MARKETING ORGANIC FOOD IN AUSTRALIA: A STUDY OF FACTORS INFLUENCING CONSUMERS' PURCHASE INTENTION

A Thesis submitted by

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For the award of

Doctor of Philosophy

2019

ABSTRACT

The organic food industry is experiencing much growth across the globe. Currently, organic food is perceived as healthy, safe and environmentally friendly. Thus, most nutrition experts advise consumers to consume organic foods due to their health benefits. Research on factors influencing Australian consumers' organic food purchasing intentions is limited. Further, there is a lack of exploratory studies considering the main factors that potentially influence consumers' organic food purchases. There is a need to conduct further research using a mixed method approach to empirically investigate the influence of various factors on consumers' organic food purchasing intentions. This study aims to explore the key factors that influence Australians' organic food purchasing intentions. It also aims to empirically examine the influence of various factors on consumers' purchasing intentions of organic food. The present study employed an exploratory sequential mixed method approach to collect and analyse data to achieve the objectives of the study and to answer the research questions. First, the researcher used a qualitative study with 30 participants to explore the key factors that motivate consumers to purchase organic food. The mall intercept method was utilised as the sampling method and thematic analysis was employed using NVivo.

The study unveiled various factors that may influence consumers' decisions to purchase organic food. The study revealed that health concerns, price, labelling, availability, trust, environmental concerns, certification, taste, packaging, nutritional value, quality, subjective norms and social media are the most important factors influencing consumers' purchases of organic food. Second, a quantitative study was employed using a survey of 390 respondents to confirm the findings of the exploratory study. The statistical software, SPSS and AMOS, were used to analyse the survey data.

The results of the quantitative study confirmed that certification, packaging, sensory food attributes and social media positively influence both consumers' trust and intentions to purchase organic food. Further, the results show that trust has a positive influence on consumers' organic food purchasing intentions. Health concerns and subjective norms positively influence purchasing intentions. It was found that environmental concerns have no influence on consumers' organic food purchasing intentions.

The study asserts that there are statistically significant differences between demographic variables such as gender, income, education, employment status and number of children,

towards organic food purchasing intentions. Age, occupation, marital status and ethnicity were not significant. The study increases the body of knowledge by identifying the main factors that influence consumers' intentions to buy organic food in the Australian context. Further, the study fills gaps identified in the literature. Moreover, the findings of the study can help organic food industry stakeholders in the formulation of marketing strategies to attract more consumers towards organic food. Limitations of the research are also identified and these provide avenues for future research.

CERTIFICATION OF THESIS

This thesis is entirely the work of ***Mohammad Nabeel Ibrahim Almrafee*** except where otherwise acknowledged. The work is original and has not previously been submitted for any other award, except where acknowledged.

Principal Supervisor: Dr Ranga Chimhundu
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Student and supervisors' signatures of endorsement are held at USQ.

LIST OF PUBLICATIONS

- **Conference Paper:**

  - Almrafee, M, Chimhundu, R & Hassan, R 2019, 'Marketing Organic Food in Australia: A Qualitative Study of Factors Influencing Consumers' Purchase Intention', *Proceedings of the International Food Marketing Research Sympoium*,University of Sunshine Coast, Australia 12-13 June 2019.

- **Journal Papers in Preparation:**

  - Almrafee, M, Chimhundu, R & Hassan, R 2019, Consumers' Purchase Intentions of Organic Food: An empirical study (Target Journal: *Appetite*).

  - Almrafee, M, Chimhundu, R & Hassan, R 2019, Why Australian Consumers Buy Organic Food: A Qualitative Study (Target Journal: *Food Policy*).

  - Almrafee, M, Chimhundu, R & Hassan, R 2019, Why Some Consumers Avoid Organic Food: Evidence from Australia (Target Journal: *Food Policy*).

ACKNOWLEDGEMENTS

{In the name of Allah, the most beneficent, the most merciful}

First and foremost, I would like to express my gratitude to Allah for giving me the strength to finish my PhD.

I would like to express my sincere thanks to my Principal Supervisor, Dr Ranga Chimhundu, who has guided me over the past years of my PhD journey with his interest, inspiration and great efforts to explain things very simply and clearly. I also would like to take this opportunity to thank my Associate Supervisor, Dr Rumman Hassan, who has also guided me through the whole period of my PhD journey.

I would like to sincerely acknowledge the financial support from Mutah University in Jordan for offering me the opportunity to carry out my study. Their financial support helped me a lot during my PhD journey and enabled me to achieve my ambition. In addition, I would like to thank Sandra Cochrane who spent her valuable time proofreading the final draft of this thesis.

I am deeply grateful to my beloved parents for their endless prayers, encouragement and support throughout my life. Many thanks, especially and forever, to my lovely wife, Reham, for her support and encouragement during my PhD journey. Also, special thanks to my lovely children, Aseel and Nabeel, for their amusing questions and their beautiful smiles. Many thanks to my sisters and my brother, Omar, for their prayers for me throughout my study.

I also offer my thanks to my teachers who encouraged me to travel to obtain a PhD, Professor Fairouz Aldhmour, Professor Raid Al-Adaileh, Professor Mohammad Almahasnieh and Professor Adel Salloum.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ABS	Australia Bureau of Statistics
AMOR	Australian Market Organic Report
AVE	Average Variance Extracted
ANOVA	One-Way Analysis of Variance
AMOS	Analysis of a Moment Structures
AOFGS	Australian Organic Farming and Gardening Association
AUD	Australian Dollar
AVA	Availability
BFA	Biological Farmers of Australia
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CR	Composite Reliability
CR	Certification
EFA	Exploratory Factor Analysis
ECs	Environmental Concerns
FA	Factor Analysis
GFI	Goodness-of-Fit Index
HBM	Health Belief Model
HREC	Human Research Ethics Committee
HCs	Health Concerns
ICT	Information and Communication Technology
IFI	Incremental Fit Index
IFOAM	International Federation of Organic Agriculture Movement
INT	Intention
KMO	Kaiser-Meyer-Olkin
LSD	Least Significant Difference
MRC	Market Research Consulting
NFI	Normed Fit Index

NASAA	National Association for Sustainable Agriculture Australia
PBC	Perceived Behavioural Control
PCA	Principal Component Analysis
PAF	Principal Axis Factoring
PL	Packaging and Labelling
PA	Packaging
PR	Price
RMR	Root Mean Square
RMSEA	Root Mean Square Error of Approximation
SCT	Social Cognitive Theory
SEM	Structural Equation Modelling
SPSS	Statistical Package for Social Science
SNs	Subjective Norms
SM	Social Media
SFAs	Sensory Food Attributes
TRA	Theory of Reasoned Action
TPB	Theory of Planned Behaviour
TCA	Thematic Content Analysis
TLI	Tucker Lewis Index
TR	Trust
UK	United Kingdom
USDA	United States Department of Agriculture
USA	United Sates of America
USQ	University of Southern Queensland

CHAPTER ONE: INTRODUCTION

1.1 Introduction

This chapter presents a brief overview of the research topic. It also provides background to the research problem, introduces the research questions and the research objectives, and explains the significance of the research. In addition, this chapter discusses the scope of the research and its justification. The chapter concludes with a thesis outline which provides a brief description of the content of each chapter.

1.2 Background

Recently, the world has witnessed a paradigm shift in consumers' attitudes and education, and this shift has led to an increase in consumers' preferences for organic food products (Rana & Paul 2017). This shift is due to the potential drawbacks of conventional food products, some of which may contain chemical ingredients (Rana & Paul 2017). These ingredients can present considerable hazards to human health, and consumers are becoming increasingly aware of these hazards and the importance of food safety (Basha et al. 2015). Organic food is the food produced without the use of fertilizers, herbicides and pesticides (UDDA 2016). Notably, health has been categorised as one of the most important reasons to consume organic food (Sangkumchaliang & Huang 2012; Ergönül & Ergönül 2015; Kapuge 2016; Baudry et al. 2017). Further, Worthington (2001) pointed out that organic food contains valuable vitamins that are very important for human health. Consequently, as it reduces the perceived health risks associated with food consumption, consumers are likely to pay a higher price for organic food (Yeung & Morris 2001). In addition, the consumption of and demand for organic food has increased rapidly in many countries (Hilverda et al. 2017; Rahnama et al. 2017), with global sales reaching USD 89.9 billion in 2015 and estimated to reach USD 238.4 billion by 2022 (MRC 2016). From a marketing perspective, the continued growth of and demand for organic food, provides an opportunity for companies to identify the attributes which give it an advantages over non-organic food, and gain an understanding of how consumers form their intentions to purchase organic food (Lee & Yun 2015). Furthermore, producing and marketing organic food enables farmers and other food marketing practitioners to survive and compete with the growing consolidation of farms into large industrial units with a higher level of mechanisation (Kotschi et al. 2003). In addition, adopting organic farming is very beneficial to human health and the environment, and is

considered to be a lucrative business (Asif et al. 2018). Since marketers have to promote the benefits of organic food to persuade consumers to purchase it (Teng & Wang 2015), research on factors that influence its purchase is important for further understanding (Petrescu et al. 2017; Rana & Paul 2017). In this regard, scholars have attempted to identify the factors influencing the purchase of organic food. They include intrinsic factors such as flavour and taste, and extrinsic factors such as price, health consciousness, environmental concerns, food safety, nutrition information, and quality (Tarkiainen & Sundqvist 2005; Michaelidou & Hassan 2008; Shafie & Rennie 2012; Wee et al. 2014; Al-Taie et al. 2015; De Toni et al. 2018). Therefore, before offering organic products, marketers need to know and understand the target market very well (Nandi et al. 2016).

1.3 Statement of the problem

It can be argued that, although Australia is globally ranked as a country with the largest area in farmland under organic cultivation (O'Mahony & Lobo 2017; Willer & Lernoud 2017, 2018), it is deemed to be an emerging organic food market (Sultan et al. 2018). Further, according to a report published by the Australian Department of Agriculture (2014), Australians pay approximately AUD 141.4 billion for conventional food annually. On the other hand, the annual expenditure on organic food products is estimated to be $2.4 billion (Lawson et al. 2018). Thus, it may be argued that the value of the Australian organic food market is relatively small compared to the conventional food market (Sultan et al. 2018). Additionally, a report published by International Federation of Organic Agriculture Movement (IFOAM) showed that Australian producers of organic food have a higher export rate of organic food to outside of Australia, hence, there is need to market organic food in the local market of Australia (Willer & Lernoud 2018). In addition, the question of why Australians purchase or do not purchase organic food remains unexplored and needs to be better understood (Anisimova 2016).

To understand this phenomenon, it is essential to determine the reasons that encourage or restrict Australians' purchase of organic food (Anisimova 2016). Therefore, there is a need to conduct a study to explore and determine the main factors influencing the purchase of organic food (Lee & Yun 2015; Gakobo & Jere 2016; Hwang 2016; Teng & Lu 2016; Chekima et al. 2017; Petrescu et al. 2017; Rana & Paul 2017; Massey et al. 2018; Wang et al. 2019). This need motivates the current study.

1.4 Research objectives

The current research aims to achieve the following main objectives:

1. To explore the key factors that influence consumers' organic food purchasing intentions.

2. To examine the influence of various factors on consumers' organic food purchasing intentions.

3. To investigate the role of Australian consumers' demographic characteristics in their behavioural intentions towards organic food purchases.

1.5 Research questions

Based on the above objectives, the current study tries to answer the following research questions:

1. What are the factors that influence consumers' intentions to purchase organic food in Australia?

2. What is the influence of the factors on consumers' purchase intention of organic food?

3. What is the role of demographic variables (i.e. gender, age, income, education level, occupation, employment status, marital status, number of children and ethnicity) on Australian consumers' organic food purchasing intentions?

1.6 Scope of the study

The current research is conducted in Toowoomba, which is a regional town in Australia. The rationale for selecting a regional area like Toowoomba is the lack of studies undertaken to understand why consumers purchase or do not purchase organic food in regional areas of Australia. Further, the characteristics of the respondents are representative of regional Australia. In addition, to the best of the researcher's knowledge, no research has been carried out in Toowoomba to explore and investigate the key factors that potentially influence consumers' intention to purchase organic food in this city. The kind of organic food that is within the scope of this study is organic food in general. In addition, Sultan et al. (2018) argued that consumers who live in metro/city areas of Australia are more likely to purchase organic food than consumers who live in regional areas of Australia. Thus, because

Toowoomba is deemed a regional area (Rolfe & Windle 2008), this study is undertaken to gain an understanding of organic food purchasing in a regional centre.

1.7 Justification of the research

The current research is justified on the basis of the following reasons:

1. Although Australia is considered to be the largest national producer of organic food worldwide (O'Mahony & Lobo 2017; Lawson et al. 2018; Wheeler et al. 2019), very few Australian academic studies have been conducted on this subject, and there is a need to conduct further research to understand Australian consumers' purchases of such products (Heller & Willer 2007; Smith & Paladino 2010; Phuong 2013; Anisimova 2016; O'Mahony & Lobo 2017). Furthermore, the Australian Market Organic Report (AMOR) by Lawson et al. (2018) recommended future research to understand Australian consumers' preferences towards organic food. Moreover, there is a need to understand why consumers who live in regional areas of Australia are less likely to buy organic food (Rolfe & Windle 2008). Thus, this study is justified.

2. Globally, there is a need to conduct further research to identify the main factors that may influence organic food purchase intentions of consumers in different countries (Hwang 2016; Petrescu et al. 2017; Rana & Paul 2017; Massey et al. 2018; Nuttavuthisit & Thøgersen 2019; Wang et al. 2019) as identification of these essential factors enables producers, processors and sellers to understand why consumers purchase organic foods, and thus develop strategies for targeting those consumers more effectively and easily (Persaud & Schillo 2017; Massey et al. 2018; Wang et al. 2019).

3. This research is conducted to address the gaps identified in the literature. It is important to carry out studies that fill the gaps found in academic research. These gaps are as follows: very few studies that have been conducted in the Australian context to understand consumers' purchase intentions towards organic food (Heller Willer 2007; Smith & Paladino 2010; Phuong 2013; Nguyen & Ha 2016; Anisimova 2016; O'Mahony & Lobo 2017; Wheeler et al. 2019). Also, little is known about the influence of social media and organic food attributes on both consumers' trust and purchasing intentions towards organic food (Muhammad et al. 2016; Persaud & Schillo 2017; Fathelrahman & Basarir 2018). Further, the influence of trust and packaging on purchasing intentions of organic food has received little attention (Yin et al. 2016; Nuttavuthisit & Thøgersen

2017; Meyerding & Merz 2018; Lian & Yoong 2019; Nuttavuthisit & Thøgersen 2019). The literature indicates that there is a need to carry out more qualitative studies to better understand why consumers buy or do not buy organic food (Lee 2016; Dumortier et al. 2017; Shin et al. 2019) . In addition, there is a need to understand the role of consumers' demographic characteristics in the purchase intentions towards organic food (Yadav 2016; Chekima et al. 2017; Yang et al. 2018; Tariq et al. 2019). Additionally, very few studies have employed the Social Cognitive Theory in the context of organic food (Li & Zhong 2017; Preko 2017).

4. For new investment in the organic food industry, correct and accurate information is crucial for investors in the Australian context (O'Mahony & Lobo 2017). Furthermore, various international reports, such as The World of Organic Agriculture (2017), have recommended undertaking more research to investigate the market of organic food to assist new investors in this industry (Willer & Lernoud 2017).

1.8 Significance of the study

The significance of the present study stems from its contributions to theory and practice.

1.8.1 Contribution to the body of knowledge

The present study provides incremental contributions to the area of food marketing. First, it extends the body of knowledge by exploring the key factors that influence consumers' purchase intention of organic food in the Australian context using a mixed method approach. Second, the existing study covers several issues like how social media affects both consumers' trust and purchase intention of organic food (Persaud & Schillo 2017; Ayyub et al. 2018; Fathelrahman & Basarir 2018). Also, this study outlines how organic food attributes, packaging and trust influence consumers' intention to purchase such products (Prentice et al. 2019; Lian & Yoong 2019; & Meyerding & Merz 2018). Third, the current study expands the body of literature by further investigating how the differences in consumers' demographic characteristics influence the purchase intention of organic food (Yang et al. 2018; Tariq et al. 2019). Fourth, the existing study has suggested a new conceptual framework that might be used as a reference by the researchers in the future. Finally, this study expands SCT and TPB by adding additional variables such as social media and trust.

1.8.2 Contribution to practice

The existing study contributes to practice in several ways. First, the practitioners of organic food such as marketers, retailers, producers may benefit from the findings of this study. For example, the finding that social media influences both consumers' trust and purchase intention of organic food can be a basis for practitioners to focus on the use of social media as a digital platform to attract more consumers; and the finding that availability is one of the barriers restricting consumers to buy organic food can be a basis for organic food retailers to address the availability issue. Second, the findings of this study could be beneficial to organisations (e.g. non-governmental organisations) that try to encourage people to consume organic food products. Third, the findings of the current study might be used by investors in the organic food industry who need correct and accurate information about the factors that motivate consumers to buy organic food. They could make better decisions through a better understanding of the essential motives that influence consumers' purchase intention of organic food products.

1.9 Outline of the thesis

This section shows the main chapters of the current thesis. Overall, this thesis is comprised of seven chapters. Each chapter of the thesis is as follows:

Chapter One: Introduction

This chapter provides a brief overview of the topic of the study. It also presents background to the research problem, research objectives and research questions. Further, this chapter shows the main research contributions. It includes an outline of the thesis that provides a brief description of the contents of each chapter of the thesis.

Chapter Two: Literature review

This chapter presents a literature review of the topic of study. It provides an overview of the organic food concept and its evolution. This chapter also presents a comprehensive overview of the past studies conducted into the same topic. Factors that influence consumers' purchase intentions in the context of organic food are also presented. In addition, a comparison between various theories is provided. This chapter also identifies a gap in the literature.

Chapter Three: Research methodology

This chapter begins by presenting a research paradigm. It also provides a discussion about research approaches and design. Further, this chapter shows the procedures and stages of data collection and analysis. Ethical considerations are also provided.

Chapter Four: Findings of the qualitative study

Chapter four explains and discusses the findings of the exploratory stage of the study (qualitative study). The main purpose of the qualitative study is to explore the main factors that potentially influence consumers' purchase of organic food. It begins with a demographic profile of the participants. This chapter also presents the findings of each question used in the interview protocol.

Chapter Five: Development of conceptual framework and research hypotheses

This chapter discusses the process of developing the conceptual framework of the research. In addition, it presents the formulation of the hypothesis that will be tested.

Chapter Six: Quantitative data analysis

This chapter outlines the findings of the confirmatory stage of the study (quantitative study). It starts with the demographic profile of the respondents, followed by the preparation of data for analysis, followed by descriptive statistics. This chapter also shows all the statistical tools used to analyse the quantitative data, such as EFA, CFA, followed by an examination the stated hypothesis using Path analysis and One-way ANOVA, and the other reliability and validity tests employed.

Chapter Seven: Discussion and conclusions

The last chapter of the thesis presents a discussion and concludes the findings of the study. It offers the theoretical and practical contributions of the study. Further, it provides a discussion on the limitations and directions for future research.

1.10 List of definitions

In this section, definitions of the terms for all the variables used in the study are provided as follows:

- Certification: Is defined as a tool for signalling to consumers that a food is certified organic (Janssen & Hamm 2012).

- Packaging: This variable is defined as “all products made of any materials of any nature to be used for the containment, protection, handling, delivery and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer” (Olsson et al. 2004, p. 98).
- Labelling: Is defined as “any words, particulars, trademarks, brand name, pictorial matter or symbol relating to a foodstuff and placed on any packaging, document, notice, label, ring or collar accompanying or referring to such foodstuff ” (Cheftel 2005, p. 533).
- Social media: Is a form of online advertising that that uses social networks such as Facebook, Twitter, and YouTube for the purpose of communication between the company and consumers (Ismail et al. 2018).
- Food attributes: Are features that differentiate one type of food from other foods (Jang et al. 2009).
- Health concerns: Are health factors, including the individual’s concern about health, that are significantly associated with health-related behaviours (Seeman & Seeman, 1983).
- Environmental concerns: This variable can be defined as “people's awareness of environmental issues, their support for solving environmental problems, and their willingness to work hard” (Sun et al. 2019, p. 482).
- Subjective norms: Are the individual perceptions of behaviours that most people who are important to an individual think that individual should or should not perform (Fishbein and Ajzen 1975).
- Food availability: Is defined as having sufficient quantities of food being available on a consistent basis (Thomas et al. 2014).
- Price: Is “the amount of money one receives in exchange for a product during a sale” (Powell et al. 2013, p. 662).
- Trust: Is “an expectation that the trustee is willing to keep promises and to fulfil obligations” (Pivato et al. 2008, p. 6).
- Intention: Is an indication of an individual's readiness to perform a given behaviour (Ajzen 1991).

1.11 Chapter summary

This chapter provides a brief overview of the topic of the study. It presents the background of the study followed by the research problem, research objectives and the research questions. Further, it discusses the scope of the study and outlines the justification for

carrying out this study. Finally, it provides an outline of the current thesis. The next chapter will present a review of the relevant literature regarding the organic food industry as well as the main antecedents of consumers' purchasing intentions towards organic food. Furthermore, it will review the findings of past studies on this topic, and compare the various relevant theories. In addition, it will identify the gap in the body of knowledge that will be addressed in the study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The main aim of this chapter is to discuss, document and analyse the earlier studies related to consumers' purchasing intentions in the context of organic food. This chapter is divided into eight sections. The first section provides an overview of the organic food industry, including a definition of organic food and the evolution and demand for organic food. The second section presents a comparison between buyers and non-buyers of organic food. The third section reviews the role of demographic variables in purchasing intentions towards organic food. The fourth section provides a detailed discussion of the main factors that motivate consumers, of various countries to purchase organic food. The fifth section presents an explanation of consumers' purchasing intentions towards organic food. The sixth section comprehensively reviews the relevant literature regarding theories associated with this topic. The seventh section identifies the gaps that need to be addressed, and the last section provides a summary of the chapter.

2.2 Understanding the organic food industry

2.2.1 Definition of organic food

Generally speaking, the term 'organic' means "an ecological management production system that promotes and enhances biodiversity, biological cycles and soil biological activity" (Chandrashekar 2014, p. 52). There is a variety of organisations (and researchers) that have defined organic food. For instance, according to the United States Department of Agriculture (USDA), organic food is defined as food produced using environmentally sound practices instead of using conventional pesticides or fertilizers made with synthetic ingredients and not processed using industrial solvents, irradiation, chemical food additives, or genetic engineering (USDA 2016). Further, Shafie and Rennie (2012) defined organic food as a food from a farming system that avoids the use of synthetic fertilizers and pesticides. In addition, Hoppe et al. (2013) defined organic food as products that are made according to the standards of organic agriculture. Thus, there is a consensus that organic food should be made and produced without using chemicals, artificial fertilizers, or pesticides. The following table 2.1 summarises those definitions.

Table 2.1 Definitions of organic food

No.	Definition	Author (s)
1	It can be an ecological management production system that promotes and enhances biodiversity, biological cycles and soil biological activity.	Chandrashekar (2014)
2	Organic food is the food produced using environmentally sound practices instead of using conventional pesticides or fertilizers made with synthetic ingredients and not processed using industrial solvents, irradiation, chemical food additives, or genetic engineering.	USDA (2016)
3	Organic food is a food from a farming system that avoids the use of synthetic fertilizers and pesticides.	Shafie and Rennie (2012)
4	Organic food as products that are made according to the standards of organic agriculture.	Hoppe et al. (2013)

Source: Created for this study based on the literature.

2.2.2 Evolution of the organic food industry

Historically, organic farming systems developed in German-speaking and English-speaking countries in the early 20th century, primarily in Europe and the United States (Lockeretz 2007; Kuepper 2010). According to Kuepper (2010), the pioneers who moved from conventional agriculture into organic agriculture were strongly motivated by a desire to overcome problems associated with agriculture such as soil depletion, low quality food, decline of crop varieties, rural poverty and livestock feed. This movement led to enhanced human health (Orbol 2013). Since these beginnings, most of the practitioners of organic food industry have employed specific standards to ensure that organic food products are produced based on agreed standards issued by the International Federation of Organic Agriculture Movement (IFOAM) (Sanders 2006). The role of these standards is to monitor the implementation of organic food standards (Sanders 2006). Further, there are various types of standards that should be followed by the producers associated with the organic food industry. According to Kotschi et al. (2003) these standards are as follows:

- Public (government) regulations
- Private (certifier) standards
- Industry (buyer) standards
- Voluntary standards
- Production and processing standards, and certification criteria

In addition, Table 2.2 provides a summary of the evolution of organic food in Australia.

Table 2.2 Organic food evolution

Year	Name of association
1944	The Australian Organic Farming and Gardening Association (AOFGS)
1945	The Compost of Victoria
1946	The Living Soil Association
1987	The National Association for Sustainable Agriculture Australia (NASAA)
1988	The Biological Farmers of Australia (BFA)

Source: Created for this study based on the literature.

2.2.3 The global market for organic food

Globally, the consumption of, and demand for organic food has increased rapidly (Hilverda et al. 2017; Rahnama et al. 2017). Further, according to Willer and Lernoud (2017), the world market for organic food products continues to show positive growth. In addition, global demand for organic food continues to boom with sales volume reaching USD 89.8 billion in 2015 and sales expected to reach USD 238.4 billion by 2022 (MRC 2016). A report conducted by Willer and Lernoud (2017) indicates that the United States is considered to be the leading market for organic food (35.9 billion euros), followed by Germany (6.8 billion euros), France (5.5 billion euros), and China (4.7 billion euros) .With regard to global organic farmland, the Australian Organic Market Report 2017 (AOMR) reported that a quarter of organic farmland is located in developing countries such as India (585,200 producers), Ethiopia (203,602 producers), and Mexico (200,039 producers) (Andrew & Lawson 2017). Furthermore, according to the Australian Organic Market Report 2018 (AOMR), globally, there are about 178 countries with organic agricultural activities, and there are approximately 2.7 million organic food producers. The global area under organic management is estimated to be around 57.8 million hectares (Lawson et al. 2018; Wheeler et al. 2019). Additionally, the literature has demonstrated that the growth in organic food production is directly influenced by consumers' preferences that are mainly motivated by several factors such as health, ethics, trust, availability, price, environmental issues, nutritional content and safety (Misra & Singh 2016; Baudry et al. 2017; Dumortier et al. 2017; O'Mahony & Lobo 2017; Rahnama 2017; Asif et al. 2018).

2.2.4 Australian organic food

Globally, Australia has the most organic agricultural land, 35 million hectares, followed by Argentina, 3.1 million hectares, and the United States of America, 2 million hectares (O'Mahony & Lobo 2017; Willer & Lernoud 2017; Lawson et al. 2018). Historically, it can be argued that the first "organic" farming society was the Australian Organic Farming and

Gardening Association (AOFGS) that was founded in 1944, followed by the Compost of Victoria which was established in 1945, the Living Soil Association in Tasmania that was founded in 1946, the National Association for Sustainable Agriculture Australia (NASAA) that was founded in 1987, and the Biological Farmers of Australia (BFA) which was established in 1988 (Paull 2013; O'Mahony & Lobo 2017). Further, according to the Australian Organic Market Report 2018 (AOMR), with respect to the total demand for organic food items in Australia; the estimated value of the organic grocery market for the year 2018 was 2.4 billion dollars and the number of households that purchased organic grocery products was 384,000 (Lawson et al. 2018). In addition, Australia has several kinds of organic food practitioners such as producers and processors or handlers and others (Lawson et al. 2018). The following Table 2.3 (adopted from the Australian Organic Market Report 2018) summaries an estimation of organic food operations in Australia from 2002 to 2017.

Table 2.3 Estimated organic food operations in Australia 2002-2017

Year	Producers	Processors	Handlers and other	Total
2002	1650	397	194	2241
2003	1730	441	180	2351
2004	1859	412	165	2436
2005	1871	523	141	2535
2006	1691	743	131	2565
2007	1776	607	206	2589
2009	2129	657	200	2986
*2011	2117	765	187	3069
2014	1707	719	141	2567
2015	1999	1136	443	3578
2016	2075	1163	513	3751
2017	1998	1432	598	4028

Source: The Australian Organic Market Report 2018

2.3 Buyers vs. non-buyers of organic food

Several studies have explored the differences between buyers and non-buyers of organic food products. In a US study which focuses on the differences between and similarities of buyers and non-buyers of organic food, Finch (2006) found that both buyers and non-buyers indicated that they were likely to buy organic food if a family member became pregnant. Further, the author found that buyers of organic food would reduce the amount of purchasing such products if their income declined. With regards to non-buyers, the study found that, due to the lack of familiarity with organic food, non-buyers did not value such products. This group reported that organic food was too expensive. It also indicated that organic food was

only bought by young consumers, well-educated consumers, and health conscious consumers. On the other hand, the current buyers stated that price was an important factor when buying organic food. In addition, the study reported that increasing the availability and lowering the price of organic food would lead to an increased number of organic food buyers in the future.

Another study, conducted by Krystallis et al. (2006), investigated the differences between buyers and non-buyers of organic food in Greece. They found that both buyers and non-buyers perceived organic food as safe food and gave importance to the country of origin, freshness, nutritional value and vitamin content. Furthermore, they found that buyers of organic food are less price sensitive, and are influenced by various factors such as the quality of organic food, and labelling. An Australian study carried out by Chang and Zepeda (2005) suggested that Australian buyers of organic food tend to buy organic food due to factors such as personal health, the environment and animal welfare. Non-buyers considered two factors, namely appearance and taste as the key motives that might influence them to buy such foods in the future. In addition, the study suggested that increasing consumers' awareness of organic food products will increase the organic food market in Australia. An Indian study by Chakrabarti and Baisya (2007) pointed out that regular buyers and occasional buyers of organic food tend to be influenced by nutritional value and health concerns when they buy organic food. Moreover, Shepherd et al. (2005) reported that environmental concerns appears to be less important than health consciousness in the purchase of organic food products in Sweden. However, this trend differs between regular and occasional buyers of organic food products.

2.4 Demographic variables and organic food consumers

The literature indicates that the demographic profile of consumers significantly influences their buying intentions and decisions in the context of organic food (Rahnama et al. 2017; Janssen 2018; Basha & Lal 2019). Demographic variables such as gender, age, income, education, occupation, number of children, and ethnicity are important factors in consumers' purchase intentions towards organic food (Ahmad & Juhdi 2010; Doorn & Verhoef 2015). Several earlier studies explored the role of demographic variables on consumers' purchase intentions towards organic food. Past studies showed that gender has a positive influence on purchasing organic food products (Kriwy & Mecking 2012; Pelletier et al. 2013). Xu and Wu (2010) indicated that gender, age, educational level and income are the main factors that determine the purchase of organic food in China. Sultan et al. (2018) conducted a study to

segment the Australian organic food market. The study found that demographic variables such as income and education are the major variables that influence Australians' organic food purchasing decisions. By contrast, Rahnama et al. (2017) found that demographic variables such as age, gender, income, education and marital status have no influence on Iranians to purchase organic chicken. Thus, the literature shows a variety of demographic variables in the context of organic food purchases. Furthermore, many scholars suggest that more studies be conducted to understand the association between consumers' demographic variables and purchasing intention in the context of organic food (Chekima et al. 2017).

2.4.1 Gender

Gender is considered to be one of the key demographic variables for purchasing food and eating behaviour (Kim et al. 2009). Previous studies confirmed that female consumers are more willing and are more likely to purchase organic food regularly (Lea & Worsley 2005; Tsakiridou et al. 2006). Female consumers are more likely to purchase organic food because, to some extent, it is the women in the family that have a responsibility to shop for the household. Thus, they are more likely to have more awareness of the importance of organic food (Lockie et al. 2004). Another study undertaken in Spain by Ureña et al. (2008) acknowledged that, although females have more favourable attitudes to buying organic food than males, they were less willing to pay a premium for organic food. The study showed that females were more concerned about other factors such as health, environmental information and nourishment than males, and that they looked for low cost when buying organic food more than males. In contrast, according to Roitner-Schobesberger et al. (2008), in Bangkok, males are more likely to buy organic food than females in Bangkok. The study suggests that Thai males earned higher incomes and held higher educational qualification than females.

Prior studies found that gender did not seem to be an important variable in the purchase of organic food. For instance, Dahm et al. (2009) who investigated how consumers' attitudes towards and awareness of organic food would predict their intention to buy organic food in the US. The study found that equal numbers of females and males were aware of the definition of organic food and both genders had a positive attitude towards organic food products. Thus, the influence of gender on consumers' choice of organic food could be deemed to be a debatable issue.

2.4.2 Age

Past literature indicates that age has an influence on consumers' purchase intentions towards organic food (Sultan et al. 2018). Several studies have advanced the notion that younger consumers are more likely to buy organic food in comparison with older consumers (Onyango et al. 2007). On the other hand, some studies claimed that older people are more likely to buy organic food compared with younger people (Roitner-Schobesberger et al. 2008). It may be argued that older consumers may not be able to pay for organic food because they have limited disposable income compared with younger consumers who can gain more money by working more than one job (Rimal et al. 2005). With regards to older consumers, this group of people thinks about health issues due to perceived health vulnerability, and in general they have a higher risk of sickness than younger consumers (Bhaskaran & Hardley 2002). In addition, some studies argued that there is no significant difference in the age group of consumers in terms of purchase intentions regarding organic food. For example, an Australian study by Oates et al. (2012) claimed that the age of Australian consumers did not differ with the level of organic food product purchases. Similarly, Denver and Jensen (2014) found that age had no significant association with consumers' intentions to buy organic apples in Denmark. So, it can be concluded that the association between the age of consumers and buying organic food is a debatable issue.

