <i>Please choose Yes or No for the following questions.</i>		<i>Yes</i>	<i>No</i>	<i>For office use only</i>	
1	Does your family or even your close friends eat organic food regularly?	1	2	V21	
2	Do the people who are close to you recommend organic food to you?	1	2	V22	
3	Given the public opinion, do you think people consider organic food better than non-organic?	1	2	V23	

Section F: Consumer Attitude <i>Please choose Yes or No for the following questions.</i>		<i>Yes</i>	<i>No</i>	<i>For office use only</i>	
1	Organic food is higher in quality than conventionally grown.	1	2	V24	
2	Organic food is healthier than conventionally grown.	1	2	V25	
3	Organic food is safer than conventionally grown.	1	2	V26	
4	Organic food is fresher than conventionally grown.	1	2	V27	
5	Organic food is tastier than conventionally grown.	1	2	V28	



Section G: Intention to purchase:		Yes	No	For office use only	
<i>Please choose Yes or No for the following questions.</i>					
1	When buying food, do you consider the price as an important factor?	1	2	V29	
2	Do you consider organic food products as being more expensive than conventional food products?	1	2	V30	
3	Do you find organic food in the stores where you usually shop?	1	2	V31	
4	Do you find it difficult of find organic food products?	1	2	V32	
5	Are you willing to buy organic food products?	1	2	V33	
6	Would you buy more organic food if it was cheaper?	1	2	V34	

Section H: Actual consumption behaviour.		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	For office use only	
<i>For each of the following statements, please indicate your opinion by circling one of the numbers on the scale where 1 = Strongly Disagree and 5 = Strongly Agree.</i>								
1	I purchase organic food	1	2	3	4	5	V35	
2	I purchase organic food on a regular basis	1	2	3	4	5	V36	
3	I intend to continue to purchase organic food	1	2	3	4	5	V37	
4	I plan to increase the amount of organic food I purchase	1	2	3	4	5	V38	
5	I plan to start purchasing different types of organic food products	1	2	3	4	5	V39	
6	I intend to continue purchasing organic products on a regular basis	1	2	3	4	5	V40	

Section I: Shopping behaviour A		Not at all (Never)	Sometimes (few-times/ month)	Often (once a week)	More often More than once a week	Always (Daily)	For office use only	
<i>Indicate how often you shop at the following retail shops.</i>								
	Pick n Pay	1	2	3	4	5	V41	
	Checkers	1	2	3	4	5	V42	
	Woolworths	1	2	3	4	5	V43	
	Food Lover's Market	1	2	3	4	5	V44	
	Spar	1	2	3	4	5	V45	
	Farmers markets	1	2	3	4	5	V46	

Section J: Shopping behaviour B					For office use only		
1	What kind of organic food do you buy? Order your preference from 1 to 3: (1 = less preferred and 3= most preferred)	Vegetables?	1	2	3	V47	
		Fruits?	1	2	3	V48	
		Dairy Products?	1	2	3	V49	
		Cooked food	1	2	3	V50	
		Meat	1	2	3	V51	
2	How much would you pay for organic foods above of what you would pay for non-organic (price premium)? <i>Select one option that indicates your opinion</i>	0	1		V52		
		up to 25%	2				
		26%-50%	3				
		51%-75%	4				
		76%-100%	5				
		more than 100%	6				



|

Thank you for your participation

ANNEXURE B: ETHICS APPROVAL LETTER



UNISA-CAES HEALTH RESEARCH ETHICS COMMITTEE

Date: 05/08/2019

Dear Ms Mathope

NHREC Registration # : REC-170616-051
REC Reference # : 2018/CAES/088
Name : Ms MB Mathope
Student # : 62140876

**Decision: Ethics Approval
Renewal after First review from
01/08/2019 to 31/07/2020**

Researcher(s): Ms MB Mathope
Betty.M@vectorlog.com

Supervisor (s): Mrs L Christie
chrisl@unisa.ac.za; 011-471-2811

Dr B Swanepoel
biancaswanepoel@nwu.ac.za

Working title of research:

Investigating factors that influence consumer attitude and intention to purchase organic foods

Qualification: M Consumer Science

Thank you for the submission of your progress report to the Unisa-CAES Health Research Ethics Committee for the above mentioned research. Ethics approval is renewed for a one-year period. After one year the researcher is required to submit a progress report, upon which the ethics clearance may be renewed for another year.