2.4.3 Education level

The literature indicates that consumption of organic food is strongly correlated with the education level of consumers (Wang et al. 2019). Various studies have investigated the differences in education levels of consumers and their purchasing intentions in the context of organic food. Singh and Verma (2017), who investigated Indians' purchasing intentions towards organic food, found that consumers who hold a Master's degree are more willing and buy organic food. Another recent study carried out by Rani and Singla (2019) reported that an increase in the education level of consumers led to an increase in the purchase intentions towards organic food in Punjab State, India. Similarly, a Turkish study by Demirtas (2018) indicated that an increase in education level led to increased consumer knowledge of and awareness towards organic food, therefore increasing buying intention for organic food.

By contrast, Hashem et al. (2018) found that the education level of the consumers is not statistically significant with respect to consumers' choice of organic food. Likewise in Australia, it was found that the education level of consumers produced minimal differences

in terms of tendency to buy organic food (Lea & Worsley 2005). This finding was also supported by (Rimal et al. 2005; Lin et al. 2008). As a result, the extent to which education level can be an influential determinant for buying organic food is unclear.

2.4.4 Income

Arguably, the income level of consumers is one of the major factors that influences the growth of the organic food market (Sultan et al. 2018; Pandey et al. 2019). Further, an increase in the level of consumers' disposable income leads to an increased consumption of organic food (Rana & Paul 2017; Asif et al. 2018; Wang et al. 2019). Indeed, consumers who live in affluent countries are more likely to purchase organic food products (Deliana 2012). In contrast, others have argued that having a higher income does not increase the likelihood of consumers buying organic food (Nikolić 2018). Empirically, much work has been carried out on the relationship between income and purchase intentions in the case of organic food. Further, some of these studies employed income as a control variable. In this respect, a study by Singh and Verma (2017) examined whether there was a significant difference between consumers' income and their intention to purchase organic food. They found that there was a significant statistical difference between consumers' income and purchasing intention toward organic food. Further, they indicated that consumers who earn higher incomes had a statistically significant higher score for buying organic food than respondents who earned lower incomes.

Conversely, a study of Rahnama et al. (2017) found that consumers' income has no influence on their purchase of organic chicken in Iran. In addition, a Chinese study by Xie et al. (2015) noted that there is no statistical difference between personal income and purchasing intention of organic food products in Eastern China. In Australia, Wheeler et al. (2019) pointed out that Australians' income is an essential factor when buying organic food. On the other hand, an early Australian study by Bus and Worsley (2003) asserted that there was no statistically significant difference between the income of consumers and the purchase of organic milk.

2.4.5 Marital status

Past research reported that marital status is one of the essential consumers' demographic variables that influence consumer buying behaviour (Srinivasan et al. 2015). Further, the literature has indicated that married consumers are more likely to buy organic food than single consumers and hence, marital status has a positive influence on consumers' demand for organic food (Dimitri & Dettmann 2012; Rana & Paul 2017). On other hand, a study

undertaken by Khan (2012) noted that, in Norway, single consumers are more willing to purchase organic food than married consumers. By contrast, other studies claimed that there is no correlation between purchasing organic food and consumers' marital status. Hasanov and Khalid (2015) noted that marital status had no influence on consumers' intention to purchase organic food in Malaysia. Aygen (2012) found that there was no statistically significant difference between consumers' marital status and buying organic food in Turkey. Further, the author reported that married consumers are more likely to buy organic food than single consumers. Similarly, an Australian study by Sultan et al. (2018) reached the conclusion that differences in consumers' marital status have no relationship with the purchase of organic food.

2.4.6 Employment status

It may be argued that the employment status of consumers can influence their purchase of organic food (Mehra & Ratna 2014). Different findings have been reported in the literature regarding the relationship between consumers' employment status and their intention to purchase organic food. For example, Ward et al. (2012) identified the determinants of buying organic food in Australia. They found that, in Australia, consumers who work in full-time jobs are more likely to buy organic food. Likewise, Mehra and Ratna (2014) reported that the employment status of Indians had a positive influence on intention to buy organic food. By contrast, some other studies have not found any correlation between consumers' purchase of organic food and their employment status. A study carried out in the United Arab Emirates indicated that there is no relationship between consumers' decisions to purchase organic food and their employment status. Further, some studies have used employment status as a control variable. One such study was undertaken in Croatia by Brčić-Stipčević et al. (2013) who found that there is a statistically significant difference in the purchase of organic food.

2.4.7 Occupational status

The literature confirms that occupation is an important component of consumers' socio-economic status (Tung et al. 2012). Several marketing research studies have employed the occupational status of individuals including consumers' purchasing intentions in the context of organic food (Ahmad & Juhdi 2010; Tung et al. 2012; Yadav & Pathak 2016). In this respect, a Taiwanese study by Tung et al. (2012) asserted that consumers who have higher occupation prestige tend to purchase organic food more than the other groups. In addition, Petersen et al. (2013) have also noted that the occupation of consumers is considered to be strongly associated with the purchase of organic food in Denmark. Moreover, some

researchers used the occupational status of consumers as a control variable. For example, a Serbian study by Grubor and Djokic (2016) pointed out that there is a significant difference between consumers' occupations and their purchasing intentions towards organic yogurt. Conversely, Shafie and Rennie (2012) claimed that the occupational status of consumers in Malaysia had no significant influence on intention to buy organic food. Similarly, Shashikiran and Madhavaiah (2015) confirmed that there is a relationship between the occupation of consumers and their readiness to buy organic food in India.

2.4.8 Number of children in the household

In the context of organic food, the number of children in the household has an influence on consumers' purchases of organic food (Ward et al. 2012). Past studies have employed the presence and number of children as a variable that may influence consumers' purchasing intentions towards organic food (Baudry et al. 2018; Massey et al. 2018). A study of Jose and Kuriakose (2016) reached the conclusion that the presence of children in the household has an influence on decisions to buy organic food. The author reported that 57% of the consumers who purchased organic food had children in the household. Further, Janssen (2018) asserted this idea that families that have children are more willing to buy organic food than families without children. In addition, Slamet et al. (2016) also indicated that consumers who have children in their household are more likely to pay for organic food products. On the other hand, some of the past studies contradict this finding. In this regard, Omar et al. (2017) claimed that the presence of children in the household does not have any influence on consumers' purchasing intentions towards organic food. Denver and Christensen (2015) also found that the number of children in the household seems to have no influence on the organic food choice.

2.4.9 Ethnicity

Previous research found that the consumption of various forms of products is influenced by consumers' ethnicity (Kurtulus et al. 2016; Zhao 2017). In the case of organic food, a lot of studies have been undertaken to understand the association between ethnicity and the consumption of organic food. A study conducted in the US by Dettmann and Dimitri (2007) reported that ethnicity influences consumers' intentions to buy organic vegetables. Similarly, Dimitri and Dettmann (2012) revealed that ethnicity is associated with consumers' purchase intentions towards organic food. In contrast, other studies stated that there is no relationship between consumers' ethnicity and their purchasing intentions towards organic food. In this respect, Curl et al. (2013) investigated the influence of consumers' demographic variables

on their consumption of organic food. They reported that there is no association between consumers' ethnicity and buying organic food.

In addition, several studies employed ethnicity as a control variable. For instance, Dardak et al. (2009) noted that there is no statistically significant difference between consumers' ethnicity and their intention to buy organic vegetables and fruits in Malaysia. Moreover, the literature suggests that further research is needed to understand the influence of ethnicity on purchase intentions towards organic food (Dimitri & Dettmann 2012).

2.5 Consumers' purchasing intention

Consumers' purchasing intentions can be influenced by a number of factors (Chen & Lobo 2012). Intention is defined as an indication of an individual's readiness to perform a given behaviour (Ajzen 1991). Several studies investigated consumers' intentions to purchase organic food. A recent study by Wang et al. (2019) examined the influence of attitudes, subjective norms and health consciousness on consumers' organic food purchasing intentions. They found that all of the mentioned variables were predictors of the intention to purchase such products. Another study by Asif et al. (2018) investigated consumers' organic food purchasing intentions in Pakistan, Turkey and Iran. The study showed that both attitudes and health consciousness influenced intention to purchase organic food in these three countries, while the influence of other factors varies from country to country. For example, in Pakistan the subjective norms factor was found to have an influence on consumers' intention to buy organic food, whereas, environmental concerns and perceived behavioural control were found to be non-significant and thus, do not influence intention to purchase such products. In Turkey, subjective norms and perceived behavioural control were found to be influential factors on consumers' intentions to purchase organic food, whereas environmental concerns were found to have no influence on intention to purchase organic food. Lastly in Iran, the study demonstrated that subjective norms and environmental concerns both have an influence on consumers' intentions to purchase organic food, whereas perceived behavioural control was found to have no influence on intention to purchase organic food in this country.

A review study carried out by Rana and Paul (2017) revealed that several factors influence intentions to purchase organic food in different countries. They reported that these factors are: health consciousness, environmental concerns, quality, food safety, fashion trend, social consciousness, willing to pay, knowledge, price, certification, availability, education, marital status, and family size.

Furthermore, a study by Kapuge (2016) who investigated Sri Lankans' organic food buying intentions, revealed that awareness and health consciousness influenced consumers' buying intentions, whilst environmental concerns and reference group were found to not influence organic food purchasing intentions. Yazdanpanah and Forouzani (2015) examined the factors that may influence students' buying intentions regarding organic food in Iran. They confirmed that attitude was the main factor which predicts students' intentions to buy such products. In addition, moral norms and self-identity were found to influence intentions to buy organic food. The study also revealed that perceived behavioural control and subjective norms did not show significant influence on intention to buy organic food.

Maloney et al. (2014) stated that attitudes and subjective norms directly influence intention to purchase organic food, and perceived behavioural control and perceived expensiveness were found to indirectly influence intention. The study showed that awareness indirectly influences intention, but directly influences attitudes and perceived behavioural control. Empirical evidence has shown that in Malaysia, consumers' organic food purchase intentions are influenced by perceived food safety, health, environmental factors and animal welfare, while perceived quality has no influence on intention to purchase such products (Wee et al. 2014). Other research (Nasir & Karakaya 2014) demonstrated that hedonic consumption patterns, utilitarian, health orientation, and socially responsible consumption were the essential factors that positively influenced Turkish consumers to buy organic food.

A study undertaken by Paul and Rana (2012) reported that Indian consumers are influenced by various factors when they buy organic food. The results showed that health concerns were found to be the most important reason to buy organic for the majority of consumers. The study also found that the majority of consumers revealed that the lack of availability of some forms of organic food is deemed to be an obstacle that limits their ability to continue purchasing organic food. Further, the study indicated education to be a demographic variable significantly influencing consumers' intentions to purchase such products.

In Poland, the sensory appeals of organic food were the most important factors that motivate the purchase of organic food, followed by price and food safety (Żakowska-Biemans 2011). It is evident that Malaysian consumers' intentions to buy organic food are influenced by the perceptions of organic food, and that food safety and health factors are important factors for consumers when they purchase such items (Ahmad & Juhdi 2010). A Danish study carried

out by Kalogeras et al. (2009) to determine the key motive for purchasing organic olive oil showed that awareness, perception about food quality, high price, and preferences were the main factors that motivate Danish consumers to purchase organic olive oil. Further, Lodorfos and Dennis (2008), who examined the factors that influence consumers' intentions to buy organic food reported that attitudes, subjective norms, perceived behavioural control, price, availability, and product information were factors that influenced consumers' intentions to purchase organic food. In the same year, in Italy, De Magistris and Gracia (2008) indicated that Italians were strongly motivated by their attitudes towards health and environment when buying organic food.

Chen (2007) undertook a study to better understand attitudes and purchasing intentions towards organic food in Taiwan. The outcomes of the study showed that both organic food involvement and food neophobia moderated the relationship between attitudes and purchase intentions towards organic food. The results also showed that food involvement exercises moderating the effects on the relationships between consumers' intentions to buy organic food and the antecedents of the TPB except for the subjective norms. The six food choice motives (mood, natural content, animal welfare, environmental protection, political values and religion) determine the consumers' positive attitudes towards organic foods. In Norway, a study by Honkanen et al. (2006) investigated the influence of ethical values on consumers' intentions to purchase organic food. The study demonstrated that environmental and animal rights issues had a strong influence on attitudes towards organic food. Further, political motives had some positive influence on attitudes, whilst religion was not important as a food choice criterion. In Finland, Tarkiainen and Sundqvist (2005) showed that the relationship between subjective norms and attitudes towards organic food purchasing intentions was significant, while the relationship between health consciousness and attitudes towards buying organic food was not significant. Perceived behavioural control and perceived availability of organic food have no effect on buying intentions of organic food. In the same year, an Australian study undertaken by Lea and Worsley (2005) found that health, environment and taste were significant to Australian intentions to purchase organic food, whereas price and availability were considered to be barriers to the purchase of organic food. Arvanitoyannis et al. (2004) conducted a study to analyse consumers' attitudes towards organic food in Greece. They pointed out the vast majority of consumers agree that organic food is healthier than conventional food. In addition, they reported that sensory appeal,

healthiness and willingness to pay are the essential factors that influence organic food purchasing intentions.

It can be concluded that various motives influence the purchase of organic food. As mentioned previously, these motives play an important role in convincing consumers to buy such products. On the other hand, other factors such as price and the limited availability of some forms of organic food were considered to be barriers that restrict the purchase of such foods.

2.6 Consumers' motivations to purchase organic food

There are numerous studies explaining consumers' purchase intentions towards organic food (Asif et al. 2018; Shin et al. 2019). In addition, scholars have debated several factors that influence consumers' purchase intentions in the context of organic food over a period of time (Rana & Paul 2017; Asif et al. 2018; Wang et al. 2019). Some of the past studies focused on the influence of health concerns on consumers' intentions to buy such products (Misra & Singh 2016; Petrescu et al. 2017; Rana & Paul 2017; Apaolaza et al. 2018). Other studies have reported that environmental concerns were one of the essential determinants that influence the purchase of organic food (Laureti & Benedetti 2018; Schrank & Running 2018; Ditlevsen et al. 2019).

Some studies indicate that consumers' purchasing intentions towards organic food can be triggered by the nutritional value of organic food (Ergönül & Ergönül 2015; Dumortier et al. 2017). Several studies stated that many consumers believe that organic food is better quality since organic food is free of pesticides and chemical residues (Ozguven 2012; Rahnama 2016). Along with the mentioned motives that influence consumers to purchase organic food, other studies confirmed that purchasing organic food is strongly influenced by subjective norms (Scalco et al. 2017; Asif et al. 2018; Laureti & Benedetti 2018). In addition, the availability of organic food was reported to be another motive that influences the purchase of organic food (Thøgersen et al. 2015; McReynolds et al. 2018; Sultan et al. 2018). Arguably, there are other important factors that influence the purchase of organic food worldwide. The details of those factors and motivations are discussed next.

2.6.1 Health concerns

Health concerns are health factors, including the individual's concern about health, that are significantly associated with health-related behaviours (Seeman & Seeman, 1983). Arguably, there is a prevalent belief that organic food is healthy food (Magkos et al. 2006;

Hasimu et al. 2017; Apaolaza et al. 2018; Janssen 2018; Ditlevsen et al. 2019). Organic foods contain several kinds of vitamins that people can benefit from (Forman & Silverstein 2012). Further, food scientists argue that eating organic food leads to a decrease in the level of diseases and health risks such as cancer, obesity and being overweight, as well as diabetes (Rembiałkowska & Średnicka 2009; Huber et al. 2011; Barański et al. 2017; Mie et al. 2017; Sun et al. 2018). Furthermore, the consumption of organic food contributes to the improvement of the human immune system (Rembiałkowska & Średnicka 2009; Huber et al. 2011).

The marketing literature addressing consumers' intentions to purchase organic food products confirms that health concerns are considered to be a major motive for the purchase and consumption of organic food products (Oraman & Unakitan 2010; Paul & Rana 2012; Nasir & Karakaya 2014; Effendi et al. 2015; Misra & Singh 2016; Petrescu et al. 2017; Apaolaza et al. 2018). For instance, a study conducted by Asif et al. (2018) in three countries, namely; Pakistan, Turkey and Iran found that health concerns are one of the important determinants for consumers in the three countries when they purchase organic food. Further, a Taiwanese study (Lee et al. 2018) suggests that organic food choices were related to consumers' health concerns towards non-organic food products. A more recent study (Ditlevsen et al. 2019) reveals that health concerns are more important than any other factor in terms of purchasing organic food. Consumers' interest in health issues seems to correspond to their interest in, and desire to, consume organic food products (Rana & Paul 2017).

Another study conducted in Mexico by Escobar-López et al. (2017) confirmed that Mexicans consume organic food to prevent different kinds of diseases such as cancer. They indicated that those consumers considered health as one of the main motives in their intention to purchase organic food. Ditlevsen et al. (2019) conducted a qualitative study using focus groups to explore the main factors that Danish consumers take into consideration when purchasing organic food. They found that health concerns were found to be the main determinants for consumers buying organic food.

In addition, consumers have a willingness to pay a premium price for chemical free organic food products (Hughner et al. 2007; Adams et al. 2018; Jeong & Jang 2019; Wang et al. 2019). In this respect, Aryal et al. (2009) assessed consumers' willingness to pay for organic food. They reported that consumers in Kathmandu Valley were willing to pay a premium

price for organic food products. Similarly, Loo et al. (2011) argued that consumers were willing to pay for healthy organic chicken.

In Australia, a study conducted by Phuong (2013) confirmed that the health benefits of organic food was the primary reason for buying organic food. Smith and Paladino (2010) also stated that consumers' intentions to purchase organic food was strongly influenced by health concerns. In addition, Oates et al. (2012) reported that health reasons are always cited as a key determinant for organic food consumption in an Australian context. Thus, it can be argued that consumers' health concerns are the key factors influencing purchase intentions of organic food. In contrast, some scholars have asserted that there is no significant association between health concerns and buying intentions towards organic food. In this respect, Waqas and Hong (2019), who undertook research in Pakistan, revealed that health concerns do not significantly influence intentions to purchase organic food. Moreover, Tarkiainen and Sundqvist (2005) indicated that health concerns were not the major factor influencing the purchase of organic food in Finland.

2.6.2 Environmental concerns

In the literature of Environmental Studies, researchers indicate that consumers in developed and wealthy countries are likely to buy products that produce minimal environmental losses to the Earth such as pollution, vegetation damage and losses to surface water. They also favour those products that provide optimal conditions for animal health and welfare (Hansen et al. 2001; Boer 2003). One of the production systems that ensures environmental protection and guarantees the minimum level of environmental damage is the organic systems (Pimentel et al. 2005). Environmental concerns can be defined as "people's awareness of environmental issues, their support for solving environmental problems, and their willingness to work hard" (Sun et al. 2019, p. 482). In the context of organic production systems, no pesticides or commercial fertilizers are applied to the organic systems (Pimentel et al. 2005). In addition, De Magistris and Gracia (2008) reported that the production system of organic food incorporated good environmental practices that preserve natural resources and use a high level of biodiversity. Many countries have adopted organic farming systems due to their positive impact on the environment (Stolze et al. 2000). Thus, consumers are more likely to consume organic food (De Toni et al. 2018).

In the Consumer Behaviour literature, past studies indicate that environmental concerns are one of the factors influencing consumers' purchase intentions in the context of organic food

(Shafie & Rennie 2012; Hassan et al. 2015; Bryła 2016; Baudry et al. 2017; Laureti & Benedetti 2018; Wheeler et al. 2019). In this regard, consumers have a feeling of ethical obligation and responsibility to try to protect the environment (Lea & Worsley 2008).

Several studies have examined the influence of environmental concerns on consumers' purchase intentions towards organic food. For example, a qualitative study carried out by Schrank and Running (2018) reported that consumers are motivated by environmental concerns to buy organic food. They reached the conclusion that consumers are strongly concerned about protecting the environment through the purchase of organic food products. As well, according to Slamet et al. (2016) Indonesian consumers are more likely to buy organic vegetables due to increased interest in environmental issues. Nasir and Karakaya (2014) also underlined the essential motives that drive consumers to buy organic food. They asserted that environmental issues and a feeling that they should protect the environment were two of the drivers that influence consumers' purchase of organic food.

Other studies however, have asserted that environmental concerns have no significant influence on consumers' purchase intentions towards organic food. In this regard, Yadav and Pathak (2016) looked at the relationship between Indian consumers' purchase intentions and environmental concerns. They claimed a non-significant influence association between environmental concerns and Indians' purchasing intentions in the context of organic food. Likewise, Rahnama (2017), in examining the effect of consumption values on Iranian women's likelihood to buy organic yogurt, confirmed that environmental value had no impact on women's behaviour choices towards organic yogurt.

2.6.3 Availability

From a review of the literature, it appears that availability is one of the main determinants influencing organic food purchase intentions (Paul & Rana 2012; Kouy et al. 2016; Jeong & Jang 2019). It can be argued that the limited availability of organic food is one of the main barriers to the growth and development of the organic food market as consumers are unable to access and buy such products (Ahmed & Rahman 2015; Bryła 2016; Petrescu et al. 2017; McReynolds et al. 2018; Wang et al. 2019). Further, consumers confirmed that in terms of availability, organic food is limited in the market (Żakowska-Biemans 2011).

There is an abundance of studies on the influence of availability on consumers' intention to buy organic food. For instance, Sultan et al. (2018) stated that the most frequently cited

buying constraint of organic food products is the availability factor. Earlier studies investigated the influence of availability on consumers' purchase intention of organic food (Jolly 1991; Sparks & Shepherd 1992; Magnusson et al. 2001). The studies indicated that organic food is limited in the market. Likewise, Aertsens et al. (2011) reported that the respondents cited lack of availability of organic food as one of the main obstacles to buy such products in Belgium.

In Australia, it can be argued that a lack of availability of organic food products is one of the factors limiting their purchase. In this respect, Nguyen and Ha (2016) noted that 17% of the consumers who did not buy organic food cited that the unavailability of organic food was the second reason restricting their purchase of organic food products. Additionally, Chang and Zepeda (2005) carried out a qualitative study using focus groups to understand the motives that influence consumers' demand for organic food in the Australian context. They found that lack of availability appears to be a key obstacle to organic food demand. Supporting this argument, Lockie et al. (2002) claimed that the principal factor limiting the purchase of organic was the lack of availability of those products in Australia. Thus, it can be asserted that limited availability of organic food products is seen one of the major barriers to buying organic food for many of consumers.

Conversely, past studies have also found that lack of availability of organic food is not the main barrier to purchasing such products. For instance, Tarkiainen and Sundqvist (2005) argued that perceived availability of organic food had no significant influence on consumers' intentions to purchase such products. Similarly, Magnusson et al. (2001) reached the conclusion that Swedish consumers were satisfied with the availability of organic food, and did not consider the availability of organic food as a barrier to purchasing such products.

2.6.4 Price

From a review of the literature, it can be argued that producing organic products costs more than producing conventional food (Roseboro 2009; Stewart 2010). Roseboro (2009) pointed out that the reasons leading to the increased costs of producing organic food are as follows:

- Producers of organic food are required to meet strict standards for organic certification, which leads to more costs related to things such as time and management
- Producing organic food is labour intensive.

- Producing organic food lacks the economies of scale that allow big food companies to buy large quantities of ingredients or crops at lower prices.

The abovementioned reasons contributed to the increased cost of producing organic food, which leads to more expensive food prices in the market (Muscănescu 2013). This claim is asserted by several studies. In this respect, Hasimu et al. (2017), Janssen (2018) and Jeong & Jang (2019) stated that organic food products are perceived as expensive food. Thus, the higher price of organic food is deemed to be one of the major obstacles to purchasing organic food (Baudry et al. 2017; Shin et al. 2018; Wang et al. 2019). As a result, higher prices of organic food limit consumers' ability to purchase organic food (Padel & Foster 2005; Smith & Paladino 2010; Żakowska-Biemans 2011).

Empirically, much work has been carried out on the relationship between price and purchase intentions towards organic food. For example, Rahnama (2017), in his study that investigated the influence of consumption values on Iranian females' behaviour to buy organic yogurt, he reported that the association between price and consumers' purchases of organic food is significant. Thus, price is considered one of the consumption values that influence consumers' choice regarding organic yogurt. Similarly, some authors (Aschemann-Witzel & Zielke 2017; Rani & Singla 2019) argued that consumers with a good financial status have a greater tendency to purchase organic food in comparison with those who have lower income.

Likewise, in the Australian context, a study undertaken by Sultan et al. (2018) noted that some Australian consumers accept the idea that the price of organic food is expensive, and agree that the premium price of organic food is justified. On the negative side, another study carried out in Australia by Lobo et al. (2014) claimed that Australian consumers were unable to buy organic food due to the high price of such products. Additionally, a number of studies pointed out that lowering the prices of organic food leads to an increase in the purchase of those products. In this respect, Lea and Worsley (2005) reported that if the prices of organic food went down, Australian consumers would be more willing and likely to buy such products. In the same way, Croatian consumers who did not purchase organic food indicated that they would buy those products if they were cheaper (Radman 2005). Thus, in can be inferred that price is an essential factor in the context of organic food purchase.

2.6.5 Quality of organic food

Generally, quality can be defined "a series of attributes selected on the basis of accuracy and precision of measurement" (Shewfelt 1999, p. 198). In the case of food products, quality is currently considered to be a major concern facing the industry (Aung & Chang 2014). Hence, higher food quality leads to higher growth in consumption of food products (Guo et al. 2016). Further, the literature indicates that organic food is perceived to be of high quality (Popa et al. 2018; Nuttavuthisit & Thøgersen 2019). Therefore, due to the importance of food quality, many researchers are seeking to investigate consumer behaviour towards the quality of food products (Botonaki et al. 2006).

In the context of organic food, product quality refers to "the value for money that consumers feel that they are receiving from purchasing their organic products, and here, when one pays more for products - one expects better quality of products " (Basha & Lal 2019, p. 102). Prior studies found that the perceived quality of organic food was better than conventional food (Hjelmar 2011; Loebnitz & Aschemann-Witzel 2016; De Toni et al. 2018). The high quality of organic food products leads consumers to purchase those products in comparison to conventional food (Rahnama 2016). Moreover, it is evident that consumers usually use quality as a justification to buy organic food (Thøgersen et al. 2017). In addition, several studies have asserted that the quality of organic food has a positive and significant influence on consumers' purchase intentions towards these products. For instance, Popa and Dabija (2019) who carried out a qualitative study to understand the development of the Romanian organic food market. They reported that the quality of organic food is deemed as an important factor that determines its consumption. Similarly, Janssen (2018) investigating the determinants of organic food purchase, confirmed that the high quality of organic food is one of the main determinants for buying such products.

In Australia, a study conducted by Wheeler et al. (2019) asserted that quality is one of the organic food purchase choice determinants in South Australia. Likewise, another study undertaken by Sultan et al. (2018) to segment the consumers of organic food in the Australian market, confirmed that consumers look for the quality standards of organic food products. Further, Smith and Paladino (2010) investigated the influence of organic food quality on Australians' purchase intentions regarding those products. They reported that quality is one of the factors that significantly influenced Australians' purchase of organic food products. It can then be concluded that, quality is an important factor when purchasing organic food.

2.6.6 Nutritional value

The literature indicates that organic food is perceived to have greater nutritional value in comparison to conventional food (Massey et al. 2018; Ditlevsen et al. 2019). Nutritional value can be defined as "the usefulness of products and food groups to cover the consumer's needs related to metabolism" (Rembiatkowska & Badowski 2012, p. 240). In this regard, food scientists state that organic food contains many minerals, vitamins and proteins (Lea & Worsley 2005; Shafie & Rennie 2012). Thus, this would lead consumers to purchase and consume organic food (Lee & Yun 2015). From a review of the literature, it can be argued that nutritional value of organic food is considered to be one of the main factors that influence consumers of such products (Sobhanifard 2018).

A study carried out by Dumortier et al. (2017) indicated that the nutritional value of organic food was the main determinant for purchasing organic food. In addition, a Turkish study carried out by Ergönül and Ergönül (2015) found that 91% of respondents agreed that the nutritional value of the organic food is deemed the most important driver of buying intentions towards such products. Similarly, EscobarLópez et al. (2017) undertook a study to identify the key motives of purchasing organic food in Mexico and found that the nutritional content of food is one of the main motives that motivate Mexicans to buy organic food products.

In Australia, consumers look for nutritional value when they buy organic food products. For instance, Chang and Zepeda (2005) asserted that nutrition is one of the most important characteristics that Australians pay attention to when they purchase organic food. Hence, it is concluded that nutrition is a key factor when buying organic food.

2.6.7 Hedonism

A review of the literature clearly shows that many consumers intend to purchase organic food based on the hedonism factor. For instance, Escobar-López et al. (2017) indicated that Mexicans tend to purchase organic food because of hedonism. Further, an Australian study by Anisimova (2016) asserted that hedonism enhances and increases Australians' intention to buy organic food. Similarly, Lee and Yun (2015) pointed out that hedonism plays an important role in the determination of consumers' intentions to purchase organic food in the US. Likewise, Lee and Goudeau (2014) confirmed that consumers' attitudinal loyalty for organic food is positively determined by the hedonism factor. Further, Nasir and Karakaya

(2014), found that hedonism was a significant predictor for purchasing organic food in Europe.

2.6.8 Organic regulations

In 2006 a worldwide legal framework for organic food farming was established (Heller & Willer 2007). Furthermore, about 74 countries have their own legal regulations to organise organic farming (Ergönül and Ergönül 2015). According to Pivato et al. (2008), the regulation of organic farming is designed to achieve the reduction of pesticide use, better soil protection, the preservation of biodiversity, and animal welfare. The literature shows that regulations have an influence on consumers' purchase intentions in the context of organic food. Hsu and Chen (2014) indicated that regulations significantly influence consumers' intentions to purchase organic food in Taiwan. Likewise, in China, Chen and Lobo (2012) claimed that consumers are strongly influenced by organic food regulations when buying organic food. Similarly, Yin et al. (2016) pointed out that Chinese consumers usually evaluate government regulations to shape and enhance their trust towards organic food.

2.6.9 Lifestyle

The consumption of organic food has been seen as a lifestyle choice by individuals who consume organic food regularly (Chen 2009; Basha et al. 2015). Past studies used lifestyle as a predictor of consumers' purchase intentions towards organic food (Chen & Lobo 2012). A recent study by Basha and Lal (2019) argued that lifestyle is deemed to be the main motive that drives consumers to purchase organic food. Moreover, a study conducted by Rahnama et al. (2017) to investigate Iranian consumers purchasing of organic chicken, found that lifestyle was one of the factors that influence the purchase of organic chicken. In addition, they reported that lifestyle choice seemed to be a growing trend in the consumption of organic food. Similarly, another study (Misra & Singh 2016) indicted that lifestyle choice would lead to an increase in the growth of organic food in India. In Indonesia, Suprapto and Wijaya (2012) found that lifestyle influences consumers' attitudes towards organic food.

2.6.10 Taste

The literature indicates that consumers' preferences for organic food is associated with several factors such as better taste (Kareklas et al. 2014; Kottala & Singh 2015). In terms of taste, Shin et al. (2018) noted that consumers expect better taste when buying and consuming organic food. From a review of the literature, past studies found that taste significantly

influenced the purchase of organic food. For example, Baudry et al. (2017) conducted a survey of 22,366 respondents living in France. This study found that consumers pay attention to the taste dimension when purchasing organic food items. Bernard and Liu (2017), who carried out a study in USA, reported that when consumers purchase organic food, taste is considered to be a key factor. In addition, Bryła (2016) who conducted research in Poland to determine the main motives for and barriers to buying organic food, confirmed that the taste of organic food is one of the essential motives driving the Polish to purchase organic food products. A Jordanian study carried out by Lillywhite et al. (2013) found that 34% of the respondents identified taste as one of the most important motives for buying organic food.

It can be argued that Australians also pay more attention to taste when they buy organic food. In this context, Lea and Worsley (2005) found that the vast majority of the (Australian) respondents agreed that organic food is tasty food, thus, they are more willing to buy such products. Likewise, Lobo et al. (2014), who investigated organic food purchasing behaviour in Victoria (Australia), asserted that Australians agreed that organic food is tastier than conventional food. Further, McCarthy and Murphy (2013) pointed out that consumers in north Queensland were strongly influenced by the taste factor when purchasing organic food. They reported that taste was one of the reasons that led consumers to buy those products.

2.6.11 Trust

Trust can be more important in organic food purchasing decisions than conventional food. This is because the market is small and consumers generally have limited knowledge and awareness of organic food (Teng & Wang 2015). In this respect, trust is defined as "an expectation that the trustee is willing to keep promises and to fulfil obligations" (Pivato et al. 2008, p. 6). In addition, the literature indicates that trust is shown to have a powerful influence on consumers' choice of organic food (Anisimova 2016). Moreover, the literature reveals that organic food is considered to be a credence product, meaning that consumer trust is a prerequisite for purchasing organic food products (Dumortier et al. 2017; Nuttavuthisit & Thøgersen 2017). Therefore, consumers who have trust in organic food are more likely to spend less effort to buy organic food products (Khare & Pandey 2017).

Recent consumer studies indicate that trust is an important factor that influences consumers' purchasing intentions towards organic food products (Anisimova 2016; Sobhanifard 2018; Basha & Lal 2019). On the other hand, Nuttavuthisit and Thøgersen (2017) reported that lack

of consumer trust and scepticism about organic food are barriers to the growth of the organic food market. Thus, trust is a crucial factor in the organic food domain (Pivato et al. 2008). A study by Basha and Lal (2019) investigating Indian consumers' attitudes towards buying organic food, found that trust has a significant influence on consumers' intentions to purchase organic food. Further, they reported that trust is one of the main factors which tends to account for a switch from conventional food to organic food. Similarly, Misra and Singh (2016), who determined the factors that influence the growth of the organic food market, argued that trust is one of the drivers of the growth of the organic food market. They indicated that companies that market organic food products need to make more effort to increase the level of consumers' trust in organic food.

In Australia, it is evident that trust influences consumers' purchases of organic food. For example, Phuong (2013) found that the level of consumers' trust in organic food is a very important factor influencing the purchase for organic food. Further, Nguyen and Ha (2016) stated that the more Queensland (state of Australia) consumers trust organic food, the more likely they are to buy organic food products. In addition, Anisimova (2016) asserted that the trust factor enhanced consumers' purchasing intentions towards organic food. He stated that trust not only affects consumers' decisions to purchase organic food, it influences the type of food distribution channel. Interestingly, the literature indicates that there is a need to carry out more studies that examine the effect of trust on consumers' decisions to purchase organic food (Yin et al. 2016; Nuttavuthisit & Thøgersen 2017).

2.6.12 Packaging and labelling

Consumers seek accurate, reliable, and clear information about organic food (Shafie & Rennie 2012). Packaging and labelling can be employed to ensure the accuracy, durability and good visibility of products (Sehrawet & Kundu 2007). Packaging includes all the activities of producing and designing the container of a product. Furthermore, packaging is considered to be extremely important because it is the purchaser's first encounter with a product (Kotler et al. 2016). One of the objectives that packaging seeks to achieve is to help consumers identify brands and convey persuasive and descriptive information about the product (Kotler et al. 2016). A label may be a tag attached to the product or graphic design which is deemed to be part of the packaging. Moreover, the label performs various functions such as helping consumers to identify the producers and brands, and describe products by providing information about them. Labels can also be used as a way of promoting products

by using attractive graphics (Kotler 2001). Additionally, package labelling informs consumers about the nutritional value of, and ingredients in the food (Robertson 2006; Marsh & Bugusu 2007).

Generally, packaging and labelling influence food consumers' judgement and purchasing decisions (Silayoi & Speece 2004). Furthermore, food packaging can be employed as the silent salesman of a product at the point of sale (Silayoi & Speece 2004). In addition, consumers' expectations of food can be generated from packaging and labelling (Silayoi & Speece 2007). Hence, packaging and labelling enable marketers and food practitioners to function on a self-service basis (Robertson 2006).

Specifically, in the case of organic food, the literature indicates that consumers always need packaging and labelling to inform them about organic food (Aryal et al. 2009). Further, packaging and labelling can be a facilitator for consumers to purchase organic food, because packaging and labelling enable consumers to identify the certified organic food products (Henryks et al. 2014). In addition, the use of packaging and labelling is rapidly increasing in developed countries (Salgado-Beltrán et al. 2013). Studies have asserted the importance of packaging and labelling in the organic food sector. For example, Tariq et al. (2019), who carried out a study in China, reported that the packaging and labelling of organic food products strongly influenced consumers' intentions to purchase those products. Further, Meyerding and Merz (2018) argued that the presentation of realistic packaging and using organic labelling increased the purchase of organic food in Germany. In a study carried out in Iran by Rahnama et al. (2017) to identify the main factors that influence consumers to buy organic chicken, packaging was found to be one of the most influential factors on consumers' decisions to purchase organic chicken. In addition, Lee et al. (2018) also stated that the use of the 'organic' label on packaging can increase consumers' consumption of organic food because it plays a vital role in distinguishing organic food from conventional food.

Additionally, the literature also indicates that packaging and labelling not only influence consumers' purchasing intentions towards of organic food, they influence consumers' trust towards organic food. In this respect, several studies confirmed that the level of consumer trust is strongly influenced by the label of organic food (Hamzaoui Essoussi & Zahaf 2008; Yin et al. 2016; Ayyub et al. 2018). Packaging also influences the level of consumer trust towards food products (Buzby & Ready 1996; Shah et al. 2013). Therefore, in the context of

consumer studies of organic food, it can be concluded that packaging and labelling are essential factors that influence the choice of such products.

In Australia, few studies have investigated the influence of packaging and labelling on consumers' intentions regarding organic food. Nguyen and Ha (2016) argued that 77% of respondents in Queensland, Australia used labels to recognise organic food products. They also stated that Australian consumers do not recognise the authenticity of organic food without labels. Another study undertaken by McCarthy and Murphy (2013) pointed out that the label is the most important factor that influences Australians' choice of organic food.

Although there are some studies that examine the role of labelling and packaging on consumers' purchase intentions towards organic food, there is a need to conduct further studies to obtain more insights into the influence of organic labelling on consumers' choice of organic food (Lee et al. 2018). In addition, the literature also indicates that packaging is considered to be one of the variables that needs more investigation in the area of organic food purchases (Hemmerling et al. 2015).

2.6.13 Food safety

Globally, people's concerns about, and perceptions of, food safety have become fundamental to food consumption (Becker et al. 2015; Nandi et al. 2016). Yin et al. (2016) argued that consumers who pay more attention to food safety are more likely to buy organic food. A review of the literature reveals several past studies highlighting the influence of organic food safety on consumers' intentions to purchase organic food. A Polish study undertaken by Bryła (2016) stated that food safety is one of the principal motives for consumption of organic food. He pointed out that 30% of respondents mentioned that food safety is a key factor when they purchase organic food. Similarly, Shafie and Rennie (2012) reported that food safety influences consumers' organic food preferences. Further, Ozguven (2012) investigated the association between food safety and buying organic food. The results demonstrated that Turkish consumers were significantly influenced by the food safety factor when they bought organic milk, fruits and vegetables. In addition, Michaelidou and Hassan (2008) indicated that food safety is the most important predictor of consumers' intention towards buying organic food in Scotland. Therefore, food safety is deemed an essential factor in the context of organic food.

2.6.14 Certification

Generally speaking, with an increasing severity of food safety and environmental issues, several measures such as certification should be undertaken to ensure the safety of food (Yin et al. 2010). In the case of organic food, certification can be employed as a tool for signalling to consumers that a food is certified organic product (Janssen & Hamm 2012). Developed countries, including Australia, have their own national standards for organic certification, with specific production requirements (Chang & Zepeda 2005). Further, farmers and producers of organic food are required to have certification to be able to produce and market organic food (Barrett et al. 2001). As a result, producers and farmers of organic food need to provide several documents to a certifying body to ensure that they follow the standards and guidelines for producing organic food (Sobhanifard 2018).

In the Australian context, since 1992, the government provided the national standards for producing organic food (Willer & Kilcher 2009; Phuong 2013). These standards oblige the producers of organic food items to use specific allowable inputs such as animal manures, natural herbicides, and prohibit the use of chemical substances (Lyons 2006). Further, the organic industry and the Australian government continue to respond to international organic development through reviewing the national standards for organic products (Willer & Lernoud 2017). Thus, certification guarantees that the food is organically produced which makes consumers satisfied about buying such products (Orlando 2018).

Empirically, much work has been carried out on the relationship between the availability of certification and consumers' purchase intentions towards organic food. In this respect, a recent study carried out in China by Tariq et al. (2019) found that certification is one of the important factors influencing Chinese consumers' purchase of organic food. A similar study by Rana and Paul (2017) identified certification as a factor that motivates consumers' purchasing intentions towards organic food. Another study conducted in India by Misra and Singh (2016) found that the certification of organic food contributed to the growth of organic food in that country. They also reported that consumers' trust in organic food is associated with the use of certification in the organic food industry.

An Australian study undertaken by Chang and Zepeda (2005) suggested that increasing consumers' awareness of certification leads to an increase in the demand for organic food. Likewise, Lockie et al. (2002) who carried out qualitative research using focus groups, found that all the participants in the study confirmed the importance of certification in the context of organic food. In addition, Lobo et al. (2014) who investigated consumers' organic food

buying behaviour in Victoria, showed that certification is considered to be one of the factors that drives consumers to buy and consume organic food.

2.6.15 Promotion

Promotion is one of the marketing mix elements that includes advertising, personal selling, sales promotion, publicity and public relations (Kotler et al. 2016). Promotional campaigns play a vital role in informing, persuading and reminding consumers about products (Vecchio-Sadus & Griffiths 2004). Thus, promotional activities are considered to be an important tool to increase the level of consumers' awareness and knowledge of various brands (Mathew et al. 2010). In the case of organic food, the literature indicates that consumers need to be knowledgeable about the food they purchase to satisfy their needs and desires (Shafie & Rennie 2012; Singh & Verma 2017). Chiou (1998) stated that varying levels of knowledge lead consumers to have different purchasing intentions for products. As a result, knowledge about organic food is crucial in the consumers' purchasing behaviour (Singh & Verma 2017). Prior studies argue that consumers are not adequately aware of, and knowledgeable about, the benefits of organic food products, and therefore, there is need to increase consumer awareness and knowledge of organic food (Shafie & Rennie 2012). Moreover, insufficient awareness of consumers about organic food tends to be one of the barriers to the growth of organic food market (Bryła 2016).

In relation to organic food promotion, some studies indicate that insufficient promotion for organic food is one of the barriers restricting demand for such products (Hughner et al. 2007; Krishna & Balasubramanian 2018). In this respect, one of the methods to increase awareness and knowledge of organic food is to employ promotional campaigns (Scholl-Grissemann 2018; Yang et al. 2018). Moreover, companies that market organic food can use different tools to promote organic food for the public. They may use direct marketing, advertising, brochures, social media platforms and personal selling (Papasolomou & Melanthiou 2012). Additionally, studies suggest that marketers could use a promotional display in the stores where consumers taste and test organic food (Lee & Yun 2015).

Several studies carried out to examine the influence of promotion on consumers' intention to buy organic food, for instance, Rahnama (2016), investigated the influence of advertising on consumers' choice of organic food. The results of the study showed that advertising strongly influenced purchase of organic food. Further, a Malaysian study undertaken by Leong and Paim (2015) found that the use of advertising to promote organic food has a positive influence on Malaysians' intentions to purchase such products. A similar study by Nugroho

et al. (2015) found that Indonesian consumers realise that personal selling and advertising are crucial factors that influence their decisions to purchase organic tofu. Moreover, another study undertaken in South Korea reported that Korean consumers would like to use TV to watch advertising that enables them to obtain more information about organic food (Suh et al. 2012).

In Australia, Nguyen and Ha (2016) pointed out that Australian consumers need information about organics, especially about various certification bodies, that show how organic food is certified, and marketers need to use different promotional campaigns to increase the number of consumers buying organic food. Further, Chang and Zepeda (2005) who conducted a study to understand consumers' demand for organic food in Australia, reported that the promotion of organic food has been a contributing factor in the increased demand for organic food. Thus, it can be concluded that conveying information about organic food through different promotional tools is an important means of increasing the level of consumers' knowledge and awareness of organic food which leads to increased demand for organic food products.

The literature has reported that consumers lack information about organic food products (Jurado et al. 2019). Thus, there is a need to increase knowledge regarding such products. Despite the efforts of promotional campaigns to increase consumers' knowledge and awareness of organic food, and to convince consumers to purchase such products, there is a need to investigate the influence of other promotional tools, like social media, on consumers' trust in purchasing organic food (Šerić and Praničević 2018). More specifically, Ayyub et al. (2018) argued that little is known about the influence of social media on consumers' trust of organic food. In addition, the literature indicates that there is scant empirical studies on the influence of social media on consumers' intentions to purchase organic food (Muhammad et al. 2016; Persaud & Schillo 2017; Fathelrahman & Basarir 2018). Thus, to better understanding the role of social media in enhancing consumers' knowledge and awareness regarding organic food products (Wang et al. 2019), marketers are required to manage their social media sites to better send positive messages to consumers (Kudeshia & Kumar 2017).

Social media, including electronic platforms such as Facebook, Twitter, and LinkedIn, (Raghupathi & Fogel 2013) enable companies to promote their products to consumers and enable the brand to communicate with consumers (Kang & Kim 2017). Moreover, social media provides more opportunities to facilitate access of information and greater ease of interaction between consumers and businesses (Sundjaja et al. 2017). Further, social media is considered to be an effective marketing tool that facilitates the education of consumers

about products (Han & Stoel 2017). In Australia, 93% of the population has a Facebook account (Sensis 2015). Thus, due to the increasing number of consumers who use social media (Schivinski & Dabrowski 2016), it is important to understand the influence of social media on Australians' purchase intentions (Arli 2017).

This literature review found very few studies that examined the influence of social media on trust and purchase intention. For example, Hajli (2014) has examined the influence of social media on consumers' buying intentions in the UK. He found that social media plays an important role in enhancing consumers' trust and buying intentions. Further, a study carried out by Tatar and Eren-Erdoğmuş (2016) to understand the influence of social media on brand trust when choosing hotels, asserted that social media positively influences customers' trust when booking hotels. Similarly, a US study undertaken by Baglione and Tucci (2019) indicated that Facebook is one of the social media tools that improves consumers' trust when buying brands. Notably, most of the studies that examined the influence of social media on consumers' trust have focused on various forms of products and ignored the influence of social media on consumers' trust of organic food products. Thus, there is a specific need to investigate the influence of social media on consumers' trust towards buying organic food (Ayyub et al. 2018).

With respect to purchasing intention generally, the literature indicates that social media advertisements facilitate the shaping of consumers' intentions to purchase products (Alalwan 2018; Baum et al. 2018). Similarly, in the domain of fast food, Gaber and Wright (2014) found that advertising on social media influenced Egyptian consumers' fast food purchase intentions. Specifically, in the context of organic food, very few studies have been conducted to gain an understanding of the role of social media. For instance, Wang et al. (2019) reported that consumers used social media to obtain information regarding organic food products, but this study did not investigate the influence of social media on consumers' purchasing intentions. Another study by Fathelrahman and Basarir (2018) was conducted to understand United Arab Emirates' consumers' purchasing attitudes and behaviour towards using the World Wide Web for ordering food products in general, and consumers' perceptions of social media such as Facebook, Twitter, Instagram and WhatsApp. The findings of their study showed that consumers were significantly influenced by the information provided by the marketers of organic food on social media and other consumers' purchases of such products. Therefore, there is a need to conduct further research to increase the body of knowledge about the role of social media platforms in shaping consumer purchasing intentions towards

organic food products (Muhammad et al. 2016; Persaud & Schillo 2017; Fathelrahman & Basarir 2018).

2.6.16 Ethical beliefs

In the context of organic food, ethical consumerism has been investigated to have a significant influence on consumers' purchasing choices in this market (Escobar-López et al. 2017). A survey conducted by Baudry et al. (2017) found that consumers' organic food purchasing decisions are determined by ethical choices. This result is consistent with a study conducted by Yadav and Pathak (2016) which found that, in India, the moral attitudes of consumers strongly influenced intention to buy organic food. A qualitative study carried out in Denmark by Hjelmar (2011) pointed out that ethical considerations played a key role in consumers' organic food purchasing decisions. Similarly, Michaelidou and Hassan (2008) argue that ethical consciousness influences both consumers' attitudes and intentions to purchase and consume organic food items in Scotland. Thus, ethics plays a very important role in consumers' decisions in the context of organic food and, therefore, consumers adopt the consumption of organic food as an ethical value (Grosglik 2017).

2.6.17 Brand name

The literature highlights the importance of brand name in consumers' purchasing behaviours related to various products (Hasan 2008). In the case of organic food, Drexler et al. (2018) showed that most consumers pay more attention to the brand name of the organic food that they purchase. Similarly, Beaudreault (2009) revealed that, in the US, brand strongly influences consumers' perceptions of organic food. By contrast, another study found brand name as a less important factor when purchasing organic food (Loo et al. 2013).

2.6.18 Perception

The literature indicates that consumer perception plays an essential role in organic food purchasing decisions (Schleenbecker & Hamm 2013). For example, Rahnama et al. (2017) conducted a study to understand Iranian purchasing intentions towards organic food. They reported that perception significantly influences consumers' intentions to purchase organic chicken. Similarly, Ahmad and Juhdi (2010) found that Malaysian consumers' organic food purchasing intentions are strongly influenced by their perceptions of these products.

2.7 Theories related to consumers' intentions to purchase organic food

Several theories and models have been employed in the study of organic food. Previous research has largely employed the Theory of Reasoned Action (TRA) and the Theory of Planned Behaviour (TPB) to predict organic food purchasing intentions. Some studies have employed other theories such as the Theory of Consumption Values and the Social Cognitive Model (SCM). Additionally, some studies have used certain models in relation to consumers buying behaviour of organic food such as the Health Belief Model (HBM). What follows is a discussion of each theory or model. Furthermore, a discussion of the criticism(s) directed towards each theory or model is also presented. This section outlines the use and justification of the theory employed in the current study.

2.7.1 Theory of Consumption Value

The Theory of Consumption Value was developed by Sheth et al. (1991). This theory explains why consumers choose to purchase or not to purchase a specific product (s), and why consumers choose one product over another one. According to the theory of consumption value, there are five main values that influence consumer buying behaviour. These values are as follows:

1. Functional value
2. Conditional value
3. Social value
4. Emotional value
5. Epistemic value

The following Figure 2.1 illustrates the components of this theory.

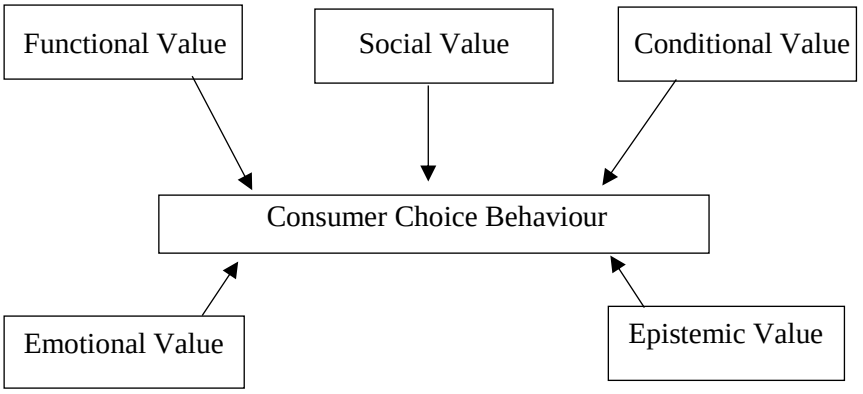

Figure 2.1: The components of the theory of consumption value

Source: Sheth et al. (1991)

According to this theory, functional values refer to "perceived utility acquired from an alternative's capacity for functional, utilitarian or physical performance" (Sheth et al. 1991, p. 160). The literature states that consumers seek the maximum benefits, qualities and functionality at the lowest costs (Hur et al. 2012). From a marketing perspective, the importance of a product's function is perceived as the main determinant of consumers' purchasing behaviour (Nowlis & Simonson 1996). In the context of food products, functional value can be represented as the nutritional value of food (Shaviklo et al. 2011). Conditional value can be defined as "the perceived utility acquired by an alternative as the result of the specific situation or set of circumstances facing the choice maker" (Sheth et al. 1991, p. 162). Conditional value can be influenced by antecedent physical or social contingencies which improve a product's social and functional value (Nowlis & Simonson 1996; Hur et al. 2012). Previous studies reported that time, place and context are considered as the basic determinants for describing conditional factors (Laaksonen 1993). Lin and Huang (2012) found that conditional value has a positive influence on consumers' choice of a products.

Social values is defined as "the perceived utility acquired from an alternative's association with one or more specific social groups" (Sheth et al. 1991, p. 161). The theory indicates that consumers' choice of various goods is influenced by social value. Further, the theory supposes that many products, such as apparel or jewellery, are chosen on the basis of social image. The literature also confirms that social values have an influence on consumers' choice of products and services (Vazifehdust et al. 2013; Biswas & Roy 2015).

Emotional value is defined as "the perceived utility acquired from an alternative's capacity to arouse feeling or affective states" (Sheth et al. 1991, p. 161). The theory argues that services and goods might be bought based on emotional responses. The theory indicates that the choice of a product is influenced by aesthetic alternatives (religious causes). Previous studies asserted that emotional values influence consumers' choice of product (Hur et al. 2012).

Epistemic value is defined as "the perceived utility acquired from an alternative's capacity to arouse curiosity, provide novelty, and/or satisfy a desire for knowledge" (Sheth et al. 1991, p. 162). The theory argues that epistemic values relate to consumers' knowledge about products (Rahnama 2017). Prior studies indicated that epistemic values positively influence consumers' purchasing behaviour (Hur et al. 2012; Yoo et al. 2013).

From a review of the extant literature, there are few studies found that employed the Theory of Consumption Values to understand consumers' purchase choice in the context of organic food. For instance, Rahnama (2017) utilised the theory of consumption values to examine the influence of consumption values on Iranian women buying organic yogurt. The results of the study showed that functional values, conditional values and epistemic values positively influence women's organic yogurt buying behaviour. Similarly, Finch (2006) applied the theory of consumption value to examine the influence of personal consumption values and beliefs on organic food purchasing behaviour. The study found that both functional values and social values tend to play an important role in shaping organic food buying behaviour towards organic food in the US. Further, the study showed that consumers would change their buying behaviour due to conditional values, and that some of the consumers were confused about organic food, which means that epistemic value is not significant.

Surprisingly, the developers of the theory of consumption value (Sheth et al. 1991) indicated that this theory can be applied to any consumer purchase choice regarding purchasing various products, with the limitation that the purchase decision of a product is taken only by the individual him/her self. Thus, this means that this theory ignores the influence of others on consumers' purchasing behaviour regarding various products including organic food. Hence, this can be considered as criticism of the theory. In addition, the current study investigates the influence of subjective norms on consumers' purchasing intention in the context of organic food. Thus, this theory is not suitable to be used in this case. As a result, this theory is not employed in the current study.

2.7.2 Health Belief Model (HBM)

The Health Belief Model is one of the most commonly used theoretical models in health behaviour studies (Wang & Li 2015). HBM was developed in the 1950s by Rosenstock (Gillam 1991). Basically, HBM focuses on peoples' perceptions about risk or diseases (Che et al. 2014). The model includes five elements: (1) perceived susceptibility, (2) perceived seriousness, (3) perceived benefits of taking action, (4) barriers to taking action, and (5) cues to action. Further, HBM has been widely applied in a variety of public health settings over the years (Deshpande et al. 2009). Hence, HBM is primarily utilised by medical researchers (Cook 2018). Some studies have used HBM to predict the consumption of food products. For instance, a study conducted in Taiwan by Wang and Li (2015) applied HBM to

understand the influence of stress and visible health problems on intentions to continue the consumption of healthy food. They found that perceived benefits and perceived barriers of healthy foods are considered as critical factors for continuing the consumption of healthy food. In addition, a Canadian study by Deshpande et al. (2009) adopted HBM to predict the consumption of healthy food. The results showed that dietary status, perceived severity, perceived susceptibility, and cues significantly influence predicted healthy food consumption. In the context of organic food, very few studies used HBM to predict purchasing behaviour of organic food. In this respect, Yazdanpanah et al. (2015) undertook a study to investigate the antecedents of purchasing organic food in Iran. They utilised HBM to predict the purchase behaviour towards organic food. The study revealed that general health orientation, self-efficacy, perceived susceptibility, perceived severity and perceived benefits were significant predictors of consumers' organic food purchasing behaviour.

Interestingly, HBM has been criticised by many scholars over the years. Scholars have claimed that HBM is a weak model for predicting health related behaviour, and that it is just a list of variables (components) rather than a theory based on adequately specified relationships between its core components (Armitage & Conner 2000; Norman & Brain 2005; Taylor et al. 2006; Orji et al. 2012). In addition, a major limitation of HBM is presented by Gillam (1991) who claimed that HBM remains highly abstract. This means that the variables of the model are difficult to define, and that past studies failed to proof that HBM can produce strong predictive value for behaviour. Consequently, HBM is not applied in the current study.

2.7.3 Social Cognitive Theory (SCT)

Social Cognitive Theory suggests a model of individual behaviour which is widely used in various fields of research (Carillo 2010). SCT was propounded by Bandura (1986). This theory is concerned with the way individuals exercise control over their behaviour and their environment (Bandura 1986). SCT proposed that peoples' actions are explained by three variables: (1) personal factors, (2) environmental factors and (3) behavioural factors (Bandura 1986, 2001; Preko 2017). The following Figure 2.2 shows the components of the SCT.

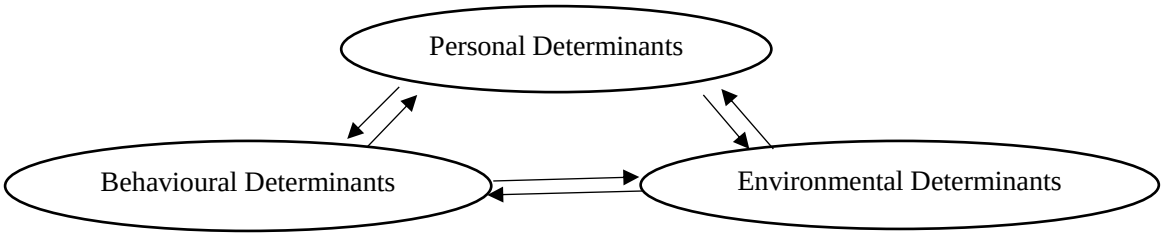

Figure 2.2: Social Cognitive Theory (SCT)

Source: Bandura (2001)

Personal factors include consumers' personal characteristics such as gender, age, education, income, occupation, ethnicity, employment status, marital status, and number of children (Bong 1999; Timperio et al. 2006; Kotler et al. 2014; Preko 2017). Previous research confirmed that consumers' personal characteristics influence their buying behaviour (Khuong & Duyen 2016; Husnain et al. 2019). Prior research asserts that consumers' personal factors have an influence on their decisions to purchase organic food (Lea & Worsley 2005; Tsakiridou et al. 2006; Sultan et al. 2018; Pandey et al. 2019; Wang et al. 2019). On the other hand, some studies have contradicted this argument. They have claimed that personal factors such as the gender, age, income, and education level of consumers have no significant association with organic food purchasing behaviour (Dahm et al. 2009; Denver & Jensen 2014; Rahnama et al. 2017; Hashem et al. 2018).

In relation to behavioural factors, SCT argues that individuals' behaviour can be influenced by several variables such as outcome expectation, self-efficacy, self-control and reinforcement (Bandura 1986). The self-efficacy variable attempts to examine the ability of humans to perform a behaviour (Preko 2017). Consumers show that their attitudes towards a product is based on their ability to recognise and then buy products such as green goods (Preko 2017). In addition, in 2004 the originator of SCT argued that SCT includes one's knowledge of the health risks and benefits of various health practices, perceived self-efficacy that one can exercise control over his/her health habits, outcome expectations about the expected benefits and costs for various health habits, the health goals that individuals set for themselves and concrete plans for realising them, perceived facilitator and social support, and barrier to make changes (Bandura 2004).

In the case of organic food products, past studies indicate that self-efficacy is related to consumers' internal control for purchasing organic food products (Tarkiainen & Sundqvist

2005). Organic food is deemed to be expensive food (Janssen 2018) which makes it unavailable to low-income consumers (Meixner et al. 2014), therefore, the higher price of organic food could be seen as an obstacle that makes consumers avoid purchasing such products. However, the higher price of organic food can be classified as problem related to self-efficacy because it makes purchasing organic food more difficult (Tarkiainen & Sundqvist 2005).

Additionally, according to the SCT, whatever other factors may serve as motivators for the behaviour, those factors are rooted in the core belief that the individual has the power to produce desired changes by his/her own behaviour (Bandura 2004). Moreover, SCT also claimed that it is very difficult to convince and motivate individuals to adopt certain behaviour unless they are provided with the appropriate resources that enable them to realise and support those behaviours, thus media could be used as a method to promote the performance of certain behaviour by informing, modelling, motivating and guiding personal changes (Bandura 2004). Hence, according to the SCT, media can influence consumers' buying behaviour (Bandura 2001; Shephard et al. 2016). Thus, SCT suggests that marketing can be employed as a tool to influence consumers' intentions to buy various products (Harris et al. 2009). Indeed, in the context of organic food products, prior studies have asserted the important role of media in enhancing consumers' knowledge and awareness regarding organic food which contributes to convincing and persuading those consumers to purchase such products (Suh et al. 2012; Leong & Paim 2015). For instance, Rahnama et al. (2017) stated that advertising messages and other forms of social media are useful ways to increase consumers' awareness of organic chicken in Iran. Further, Bernal Jurado et al. (2019) claimed that consumers struggle from a lack of information about organic food in Spain. Thus, media including social media can be an effective tool to increase Spanish consumers' knowledge of those products.

In relation to outcome expectation, the SCT argues that humans' behaviour is strongly influenced by the outcome people expect as a result of the behaviour (Bandura 1986, 2001, 2004). According to the SCT, people adopt behaviours that provide them with self-satisfaction and self-worth, thus outcome expectation is judgement or consumer belief about the likely consequences of performing a certain behaviour (Bandura 1986, 2001, 2004). According to Heinrich et al. (2011), the health benefits of a product is associated with outcome expectation. Because consumers realise that organic food is perceived to be healthy

food (Lea & Worsley 2005; Paul & Rana 2012; Shin & Mattila 2019), the health benefits of organic food reflect outcome expectancy of the SCT. With regards to environment, the literature indicates that consumers look for environmental benefits when they undertake purchase behaviours, which reflects outcome expectancy for this behaviour (Leonidou et al. 2010). In the context of organic food, past studies asserted that consumers purchase organic food for environmental reasons and environmental concerns significantly influence consumers to purchase such products (Shafie & Rennie 2012; Wheeler et al. 2019). Furthermore, many consumers consider organic food to be an environmentally friendly product (Rana & Paul 2017). Some consumers in Australia purchase organic food to protect the environment (Lea & Worsley 2005). Accordingly, it can be said that the health benefits and environmental benefits of organic food also reflect outcome expectation supposed by the SCT (Bandura 1986, 2004). Moreover, many studies have used environmental issues as motives to purchase organic food with outcome expectation as a component of the SCT. One such study is that of Li and Zhong (2017). In relation to health benefits, a study conducted by Anderson et al. (2000) asserted that healthy food and nutritional content of the food were factors related to outcome expectation when buying food products.

The third component of the SCT is the environmental factor (Bandura 1986, 2001, 2004). Environmental factors are defined as "the physical, social and attitudinal environment in which people live and conduct their lives" (Forslund et al. 2013, p. 802). With regards to physical environment, the literature of food products indicates that physical environmental factors include the availability and accessibility of food (Hearn et al. 1998; NeumarkSztainer et al. 1999; Haerens et al. 2008; Williams et al. 2010; Chang et al. 2011; Lubans et al. 2012; Rahmanian et al. 2014). In relation to social environment, it can be said that SCT supposes that individuals' behaviour can be facilitated through the relationships that people have with others who have the same social background and interests (Oakley & Salam 2014). In this respect, prior research explained this process using several terms like subjective norms, social norms, social influence, or reference group (Ajzen 1991; Bandura 2001; Muk 2007; Radder et al. 2010). Several studies asserted that consumers are influenced by their social relationships with friends, relatives and others when buying organic food (Smith & Paladino 2010; Asif et al. 2018; Basha & Lal 2019). Interestingly, since organic food belongs to green marketing (Bekele et al. 2017; Li & Zhong 2017), the literature includes very few studies that employ SCT in the context of organic food (Li & Zhong 2017; Preko 2017).

Scholars have asserted the strengths of SCT. For instance, Erlich and Russ-Eft (2011) stated that one of the strengths of SCT is that the researchers who apply it can determine process influences which account for learned outcomes. In addition, Liguori et al. (2018) confirmed the robustness of SCT in investigating entrepreneurial intentions. In addition, past studies confirm the ability of SCT to predict consumers' intentions to purchase and consume various foods (Lacroix et al. 2016). Prior studies also confirmed the validity and applicability of SCT in the Social Sciences (Groschke 2013). Consequently, SCT is widely employed and adopted to predict and explain human behaviour (Chai et al. 2009; Guan et al. 2018; Ridder 2019).

2.7.4 Theory of Reasoned Action (TRA)

The Theory of Reasoned Action (TRA) originated in 1967 from Martin Fishbein, and was extended by Fishbein and Icek Ajzen (Fishbein & Ajzen 1975, 1980). The TRA proposes that behavioural intention, which is the immediate antecedent to behaviour, is a function of beliefs about the likelihood that a certain behaviour will lead to a specific outcome (Madden et al. 1992). The TRA divides the beliefs leading to behavioural intention into two main elements, namely behavioural beliefs which reflect attitudes and normative beliefs which reflect subjective norms (Fishbein & Ajzen 1980). Figure 2.3 illustrates the components of TRA. Thus, consumers' behavioural intentions towards a product is strongly associated with those elements (Xiao 2019).