Due date for progress report: 31 July 2020

*The **minimal risk application** was **reviewed** by the UNISA-CAES Health Research Ethics Committee on 02 August 2018 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.*

The proposed research may now commence with the provisions that:



University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the Committee.
3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.
7. No field work activities may continue after the expiry date. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

*The reference number **2018/CAES/088** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Yours sincerely,



Prof EL Kempen
Chair of CAES Health REC

E-mail: kempeel@unisa.ac.za
Tel: (011) 471-2241



Prof MJ Linington
Executive Dean : CAES

E-mail: lininmj@unisa.ac.za
Tel: (011) 471-3806

URERC 25.04.17 - Decision template (V2) - Approve

University of South Africa
Pretter Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

ANNEXURE C: EDITOR'S CERTIFICATE

7 January 2020

LANGUAGE EDITING CERTIFICATE

I, the undersigned, hereby certify that I have conducted the language editing and reference verification of the dissertation of Ms Betty Mathope.

Title: *Investigating factors that influence consumer attitude and intention to purchase organic foods*

Exclusions: Annexures

The following reference works were used as sources of authority:

American Psychological Association. (2019). *APA style: references*.

<https://apastyle.apa.org/style-grammar-guidelines/references>

Burger, M. (2010). *Bibliographic style & referencing techniques*. Pretoria: Unisa.

Lexico: Dictionary & thesaurus. (2019). Oxford University Press.

<https://www.lexico.com/en>

Mudrak, B. (2015). *Verb tense in scientific manuscripts*. Durham, NC: AJE.

<https://www.aje.com/en/arc/dist/docs/AJE-Choosing-the-Right-Verb-Tense-for-Your-Scientific-Manuscript-2015.pdf>

Waddingham, A. (2014). *New Hart's rules: the Oxford style guide*, 2nd ed. Oxford: OUP.

Waite, M. (Ed.). (2006). *Oxford paperback thesaurus*, 3rd edition. Oxford: OUP.



Susan Swanepoel - Freelance editor, bibliographer & indexer
BAHons. HDLS.

Member of the Professional Editors' Guild, Member no. SWA006
www.editors.org.za

SUSAN SWANEPOEL - FREELANCE EDITOR, BIBLIOGRAPHER & INDEXER
338 Snowy Walker St Garfontein 0081 • 0728428207 • susanswan338@gmail.com

ANNEXURE D: Turn it in (Similarity) Report

Turnitin Originality Report

Processed on: 27-Feb-2020 13:58 SAST

ID: 1265194331

Word Count: 42442

Submitted: 1

M Consumer science dissertation By B Mathope

Similarity Index	Similarity by Source	
33%	Internet Sources:	26%
	Publications:	16%
	Student Papers:	22%

2% match (Internet from 11-Mar-2019)

http://uir.unisa.ac.za/bitstream/handle/10500/25304/dissertation_de%20freitas_d.pdf?isAllowed=y&sequence=1

1% match (Internet from 27-Jan-2015)

<http://www.diva-portal.org/smash/get/diva2:723474/FULLTEXT01.pdf>

1% match ()

<http://hdl.handle.net/10500/23503>

< 1% match (Internet from 07-Jun-2018)

<http://www.saibw.co.za/docs/Proceedings%20SAIMS2014.pdf>

< 1% match (student papers from 20-Feb-2020)

Submitted to Sunway Education Group on 2020-02-20

< 1% match (Internet from 13-Dec-2019)

<http://www.londonchurchillcollege.ac.uk/wp-content/uploads/2018/02/180116%20Journal%20Vol%205%20No%202%20Winter%202017%20Final.pdf>

< 1% match (Internet from 06-Nov-2017)

http://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=3471&context=open_access_etds&filename=25&type=additional

< 1% match (Internet from 20-Mar-2019)

<https://core.ac.uk/download/pdf/81158463.pdf>

< 1% match (Internet from 18-Jul-2018)

<http://www.diva-portal.se/smash/get/diva2:824298/FULLTEXT01.pdf>

< 1% match (Internet from 25-Feb-2014)

<http://publications.theseus.fi/bitstream/handle/10024/24114/Organic%20food%20market%20segmentation%20in%20China%20final.pdf?>

< 1% match (student papers from 09-Jun-2017)

Submitted to Universitat Politècnica de València on 2017-06-09

< 1% match (Internet from 12-Aug-2015)

<http://webcache.googleusercontent.com/search?q=cache:nekinUjwz6MJ:www.ccsenet.org>

< 1% match (publications)