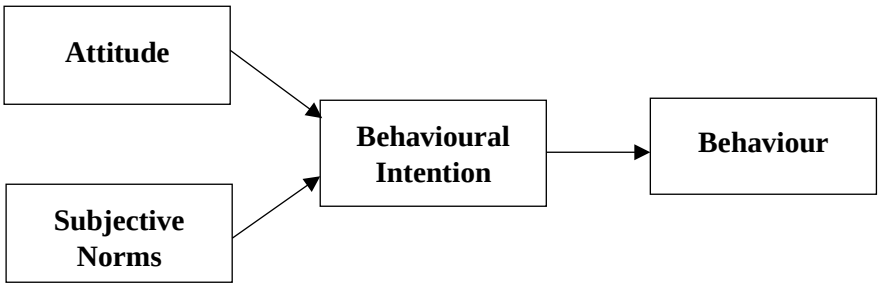

Figure 2.3: Theory of Reasoned Action (TRA)
Source: Madden et al. (1992)

According to the TRA, attitude is defined as "a disposition to respond favourably or unfavourably to an object, person, institution or event" (Ajzen 2005, p. 3). The term belief is reserved for the information that individuals have about people, objects and other issues. This information may be truthful or it may be just an individual's point of view. Moreover,

this information might be negative or positive (Petty 2018). Further, the literature indicates that social psychologists agree that attitudes can be used to refer to a general positive or negative feeling about something (Petty 2018). According to the TRA, the term subjective norm can be defined as "the perceived social pressure to perform or not to perform the behaviour" (Ajzen 1991, p. 188). According to the TRA, subjective norms exert great influence on human behaviour (Manning 2009). For example, someone will perform a specific behaviour because his/her friend, parents, and others persuaded and influenced the decision perform that behaviour (Manning 2009).

In the case of organic food, several earlier studies have been carried out to investigate consumers' purchase intention using TRA. Effendi et al. (2015) conducted a study to determine the motives that influence Indonesian consumers to buy organic food. The study found that organic food knowledge, health knowledge and subjective norm variables explained consumers' intentions to buy organic food, whereas cultural and food attributes had no influence on consumers' attitudes to buying organic food. The study revealed that TRA was able to provide a framework for studying consumers' behaviour towards organic food products. An Austrian study undertaken by Gotschi et al. (2009) to understand how knowledge, social norms (subjective norms), and attitudes shaping consumer' purchasing behaviour revealed that knowledge towards organic food did not explain consumers' self-reported purchasing behaviour when purchasing organic food. Further, the study also reported that cultural patterns were more useful for predicting consumers' behaviour regarding organic food.

Additionally, the literature asserts that both attitudes and subjective norms are the main drivers of consumers' organic food purchasing intentions (Soyez et al. 2012; Al-Swidi et al. 2014; Teng & Wang 2015; Slamet et al. 2016; Asif et al. 2018). On the other hand, other studies have argued that it is not usually assumed that consumers have consistent and stable attitudes towards the purchase of organic food (Hidalgo-Baz et al. 2017; Mørk et al. 2017). Further still, other studies have claimed that subjective norms do not to have a significant influence on consumers' purchase intentions towards organic food (Leong & Paim 2015; Yazdanpanah & Forouzani 2015).

Although TRA has been widely used in marketing research, a number of scholars have criticised the TRA as follows. While TRA is able to adequately predict individuals'

behaviours that are relatively straightforward under circumstances where there are barriers to action, the mere formation of intention is inadequate to predict behaviour (Armitage & Conner 2001). Further, another criticism of TRA by Taylor et al. (2006) is that it was developed to promote a general understanding of volitional behaviour rather than an understanding of behaviour determined by situational determinants outside the control of the subject. Another limitation of the TRA is the susceptibility of human intention (Kashima & Gallois 1993). Moreover, Hunter (2006) argued that the TRA just focuses on volitional behaviour, thus TRA is not designed to explain non-volitional behaviour. As a result, the originators of the TRA have extended it and renamed it to the Theory of Planned Behaviour (TPB) (Ajzen 1991).

2.7.5 The Theory of Planned Behaviour (TPB)

The Theory of Planned Behaviour (TPB) is an extension of the Theory of Reasoned Action (TRA), made necessary by the original model's limitations in dealing with behaviour over which people have incomplete volitional control (Ajzen 1991). The essential factor in the TPB is the person's intention to act a given behaviour (Ajzen 1991). TPB links behavioural intention with attitudes, subjective norms, and perceived behavioural control. These are the basic antecedents of the intention to perform a certain behaviour, and mediates their relationship with human behaviour (Scalco et al. 2017). In addition, TPB is considered as one of the most widely used theories in the research of consumer behaviour, and it has been successfully used to explain organic food consumption intention and behaviour (Tarkiainen & Sundqvist 2005; Chen 2007; Arvola et al. 2008; Aertsens et al. 2011; Nuttavuthisit & Thøgersen 2017). The major difference between TRA and TPB is that the originators of the TPB included the perceived behavioural control (PBC) construct as an independent factor of intention to the theory (Ajzen 1991; Hagger et al. 2002). The PBC presents a person's evaluation of his/her ability regarding engagement in a specific behaviour (Hagger et al. 2002). Further, PBC as an additional variable to the TPB reflects the constraints or barriers to perform a behaviour (Hagger et al. 2002). In addition, PBC is considered to be an influential factor for both intention and behaviour (Ajzen 1991, 2005). All variables of TPB are represented in Figure 2.4 below.

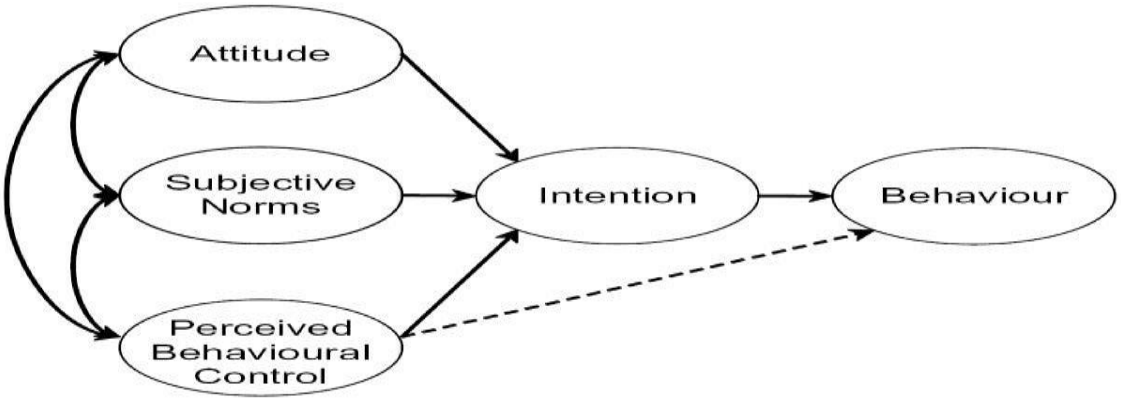

Figure 2.4: Theory of Planned Behaviour (TPB)

Source: Ajzen (1991)

Scholars have asserted that TPB is more robust than TRA when applied in different fields of Science (Hagger et al. 2002; Scalco et al. 2017). In this respect, Dowd and Burke (2013) argued that TPB was found to be a solid theory for predicting intention to buy organic food. Moreover, TPB is deemed to be an important social cognitive model which aims to explain variance in volitional behaviour (Ajzen 1991) and it has been successfully applied in predicting behavioural intention (Aertsens et al. 2009; Kim et al. 2013). Thus, TPB has been chosen by several studies due to its robustness in predicting behavioural intention (Suprapto & Wijaya 2012; Yazdanpanah & Forouzani 2015).

TPB has been widely employed to predict consumers' organic food purchase intentions (Tarkiainen & Sundqvist 2005; Gracia Royo & de-Magistris 2007; Peštek et al. 2018; Basha & Lal 2019). The researchers of organic food have confirmed that TPB is one of the successful theories to predict consumers' behaviour regarding organic food products (Zagata 2012; Al-Swidi et al. 2014; Scalco et al. 2017). For example, Basha and Lal (2019) used TPB to study Indian consumers' attitudes towards buying organic food. In their study, the authors used attitudes and subjective norms as the original elements of TPB, and they added more factors to the model including environmental concerns, health concerns, supporting local farmers, quality, convenience and price, animal welfare, and trust and safety. The study revealed that both attitudes and subjective norms influenced consumers' intentions to purchase organic food. This finding asserted the robustness of TPB to predict behavioural intention regarding organic food purchase. Further, the study reported that additional factors, such as environmental concerns and quality also influenced consumers' intentions to

purchase organic food. On the other hand, health concerns, supporting local farmers, convenience and price, animal welfare, and trust/safety were found to be non-significant and thus did not influence consumers' intentions to purchase organic food in India.

Another study by Wang et al. (2019) to investigate the factors that influence Tanzanian consumers to purchase organic food employed TPB and added health consciousness to the model. The results pointed out that consumers' attitudes, subjective norms and health consciousness were the main factors motivating Tanzanians to choose organic food, while perceived behavioural control (PBC) was found to be a weak influencer on intention to purchase organic food. Yadav and Pathak (2016) used TPB to predict consumers' intentions to purchase organic food. They added moral attitudes, health consciousness and environmental concerns to the TPB, and reported that attitudes, subjective norms and PBC partially influenced consumers' intentions to purchase organic food. The additional factors, except for environmental concerns, were found to have a positive influence on consumers' organic food purchase intentions. However, some past studies found that TPB could not predict intention to purchase organic food. In this respect, an Iranian study carried out by Yazdanpanah and Forouzani (2015) to predict consumers' organic food purchase intentions found that consumers' attitudes significantly influenced intention to purchase organic food, while subjective norms and PBC did not significantly influence consumers' intention regarding organic food. Further, they used moral norms and self-identity as additional factors to the original model, and found that moral norms and self-identity increased the explanatory power of the original model.

An Australian study by Smith and Paladino (2010) utilised the TPB to establish a model to test the relationship between organic food knowledge, subjective norm and familiarity. They revealed that intention was mediated by attitudes towards organic knowledge, subjective norm and environmental concerns. Further, another study in the UK (Lodorfos & Dennis 2008) adopted the TPB as a model to examine intention to purchase organic food. The outcome revealed that TPB was able to predict consumers' intention to purchase organic food. This study also indicated that organic food product attributes and subjective opinions of others are key determinants of consumers' intentions.

2.7.6 Overlapping of TPB and SCT

Scholars have indicated that there is an overlap of TPB and SCT in terms of application. In this regard, the concept 'attitudes' in the TPB is very similar to the concept of outcome expectation in SCT and the term 'subjective norms' in the TPB reflects social support in the SCT (Li & Zhong 2017). Further, according to past studies, the 'PBC' construct in the TPB is similar to that of self-efficacy in the SCT (Bandura 2004; Tarkiainen & Sundqvist 2005; Taylor et al. 2006). The core component of the TPB is behavioural intention (Ajzen 1991, 2005), and the SCT also uses the term "goal" which reflects intention in TPB (Li & Zhong 2017). It can be said that the major difference between TPB and SCT is that SCT supposes that there is an association between the individual's behaviour and the media (Bandura 2004), and SCT takes into consideration the influence of personal factors such as consumers' characteristics in predicting behaviour (Bandura 2001). Thus, to some extent, similarity can be noted between TPB and SCT (Conner & Norman 2005).

2.7.7 Theory applied in the current study and justification

After reviewing the literature regarding the theories applied in the context of consumers' organic food purchase intentions, it was found that Social Cognitive Theory (SCT) and the Theory of Planned Behaviour (TPB) are the most appropriate theories to be employed in the current study. As previously discussed, the justification for adopting the TPB is the robustness of this theory and its ability to predict consumers' intention in the context of organic food (Tarkiainen & Sundqvist 2005; De Magistris & Gracia 2008; Zagata 2012; Scalco et al. 2017). In addition, the SCT has been confirmed by past studies to be an effective theory to predict consumer behaviour in different disciplines (Erlich & Russ-Eft 2011; Lacroix et al. 2016; Liguori et al. 2018). Additionally, as previously mentioned, SCT is able to predict human behaviour by examining the influence of the media (Bandura 2004) which makes SCT more applicable in various areas of Science (Motl 2007; Nago et al. 2012; Liguori et al. 2018).

Additionally, and as mentioned previously, the literature confirms that consumers purchase organic food due to the health and environmental benefits of such products (Krishna & Balasubramanian 2018; Lehtimäki 2019; Pandey et al. 2019), hence organic food is perceived as a healthy and environmentally friendly product by many of the consumers (Apaolaza et al. 2018; Asif et al. 2018; Pilař et al. 2018; Huy et al. 2019). Moreover, several studies point out that consumers purchase and consume organic food to avoid diseases such

as cancer (Huber et al. 2011; Mie et al. 2017; Sun et al. 2018), and they also purchase organic food to protect the environment (Janssen 2018; Basha & Lal 2019). Accordingly, health and environmental benefits reflect outcome expectation in the Social Cognitive Theory (Li & Zhong 2017), and reflect attitudes in the Theory of Planned Behaviour (Li & Zhong 2017). Furthermore, prior studies stated that many consumers avoid purchasing organic food due to reasons such the limited availability of organic food and the higher prices of such products (Gulseven 2018; Kawemama et al. 2018; Wang et al. 2019). Thus, higher price and limited availability of organic food are considered to be barriers that restrict purchase of these products (Baudry et al. 2017; Shin et al. 2018). According to the TPB and SCT, perceived behavioural control (PBC) or self-efficacy refers to the ease or difficulty of consumers to perform the behaviour (Bandura 2004; Tarkiainen & Sundqvist 2005; Preko 2017). Thus, high price and limited availability reflect PBC in TPB and self-efficacy in SCT.

On the other hand, some of the previous SCT studies used availability of food as one of the environmental factors. For instance, Hearn et al. (1998) utilised availability and accessibility of fruits and vegetables as an environmental variable. Further, Branscum and Sharma (2011) used SCT to predict the consumption of snack food in US. They employed availability of snack food as one of the environmental factors of SCT. Thus, the literature indicates that both price and availability could be used as environmental factors, and high price and limited availability of products could be used as self-efficacy.

Another issue is that social influence seems to be an essential motive that encourages consumers to purchase various forms of food including organic food (Steeves et al. 2016). In this respect, TPB suggests that consumers may be influenced by their family, friends, and others when considering the purchase of organic food (Basha & Lal 2019; Wang et al. 2019). In the TPB, this case is called subjective norms (Ajzen 1991, 2005) and in the SCT is called social support (Bandura 1999, 2002). Thus, both TPB and SCT assert the importance of social influence on consumers' purchase intentions in the context of organic food (Lodorfos & Dennis 2008; Smith & Paladino 2010; Yadav & Pathak 2016).

In addition, and as previously mentioned, the SCT confirms the role and influence of media on human behaviour (Bandura 1999) and SCT asserts the process that individuals follow to acquire knowledge that facilitates and persuades people to perform behaviours (Bandura 1986, 2004). Thus, various promotional campaigns like advertising, brochures, and different

forms of social media would be effective tools to inform and persuade consumers to purchase organic food (Kozelová et al. 2013; Yang et al. 2018). As a result, TPB and SCT are the most appropriate theories for this study.

2.8 Gaps in the literature

After an intensive review of the literature, the researcher identified several research gaps that need to be addressed. This study attempts to address the following gaps:

1. Although there has been considerable global research on factors influencing consumers' organic food purchase intentions, there is scant empirical research investigating consumers' organic food purchase intentions in Australia (Heller Willer 2007; Smith & Paladino 2010; Phuong 2013; Nguyen & Ha 2016; Anisimova 2016; O'Mahony & Lobo 2017; Wheeler et al. 2019).

2. Further, the literature indicates that there is a need to investigate the role and influence of social media on consumers' organic food purchase intentions (Muhammad et al. 2016; Persaud & Schillo 2017; Fathelrahman & Basarir 2018). Past studies ignored the influence of social media on consumers' trust of organic food (Ayyub et al. 2018).

3. Past studies reported that little attention has been paid to the influence of organic food attributes on consumers' trust (Prentice et al. 2019).

4. Few studies have employed Social Cognitive Theory (SCT) in the field of organic food purchasing behaviours (Li & Zhong 2017; Preko 2017).

5. There is a lack of research investigating the influence of trust on consumers' intentions to purchase organic food (Yin et al. 2016; Nuttavuthisit & Thøgersen 2017; Lian & Yoong 2019; Nuttavuthisit & Thøgersen 2019). Further, very few studies have measured the influence of trust in tandem with the TPB for organic food purchase intentions (Qi & Ploeger 2019).

6. The existing body of literature indicates that there is a need to carry out more qualitative studies to gain better insights into consumers' organic food purchasing behaviour (Lee 2016; Dumortier et al. 2017; Shin et al. 2019). Further, there is a need to conduct a

study based on a mixed method approach to better understand the growth of organic food purchases (Liang 2016; O'Mahony & Lobo 2017).

7. More research that uses consumers' demographic characteristics is needed to understand the differences between consumers purchasing of organic food based on their personal characteristics (Yadav 2016; Chekima et al. 2017; Yang et al. 2018; Tariq et al. 2019).

8. Few studies have examined the association between packaging and organic food purchasing (Hemmerling et al. 2015; Meyerding & Merz 2018).

In this study, the gaps are summarised in Appendix I.

2.9 Chapter summary

This chapter has reviewed the literature on consumers' intentions to purchase organic food. It began with a general overview of the organic food industry. Next, it comprehensively reviewed past studies regarding the main factors that influence consumers to purchase organic food products. In addition, this chapter has reviewed the various theories related to food consumption behaviour, and has justified selection of the theories to be applied in this study. It has also identified the research gaps that need to be addressed. The next chapter outlines and presents details of the research methodology that will be employed to collect and analyse data for the purpose of providing answers to the research questions and achieving the research objectives.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter introduces and discusses the research methodology used to collect and analyse the data needed to answer the research questions and meet the objectives of this thesis. The chapter is divided into seven sections. The first section discusses the research philosophy. The second section explains the methodological paradigm employed in this research. The third section presents the research approach and the fourth section discusses the research design. The fifth section presents a discussion about stages of data collection and analysis employed in the research. The sixth section outlines the ethical considerations of the research, and the last section provides a summary of the chapter.

3.2 Research Paradigm

Research philosophy is considered to be essential to conducting any research and helps ensure reliable findings (Bahari 2010). Research philosophy is defined as the way researchers view the world (Saunders 2009).Various paradigms must be considered when the researchers design the research approach and method. A paradigm is defined as "a way of examining social phenomena from which particular understandings of these phenomena can be gained and explanations attempted" (Saunders 2009, p. 118). Mackenzie and Knipe (2006) reported that when researchers neglect to use a research paradigm, many problems can occur during the research process. Therefore, understanding the research philosophy helps researchers recognise which design is suitable for their study (Easterby-Smith et al. 2012). In Business research, there is a need to understand the researcher's philosophy (Gill & Johnson 2010). The research philosophy works as a guide to help researchers select the most appropriate research approach and data collection methods, and answer the research questions of their particular study (Omotayo & Kulatunga 2015).

A research paradigm is considered to be the philosophical framework that assists and guides the researcher on how to conduct their research (Higgs & Titchen 1998; Creswell 2007). Research paradigm can be defined as "a basic set of beliefs that guide action" (Lincoln et al. 2011, p. 91). There are several research paradigms that the researchers could employ in their research studies (O'leary 2004; Malhotra 2008). According to Krauss (2005), understanding the research's philosophical paradigm is an essential part of conducting a research study. Choosing the appropriate research paradigm is a central point in the research process for all disciplines (Mangan et al. 2004). According to Tashakkori et al. (1998) research paradigms

are classified into three main paradigms: positivism paradigm, constructivism paradigm, and pragmatism paradigm. These paradigms will be discussed in the next section.

3.2.1 Positivist paradigm

In the positivist paradigm, knowledge can be discovered and verified through direct measurement of a certain phenomenon (Krauss 2005). Mertens (2015, p. 15) pointed out that "the underlying assumptions of positivism include the belief that the social world can be studied in the same way as the natural world, that there is a method for studying the social world that is value-free, and that explanation of a causal nature can be provided". Essentially, positivist researchers employ quantitative methods such as surveys for collecting and analysing research data (Guba & Lincoln 1994; Healy & Perry 2000; Ary et al. 2018). The responsibility of quantitative researchers is to examine various variables in the research, and analyse and present the results using different statistical procedures (Gravetter & Forzano 2018). Positivism has been criticised by many scholars. For instance, Weaver and Olson (2006) stated that positivism is inappropriate for investigating and understanding some complex issues such as socio-political and ecological issues. Thus, many of researchers in various disciplines of the Social Sciences have shifted away from employing the positivist paradigm as a single paradigm in their research studies (Morgan 2007).

3.2.2 Constructivism /Interpretivist paradigm

Interpretivists or constructivists argue that to understand the world of meaning, the researchers must interpret it (Schwandt 1994). The goal of the constructivist or interpretivist paradigm is to create rich and new interpretations and understandings of a phenomena (Saunders et al. 2009). Thus, interpretivist researchers often address the research problem or phenomena based on interaction with respondents (Creswell 2007). In this research paradigm, the researchers collect data and address the research problem using qualitative methods such as interviews and focus groups (Creswell 2007). The interpretivist research paradigm was created as a criticism to the positivism paradigm (Saunders et al. 2009). Hence, researchers in this paradigm have the flexibility and freedom to include or exclude various ideas in their research studies (Kumar 2019).

3.2.3 Pragmatist paradigm

Pragmatism was developed as an alternative to positivism and constructivism (Quinn 2002). In pragmatism, researchers employ both qualitative and quantitative methods in a single

study to address the research problem (Creswell 2007). Therefore, this paradigm takes into consideration the advantages and disadvantages of positivism and constructivism (Quinn 2002; Feilzer 2010). According to Tashakkori et al. (1998), Johnson & Onwuegbuzie (2004) and Denscombe (2008) pragmatism is an appropriate research paradigm justifying the use of a mixed method as a way to address the research problem. Further, pragmatist researchers employ this paradigm to answer the questions "what" and "how" to research (Creswell 2007).

3.2.4 Research paradigm of the current study and its justification

The current study has two main objectives. The first objective is to explore the main factors that potentially influence consumers' organic food purchase intentions. The second objective is to examine how various factors influence consumers' organic food purchasing intentions. Based on an argument of Creswell (2007), if the researcher is required to answer research questions such as what and how, the pragmatism paradigm is the most appropriate paradigm. In addition, when the researcher conducts research using a mixed method approach, pragmatism research paradigm is the most suitable paradigm (Creswell 2007). Thus, the pragmatism paradigm is considered as the most appropriate paradigm for the current study. In this study, the researcher first used the qualitative method to explore the factors that influence consumers' organic food purchases, then a quantitative method was used to confirm the findings of the qualitative stage.

3.2.4.1 Mixed method approach

Recently, the use of a mixed method approach has become increasingly common in a variety of research areas (Bryman 2006; Creswell 2009). Methodologically, there are two main types of mixed method design available for researchers to use: concurrent and sequential mixed method designs (Johnson & Onwuegbuzie 2004). In concurrent mixed methods, researchers collect data using both quantitative and qualitative methods in the same research period (Creswell & Zhang 2009). In sequential mixed method designs, the researcher (investigator) gathers data using both quantitative and qualitative methods in consecutive stages within single study (Ivankova et al. 2006). Sequential mixed methods can be further classified into three strategies: sequential exploratory, sequential explanatory, and sequential transformative (Creswell 2009). In the sequential exploratory strategy, researchers collect data using qualitative methods followed by quantitative methods. In the explanatory sequential strategy, researchers use quantitative methods first followed by qualitative

methods in the second phase of the research. In sequential transformative, researchers employ either qualitative followed by quantitative or quantitative followed by qualitative for data collection (Creswell et al. 2003). The following Figure 3.1 illustrates the process of the sequential exploratory mixed method employed in the current study.

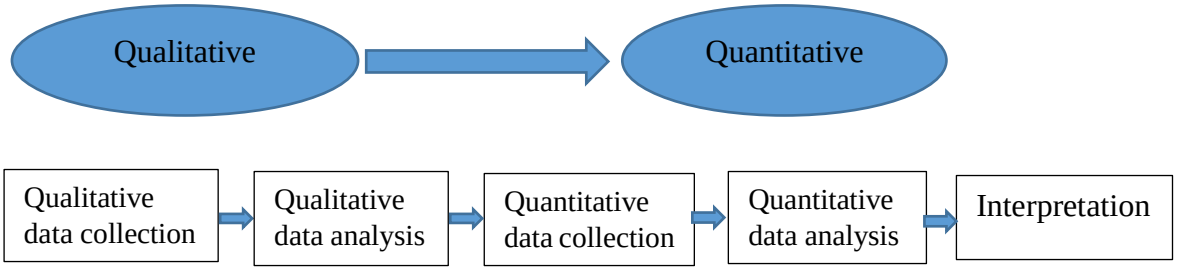

Figure 3.1 Sequential exploratory mixed method

Source: Adapted from Terrell (2012)

3.2.4.2 Justification for adopting mixed method

In the current study, in order to answer the research questions, the researcher employed a mixed method approach. A sequential exploratory method was used to collect the primary data needed for both phases of the study. The first phase was an exploratory study (qualitative) to explore the main factors that influence consumers' purchases in the context of organic food using semi-structured interviews, followed by a confirmatory study (quantitative) to examine the relationships between variables and to confirm the findings of the qualitative phase (Teddlie & Tashakkori 2003; Creswell 2007). Further, mixed method research is being increasingly applied in research practices due to its advantages (Johnson et al. 2007). In addition, mixed method approach can address exploratory and confirmatory research questions concurrently, providing a stronger inference than one method (Venkatesh et al. 2013).

In addition, the use of mixed method approach enables researchers to obtain extra constructs for the quantitative phase efficiently (Creswell 2007). Additionally, according to O'Mahony and Lobo (2017) adopting a mixed method approach is very important due to the ability of this approach to provide an integrated methodology to better understand the growth of organic food in the Australian context. In addition, as previously discussed in Chapter Two,

there is a lack of empirical studies in the organic food and consumer behaviour field in the Australian context. Therefore, a mixed method approach is the most appropriate approach to use in the current study (Bruschi et al. 2015). The following section discusses the methods for data collection and analysis for the both phases of the study; the exploratory phase (qualitative study) and confirmatory phase (quantitative study).

3.3 Research approach (inductive, deductive approaches)

Research approach is defined as "the procedures that need to be conducted in order to execute research methodically" (Tibane & Niemand 2017, p. 8). Methodologically, the research approach is divided into three basic approaches: inductive approach, deductive approach, and combined inductive-deductive approach (Cohen et al. 2005). Quinn (2002) argues that the inductive research approach is largely qualitative in nature. In this approach, researchers can explore questions and variables that are needed in the study (Quinn 2002). Further, inductive research approach is used to read raw data to derive concepts, themes, and a model through interpretations made from the data collected using semi-structured interviews (Thomas 2006). Accordingly, in this research, the researcher employed an inductive research approach as the first stage to collect data to derive and extract themes, concepts, or factors to be used for further investigation in the second stage of the research.

Unlike the inductive research approach, the deductive research approach is related to the use of a quantitative method of data collection and analysis (Saunders et al. 2009). In the deductive approach, researchers examine the relationships between the variables using a hypothesis (O'leary 2004). In this approach, the researchers in Business fields employ surveys to collect data from respondents to test the stated hypothesis (Saunders 2009). In this research, the deductive research approach is utilised as the second stage to confirm the findings of the qualitative focused interviews stage (Teddlie & Tashakkori 2003).

Alternatively, researchers can employ the combined inductive-deductive research approach. With this approach, researchers conduct both qualitative research and quantitative research in a single study (Saunders 2009; Ary et al. 2018). Integrating inductive-deductive approaches in a single study enables researchers to acquire knowledge through examining and validating the findings of an inductive approach by using a deductive approach (Ary et al. 2018). Accordingly, the current research employed a combined inductive-deductive research approach. The inductive approach was used as the first research approach to explore the potential factors that influence consumers' organic food purchasing intentions, and the

deductive approach was employed as the second research approach to confirm the findings that were derived from the inductive research approach.

3.4 Research design

A research design provides a general framework to describe how data are collected and analysed (Bell et al. 2018). The research design is also considered a grand plan for approaching the topic of research (Greener 2008). In addition, it is very important to ensure the correct research design selection as it enables the researcher to answer the research questions and fulfil the research objectives (Sekaran & Bougie 2016). In this research, the research design consists of six elements. These elements are:

- Data collection techniques for the qualitative and quantitative stages of the research.
- Unit of analysis of the qualitative and quantitative stages of the research.
- Sampling method and sample size of the qualitative and quantitative stages of the research.
- Process of contacting the respondents for the qualitative and quantitative stages of the research.
- Development of research instruments for the qualitative and quantitative stages of the research.
- Data analysis of the qualitative and quantitative stages of the research.

More details are in sections 3.5.2 and 3.53. Section 3.5.2 discusses the elements of research design related to the qualitative stage of the research, and Section 3.5.3 discusses the elements of research design related to the quantitative stage of the research.

3.5 Stages of data collection

3.5.1 Literature review (Exploratory phase)

In this research, two types of data were used, namely primary data and secondary data. Secondary data are the data already available for use such as journal articles, reports, and published books (Cheng & Phillips 2014). One of the advantages of the secondary data is that they are not expensive to obtain in comparison with primary data (Zikmund et al. 2013). On the other hand, marketing researchers obtain and gather primary data to address certain research problems or questions (Curtis 2008). With regards to the preparation stage of the

research, the researcher utilised different forms of secondary data such as published journal articles, books, and reports to develop a general knowledge on the topic of the study. Further, the researcher used various databases to obtain the necessary data such as Scopus, Digital library of the University of Southern Queensland, Emerald, Google Scholar, and some governmental websites. Furthermore, those databases are considered to support the researcher at this stage of the study (Creswell 2009). Therefore, the researcher used various databases to find and review the literature in the area of this research.

In this stage, the researcher used those databases to find and review the literature in order to identify and understand the key factors that motivate and influence consumers' organic food purchases. Further, the researcher used different keywords to find suitable articles, such as "Organic food", "Consumers' purchase intention", "Determinants to purchase organic food", "Antecedents to buy organic food ","Demand for organic food", and "Predicting consumption of organic food" to determine the most suitable research articles for the purpose of the current study. For more details about the literature review stage as the preparation stage, please refer to Chapter 2.

3.5.2 In-depth interviews (Exploratory phase)

Qualitative research is widely used in various disciplines, and it has a variety of purposes, quality and types (Quinn 2002). Creswell (2007) argued that qualitative investigators can use different techniques to collect data such as observation, focus groups, interviews (unstructured, semi-structured), documents, and audio-visual materials. Qualitative research enables the researchers to obtain detailed information with more insights from the participants (Ledford & Gast 2018). This can be achieved through exploration of the participants' beliefs, experiences, and behaviours (Green & Thorogood 2018). The first objective of the current study is to explore and understand the potential factors that influence consumers' organic food purchases. Therefore, exploratory research is considered to be the most appropriate method in the first stage of the current study. The purpose of the qualitative study was to double-check whether additional factors could be established over and above what was found in the literature. The research had to be rigorous.

In the context of Australia, as shown in the Chapter 1, due to the limited literature on organic food and consumers' purchases, a qualitative study was adopted to obtain deeper insights and gain a detailed understanding of the factors that influence consumers' organic food purchases. In this study, semi-structured interviews were conducted to obtain a better

understanding and gain greater insight into the factors that influence the consumer purchases of organic food products. The following section discusses and justifies the use of semi-structured interviews for the current study.

3.5.2.1 Data collection through in-depth interviews

The purpose of the interviews was to explore the key factors influencing consumers' purchases of organic food products. In this stage of the research, a semi-structured interview was adopted as the data collection technique. For this form of interview, the researcher must have a list of questions to ask, and there is the flexibility to ask additional questions during the interview (Saunders 2009). Researchers can use four modes of semi-structured interviews, namely face-to- face, email, telephone, and MSN messenger (Irvine et al. 2013). Furthermore, semi structured interviews are considered to be an appropriate form of interviewing due to their ability to explore the participants' views and perceptions about various issues which enable the researcher to probe more into the topic of interest (Louise Barriball & While 1994). In addition, Shuy (2003) pointed out that the face-to-face interview is considered to be a better way to achieve a high response from the participants. Thus, in this study, the researcher employed face-to-face semi-structured interviews to gain a better understanding and more insights about the key factors that influence consumers' organic food purchases.

3.5.2.2 Unit of analysis for in-depth interviews

When designing scientific research, researchers need to indicate the unit of analysis of the study to be conducted (Creswell 2009). Unit of analysis is the individuals that the researcher collects data from (Sekaran & Bougie 2016). The unit of analysis in this research is the individuals (consumers) who purchase grocery products including organic food products for their household and are aged 18 or older.

3.5.2.3 Sampling method for in-depth interviews

In qualitative studies, non-probability sampling is the most common and widely used sampling method (Saunders 2009). For the purpose of selecting the right sample and recruiting participants suitable to be engaged in the interviews, a number of conditions should be taken into the consideration, such as ensuring that the participants are grocery buyers and that they are knowledgeable about organic food products. To achieve this, and to guarantee the right selection of the sample in the exploratory stage of the study, and to recruit

the right sample, the researcher utilised a combination of two non-probability sampling methods, namely: convenience sampling and snowball sampling. First, the researcher visited some shopping centres that market several types of grocery products and organic food products. All of those shopping centres were located in Toowoomba, Australia. Also, specialist organic food stores were visited. This method employed is called the mall intercept method and can be classified as convenience sampling and is widely used in marketing research and consumer studies (Rice & Hancock 2005; Zikmund et al. 2013; Bruschi et al. 2015).

According to Patton (1990), convenience sampling is commonly used in qualitative studies as it enables researchers to reach respondents conveniently and easily. In addition, as argued by Patton (1990), the researcher may use snowball sampling to ask the participants to recommend the names of people who know about the topic of research in order to obtain rich data. Accordingly, the researcher asked some of the participants if they could recommend their friends or relatives who buy organic food products to participate in interviews. A number of the participants who agreed to be engaged in the study also recommended some of their friends to participate in the interviews. The recommended participants were willing to contact the researcher based on the recommendation of the interviewed sample.

3.5.2.4 Sample size of in-depth interviews

In relation to the sample size of the qualitative stage, there is debate amongst scholars about the number of interviewees that should be interviewed in qualitative research. According to Quinn (2002), there is no particular rule in determining the sample size for qualitative research and it depends on what the researcher wants to know and the objective of the study. On the other hand, Green and Thorogood (2018) indicated that the sample size of qualitative research is small and few respondents would be engaged for data collection. Other scholars argue that saturation level is the key to determining the sample size in qualitative studies (Mason 2010; Saunders 2009; Malterud et al. 2016). Still others argue that selecting 12 participants is enough in qualitative research (Guest et al. 2006; Boddy 2016). Sandelowski (1995) pointed out that ten interviewees would be adequate and suitable in the qualitative stage of a research study. In contrast, Latham (2014) argued that qualitative studies need between 15 and 20 interviewees to obtain rich data from the participants. Marshall et al. (2013) considered between 15 and 30 interviews to be appropriate for studies that use

qualitative methods. Based on these arguments, in this study the researcher carried out 30 semi-structured interviews to collect data for the qualitative stage.

3.5.2.5 Managing the interview process

The researcher conducted 30 interviews at different times and places during the period of data collection. As previously mentioned, mall intercept was utilised as a method for recruiting participants. Furthermore, as previously discussed, two nonprobability sampling methods were employed in this research, namely convenience and snowball sampling methods. The researcher collected data in the period 23 April 2018 to 26 May 2018. The researcher intercepted and invited consumers exiting the various shopping centres located in Toowoomba to participate in the interviews. Many people declined to be interviewed due to lack of time. Other consumers were happy to participate in the interview but were unavailable at the time of invitation however, they suggested different times and places that suited them. The researcher positively responded to their suggestions and let them determine the appropriate time and place. For instance, some participants were happy to conduct the interview at their houses such as Participant #5, Participant #6, Participant #21, and Participant #22. Other participants preferred to sit with the researcher in a public place, for example Participant #12 suggested that the researcher conduct the interview at the Toowoomba public library. Other participant determined church as the place for interviewing, such as Participant #24, Participant #25 and Participant #30. Some participants agreed to visit the researcher's house for the interview, such as Participant #3, Participant #8 and Participant #10, while some asked the researcher to conduct the interviews at their offices, such as Participant #1, Participant #4, Participant #11, Participant #14, and Participant #17. Other participants were interviewed outside the shops where they bought their groceries.

According to Walsh and Bull (2012), establishing a rapport between the interviewees and interviewer is important and enables the respondents to provide more and rich data comfortably. Accordingly, the researcher introduced himself politely and briefly explained the objective of the interview and the purpose of the research. After this, each of the participants was given two documents, namely a consent form to sign as an acceptance to participate in the interview and an information sheet that provided information about the topic of research and how to contact the researcher if needed (refer to Appendix B and Appendix C). Further, the consent form had information about the interviews being audio

recorded. All of the participant signed the consent form and the forms were safely stored in the researcher's office.

All the interviews were audio recorded using a recorder and stored in MP3 format on a computer of the researcher and on the cloud using Google drive. The in-depth interviews took approximately 18 to 30 minutes. After the completion of each interview, the researcher immediately transcribed each interview individually using verbatim transcription which is considered to be one of the most common forms of transcription of qualitative interviews (McGrath al. 2018).

The interviewees were asked different forms of questions. The researcher began with generic questions to make the participants comfortable and to obtain the needed data. According to Agee (2009), in most qualitative studies, asking broad and generic questions enables the researcher to obtain the detailed data needed for the research. Therefore, at the beginning of the interview, the research started with generic questions such as behavioural questions related to shopping behaviour. Also, open-ended questions were asked to obtain more details and insights needed for the research. The researcher asked the participants generic probing questions such as "Have you heard about the term organic?", "What do you think organic means?", and "What do you understand by the term organic food?" After asking the generic questions, the researcher asked the participants more specific questions such as "Do you purchase organic food?", and for participants who answered "yes" the researcher asked them a more detailed question "Why do you purchase organic food". All questions are provided in the interview protocol. The interview protocol involved probing questions and other questions that were needed to obtain more information about the factors that influence consumers' purchases of organic food. Moreover, the interview protocol comprises questions related to the demographic characteristics of the participants such as gender, age, annual income, educational level, occupation, marital status, employment status, number of children, and ethnic background.

3.5.2.6 Developing the interview guide (protocol)

In this study, a semi-structured interview guide was utilised to conduct the interviews with participants. The guide or protocol is an important part of qualitative research design (Turner III 2010). Further, developing a suitable interview protocol is considered as a crucial part of qualitative research (Green & Thorogood 2018). In addition, the interview protocol usually helps the qualitative researcher take some key notes about the participants' responses during

the interview (Creswell 2007). An interview protocol can be defined as "a form used by a qualitative researcher for recording and writing down information obtained during an interview" (Creswell 2009, p. 230). According to (Creswell 2009), the interview protocol comprises of the following elements:

- A heading includes the date and place of interview, and the names of the interviewer and interviewee.
- Warm up questions at the beginning of the interview.
- Probing questions that relate to the topic of research.
- Enough space between the questions to record the interviewees' responses.
- A thankful statement to show the appreciation from the interviewer to the interviewee for his/her time and for their participation in the study.

Accordingly, the researcher designed the interview guide (protocol) that consisted of a list of questions (refer to Appendix D). The first three questions were asked to ensure that the participants did know about organic food before the interview began. These questions were as follows:

Q1: Have you heard about the term organic?

- If yes, how do you hear about this term?

Q2: What do you think organic means?

- Please provide your opinion

Q3: What do you understand by the term organic food?

- Please tell me more about your understanding

These were followed by probing questions that covered the main topic of the study. The probing questions were as follows:

Q4: Do you purchase organic food?

For the participants who stated that they purchase organic food, the researcher asked them the following probing question:

- What are the reasons for purchasing organic food?

For the participants who did not purchase organic food, the researcher asked another question which was:

- Please explain why you do not buy organic food?

Further, the researcher asked the following question to know the frequency of purchasing organic food.

Q5: How often do you purchase organic food?

After asking those questions, the researcher asked the participants questions related to the organic food products in terms of the benefits and drawbacks of purchasing such products. The questions were:

Q6: What do you believe are the advantages of purchasing organic food?

- Please tell me more about that.

Q7: What do you believe are the disadvantages of purchasing organic food?

- If there are any negatives, please tell me more about that.

The interview protocol covered a question about the trust in organic food. The question was:

Q8: Do you trust that organic food is truly organic?

If the participants answered yes, then the researcher asked another probing question which was:

- Please explain why you trust organic food is truly organic?

If the participants answered no, then the researcher asked another probing question which was:

- Please explain why you do not you trust organic food is truly organic?

The other question covered the importance of organic labelling to the purchase decision of organic food. The question was:

Q9: Do you believe that organic labelling is important for you to decide to purchase organic food?

If the participants answered yes, the researcher asked the following probing question:

- Please explain the reasons that make organic labelling important for you?

But if the participants answered no, the researcher asked the following probing question:

- What are the reasons why organic labelling is not important for you?

Due to the importance of word of mouth in the marketing literature, the researcher asked another question to understand the willingness of the participants to recommend organic food products to others. The question was:

Q10: Would you recommend your family, friends or others to purchase or consume organic food?

If the participants answered yes, the researcher asked the following question:

- Please tell me more why you would want to recommend others to buy organic food?

If the participants answered no, the researcher asked the following question:

- Please tell me more why you would not want to recommend others to buy organic food?

Finally, the researcher asked the participants if they wanted to add anything else to the interview. The question is:

Q11: Is there anything else you would like to add?

The interview protocol included questions covering shopping behaviour such as:

- Where do you do your grocery shopping?
- Who does the shopping in your household?
- How often you shop for grocery?

Questions about the participants' demographic characteristics were also included. These questions covered gender, age, educational level, annual income, employment status, occupation, marital status, the number of children or dependants, and the ethnicity of the participants. Additionally, in this protocol, the researcher documented the date, time, place, and name of interviewee for each interview conducted.

3.5.2.7 Trustworthiness of qualitative study

Methodologically, there is a consensus that the findings of qualitative studies should be trustworthy and reliable to show that there is no bias in those findings (Creswell & Miller 2000; Gunawan 2015). Further, Long and Johnson (2000) reported that meaningless findings from qualitative research leads to a waste in the effort and time of the researchers. The trustworthiness of qualitative findings can be divided into main four terms, namely credibility, dependability, transferability and confirmability. Thus, qualitative researchers

can use these criteria to establish trustworthiness in the findings of qualitative work and to persuade the readers of the accuracy in their findings (Lincoln & Guba 1985b). Credibility means that the researchers need to ensure the internal validity of the qualitative data: how to ensure that the study measures what is actually intended (Shenton 2004). Transferability refers to the external validity of qualitative findings. Qualitative researchers can achieve the transferability in their research by describing in detail the processes and procedures followed by the researcher to conduct the qualitative study. This strategy is called "thick description" (Lincoln & Guba 1985a; Merriam 1988).

Dependability (reliability) refers to the ability of researchers to repeat or replicate the findings of the study (Simon 2011). To ensure the quality of the findings of qualitative research, Seale (1999) indicated that reliability is essential characteristic ensuring the quality of findings extracted from the qualitative research. Additionally, qualitative researchers may address the credibility of findings through detailed reporting of the research design and detailed descriptions of data collection and analysis. This can assist future researchers or readers to increase their understating about the methods used in the research (Shenton 2004).

With regards to confirmability, qualitative researchers use the term confirmability to achieve "objectivity" (Lincoln & Guba 1985b). Confirmatory is simply defined as the degree to which the findings of qualitative research were confirmed by others (Trochim 2006). Scholars suggest several strategies and procedures that can be employed to ensure the credibility, dependability, transferability, and confirmability of qualitative research. For instance, Lincoln and Guba (1985a) considered member checking as the most important technique for ensuring and establishing the credibility of qualitative research. Moreover, Shenton (2004) pointed out that triangulation, peer debriefing are some of the strategies that assist qualitative studies to establish the credibility of their findings. On the other hand, Creswell (2007) argues that thick description is an essential step to establishing transferability in qualitative studies. To ensure dependability and confirmability in qualitative researches, trial auditing is useful (Seale 1999; Shenton 2004; Creswell 2007). Furthermore, triangulation can also be adopted as a procedure to establish credibility and confirmability in qualitative research (Krefting 1991).These strategies and techniques will be briefly discussed in the next section.

According to Krefting (1991) and Creswell (2007), member checking is the process of ensuing the credibility of research findings by sending the data (material), and transcripts back to the participants to read and determine whether or not the data and findings reflect

exactly what they said in the interview. Thus, in this study, the researcher returned a completed copy of the transcripts to the participants to check the accuracy of the transcripts and to judge whether or not the transcripts actually reflected the message they were attempting to convey in the interviews. In addition, Ledford and Gast (2018) pointed out that researchers who utilise multiple methods for studying and analysing a single phenomenon could use methodological triangulation as a procedure for ensuring the trustworthiness of the findings. Consequently and as previously discussed, this researcher employed a mixed method approach using qualitative interviews for exploring the potential factors that influence consumers' organic food product purchases in the first stage of a study, and a quantitative survey in the second stage using a survey questionnaire to confirm the findings. Hence, this study fulfilled the conditions of triangulation as a technique for establishing trustworthiness.

Peer debriefing is another strategy for ensuring the credibility of qualitative research (Krefting 1991). In this strategy, the researcher provides a copy of the findings of the qualitative study to impartial experts, such as colleagues, who have experience in qualitative research (Krefting 1991; Long & Johnson 2000). Shenton (2004) argues that peer debriefing can be done between the novice researcher and his/her supervision team to discuss the findings of the qualitative study. The role of the peer debriefing person is to provide feedback to the researcher about the quality of the study (Creswell & Miller 2000). Accordingly, in this study, the researcher showed the findings of the qualitative stage of the study to his supervisors, and the supervisors provided valuable feedback and ensuring that the findings were of high quality.

To establish transferability, Guba (1981) asserted that the researcher could utilise thick description as a technique to ensure and facilitate transferability in the qualitative research. The aim of adopting thick description is to describe in detail all the steps taken by the researcher to reach the findings, thereby ensuring that the readers of those findings can benefit and experience from the study (Creswell & Miller 2000; Shenton 2004; Ledford & Gast 2018). In this study, the researcher presents in detail all the steps and procedures taken prior data collection, during data collection, how the data were analysed, how the themes were created, and all of the other details related to the qualitative findings of the study. As a result, the researcher in this study achieved transferability as a procedure for enhancing and ensuring the trustworthiness of the qualitative findings.

Triangulation is also one of the strategies that help establish the confirmability of qualitative findings (Krefting 1991).Consequently and as previously indicated, the researcher employed a mixed method approach which means that triangulation is implemented due to the use of multiple data sources to address the phenomenon of this study. So, based on the above discussion, the researcher adopted several techniques to ensure the trustworthiness of the qualitative stage of the study.

3.5.2.8 Data analysis techniques of the qualitative study

Data analysis is considered to be a complex and time consuming phase of the qualitative research process (Ary et al. 2018). Data analysis of qualitative work consists of familiarising and organising, coding, and interpreting and presenting the findings (Ary et al. 2018). The purpose of data analysis from qualitative interviews is to enable the researcher to understand the world (Green & Thorogood 2018). Transcription of the interviews is the first process in data analysis. It includes converting the audio data into written data (Bailey 2008). As discussed before, the researcher transcribed the audio data into Microsoft Word documents. According to O'Connor and Gibson (2003) there are five steps in analysing qualitative data:

- **Organising the data:** Qualitative data have to be organised to facilitate ease of use. To organise the data, the researcher needs to read through transcripts and draw maps or charts to reveal the whole picture of the topic. For this purpose, the researcher carefully read the transcripts to gain overall understating of each interview. This step is essential to gaining a general sense of the qualitative data gathered (Creswell 2009).

- **Organising the concepts and ideas:** In this step, the researchers identify words, phrases, and ideas through the coding and categorising process. Coding can be carried out by the identification of segments in a text using line numbering in the document or by highlighting certain quotes to be coded (Basit 2003). Consequently, the researcher codes the most frequent words, phrases, and ideas that relate to the question asked in the protocol.

- **Building themes from the data:** After the data are coded and categorised, the categories form and create one main theme (Creswell 2007). A theme is described by Marks & Yardley (2004, p. 57) as "a specific pattern found in the data in which one is interested". The themes are discussed in the next chapter.

- **Ensuring trustworthiness in qualitative findings:** In Section 3.6.2.7 the researcher discusses in details all the procedures followed to ensure the trustworthiness in the findings of the qualitative stage of the study.
- **Interpretation of the findings:** In this step, the researcher discusses and interprets the findings that were obtained and extracted from the qualitative interviews (Creswell 2009). The next chapter presents the findings of the qualitative stage of this research.

3.5.2.8.1 Thematic content analysis (TCA)

According to Green and Thorogood (2018), there are several techniques for analysing qualitative data. Thematic content analysis is the most popular in qualitative research (Burnard et al. 2008; Green & Thorogood 2018). TCA is defined as "a descriptive presentation of qualitative data" (Anderson 2007, p. 1). Qualitative researchers can employ TCA as a way to present and describe the qualitative data (Anderson 2007). In addition, thematic content analysis (TCA) is a suitable method of analysis to generate themes from interviews (Burnard et al. 2008; Stevens & Palfreyman 2012). Furthermore, Ainsworth et al. (2018) reported that TCA can be employed to analyse semi-structured interviews. Moreover, utilising TCA enables the researcher to generate frequency counts of the themes extracted from the qualitative data (Penney et al. 2011). In the case of the Marketing discipline, TCA is widely and commonly used by marketing researchers such as Roberts and Pettigrew (2007); Crooks et al. (2011) and Al-Areefi and Hassali (2013). Further still, in the context of organic food, several studies have adopted TCA to analyse their qualitative data (Ulvila et al. 2009; Muposhi & Dhurup 2016; Pérez 2016). The qualitative data of the current study was analysed using TCA.

- **NVivo software analysis**

In this study, the researcher analysed the qualitative data through the combination of a manual process and NVivo software Version 12. NVivo software facilitates the management and analysis of qualitative data (Bazeley & Jackson 2013; Castleberry 2014). In addition, NVivo software is considered a useful tool that enables the researcher to perform various analytical processes such as coding, searching more details, and drawing diagrams and graphs that assist the researcher in analysis (Zapata-Sepúlveda et al. 2012). Further, NVivo has been widely used by prior studies to assist with the analysis of the qualitative data (Sotiriadou et al. 2014). In addition, NVivo software provides a summary of the findings using a matrix coding query, and this function allows the researcher to explore the concepts

and categories that are needed to develop the conceptual framework (Hutchison et al. 2010). The matrix coding query was utilised to analyse the qualitative data of this study.

For the use of this software, NVivo was downloaded onto the researcher's computer using assistance from an ICT staff member at the University of Southern Queensland. Consequently, the researcher employed NVivo as a tool that facilitates the analysis of the qualitative data in the exploratory stage of the research.

3.5.2.9 Pilot study

A pilot study is considered an important step when conducting qualitative studies (Kim 2011). According to Creswell (2007) qualitative researchers can employ pilot testing prior to the main interviews to refine the interview questions and to ensure the clarity of questions. Padgett (2016) highlighted some advantages of conducting a pilot study in qualitative research such as enabling the researcher to practise and train himself before the main interviews, enhancing the researcher's confidence to continue the next steps of the research, and modifying some unclear questions or rewording some questions in the interview protocol to ensure that the participants will be able to understand the questions and thus answer those questions correctly.

In this study, the researcher conducted a pilot study with three participants. The pilot comprised one academic staff member from the University of Southern Queensland. This person is an expert in the Marketing discipline and marketing qualitative research. Additionally, two organic food buyers were selected to participate in a pilot study to obtain feedback about the interview protocol. The researcher contacted those participants using personal sources. The researcher provided a consent from and information sheet for the participants. A consent form was given to the participants to sign and confirm that they agree to a recording of the interview using a MP3 recorder.

Regarding the setting of interviews, one of the interviews was conducted in the office of the participant and the other two participants were interviewed at the house of the researcher. After conducting the three interviews, the researcher asked the participants if there was any feedback about the questions. The participants confirmed that all the questions asked during the interview were clear and easy to understand and fit within the topic of research. Thus, the researcher did not change or modify any questions in the interview guide.

3.5.3 Quantitative survey (Confirmatory phase)

In the quantitative research approach, researchers collect and analyse data using statistical procedures and techniques (Anderson et al. 2018). Quantitative researchers also utilise objective measurements to collect numerical data that will be used to answer the research question and to test the research hypotheses (Ary et al. 2018). Survey using a questionnaire is one of the most widely used and popular research instruments for data collection in the Social Sciences including the Marketing discipline (Ary et al. 2018; Hulland et al. 2018). Further, a well-designed questionnaire can ensure the success of the survey due to the ability of the questionnaire to ask the same questions to different respondents simultaneously (Brace 2018). In market research, the survey questionnaire should be designed in a way that helps the respondents to provide the best data needed for the study (Brace 2018). In marketing research, a survey questionnaire can be communicated through the mail, telephone, or face-face. Thus, the questionnaire is considered a way of gathering primary data using communication between the researcher and the respondents (Zikmund et al. 2017).

In this regard, a self-administered questionnaire was developed and used to collect the primary data for the confirmatory stage of the research. A self-administered form of questionnaire enables the respondents to complete the survey by themselves (Saunders 2009; Zikmund et al. 2017). Survey by questionnaire has many advantages such as efficiency, cost effectiveness and accuracy of evaluation of the population. The use of surveys in marketing has grown due to their ability to allow consumers to share what they think (Zikmund et al. 2017). Thus, a self-administered questionnaire is considered the most suitable tool for reaching respondents and collecting data.

3.5.3.1 The survey population and sampling method

Population is defined as "the total membership of a defined class of people, objects, or events" (O'leary 2004, p. 102). The population of the current study can be defined as individuals or people who purchase groceries and food products for their household, are aged 18 and older, and reside in Toowoomba (Australia), a regional area. As argued by (Maiyaki & Mokhtar (2012), the sampling frame is considered a popular challenge in most marketing studies that deal with consumers as a respondents. However, as they argue, if the sampling frame is not easy to obtain, the researcher may use an appropriate sampling strategy. Thus, due to unavailability of a sampling frame for the existing study, a convenience sampling method was employed by approaching the primary buyers who purchase grocery and food products and are aged 18 or older. To reach to the appropriate participants, a convenience sampling method using the mall intercept method is the most appropriate method. In

marketing research, the mall intercept method enables rapid data collection and limits the possibility of respondents misunderstanding questions (Zikmund et al. 2013).

Unlike other techniques, the mall intercept method is widely used by marketers and researchers in the marketing field (Rice & Hancock 2005). The researcher conveniently intercepts and meets the respondents during their shopping time at the malls and shopping centres and asks them to participate in the survey (Rice & Hancock 2005; Kotler et al. 2009; Saunders 2009; Zikmund et al. 2013). Furthermore, the mall intercept method is a quick and inexpensive method for collecting the primary data needed for the confirmatory stage of the research (Rice & Hancock 2005; He et al. 2012). Further, adopting the mall intercept method enables the researcher to contact interviewees face-to-face which is more desirable (Keen et al. 2004).

In the context of organic food, the mall intercept method was used in previous PhD studies such as Sriwaranun (2011), Chen (2012) and Mhlophe (2015). Moreover, many previous PhD studies in marketing, such as Alnaimi (2012), Tarabashkina (2014) and ALdrees (2015), employed the mall intercept method. Further, there are many published articles in the organic food domain that have also utilised the mall intercept method such as (Ahmad & Juhdi (2010), Wee et al. (2014) and Bruschi et al. (2015). Thus, this method is considered the most appropriate tool to collect data for this stage of the research.

In this research, the main shopping centres and some organic food stores were visited to intercept and select the targeted respondents. Also, to ensure the minimum level of bias in the selection of the respondents, the researcher intercepted the respondents while they were leaving the shopping centres and organic food stores. The main shopping centres that were visited are as follows:

- Coles: five Toowoomba branches were visited (Margaret Street, Ruthven Street, corner of Anzac Avenue and James Street, Grand Central Shopping Centre, and Stenner Street).
- Woolworths: four branches were visited (Grand Central Shopping Centre, Range Shopping Centre located at 1B Burke Street, Kearneys Spring located at 445 Hume Street, Clifford Gardens Shopping Centre at James Street).
- ALDI: three stores were visited (ALDI Clifford Gardens located at 1 Princess Street, ALDI Harlaxton located at 1/7 Parrot Street, and ALDI Kearneys Spring located at the corner of Stenner Street and Hume Street).

- Organic Food Market located at 4 Neil Street.
- Central Health Food located at Grand Central Shopping Centre.
- Full of Life Organic Wholefoods Cafe & Juice bar located at 1/476 Ruthven Street.
- Other convenience stores were targeted as well in different locations within Toowoomba city.

The researcher stood at the front of the shopping centres and other targeted stores and intercepted the respondents who were leaving those centres and stores and invited them to participate in the survey. The researcher asked the consumers the following question "Would you like to participate in this survey?", if the answer was (Yes), the researcher provided a copy of the questionnaire for respondents to complete. If the answer was (No), the next exiting consumer would be targeted by the researcher. Three hundred and nighty questionnaires were completed for the main survey from 26 September 2018 to 24 October 2018.

3.5.3.2 Sample size of the quantitative phase

Determining the sample size is an important decision in most research areas (Kothari 2004; Kline 2011; Kumar 2019). Scholars argue that it is essential to have an adequate sample size for conducting quantitative research (Burmeister & Aitken 2012; Zikmund et al. 2013). Thus, determining sample size in quantitative research is not an easy step, and researchers should carefully plan when determining the sample size (Lenth 2001; Beleites et al. 2013). It can be said that there is no correct or incorrect method for determining the sample size in quantitative research (Muthén & Muthén 2002). Generally, it is recommended that the sample size be large enough (O'Rourke et al. 2013). Arguably, there are several methods for deciding the sample size for quantitative studies. For instance, Zikmund et al. (2013) stated that in determining the sample size for the probability sampling method, researchers may use a mathematical formula to calculate the appropriate sample size for the quantitative studies. Similarly, Israel (1992) recommended that the following equation could be used to determine the sample size of the survey when using probability sampling method:

$$n = \frac{N}{1 + N(e)^2}$$

This thesis employed the non-probability sampling method, thus, this formula is not used in this study. On other hand, Kline (2015) argues that the sample size can be determined based on the number of variables in the research model. He stated that researchers may use a

general rule of thumb that is 20:1. This means that the researcher can use 20 respondents for each variable in the model.

Other scholars argue that in the studies that use structural equation modelling (SEM) confirmatory factor analysis to analyse the data, sample size should be taken into consideration (Hoe 2008). There is no consensus about the sample size for the studies that apply SEM to analyse data (O'Rourke et al. 2013), but there are several suggestions for determining the sample size for structural equation modelling. For instance, 200 cases as a sample size would be sufficient in SEM according to Kline (2011) and Myers et al. (2011). On the other hand, it is widely argued that the minimum sample size required when utilising structural equation modelling is five respondents for each item of the scale measurement used in the research instrument (Hair et al. 2010). Similarly, it is widely suggested to use a ratio of approximately 5 to 10 respondents for each item in the scale (Hair et al. 2010; Muthén & Muthén 2002; DeVellis 2016). This study included 65 scale items, and based on the previous argument, the researcher decided to use the ratio of 1:6 which means for each item in the scale six participants were targeted. Thus, the sample size of the current study was 390 respondents. Based on the several perspectives about the sufficient sample size required in terms of SEM analysis, the sample size of this study exceeded the required sample size for SEM which is 200 respondents.

3.5.3.3 Measurement scale of the quantitative phase

In a quantitative survey, a Likert Scale is the most frequently used in the Social Sciences (Kothari 2004; Kumar 2005). Based on this scale, the respondents are asked to answer the given statements in the questionnaire (Kothari 2004). Further, the Likert Scale is used to respond to attitudinal questions (Brace 2018). According to Kothari (2004), the Likert Scale is more reliable because it enables the respondents to answer all the statements in the survey. Further, the Likert Scale is easy to use. Accordingly, Likert Scale was employed in this research to measure the attitudinal questions.

3.5.3.4 Development of self-administered questionnaire

This section of the chapter presents and discusses the process of developing the survey questionnaire that was used to collect data for the quantitative stage of the research. The main objective of the development of the questionnaire is to design questions that measure the constructs to be tested statistically. As mentioned by Kotler and Keller (2012) and Brace (2018) the questionnaire is a research instrument that is widely used to gather primary data

in quantitative studies. The questionnaire also consists of a set of questions that are provided to the respondents to answer. The quantitative stage of the current research tries to answer the second research question which is how the extracted variables from the qualitative interviews and prior literature influence consumers' organic food purchasing intentions. Thus, in market research, the questionnaire is deemed an important part of the qualitative study that has to be well designed to enable the researcher to collect accurate data (Brace 2018). This survey was developed using constructs adapted from the findings of the qualitative stage of the research and prior studies.

In developing the questionnaire for market research, the researcher needs to understand what forms of questions should be asked. Hence, marketing researchers should be aware of how to write and design questionnaires (Brace 2018). According to Kothari (2004) the questions used in the questionnaire have to be simple and easy to understand by the majority of respondents. Further, in the development of the questionnaire, the researcher may use two forms of questions: close-ended and multiple choice questions (Kothari 2004). Accordingly, the current questionnaire was comprised of two types of questions: multiple choice and close-ended questions. In addition, unlike qualitative interview questions, the questions in quantitative research have to be operationally defined and described before the data collection begins (Saunders 2009). Consequently, the researcher operationally defined each construct used in the survey. The survey questionnaire of this study consisted of five sections (refer to appendix F). The first four sections comprised multiple choice questions and the last section contains close-ended questions. The following is an explanation of each of the sections used in the questionnaire.

At the beginning of the survey questionnaire, the researcher introduced the title of the study and briefly described the purpose of the survey. The researcher also mentioned a brief sentence regarding the ethical clearance granted for the study. An appreciation and thank-you sentence were also provided to thank the respondents for participating in the survey. Contact information was also provided in case any respondents wanted to contact the researcher. The phone number and e-mail address of the researcher were inserted into the introduction of the questionnaire.

The first part of the questionnaire was comprised of questions related to the demographic characteristics of the respondents. As stated by O'leary (2004) and Brace (2018), any survey research should include questions that describe the respondents' demographic traits. Thus, in this research, the researcher used some question to describe the demographic

characteristics of the respondents. This included information about the respondents' gender, age, income, education level, employment status, occupation, marital status, the number of children/dependants in the household, and ethnicity. The researcher adapted some of the demographic characteristics from the Australian Bureau of Statistics (ABS).This is an Australian governmental institute. The ABS is an Australian Government body that organises and manages official Australian statistical data and information. The next section presents, in detail, the questions that describe and measure the demographic traits of the respondents.

The gender of the respondents: According to the Australian Department of the Attorney General (2018), "sex" or "gender" can be classified as male, female or unspecified, indeterminate, or intersex. Furthermore, the Australian Department of Human Services allows those who want to change their gender to do so by updating their gender details with the government. The sex/gender categories used in this survey are as follows:

- Male
- Female
- Other
- Would rather not say

The age of the respondents: It is necessary for marketers to understand the age groups of consumers in order to determine their needs and desires (Kotler & Keller 2012). In terms of age, the unit of analysis of this study is any individual aged 18 years or older. As mentioned in the above section, the age group categories used in the survey are adapted from the ABS. The respondents could choose one of the following options: 18-25, 26-34, 36-45, 46-55, 56-65, and 66 years or older.

Annual income of the respondents: In marketing research it is important to understand the purchasing power of the consumers, and income is considered one of the indicators of consumers' purchasing power (Solomon et al. 2006). In this study, the research instrument included various options for income. Participants could select the choice that represented his/her annual income. Income information is based on the Australian dollar. The options were as follows: Less than $20,000; from $20,001 to $50,000; from $50,001 to $80,000; $80,001 to 110,000; from $110,001 to $140,000; and $140,001 and above.

Education level of the respondents: Marketers are interested in understanding consumers' educational levels (Kotler & Keller 2006). Consequently, the study instrument included four options to choose from. The options were secondary education level, diploma level, undergraduate level, and postgraduate level. In addition, the researcher included "other" as another option in case the respondents did not find the appropriate answer to this question.

Employment status and occupation of the respondents: According to Kotler and Keller (2012), marketers need to know the employment status of consumers due to the importance of occupation in shaping consumers' consumption patterns. Therefore, this research instrument contained a question about the employment status and occupation of the respondents. The options available for the employment status were as follows: Full-time job, part-time job, casual job, retired and unemployed. Further, "other" was added as another option to this question in case the current answers do did not suit the respondent's status. ABS occupation options were used. The options were as follows: Manager, Professionals, Technician, Clerical and Administrative Workers, and Labourers. In addition, "other" was also added to this question in case respondents did not find the appropriate answer for this question.

Marital status of the respondents: According to the ABS, people are classified as Married, Divorced, Widowed, or Unmarried. Hence, the research instrument of the current study included these four options.

The number of children in the household: The number of children influences the purchasing and consumption patterns of households (Furnham & Gunter 2008). Consequently, the researcher felt that it was important to add questions about the number of children in the household. This question included five choices: (0) which means no children in the household, (1) to indicate that the household has one child, (2) to indicate that the household has two children, (3) to indicate that the household has three children, and (more than 3) to indicate that the household has more than three children.

Ethnic background: In studies of consumer behaviour and marketing, identifying ethnicity is considered to be useful (Hogg et al. 2010; Kotler & Gertner 2002). Thus, this study included a question about the ethnicity of respondents. Ethnicity options from the ABS were adapted. Australian Aboriginal, Pacific and Torres Strait Islander, Anglo- Australian, New Zealander, European, African and Asian, Middle Eastern, North American, South American and "other" was added in case the respondents do not find a suitable answer.

The second part of the questionnaire contains questions that relate to the grocery shopping behaviour of the respondents. In marketing surveys, it is suggested some behavioural questions are included in the questionnaire. Furthermore, behavioural questions should be answered before the attitudinal questions on the topic of the research (Brace 2018). Additionally, behavioural questions enable the researcher to have an idea about how often respondents perform the actions and what type of products they buy. Behavioural questions also facilitate the recording of respondents' behaviours (Hague et al. 2004). Thus, this part of the questionnaire included four behavioural questions. Multiple choice questions were employed in this part of the questionnaire. Utilising the multiple choice form enables the respondents to choose from a list of options that reflect his/her perspective (Brace 2018). The first question was about the place where the respondents shop. To answer this question, the researcher listed the main shopping centres located in Toowoomba. As previously mentioned in Section 3.5.3.1, the following shopping locations were offered as options: Coles, ALDI, Woolworths, convenience stores, organic food or health retail stores, and the researcher added "Other" as another choice if the respondents shopped at a place not listed in the options.

The second question of this part of the survey included a question about who usually does shopping in the households. This kind of questions is widely asked by many researchers in the Marketing discipline (Shamsudeen & Aldhamiri 2017; Wong & Nair 2018). Five choices were listed to answer this question. The options were as follows: Parents, Yourself, jointly (the participant and his or her spouse), Spouse or partner, and "other" was added in case an appropriate option was not available. The third question covered the frequency of shopping for groceries. Four options were provided for the respondents to answer from: Daily, Weekly, fortnightly, and Monthly. The last question in this part included a question about who influences the purchasing decisions of the respondents. It is argued that many influencers may affect consumers' purchasing decisions (Kotler & Keller 2012). Therefore, the researcher felt that it was useful to have such a question to understand who influences the purchasing decisions of the respondents in the existing study. The options provided to the respondents were as follows: Partner or Spouse, Parents, Children, Friends, Colleagues, and Relatives. Also, "other" was added as another option if there was another answer. This question also included "none" as another choice for respondents who believed that there were no people influencing their purchasing decisions

The third part of the questionnaire contained three questions that covered the respondents' general knowledge of organic food products. The first question was about the source of information that respondents used to learn about organic food. Eight options were provided to answer this question. The options were as follows: Articles and books, friends or family or relatives, media (TV, newspaper), advertising, educational institutes, and social media. Further, the researcher added "other" as another choice if the respondents do not find a suitable answer. Also, if respondents were unsure about the answer researcher included "not sure" as another option. The options for this question were taken from the qualitative focused interviews. The second question of this section was about the advantages of organic food from the respondent's perspective. The options provided to answer this question were also taken from the qualitative focused interviews. The options were as follows: health and nutritious benefits, good for environment, good quality food, and tasty food. The last question of this section covers information about the disadvantages of organic food from the respondent's perspective. The options to answer this question were also taken from the qualitative focused interviews. Those choices were as follows: expensive food, short shelf-life, limited availability, and poor appearance.

The fourth part of the survey covered respondents' organic food purchasing intentions. This part also included questions that investigated the respondents' trust in organic food and the importance of organic food labels. A question about the willingness of respondents to recommend that others buy organic food was also included. The first question in this part of the questionnaire investigated the respondent's intention to purchase organic food. The options provided to answer this question were based on Likert-type scale response anchors. The options are were as follows: Never, Rarely, Sometimes, Often, and Always. The second question investigated the percentage of organic food bought by the household. To answer this question, five choices were listed: 0% to 10%, 11% to 30%, 31% to 50%, 51% to 70%, and 71% to 100%.

The third question investigated the type of organic food that might be bought by respondents. The options were also based on the findings of the qualitative stage of this research. The respondents could choose one or more options of the listed options as follows: Fruits and vegetables, dairy, meat and chicken, eggs, grains, and bakery products. Also, the researcher added "other" in case the respondents' answer was not listed amongst the choices. In addition, if some of the respondents had no intention of buying organic food, the researcher included "none" as an option. The fourth question of this part covered the reasons for trust

in organic food from the respondents' perspective. The options were also taken from the findings of the qualitative stage of this research. The answers provided were as follows: Certification, Governmental regulations, Reputation of the seller, and High price of organic food products.

The fifth question in this part was about the importance of labelling of organic food. The options listed to answer this question were also taken from the qualitative stage of this research. The options were as follows: Label helps consumers better understand what is in the food they purchase, label helps consumers to differentiate between organic and nonorganic food, label informs the consumers about the certification of organic food, and "not sure" was added in case respondents did not find a suitable answer. The last question in this part investigated the willingness of respondents to recommend that others buy organic food. The respondents could simply tick "yes" to indicate their willingness to recommend that others purchase organic food, "no" to indicate their unwillingness to recommend the purchase organic food to others, or "not sure" if the respondents were unsure about this issue.

The last part of the questionnaire covered the attitudinal questions that relate to the factors that potentially influence consumers' organic food purchasing intentions. It is argued that the attitudinal questions should be asked after the behavioural questions (Brace 2018). Thus, this study included the attitudinal questions in the last part of the questionnaire. Furthermore, attitudinal questions have to be measured correctly so it is important to construct an attitudinal scale in the qualitative stage of the research (Kothari 2004). Arguably, attitudinal items can be answered using rating scales such as the Likert Scale (Saunders 2009; Sekaran & Bougie 2016). Generally, in the Likert scale, respondents are asked to indicate their agreement or disagreement with the statement given in the questionnaire (Saunders et al. 2009). Additionally, the Likert Scale is widely used in survey-based research (Kumar 2005; Joshi et al. 2015). Moreover, it is important to understand the interpretations and analysis of data derived from the Likert Scale (Sullivan & Artino Jr 2013). The Likert Scale was designed to measure the attitudinal items used in surveys (Joshi et al. 2015). Additionally, Li (2013) argues that measurements based on the Likert Scale demonstrate a good reliability. A five-point Likert Scale is most commonly used in marketing research, and gives adequate responses due to its simplicity making it easy for respondents to understand (Brace 2018). Consequently, the five-point Likert Scale was used to measure the scale items in this study. A five-point Likert Scale includes the following response categories (Saunders et al. 2009):

- Strongly disagree

- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

In addition, the respondents were given an example to help them understand how to use this scale when they respond to each statement in the scale.

This part of the survey aims to measure the most potential influential factors in organic food purchasing intentions. All the factors were taken from the interviewees in the qualitative stage of the study. As previously mentioned, all the factors are labelled from "Strongly disagree" to "Strongly agree", and 11 were measured. The following are the factors in brief (and they are discussed in detail in Chapter Four of this thesis):

- Health concerns
- Environmental concerns
- Subjective norms
- Price
- Trust
- Social media
- Packaging and labelling
- Availability
- Sensory food attributes
- Certification
- Intention to purchase organic food

The following section discusses, in detail, the items that construct each factor. Further, the source of each item is also explained.

Health concerns: The Health concerns construct is the first factor in the survey. It is measured by using a five-point Likert Scale, labelled from "Strongly disagree" to "Strongly agree". To measure this factor, initially seven items were adapted from the previous studies and the qualitative interviews of this study. Table 3.1 illustrates the items related to the health concerns factor.

Table 3.1: Initial items relating to Health concerns factor

No	Item	Adapted sources
1	Organic food keeps me healthy.	Steptoe et al. (1995); Lee and Yun (2015); and qualitative interviews.
2	Organic food contains a lot of vitamins and minerals.	(Lee & Yun 2015); and qualitative interviews.
3	Organic food helps me to live a healthy lifestyle.	Anisimova (2016) and Sultan (2014).
4	I buy food that helps maintain my weight and appearance.	Kim and House (2016); and qualitative interviews.
5	When I do shopping, I carefully choose products without any additives.	The qualitative interviews.
6	Organic food reduces the risk of illness.	The qualitative interviews.
7	Organic food has no harmful side effects.	The qualitative interviews.

Environmental concerns: The Environmental concerns construct is the second factor in the survey. This factor is measured by using a five-point Likert Scale, labelled from "Strongly disagree" to "Strongly agree". Initially, five items were used to measure this construct. The measurement items were adapted from the previous studies and qualitative interviews of the exploratory stage of this research. The following Table 3.2 summaries the items related to this construct.

Table 3.2: Initial items relating to Environmental concerns factor

No	Item	Adapted sources
1	Organic foods have been prepared in an environmentally friendly way.	Lee and Hwang (2016).
2	Organic food is beneficial for the environment.	McReynolds et al. (2018), and the qualitative interviews.
3	Producing organic food reduces the use of herbicides and pesticides in agriculture.	Roitner-Schobesberger et al. (2008), Özfer Özçelik and Ucar (2008).
4	Organic food is produced in a more environmentally friendly manner than conventional foods.	Bryła (2016).
5	Organic food helps to achieve biological equilibrium in nature.	Özfer Özçelik and Ucar (2008).

Subjective norms: The Subjective norms construct is measured by using a five-point Likert Scale, labelled from "Strongly disagree" to "Strongly agree". In this study, five items were used to measure this construct. Four of the measurement items were adapted from the previous studies, and one item was adapted from the qualitative interviews during

interviewing the participants. The following Table 3.3 presents the items related to this construct.

Table 3.3: Initial items relating to Subjective norms factor

No	Item	Adapted sources
1	My friends and family consume organic food.	Voon et al. (2011); (Singh & Verma 2017), and the qualitative interviews.
2	My family thinks that I should buy organic food rather than non-organic food.	Yazdanpanah and Forouzani (2015).
3	Most people I value would buy organic food rather than non-organic food.	Yadav and Pathak (2016).
4	My friends and family members would appreciate if I buy organic food.	Al-Swidi et al. (2014)
5	The trend of buying organic food among people around me is increasing.	Amornsin (2015), and Al-Swidi et al. (2014)

Price: The Price construct is measured by using a five-point Likert Scale, labelled from "Strongly disagree" to "Strongly agree". Six items were used to measure Price factors. Four of the items were adapted from prior studies and two items were adapted from the qualitative interviews and previous studies. Table 3.4 shows the items that belong to this construct.

Table 3.4: Initial items relating to Price factor

No	Item	Adapted sources
1	Organic food is expensive.	Voon et al. (2011) and the qualitative interviews.
2	Only consumers with high income can afford organic food.	Voon et al. (2011)
3	Organic food offers good value for money.	Steptoe et al. (1995)
4	The price of a product is very important to me.	Karunanayake and Wanninayake (2015)
5	The benefits of organic food justify its price.	Cene and Karaman (2015)
6	I would buy more organic foods if they were cheaper.	(Cene & Karaman 2015) and qualitative interviews.
7	I am not willing to pay more to buy organic food.	Tsakiridou et al. (2008)

Trust: The Trust construct is measured by using a five-point Likert Scale, labelled from "Strongly disagree" to "strongly agree". Seven items were used to measure this factor. The items were adapted from the previous studies and the qualitative interviews of this research. Table 3.5 illustrates the items related to the Trust construct.

Table 3.5: Initial items relating to Trust factor

No	Item	Adapted sources
1	I trust organic food.	Misra and Singh (2016)
2	I have doubts about buying organic food.	Misra and Singh (2016) and the qualitative interviews
3	I trust Australian institutions certifying organic foods.	Anisimova (2016)
4	I trust Australian organic food manufacturers.	Anisimova (2016)
5	I trust sellers of certified organic foods.	Anisimova (2016)
6	I would buy organic food if I can trust it is really organic.	Choden (2013)
7	I trust the organic certification logo on organic food labels.	Voon et al. (2011)

Social media: The Social media construct is measured by using a five-point Likert Scale, labelled from "Strongly disagree" to "Strongly agree". Six items were used to measure this factor. These items were adapted from the previous studies and one item was adapted from the qualitative interviews of this research. The following Table 3.6 shows the items related to this construct.

Table 3.6: Initial items relating to Social media factor

No	Item	Adapted sources
1	I am satisfied with the social media communications of the companies that market organic food products.	Khadim et al. (2018).
2	I get information about organic food from various kinds of social media.	The qualitative interviews.
3	Social media are informative about the companies' products.	Arli (2017).
4	Social media communications of the companies that market organic food products are very attractive.	Schivinski and Dąbrowski (2013).
5	Advertising on social media sites of the companies that market organic food products impacts my decision to buy organic food.	(Lee 2013).
6	Social media provides me with an efficient platform to communicate with the companies that market organic food products.	Lee (2013).

***Packaging and labelling*:** The Packaging and labelling construct is measured by using a five-point Likert Scale, labelled from "Strongly disagree" to "Strongly agree". Seven items were used to measure this factor. The items were adapted from the previous studies and one item was adapted from the qualitative interviews of this research. The following Table 3.7 presents the items related to this construct.

Table 3.7: Initial items relating to Packaging and labelling factor

No	Item	Adapted sources
1	I prefer to buy the products that have attractive packaging.	Jaafar et al. (2012).
2	For me packaging is important because it conveys information about organic food.	Peters-Texeira and Badrie (2005).
3	The quality of the packaging material is important during buying process of organic food products.	Zekiri and Hasani (2015).
4	Packaging influences my purchasing decision towards organic food products.	The qualitative interviews.
5	Organic labelling provides correct information on organic foods.	Teng and Wang (2015).
6	When I do shopping, I will pay more attention to food that has been certified with an organic label.	Müller and Gaus (2015).
7	Organic labels are important because they guarantee that the products concerned really do come from organic production.	Müller and Gaus (2015) and the qualitative interviews.
8	When I buy organic food product, I always read the label.	Escobar-López et al. (2017)

***Availability**:* The Availability construct is measured by using a five-point Likert Scale, labelled from "Strongly disagree" to "Strongly agree". Seven items were used to measure this construct. These items were adapted from the previous studies and the findings of the qualitative interviews. The following Table 3.8 presents the items related to this construct.

Table 3.8: Initial items relating to Availability factor

No	Item	Adapted sources
1	I will purchase organic food products if they are available in the marketplace.	Misra and Singh (2016)
2	I would buy more organic food if I could find more in the marketplace.	Bruschi et al. (2015)
3	There is no variety in organic food products.	The qualitative interviews.
4	Organic food is always readily available in the marketplace.	Tarkiainen and Sundqvist (2005)
5	I would buy more organic food if there were more verities of such products.	Cene and Karaman (2015)
6	I am able to find organic food products in shops.	Bruschi et al. (2015)
7	Organic foods are not available everywhere.	The qualitative interviews.

Sensory food attributes: The Sensory food attributes construct is measured by using a five-point Likert Scale, labelled from "Strongly disagree" to "Strongly agree". Eight items were used to measure this construct. These items were adapted from the previous studies and the findings of the qualitative interviews. The following Table 3.9 presents the items related to this construct.

Table 3.9: Initial items relating to Sensory food attributes factor

No	Item	Adapted sources
1	I prefer organic foods because they are tasty.	Lea and Worsley (2005) and the qualitative interviews.
2	Organic food has good flavour.	Escobar-López et al. (2017)
3	Organic food contains natural ingredients.	Steptoe et al. (1995)
4	I believe that organic food has superior quality.	Lee and Hwang (2016)
5	I consume organic foods for their nutritional content.	Escobar-López et al. (2017) and the qualitative interviews.
6	Organic food looks better/more appealing.	Bryła (2016).
7	Organic food is free of chemical and hormonal residues.	Özfer Özçelik and Ucar (2008) and the qualitative interviews.
8	Organic foods stay fresh for a shorter time.	The qualitative interviews.

Certification: This construct is measured by using a five-point Likert Scale, labelled from "Strongly disagree" to "Strongly agree". In this research, five items were used to measure the Certification construct. Two of the items were extracted from the findings of the qualitative interviews, whilst the other three items were adapted from the previous studies. The following Table 3.10 summaries the items related to this construct.

Table 3.10: Initial items relating to Certification factor

No	Item	Adapted sources
1	If organic food is certifies, I will purchase it.	The qualitative interviews.
2	I look for an organic seal.	Escobar-López et al. (2017)
3	Certificate guarantees that the food is produced organically.	Botonaki et al. (2006)
4	Organic food producers should be certified.	The qualitative interviews.
5	I believe that organic food production certificate is important for my food purchases.	Chryssohoidis and Krystallis (2005)

Purchasing intention*:* In this research, the Intention construct is employed as a dependent variable. The Intention construct is measured by using a five-point Likert Scale, labelled from "Strongly disagree" to "Strongly agree". Six items were used to measure the Intention construct. All the items were adapted from the previous studies. The following Table 3.11 summaries the items related to this construct.

Table 3.11: Initial items relating to Purchasing intention factor

No	Item	Adapted sources
1	I try to buy organic foods because they are the best choice for me.	Lee (2016)
2	I intend to buy organic food in the near future.	Hansen et al. (2018)
3	If I had to buy food today, I would buy certified organic food.	Anisimova (2016)
4	I expect to consume organic food.	Shaharudin et al. (2010)
5	For me, the probability of buying organic foods is high.	Teng and Wang (2015)
6	I am interested in experiencing the benefits of consuming organic food.	Chen and Lobo (2012).

3.5.3.5 Pre-testing the questionnaire

In the development of the survey questions, it is necessary that the researcher checks the questions carefully before conducting the main survey (Hilton 2017). Pre-testing the questionnaire is the best way to check the clarity of questions, and ensure that the questions are easily understood and that the respondents can simply answer the questions (Grimm 2010). In addition, pre-testing the questionnaire enables researchers to identify any potential problems in the wording of the questions (Agarwal 2011). Consequently, in the current study, the researcher carried out a pre-test to identify necessary improvements in the questionnaire and adjust the questions based on the evaluation of the survey questions for clarity, ambiguity and bias.

At this stage, the researcher invited ten respondents to participate in the evaluation of the questionnaire. The respondents were comprised of one academic staff and two postgraduate students from the University of Southern Queensland (USQ), as well as seven grocery shoppers. The respondents were contacted personally by phone or using the mall intercept method. Furthermore, the respondents were chosen based on different criteria such as ensuring that participants were grocery buyers and they possessed knowledge about organic food products. To ensure this, the researcher asked the participants prior to inviting them to the pre-testing process if they know what organic food is and if they buy grocery products. All of the participants in the pre-test stage were grocery buyers and they indicated that they have knowledge about organic food products. Interestingly, some of the participants purchased some forms of organic food products.

Each of the participants was given a copy of the questionnaire to read and evaluate by providing comments on the following issues:

- Are the questions provided in the questionnaire easy to understand?
- Are any of the questions given in the questionnaire ambiguous and need more explanation?
- Is there any difficulty in answering the questions in the questionnaire?
- Is the design of the questionnaire pleasant?
- Do you feel there is a need to change or adjust any question in the questionnaire?
- Do you find any redundancy in the questions provided in the questionnaire?

The majority of participants confirmed that the questionnaire was designed in a nice format, but there was some valuable feedback that the researcher took into consideration when making changes to the questions. For instance, one of the respondents indicated that there is a need to add "Not sure" as an option for Questions 5 and 6 in Part 4. Also, Question 2 in Part 3 of the questionnaire, a question about the benefits of consuming organic food had two separate options, "health benefit" and "nutrition benefit". Some of the respondents suggested that the two options be merged into one: "health and nutrition benefits". In addition, Question 3 in Part 3 of the questionnaire, required rewording for two options. The options were "not always available" and "does not look good". Based on the suggestion of some participants, the options were modified to "limited availability" and "poor appearance". Additionally, another participant indicated that he faced a problem answering Question 2 in Part 4. He stated that, less than 10% of the food he bought was classified as organic food, but there was no option that suited his choice. Thus, the researcher modified the options to be appropriate for that participant. With regards to the questions that cover the demographic characteristics, one of the participants (a USQ staff member) noticed that some of the options were lengthy and there was a need to downsize the options to be simpler. For example, the options that covered age group, annual income, education level, employment status and occupation were downsized. Moreover, Questions I and 2 in Part 4 of the questionnaire were downsized to simplify answering them.

In terms of the questionnaire item scales, some of the participants commented that there was a redundancy in some questions. For instance, items 1 and 3 that cover the construct Health concerns looked the same in meaning, thus, the researcher removed item 3. Also, item 1 and item 2 in the construct Availability were repeated, hence, item 2 was deleted. Also, as indicated by some of the respondents, there was a redundancy in items 2 and 5 in the

construct Packaging and labelling. Consequently, item 2 was removed. In addition, some of the participants commented that there is a need to reword some items such as item 7 in the construct Availability. The question was “organic food are not available everywhere”. Based on their comments, the researcher reworded the question to be “The availability of organic food is limited”.

3.5.3.6 Pilot study

Conducting a pilot study is considered an essential step in many research areas (Lancaster et al. 2004). A pilot study is simply defined as “a small-scale research project that collects data from respondents similar to those that will be used in the full study” (Zikmund et al. 2013, p. 63). Further, Connelly (2008) pointed out that the researchers may conduct a pilot study for various reasons such as developing and testing the adequacy of the research instrument, evaluating the feasibility of the whole study, and to obtain effect size information. Further, a pilot study should be done before conducting the main survey to test the questions of the questionnaire and to determine any weaknesses in the research instrument (Kothari 2004). According to Venkitachalam (2014) and Saunders et al. (2009), researchers can conduct a pilot study to test the reliability and validity of the questionnaire. In addition, conducting a pilot study enables researchers to improve the scale items of the research instrument (Creswell 2009; Ghazali 2016). Typically, a pilot study should be applied to a group of respondents similar to those who will be surveyed in the main survey (Gillham 2008).

With regards to the sample size of a pilot study, there is a debate in the literature regarding the number of respondents needed to participate in pilot studies. Methodologically, there is a consensus amongst scholars that the sample size of a pilot study should be smaller than the one for the main study (Connelly 2008; Hertzog 2008). Nevertheless, some scholars in this field offer various perspectives about the sample size that should be used in a pilot study. For instance, Hill (1998) argues that using a number from 10 to 30 is sufficient for a pilot study. On the other hand, Hertzog (2008) suggested that a sample size ranging between 10 and 40 is enough to provide accurate outcomes. Julious (2005) pointed out that employing 12 respondents per group in a pilot study is enough. In contrast, some scholars have argued that using 10% of the total sample as a sample size for a pilot study is sufficient to obtain the necessary outcomes (Connelly 2008; Hertzog 2008; Heazlewood et al. 2016).

In terms of the sampling method used in a pilot study, Saunders et al. (2009) indicated that the non-probability sampling method is the most appropriate sampling method for a pilot

survey. Thus, based on the above arguments, the researcher conducted a pilot study using 10% of the estimated number of the total sample size. Furthermore, convenience non-probability sampling was employed at this stage of the study. Respondents who participated in the pilot study were surveyed using the mall intercept method which is classified as convenience sampling (Zikmund et al. 2013). Further, and as previously mentioned, the researcher in the current study carried out a pilot study to refine and validate the research instrument (questionnaire). In this regard, Birman and Glade (1995) reported that the reliability of measurement in the research instrument is indicated by its consistency. Statistically, Cronbach's alpha is widely used to test the reliability of a research instrument and to determine the internal consistency between the items used in the questionnaire that measures the constructs of a study (Santos 1999; Tavakol & Dennick 2011). Therefore, in this study, the researcher used Cronbach's alpha equation to test the reliability and validity of the questionnaire. To apply this test, the researcher used IBM SPSS Statistics software version 25 to calculate Cronbach's alpha values of the measurement items in the research instrument. The researcher downloaded this software through assistance from an ICT staff member at the University of Southern Queensland.

- **Demographic traits for the pilot study**

In this study, it is important to present the demographic characteristics of the participants of the pilot study. Table 3.12 presents the respondents' demographic characteristics for gender, age, educational level, income, employment status, occupation, marital status, the number of children in the household, and ethnicity.

Table 3.12: Demographic characteristics of the respondents

	Characteristics	Frequency	% of sample
Gender	Male	17	41.5%
	Female	24	58.5%
	Other	0	0%
	Would rather not to say	0	0%
Age	18-25	6	14.6%
	26-35	10	24.4%
	36-45	12	29.3%
	46-55	7	17.1%
	56-65	3	7.3%

	Characteristics	Frequency	% of sample
Education level	Secondary education	10	24.4%
	Diploma	6	14.6%
	Undergraduate	14	34.1%
	Postgraduate	11	26.8%
	Other	0	0%
Employment	Full-time	21	51.2%
	Part-time	10	24.4%
	Casual	4	9.8%
	Unemployed	3	7.3%
	Retired	3	7.3%
Occupation	Manager	1	2.4%
	Professionals	18	43.9%
	Technicians	3	7.3%
	Clerical /administrative workers	8	19.5%
	Labourers	4	9.8%
	Other	7	17.1%
Annual income	Less than $20,000	10	24.4%
	$20,001-$50,000	16	39%
	$50,001- $80,000	10	24.4%
	$80,001- $110,000	4	9.8%
	$110,001- $ 140,000	1	2.4%
	$140,001 and above	0	0%
Marital status	Married/De-facto	24	58.5%
	Divorced/Separated	4	9.8%
	Widowed	3	7.3%
	Single	10	24.4%
Number of children	0	19	46.3%
	1	6	14.6%
	2	11	26.8%
	3	3	7.3%
	More than 3	2	4.9%
Ethnicity	Australian Aboriginal	1	2.4%
	Pacific and Torres Strait Islander	0	0%
	Anglo-Australian	12	29.3%
	New Zealander	0	0%
	European	2	4.9%
	African	7	17.1%
	Asian	14	34.1%
	Middle eastern	5	12.2%
	North American	0	0%
	South American	0	0%
	Other	0	0%

The pilot study was comprised of 41 respondents including 58.5% females and 41.5% males. More than half of the respondents (68.3%) were 18 to 45 years old, and just 31.7% were 56 to 66 years old or above. The majority of the respondents were postgraduate, undergraduate or diploma educated (75.5%), with only (24.4%) having completed secondary education. The reported annual income generally ranged from $20,000 to $80,000 (63.4%), with 24% earning less than $20,000, and just 9.8% earning from $80,000 to $110,000. Only one 2.4% of participants earnt $110,000 to $140,000.

In terms of ethnicity, over than half of the respondents were Australian and Asian (66%), followed by African, Middle Eastern, and European (34.2%). More than half of the sample had full-time jobs (51.2%), whilst 34.2% had a temporary job, and 14.6% were retired or unemployed. It was found that 58.5% were married, and 17.1% were either divorced or widowed, while 24.4% were single. As presented in the above table, more than two thirds of the sample (48.7%) had no children, whereas 48.7% had from one to three children, and just one participant (4.9%) has had more than three children. The majority of respondents worked as professionals or technicians (51.2%), and around 19.5% were hired as clerical and administrative workers, while 26.9% worked as a labourer and other related jobs, and only one participant (2.4%) worked as a manager.

- **Analysis of behavioural question of the pilot study (Part 2)**

- ***The first question: Where do you usually do your grocery shopping?***

Figure 3.2 illustrates the responses of the respondents for this question.

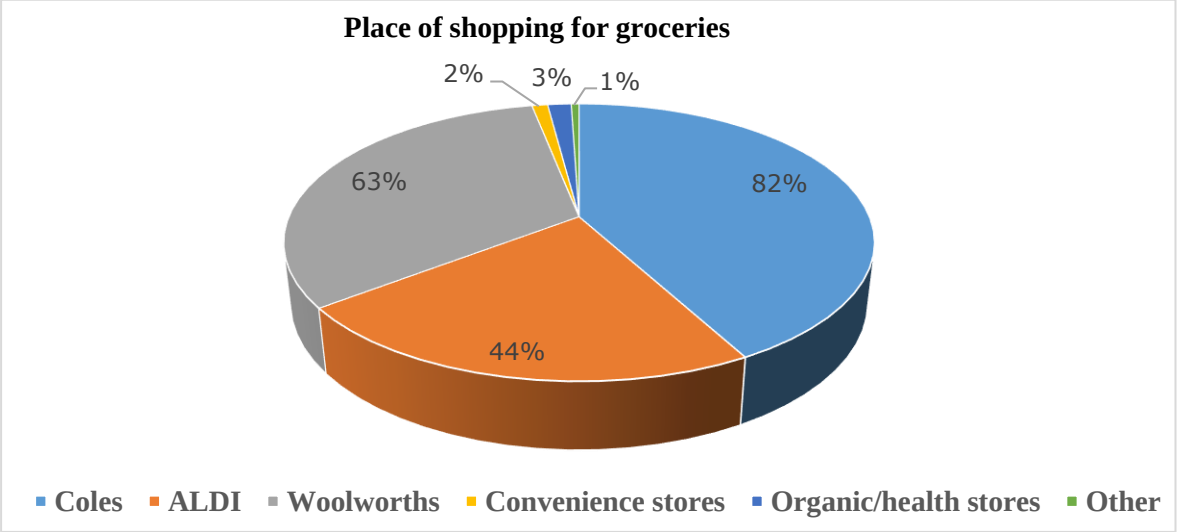

Figure 3.2 Where the respondents did their grocery shopping-Convenience

As shown in Figure 3.2, ALDI, Coles and Woolworths are the main places for buying groceries for the majority of the respondents, followed by organic/health stores, and convenience stores and other.

- ***The second question: Who does the grocery shopping in your household?***

The following Figure 3.3 shows the response of the respondents about this question.

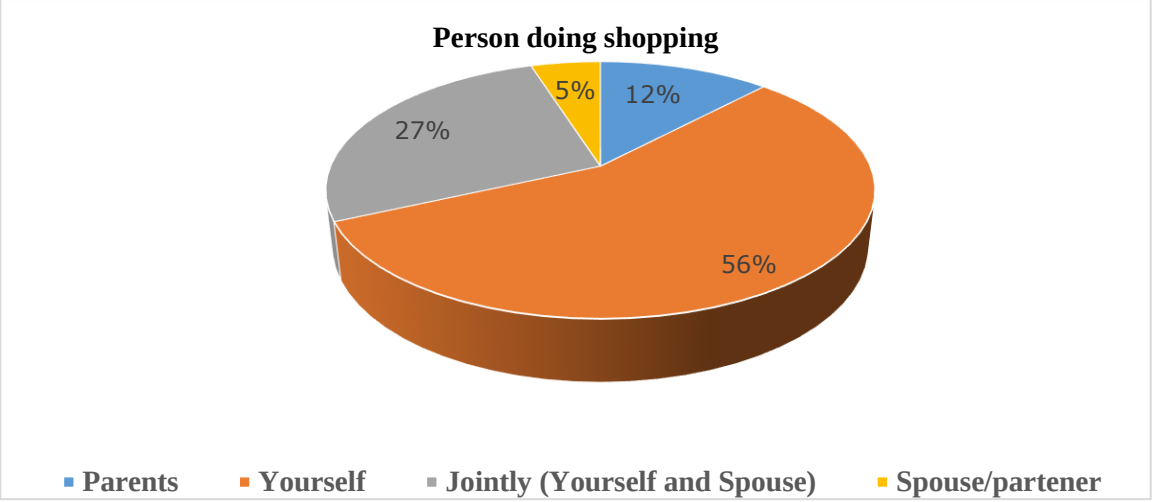

Figure 3.3 The person who does the shopping in the household

As illustrated in Figure 3.3, the majority of respondents (56%) confirmed that they did the grocery shopping by themselves. Twenty-seven percent of the sample mentioned that they do shopping for their household jointly with their partners or spouses. Other respondents (12%) indicated that it was the parents who do shopping in the household, followed by spouse/partner (5%) as buyers of groceries for their household.

- ***The third question: How often do you shop for grocery products?***

The following Figure 3.4 shows the percentage of frequency of grocery shopping in the household.

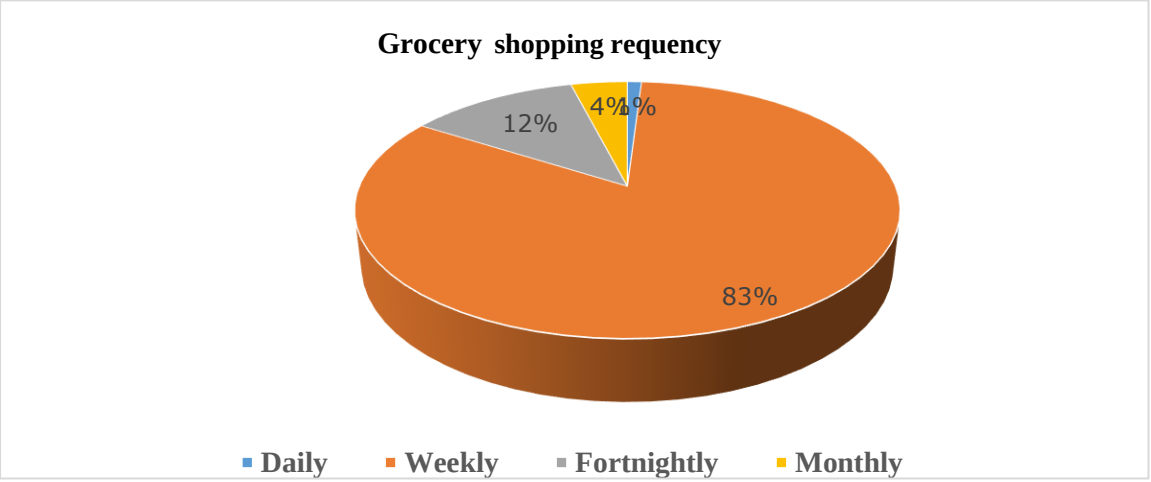

Figure 3.4 Frequency of grocery shopping in the household.

As shown in the Figure 3.4, the majority of the respondents (83%) stated that they shopped for grocery products weekly, whereas 12% of respondents indicated that they buy their groceries fortnightly, followed by monthly (4%), and only 1% of respondents responded that they bought groceries on a daily basis.

- ***The fourth question: Which of the following influence your purchasing decision?***

Figure 3.5 shows the responses to this question.

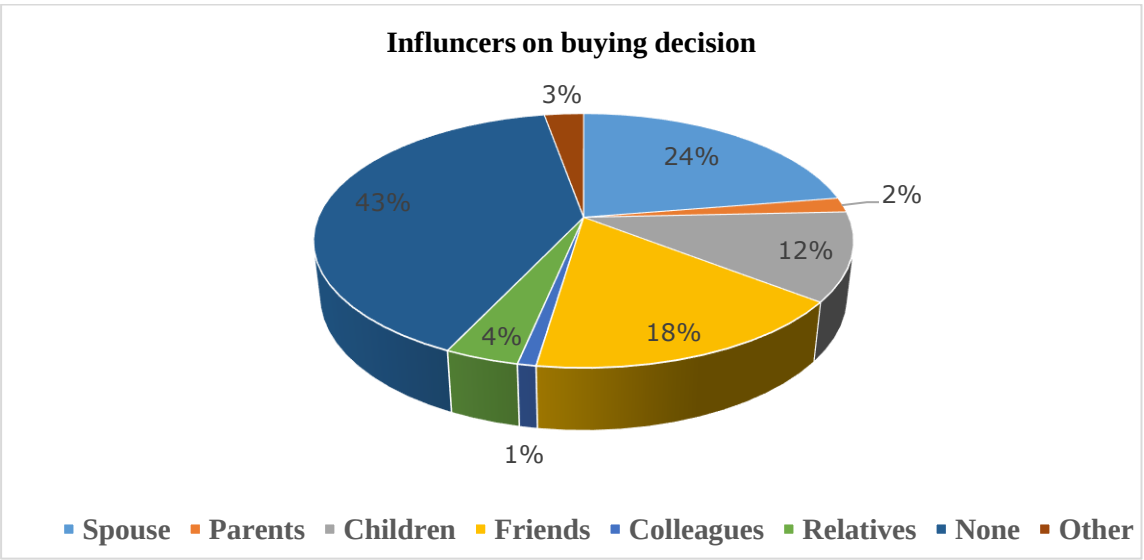

Figure 3.5 Influencers on buying decisions in the household

As illustrated in Figure 3.5, 43% of respondents confirmed that no-one influenced their purchasing decisions. Twenty-four percent of respondents indicated that their purchasing decisions were influenced by their spouses. Others (18%) stated that their friends influenced

their purchasing decision, whereas 12% of respondents reported that their purchasing decisions were influenced by their children. Some of the respondents (4%) pointed out that their purchasing decisions were influenced by their relatives, whilst 3% of respondents indicated that others played a role in influencing their purchasing decisions. Two percent of respondents confirmed that parents influenced their purchasing decisions. Finally, just 1% of respondents reported that their purchasing decisions are influenced by colleagues.

- **Analysis of behavioural questions of the pilot study (Part 3)**

- ***The first question: Where do you usually get information about organic food?***

Figure 3.6 shows the responses of the respondents to this question.

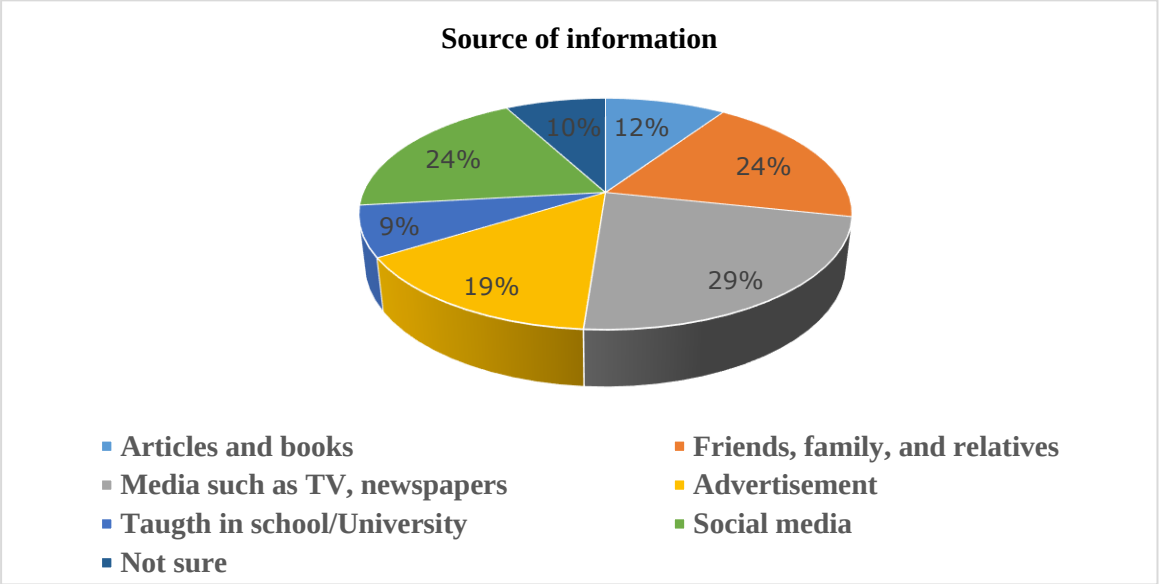

Figure 3.6 Source of information about organic food-Sources Taught

As demonstrated in Figure 3.6, 29% of respondents pointed out that mass media such TV and newspapers, were used as sources of information about organic food products. Twenty-four percent of respondents stated that they knew about organic food products through their friends, family and relatives. The same percentage of respondents knew about organic food products through social media such as Facebook, and using the social media of the manufacturers of organic foods. Advertising helped 19% of the respondents to learn about organic food products. Twelve percent of respondents reported that they read books and journals to learn about such products. Ten percent of the respondents indicated that they were unsure about the sources of information about organic food, whereas 9% of the respondents found information about organic food from education institutions such as school or university.

- ***The second question: What do you think is the greatest benefit of consuming organic food?***

Figure 3.7 presents the responses to this question.

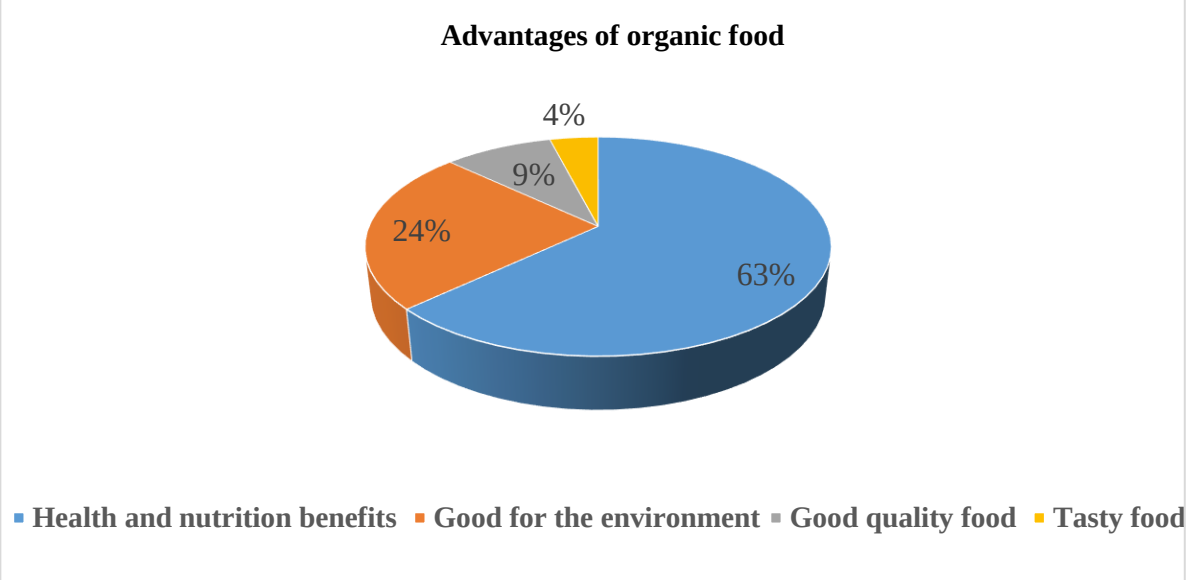

Figure 3.7 Advantages of organic food

The majority of respondents (63%) stated that health and nutrition were the greatest benefits of organic food. Twenty-four percent of respondents confirmed that organic food is beneficial for the environment. Nine percent of respondents pointed out that quality of food is considered as one of its advantages. Finally, just four percent of respondents indicated that taste is the greatest benefit of organic food.

- ***The third question: What do you think is the greatest drawback of consuming organic food?***

The following Figure 3.8 demonstrates the answers to this question.

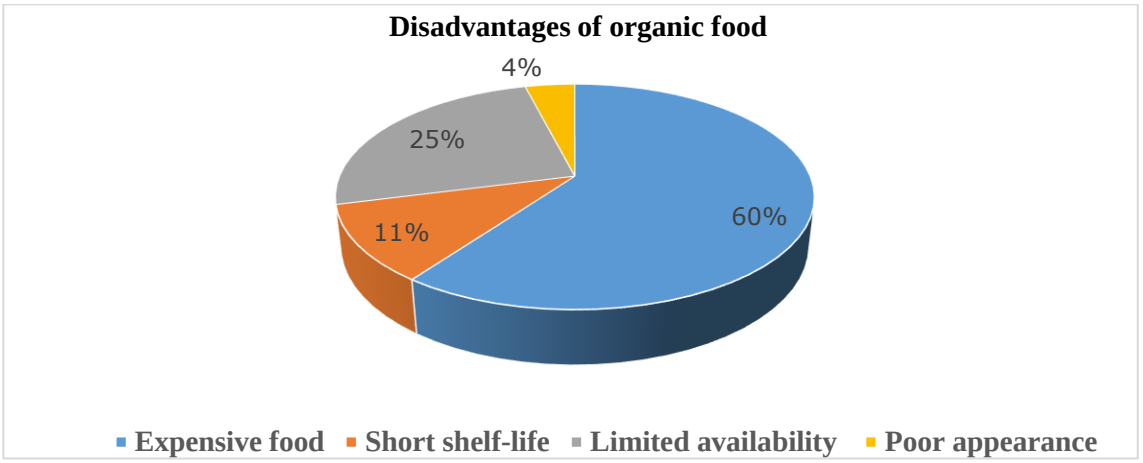

Figure 3.8: Disadvantages of organic food

As demonstrated in Figure 3.8, the majority of the respondents (60%) reported that organic food is expensive Twenty-five percent of respondents indicated that organic food not readily available. Eleven percent of respondents reported that organic food has a short shelf-life. Four percent of respondents stated that one of the disadvantages of organic food is its poor appearance.

- **Analysis of behavioural question of the pilot study (Part 4)**

- ***The first question: How often do you intend to purchase organic food?***

Figure 3.9 shows the responses to this question.

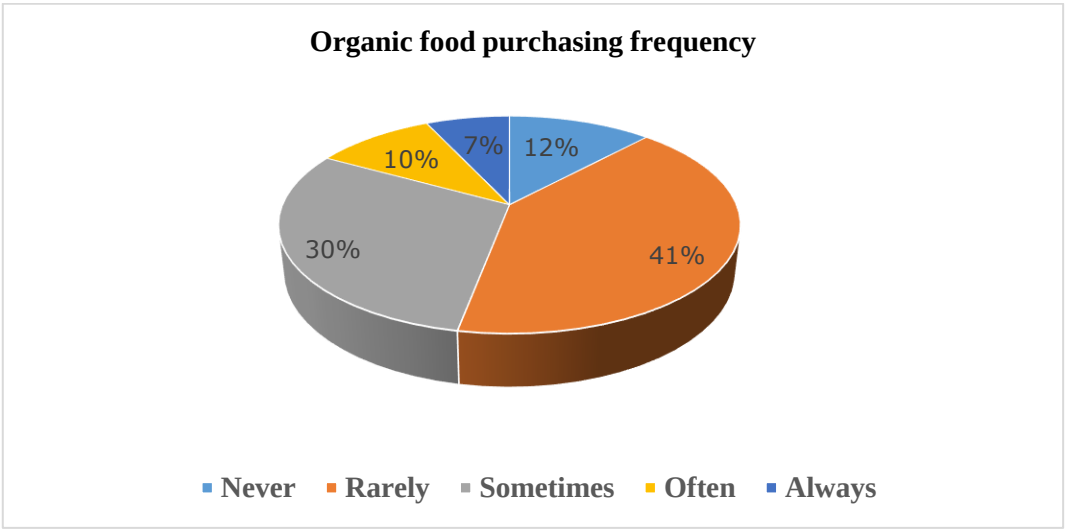

Figure 3.9 Frequency of purchasing organic food

As illustrated in Figure 3.9, 41% of respondents indicated that they rarely intended to purchase organic food, whilst 30% of the study sample reported that they sometimes purchased organic food. Twelve percent of respondents indicated that they have never purchased organic food. Ten percent of respondents often intended to purchase organic food, and finally, 7% of respondents indicated that they intend to always purchase organic food.

- ***The second question: What is percentage of the food you buy could be classified as organic?***

Figure 3.10 presents the percentage of food bought that has been organic

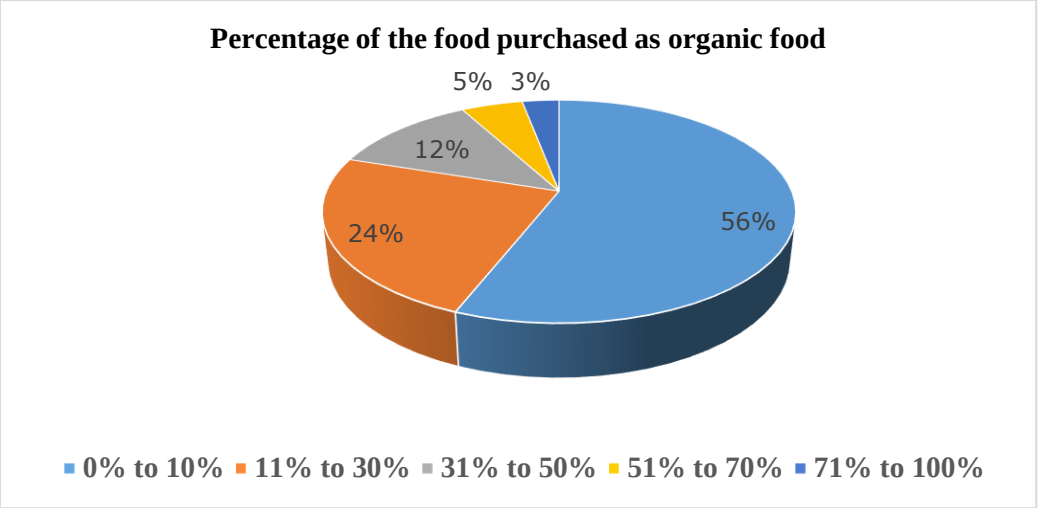

Figure 3.10 Percentage of the food purchased as organic food

As can be seen, the majority of respondents (56%) stated that they purchase from 0% to 10% food classified as organic food. Twenty-four percent of respondents indicated that they purchase from 11% to 30% of their purchases are classified as organic food. Twelve percent of respondents reported that they purchase from 31% to 50% organic food, whereas 5% of the sample purchase from 51% to 70% organic food. Finally, three percent of respondents reported that they purchase from 71% to 100% organic food.

- ***The third question: Which of the following organic products would you buy in the future?***

The following Figure 3.11 illustrates the forms of organic food that will be bought by the respondents.

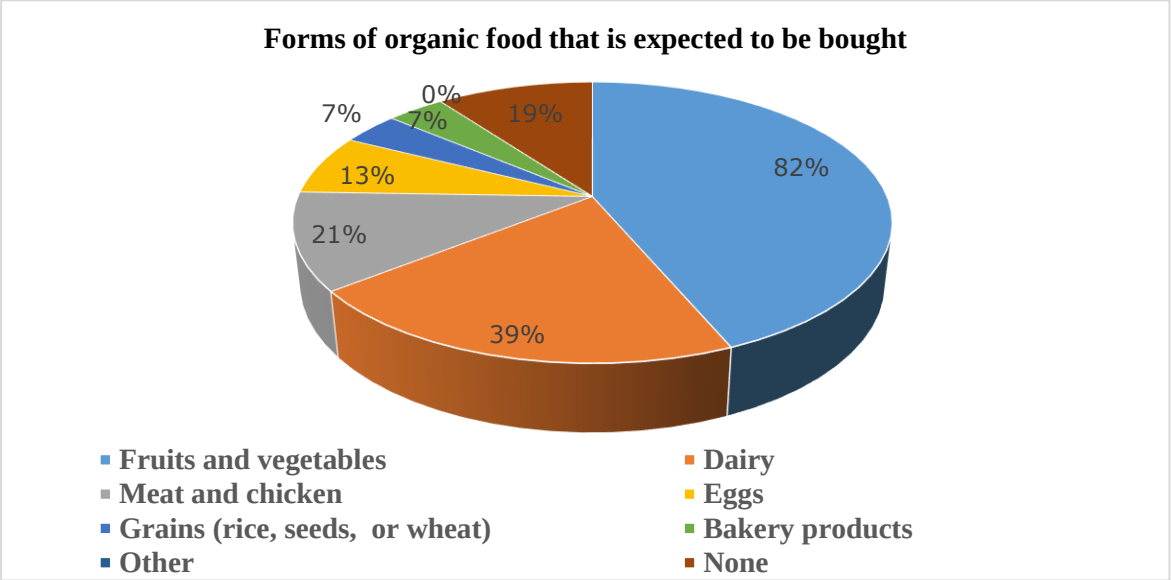

Figure 3.11 Forms of organic food products that might be purchased

As shown in Figure 3.11, 82% of respondents confirmed that they might purchase organic fruits and vegetables. Thirty-nine percent of respondents stated that they might purchase organic dairy. Twenty-one percent of respondents will purchase organic meat and chicken. Nineteen percent of respondents reported that they will not purchase any form of organic food. Some of the respondents (13%) reported that they will purchase organic eggs. Organic grains such as rice, seed, or wheat will be also purchased by (7%) of respondents, and the same percentage for organic bakery.

- ***The fourth question: What enhances your level of trust in organic food products?***

Figure 3.12 presents the responses to this question.

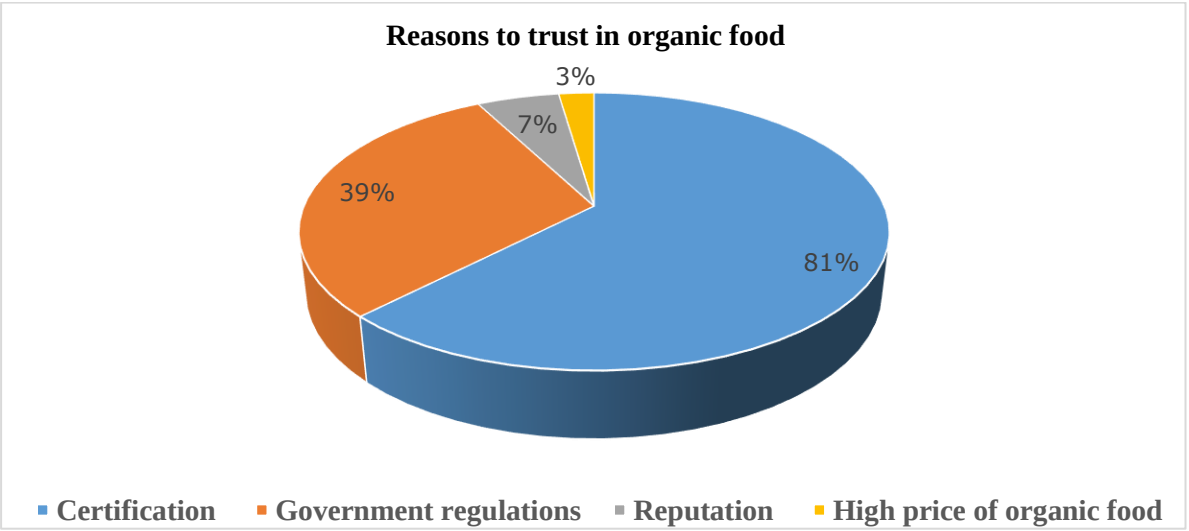

Figure 3.12 Reasons to trust in organic food

The majority of respondents (81%) pointed out that they use certification as evidence that food is produced organically, whereas 39% of the sample stated that government regulations were one of the factors that contributed to establishing trust in organic food. Seven percent of respondents reported that the reputation of the people associated with the production of organic food was considered to be reason to trust in organic food. Finally, 3% of respondents indicated that the high price of organic food leads them to trust in organic food.

- ***The fifth question: How important is the organic food label to you?***

As illustrated in Figure 3.13, 65% of respondents pointed out that labels assist them in distinguishing between the organic and nonorganic food and to ensure that they purchase organic food. Fifty-one percent of respondents reported that they use labels as way to recognize the kind of the food they purchase. Nineteen percent of respondents stated that they use the label to identify the certification of organic food, and the same percentage (19%) of respondents were unsure about how to answer this question.

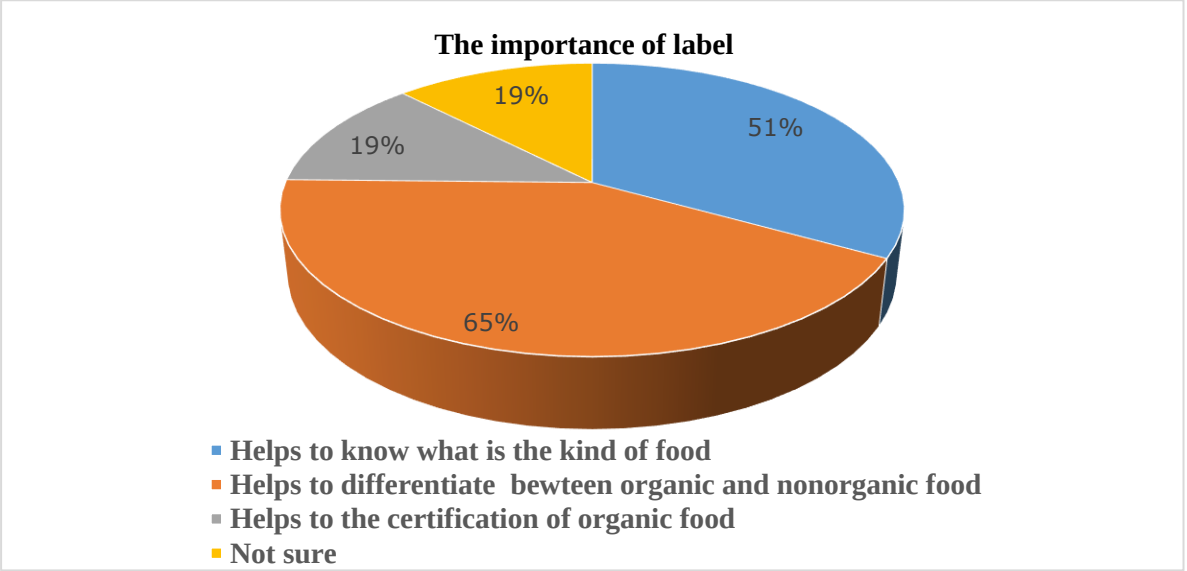

Figure 3.13 The importance of organic label

- ***The sixth question: Would you be willing to recommend others (family, friends, colleagues, etc.) to consume organic food?***

Figure 3.14 shows the responses to this question.

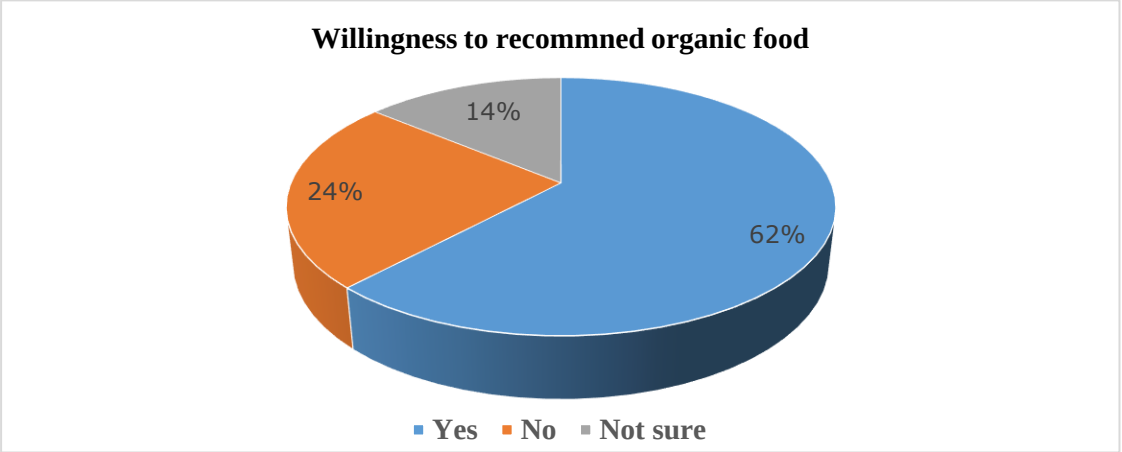

Figure 3.14 The respondents' willingness to recommend organic food

As illustrated in the above figure, 62% of the sample reported that they would recommend that their friends, family or others purchase organic food. Twenty-four percent of the respondents will not recommend the others to purchase organic food, whilst 14% of respondents stated that they were unsure whether to recommend organic food.

- **Results of the pilot study**

In this study, the researcher checked the returned questionnaires to ensure completion and accuracy. All the completed questionnaires were successfully entered into SPSS to test reliability and estimate the internal consistency of the measurements using Cronbach's alpha. Items with low Cronbach's alpha were removed. The researcher used the "if item deleted" function to enable the enhancement and improvement of the value of Cronbach's alpha (Pallant 2013). With regards to the acceptable value of Cronbach's alpha, Hair et al. (2010) argue that Cronbach's alpha with value of .0.6 and higher is acceptable. The following Table 3.13 summarises the value of Cronbach's alpha of the scale items of each construct.

Table 3.13: Reliability coefficients of the scale items (Cronbach's Alpha)

Construct	Original α	No. of items	Deleted	Modified α	No. of items
Health concerns	0.797	6 items	-	0.797	6 items
Environmental concerns	0.853	5 items	-	0.853	5 items
Subjective norms	0.859	5 items	-	0.859	5 items
Price	0.590	7 items	Item 3	0.640	6 items
Trust	0.626	7 items	-	0.626	7 items
Social media	0.785	6 items	-	0.785	6 items
Packaging/labelling	0.844	7 items	-	0.844	7 items
Availability	0.535	6 items	Item 2,6	0.701	4 items
Sensory food attributes	0.730	8 items	-	0.730	8 items
Certification	0.779	5 items	-	0.779	5 items
Intention	0.908	6 items	-	0908	6 items
Total		68 items			65 items

As presented in the above table, the value of Cronbach's alpha (α) of the constructs ranged between 0.626 and 0.908. At this stage of the study, as previously recommended by Pallant (2013), the researcher applied the statistical function "if item deleted" to enhance the value of coefficient of reliability of some weak items. Therefore, items (3) in the construct price, and items (2,6) in the construct availability should be removed to improve the value of reliability coefficient of the construct price from 0.590 to 0.640, and to increase the value of reliability coefficient of the construct availability from 0.535 to 0.701.

3.5.3.7 Data analysis techniques of quantitative phase

In this research, various statistical techniques were utilised to analyse the collected data. According to Creswell (2009), researchers must begin analysis of quantitative data by reporting statistical frequencies and percentages about the population of the study. In addition, some descriptive statistics such as mean, standard deviation of the variables might be used in the research. Consequently, in this research, the researcher used SPSS software to perform descriptive analysis such as frequencies and percentage for both demographic characteristics and behavioural questions. Mean and standard deviation of the variables were also performed. Moreover, researchers must check for missing values, detect outliers and check the normality of data for analysis (Kothari 2004; Hair et al. 2010; Ghasemi & Zahediasl 2012; Sekaran & Bougie 2016). Consequently, this researcher utilised various statistical techniques such as Z-score to detect the outliers, Missing Value Analysis to determine missing values, and skewness and kurtosis to check the normality of data.

Other statistical techniques used in this research are item-total correlation and reliability coefficient (Cronbach's alpha) to ensure the internal consistency of the variables (Hair et al. 2006; Hair et al. 2010). In addition, after item-total correlation and reliability coefficient had been applied, the researcher used another statistical technique, factor analysis (FA). This includes exploratory factor analysis (EFA), followed by confirmatory factor analysis (CFA). In this research, EFA was used to derive and explore the latent constructs needed for the research (Costello & Osborne 2005). Moreover, in this research, confirmatory factor analysis (CFA) was performed to make sure that measured variables represented a smaller number of factors or constructs. CFA is also widely used to provide a confirmatory test of the measurement used in certain research (Hair et al. 2010). Hence, this research employed CFA as another statistical technique for confirming the research measurements.

In this research, to test the stated hypotheses, path analysis using structural equation modelling by employing AMOS software was used to estimate the causal relationships between the variables (Hair et al. 2010). Further, one-way analysis of variance ANOVA was another statistical technique used to determine whether there were any potential statistically significant differences between more than two groups and one dependent variable (Kothari 2004; Hair et al. 2010; Sekaran & Bougie 2016). Accordingly, in this research, this statistical technique was performed to examine if there were statistically significant differences between the respondents' demographic characteristics and consumers' purchasing intentions in the context of organic food. Moreover, to ensure the reliability and validity of the constructs, the researcher used various statistical tools such as composite reliability, construct reliability, convergent validity and construct validity. The following Table 3.14 summarises various statistical techniques and software used to analyse data in this stage of the research.

Table 3.14: Statistical techniques used in the analysis

No	Name of statistical technique	Software	Justification of the use
1	Descriptive statistics	SPSS	To analyse the frequency of demographic characteristics of the respondents and to show the mean of the variables.
2	Z- score	SPSS	To detect the outliers.
3	Missing Value Analysis	SPSS	To determine missing values of the data set.
4	Skewness and Kurtosis	SPSS	To check the normality of the data.
5	Exploratory Factor Analysis (EFA)	SPSS	To ensure the validity of scales and to extract the constructs of the study.
6	Confirmatory Factor Analysis (CFA)	AMOS	To test how well measured variables can represent the constructs. Also to ensure the fitness of both measurement and structural model.
7	Coefficient of reliability, and tem-total correlation	SPSS	To ensure the internal consistency
8	Composite reliability, construct reliability, convergent validity, and construct validity	AMOS, and Excel Microsoft	To ensure the reliability and validity of the quantitative data.
9	Path analysis	AMOS	To test the stated hypotheses.
10	One-way ANOVA	SPSS	To determine whether there are any statistically significant differences among more than two groups and one dependent variable.

3.5.3.8 Reliability and validity of the survey

Ensuring reliability and validity is required in quantitative research (Creswell 2009; Heale & Twycross 2015; Bell et al. 2018). The reliability test is related to the consistency of the research measurements (Heale & Twycross 2015). Also, reliability refers to the degree to which the findings of the measures of the research can be replicated (Bolarinwa 2015). With regards to validity, Zikmund et al. (2013, p. 303) defined validity as "the accuracy of a

measure or the extent to which a score truthfully represents a concept". To establish the validity and reliability of the quantitative stage of the existing research, various forms of statistics techniques were used. These techniques included the following:

- **Reliability tests include:**

1. Item-total correlation: This technique indicates the degree of correlation of a single item with other items in the scale. The acceptable value of item-total correlation for each item in measurement is 0.30 or greater (Hair et al. 2010). The result of this technique is discussed in Section 6.6.1 of the thesis.

2. Reliability coefficient (Cronbach's Alpha): This technique is used to test the internal consistency of measurement items. The acceptable value of this test is 0.60 or greater (Hair et al. 2010). This technique was achieved in the pilot study. Refer to Section 3.5.3.6 in Chapter Three. Further, the reliability coefficient was also calculated in the final data analysis. See Section 6.6.2 in Chapter 6.

3. Composite reliability (CR): It is another measure for ensuring the reliability of quantitative data (Moonen-van Loon et al. 2013). Composite reliability can be given using the following formula (Raykov 1997; Colwell 2016). Further, the acceptable value for CR is 0.70 (Hair et al. 2006). Further, the result of this technique is presented in Section 6.6.5 of the current thesis.

$$CR = \frac{\left(\sum \lambda_i\right)^2}{\left(\sum \lambda_i\right)^2 + \left(\sum \epsilon_i\right)}$$

4. Construct reliability: The construct reliability is given by this statistical formula: (squared sum of the standardised factor loading divided by squared sum of standardised factor loading plus the sum of the measurement error of the indicator). The value of construct reliability should be 0.70 or greater (Chen & Chen 2010; Maditinos et al. 2010; Nusair & Hua 2010). In this research, construct reliability was calculated by using Excel Microsoft software. The result of this technique is outlined in Chapter Six of the current thesis.

- **Validity test includes:**

1. Face validity or Content validity: In Business research, face validity is used as a first step to ensure the validity of quantitative studies (Zikmund et al. 2013). Face validity means that non-researchers or a lay person can judge that the method is valid for researching the research question. Further, face validity is essential in research because it encourages respondents to participate in the survey (Greener 2008). In this research, face validity was achieved in the pre-test phase of the research. Refer to Section 3.5.3.5.

2. Convergent validity: This technique is used to assess the extent to which a set of items that measure a specific factor or construct are correlated with this construct (Hair et al. 2006; Hair et al. 2010). Statistically, to estimate the value of convergent validity, researchers can use the average variance extracted (AVE) (Hair et al. 2010). Convergent validity can be achieved if the value of AVE is 0.50 or greater (Hair et al. 2006). Therefore, this technique was used to ensure the convergent validity. AVE was calculated using Excel Microsoft. The results of this technique are discussed in Chapter Six of the thesis

3. Construct validity: It is defined as "the extent to which your measurement questions actually measure the presence of those constructs you intended them to measure" (Saunders et al. 2009, p. 373). According to Hair et al. (2010), construct validity can be achieved by using the results of confirmatory factor analysis (CFA) of the measurement model using structural equation modelling (SEM). This includes employing measurement model fitness to ensure this form of validity. Consequently, construct validity is achieved in this research, and the results are presented in Chapter Six of the thesis.

3.6 Ethical considerations

To conduct academic research, there are some ethical requirements that the researcher must fulfil (Saunders et al. 2009; Connelly 2014; Bell et al. 2018; Green & Thorogood 2018). Ensuring ethical considerations in scientific research enables researchers to protect the research respondents from various forms of harm (Israel & Hay 2006). Furthermore, most of educational organisations have particular ethical policies and rules that researchers follow (Kumar 2019). Also, ethical considerations are applicable for qualitative, quantitative, and mixed method research (Creswell 2009). In Australia, The National Statement on Ethical

Conduct in Human Research (2007) was introduced to establish instructions to those who carry out academic research that involve human participation. Based on this National Statement, all researchers in Australian education institutions, including universities, are required to have ethical clearance to collect the primary data needed for conducting research. Further, to have ethical approval to carry out any research, researchers apply for the ethical clearance to a specific committee. The responsibility of this committee is to supervise the research, ensuring those ethical issues (Walliman 2017). This committee is called the Human Research Ethics Committee (HREC). The existing research is conducted through the University of Southern Queensland (USQ). The HREC at USQ requires that researchers follow ethical rules in relation to research. This committee asks the researchers to include the following documents with their ethical approval applications:

- Consent form for the interviews which are conducted in the qualitative stage of the research. (See Appendix C)
- Participant information sheet for both the interviews and the survey. (See Appendices B and E).

This researcher applied to obtain ethical approval from the HREC at USQ, and all the required documents were uploaded to the electronic system that was used by students to apply for ethics approval. The HREC reviewed the application and approved this research. Further, the HREC confirmed that this research met the requirements of the National Statement on Ethical Conduct in Human Research (2007). The current research received the final approval on 6 September 2018. The number of the ethical approval is H18REA043. For more details, see Appendix A.

3.7 Chapter summary

This chapter presented the research methodology used to gather and analyse the data in order to answer the research questions and to meet the research objectives. The chapter is divided into several sections. The first section explained the research philosophy and paradigms and the suitable research philosophy and paradigm of the current study was also discussed. Then, the research approach of the study was presented. The following section reported the research design; then there was a discussion about the stages that followed to collect and analyse the study's data. The following section discussed and explained the ethical requirements followed by the researcher to conduct this study. The following chapter discusses the findings of the qualitative stage of the research (the exploratory study).

CHAPTER FOUR: FINDINGS OF THE QUALITATIVE STUDY

4.1 Introduction

This chapter discusses the findings of the exploratory stage of this study. The first objective of this study is to explore the main factors that potentially influence consumers' organic food purchasing decisions. Therefore, the researcher conducted semi-structured interviews with 30 consumers who purchase grocery products in Toowoomba, Australia. In this stage of the research, the researcher explored consumers' organic food purchasing decisions by identifying the essential factors that influence those decisions. This chapter is divided into three sections. The first section reports and discusses the demographic characteristics of the participants and their shopping traits. The second section presents the findings of the qualitative stage of the research. The third section provides the chapter summary.

4.2 Demographic characteristics of the participants

This section of the chapter presents an overview of the participants' demographic traits. As shown in Table 4.1, demographic characteristics of the participants include gender, age, education level, employment status, occupation, annual income, marital status, number of children in the household, and ethnicity. In the qualitative stage, different participants were interviewed based on the demographic characteristics. The following Table 4.1 summarises the participants' demographic characteristics.

Tables 4.1: Participants' demographic characteristics

	Characteristics	Frequency	% of sample
Gender	Male	13	43.33%
	Female	17	56.66%
Age	18-25	3	10%
	26-35	8	26.66%
	36-45	8	26.66%
	46-55	4	13.33%
	56-65	2	6.66%
	66 and above	5	16.66%
Education level	Secondary education	6	20%
	Diploma	10	33.33%
	Undergraduate	8	26.66%
	Postgraduate	5	16.66%
	Other (TAFE)	1	3.33%

	Characteristics	Frequency	% of sample
Employment status	Full-time	17	56.66%
	Part-time	4	13.33%
	Casual	3	10%
	Unemployed	2	6.66%
	Retired	4	13.33%
Occupation	Manager	2	6.66%
	Professional	11	36.66%
	Technician	3	10%
	Clerical /administrative worker	4	13.33%
	Labourer	6	20%
	Other	4	13.33%
Annual income	Less than $20,000	3	10%
	$20,001-$50,000	8	26.66%
	$50,001- $80,000	12	40%
	$80,001- $110,000	2	6.66%
	$110,001- $ 140,000	2	6.66%
	$140,001 and above	0	0%
	Did not respond	3	10%
Marital status	Married/De-facto	22	73.33%
	Divorced/Separated	0	0%
	Widowed	1	3.33%
	Single	7	23.33%
Number of children	0	15	50%
	1	5	16.66%
	2	4	13.33%
	3	3	10%
	More than 3	3	10%
Ethnicity	Anglo-Australian	17	56.66%
	Pacific and Torres Strait Islander	0	0%
	Asian	8	26.66%
	African	3	10%
	Middle Eastern	0	0%
	European	1	3.33%
	South American	1	3.33%

A total of 30 consumers participated in the study. Seventeen were female and 13 were male with ages ranging from 18 years to 66 years old or more. Approximately 63% of participants were young adults (18 to 45 years), followed by 20% being middle-aged (46 to 65 years), while only 16% of participants were aged more than 65 years. The majority of the participants (77%) had completed tertiary education or technical education level and 20% had completed secondary education. More than half of the participants (57%) were employed

on a full-time basis, followed by 23% with either casual or part-time jobs. However, 20% of the participants were retired or unemployed. Approximately 67% of participants reported an annual income ranging from AUD 20,001 to AUD 80,000, and 10% of participants earned below AUD 20,000, and 7% of the participants' annual income ranged from AUD 80,001 to 110,000 and AUD 110,001 to 140,000. A few participants (n=3) did not report their annual income. Further, two-thirds of participants were married and 23% were single. Half of the participants (50%) had no children, followed by 20% having three or more children. A high proportion (57%) of participants were Anglo-Australian, 27% were Asian, 10% were African and 3% were European or South American.

4.3 Participants' shopping traits

In this study, the researcher asked questions related to the participants' shopping behaviour. The following Table 4.2 summarises the participants' shopping traits.

Table 4.2: Participants' shopping traits

Question	Characteristics	Frequency	% of sample
Who does the shopping?	Parents	3	10%
	Yourself	12	40%
	Jointly (Yourself and Spouse)	13	43.33%
	Spouse/Partner	2	6.66%
	Other	0	0%
Where do you do your shopping?	ALDI	22	73.33%
	Coles	19	63.33%
	Woolworths	12	40%
	Convenience store	4	13.33%
	Other	2	6.66%
How often you shop for grocery?	Daily	3	10 %
	Weekly	23	76.66%
	Fortnightly	3	10%
	Monthly	1	3.33%
	Other	0	0%

Table 4.2 shows the distribution of participants' shopping traits. About 43% of participants indicated that they shop with their partners, whereas 40% stated shopping for themselves. A high number of participants shopped at Aldi (73%) and Coles (63%), followed by Woolworth and convenience stores, whereas about 7% of participants indicated that they shopped at other retail outlets. With regards to the frequency of shopping for grocery items, weekly shopping was the most preferred option at 77%.

4.4 Findings and discussion of the qualitative stage

This section discusses the main findings of the exploratory stage that was carried out with thirty participants. The findings of the qualitative stage are presented according to the following sequence:

- Consumers' information sources about organic food.
- Consumers' understanding of the meaning of organic food.
- The participants and their consumption of organic food.
- Forms of organic food that are purchased.
- The frequency of purchasing organic food.
- Factors that influence consumers' organic food purchasing decisions.
- Factors that constrained consumers' organic food purchasing decisions.
- Consumers' understanding of the advantages and disadvantages of organic food.
- Consumers' insights into their trust in organic food.
- Consumers' perceptions on organic labelling.
- Consumers' negative experiences with organic food.
- How to attract new consumers.
- Consumers' willingness to recommend purchasing organic food.

4.4.1 Consumers' information sources about organic food

The researcher asked participants to mention the sources of information that they used to gain awareness of organic food products. The participants responded to this question differently. The following Table 4.3 summarises the various sources used by the participants to gain awareness of organic food products.

Table 4.3: Sources of information about organic food

Source of information	Frequency	% of sample
Read about organic food	11	36.66%
Promotional campaigns and social media	7	23.33%
Media, TV, newspaper	8	26.66%
General knowledge	4	13.33%

Read about organic food: As shown in the above table, participants were asked how they heard about organic food. It was found that participants knew about organic food from different sources. Out of thirty participants, eleven (36.66%) knew about organic food through reading various resources such as those obtained through education institutions

(either school or university) or reading in general about such products. For instance, one of the participants indicated that she knew about organic food from school. Other participants reported that they heard about organic food products by reading different books and published research related to such topics. Further, one of the participants reported that she was getting information about organic food through doing research. The following are some quotes from participants:

- *"I have read a book about organic food" (Participant # 26)*
- *"I am a scientist in agriculture and food, I'm aware of the difference between organic and nonorganic" (Participant #17)*
- *"I know organic food because I am agriculture engineer" (Participant #15)*
- *"I studied about it in the schools" (Participant #28)*
- *"I have read something about it" (Participant #23)*
- *" I know about it through doing some research" (Participant # 4)*

As discussed in Chapter Three, NVivo software provides a summary of the findings using matrix coding query. This function also enables the researcher to investigate the concepts, themes and categories needed to develop the conceptual framework (Hutchison et al. 2010). Therefore, in this chapter, matrix coding query is performed to analyse the qualitative data. Figure 4.1 illustrates the matrix coding query of this question.

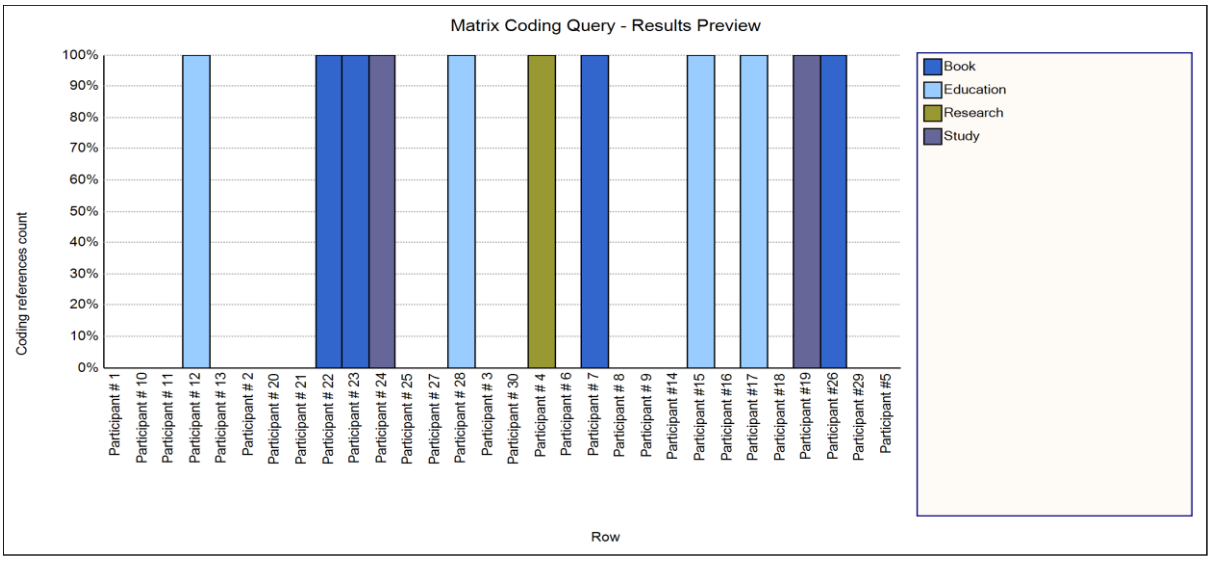

Figure 4.1 Matrix coding query regarding Read about organic food

Source: Nvivo output

Promotional campaigns and social media: Seven participants (23.33%) heard about organic food through promotional campaigns, either from stores that offer organic foods or from other promotional campaigns such advertisements and brochures. For instance, some of the participants indicated that they saw advertising that showed information about such products. Also, two of the participants indicated that they obtained information about organic food via social media. The following are examples of quotes from those interviewees:

- *"I guess it is generally from marketing" (Participant #14)*
- *"I saw the promotion of some organic food" (Participant #2)*
- *"I have seen organic fruit and cafes advertise organic food" (Participant #10)*
- *"Probably through advertising" (Participant #12)*
- "*I think it is on everything like social media" (Participant #11)*

Figure 4.2 shows the matrix coding query of this question.

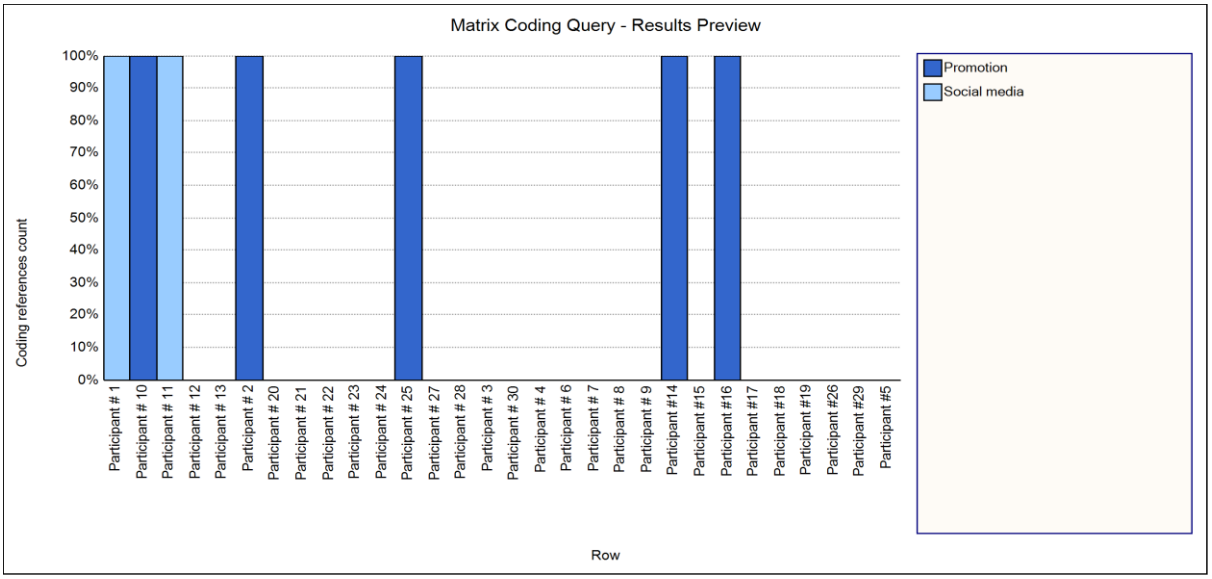

Figure 4.2 Matrix coding query about Promotional campaigns

Source: Nvivo output

Media, TV and newspapers: In this research**,** eight participants (26.66%) received information about organic foods from the mass media such as TV and newspapers. Those participants stated that they watched some programs on TV and listened to some news related to these products. As they reported, those programs provided them with valuable information that encouraged them to learn more about the benefits of such products. Also, one participant revealed that he knew about organic food from reading newspapers. The participants commented that:

- *"I heard about organic food generally from newspapers" (Participant # 9)*
- *"They even have programs on television about organic food" (Participant # 8)*
- *"I know about organic food through watching TV" (Participant #11)*
- *"From media and I have read something about it" (Participant #23)*

Figure 4.3 demonstrates the matrix coding query for this question.

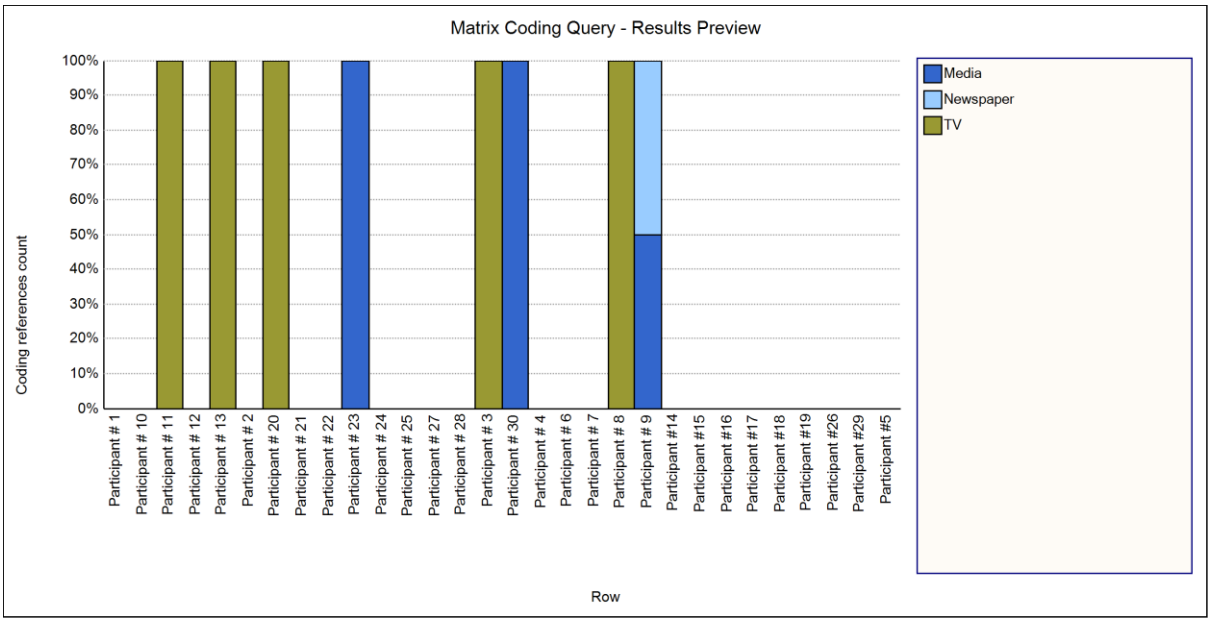

Figure 4.3 Matrix coding query about Media

Source: Nvivo output

General knowledge: In this study, four participants (13.33%) indicated that they possess general knowledge about organic food because of the business or just know about it in general. For example, one of the participants stated that he knows about organic food because he is a farmer and has recently been certified as a farmer of different organic food items. Here is an example of quotes from the interviews:

- *"Well the term organic as I am organic grower so I heard about it probably as a business" (Participant #18)*
- *"Oh I think it is just general knowledge" (Participant #27)*

Figure 4.4 shows the matrix coding query for this question.

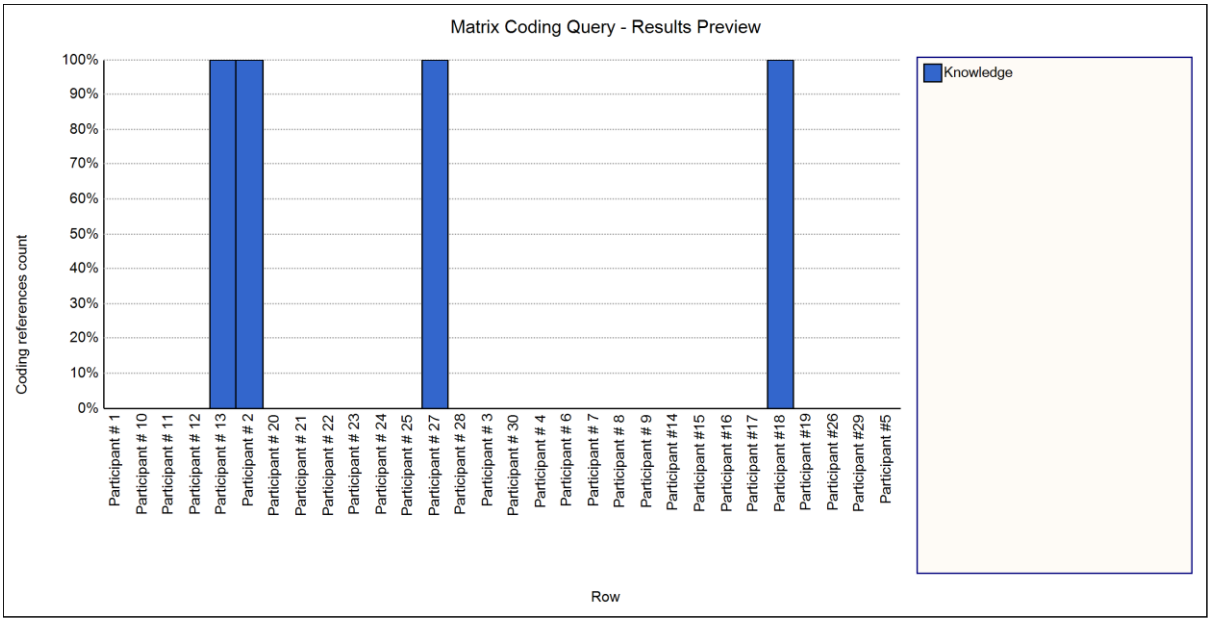

Figure 4.4 Matrix coding query about Knowledge

Source: Nvivo output

4.4.2 Consumers' understanding of the meaning of organic food

To understand consumers' perceptions of the meaning of organic food, the researcher asked participants a question about what they understood by the term 'organic food'. All of the participants (100%) indicated that organic food is the food that was grown and produced without the use of chemicals, fertilizers, herbicides, pesticides, and any other harmful additives. Further, sixteen participants (53.33%) stated that organic food means the food that was grown and produced naturally. The following are examples of responses to this question:

- *"I think it is probably the lack of chemicals" (Participant #19)*
- *"Organic food is free of pesticides and herbicides" (Participant #26)*
- *"It is devoid of any artificial chemicals and substances" (Participant #1)*
- *"Organic is thing which grows naturally" (Participant #6)*
- *"For me, organic means derived from nature" (Participant # 4)*
- *"Natural way to be seen as organic food" (Participant #3)*
- *"Well organic to me means being clean food with no chemicals" (Participant #18)*

The following Figure 4.5 shows the matrix coding query about this question.

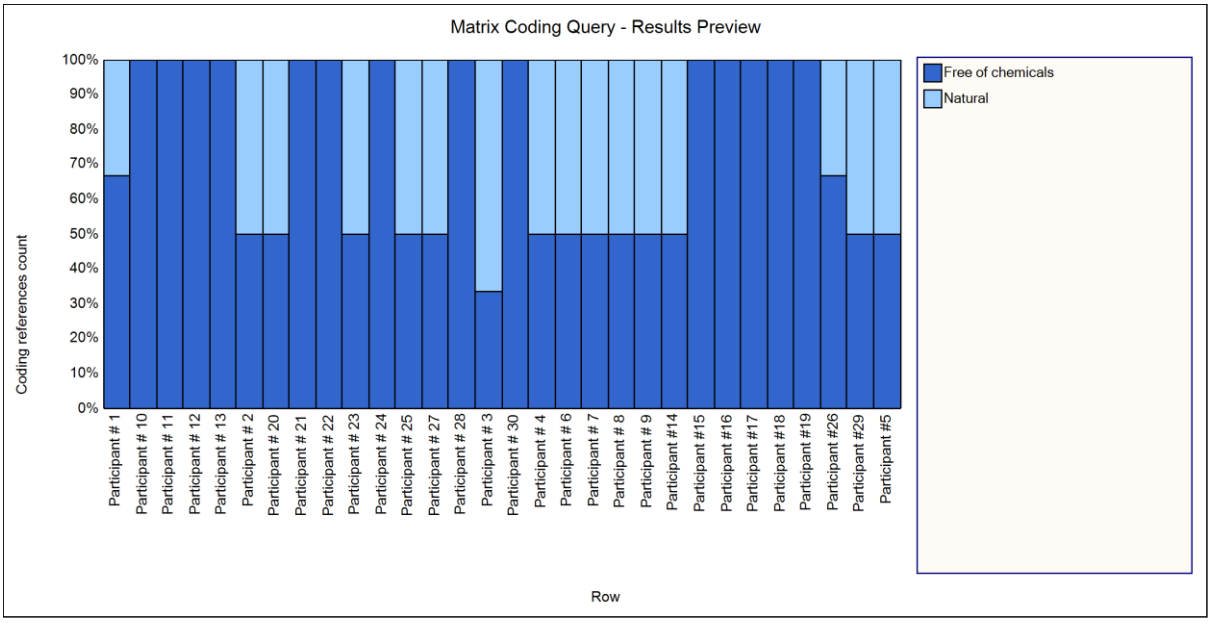

Figure 4.5 Matrix coding query about Meaning of organic food

Source: Nvivo output

4.4.3 The consumption of organic food

The researcher interviewed three kinds of grocery shoppers. Some of these participants indicated that they purchased organic food products regularly, others reported that they buy organic food occasionally, while some participants stated that they have never purchased organic food products. In this stage of the research, the researcher felt that it was necessary to categorise the participants based on their organic food product purchasing patterns. This enables the researcher to explore the reasons driving consumers to buy or not buy such products. The following Table 4.4 summarises the categories of the participants, followed by the factors that impacted each group of the participants towards purchasing organic food products.

Table 4.4: Consumers' Categorisation of purchasing organic food

No.	Category of consumers	Frequency	% of sample
1	Regular buyers	16	53.33%
	Occasional buyers	9	30%
2	Non-buyers	5	16.66%

Based on the above table, participants were categorised into two groups. The first group compromised participants who bought organic food either regularly or occasionally. The second group included participants who had never bought any form of organic food products. It is clearly shown that twenty-five participants (83.33%) had purchased some form of

organic food product either regularly or occasionally. The following is a discussion of the findings and quotes from the first group of the participants.

***Regular buyers**:* Sixteen participants (53.33%) had purchased organic food products on a regular basis. They indicated that they prefer buying organic food to nonorganic food. Further, some participants reported that they buy organic vegetables and fruits every day. For example, Participant # 29 stated that she goes daily to the shop and buys organic vegetables because she prefers fresh organic vegetables. The following are some quotes from this group of consumers:

- *"I daily buy organic vegetables, because it does not have a shelf life" (Participant #12)*
- *"I purchase organic food every day" (Participant #29)*
- *"I do go I still buy organic food" (Participant #14)*
- *"I do purchase organic food every week" (Participant #2)*
- *"I still prefer to eat organic food" (Participant #3)*
- *"We usually consume organic fruits and organic vegetables" (Participant #5)*

Occasional buyers: In this study, nine participants (30%) revealed that they purchased organic food products occasionally. These participants purchased different forms of organic food products, but they were not active buyers of such products. They stated that they did not deliberately buy organic food. For instance, one of the participants pointed out that when he went shopping, he tried to buy some organic honey just to taste it. Another participant reported that she bought some organic fruit, but she did not seek such products all the time. This group of participants commented that:

- *"I do not buy too much organic food" (Participant # 15)*
- *"I have purchased it but I am not active, that is not my first choice, I do not seek it" (Participant # 19)*
- *"I think a couple of weeks ago we bought some organic vegetables or some form of spinach food, I am assuming because I really did not pay attention, but I knew it was organic, but that purchase was a bit forced because the non-organic was not available, but today I actually made it a point to buy organic Quinoa" (Participant # 1)*
- *"Not a regular basis at all, probably three times" (Participant # 20)*

Non-buyers: Five participants **(**16.66%) had never bought organic food products. They pointed out that they had not engaged in buying such products. Some of the participants

stated that they were not interested in purchasing such products. The following are some quotes from this group:

- *"No, I have never bought organic food" (Participant # 8)*
- *"No, I do not purchase those stuff" (Participant # 30)*
- *"I do not go out of my way to purchase food that is listed as organic. So it to answer your question no" (Participant # 11)*

4.4.4 Forms of organic food purchased

In the current study, the researcher felt it was necessary to know the forms of organic food products that were purchased by both groups; regular and occasional consumers. The participants stated that they prefer to buy various forms of organic foods. Some of the participants purchased organic fruits and vegetables, whereas others preferred organic meat, eggs and chicken. The following Figure 4.6 illustrates the favourite organic food products bought by the consumers.

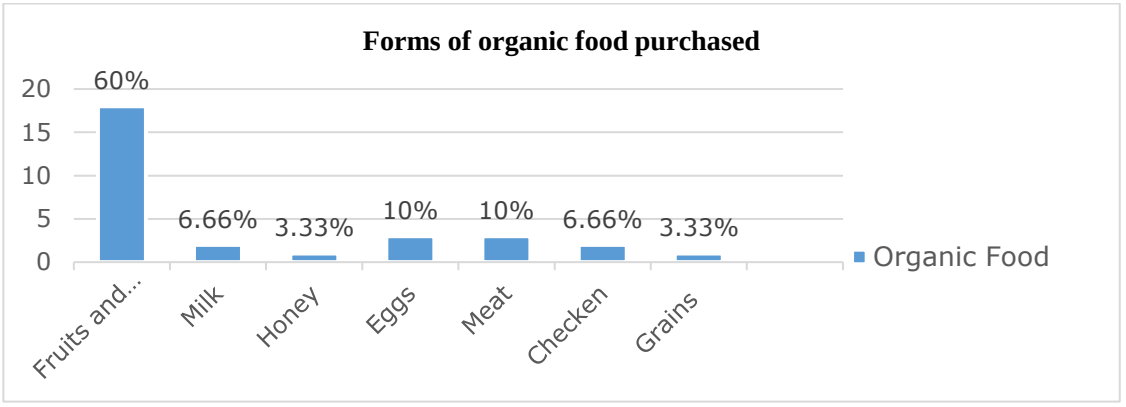

Figure 4.6: Forms of purchased organic food products

As shown in the above figure, the majority of participants purchased organic fruits and vegetables, while 10% of participants consumed organic meat and the same percentage of participants consumed organic eggs. Organic milk and chicken were less consumed by participants, followed by organic honey and grains.

4.4.5 The frequency of purchasing organic food

To understand the frequency of organic food purchasing, the participants who were engaged in purchasing organic food products were asked how often they purchased organic foods. The following Table 4.5 summarises the frequency of organic food purchasing.

Table 4.5: The Frequency of organic food purchasing

No	Shopping frequency of organic food	No. of participants	% of sample
1	Daily	4	13.33%
2	Weekly	14	46.66%
3	Monthly	3	10%
4	Occasionally	4	13.33%

Based on the above table, fourteen participants (46.66%) purchased organic food on a weekly basis. Four participants (13.33%) purchased organic food on a daily basis, while seven participants (23.33%) purchased organic food on a monthly or occasional basis. For the participants who purchased organic food daily, they indicated that they needed to buy fresh organic food every day because some forms of organic food especially organic fruits, vegetables, and dairy products have a short shelf life. Thus, they try to buy it daily to ensure fresh products.

The main objective of the exploratory stage of the research is to explore the factors that potentially influence consumers' organic food purchasing intentions. Thus, the following section of this chapter discusses those factors that influence both groups of participants to purchase organic food products.

4.4.6 Factors to be considered when purchasing organic food

This section presents and discusses the main factors that influenced consumers' organic food purchasing intentions. To probe these factors, the researcher asked the participants who were engaged in purchasing organic food products about the reasons to buy these products. The total number of consumers who bought various forms of organic food was 25 participants. The following Table 4.6 presents the extracted factors (themes) from the focused qualitative interviews.

Table 4.6: Considered factors concepts, and themes

No	Theme	Frequency	% of sample
1	Health concerns	25	100%
2	Price	25	100%
3	Label	22	88%
4	Availability	17	68%
5	Trust	17	68%
6	Environmental concerns	15	60%
7	Certification	14	56%

8	Taste	13	52%
9	Packaging	11	44%
10	Nutrition	7	28 %
11	Subjective norms	6	24%
12	Quality	6	24 %
13	Social media	2	8%

4.4.6.1 Health concerns

In this research, health concerns were found to be the most important factor when purchasing organic food for most of the participants who were engaged in purchasing organic food. All the participants who bought organic food considered health issues as the principal motive for purchasing such products. Most of participants pointed out that organic food is beneficial to their health due to the absence of chemicals, fertilizers, herbicides, and pesticides in the production of organic food. Some participants indicated that when they consume organic food they feel healthy and they are less likely to be sick. For example, Participant #17 confirmed that consuming food produced using chemicals and fertilizers leads to some diseases. It was clearly noted that the participants linked consumption of organic food with a healthy body. Some of the participants indicated that they purchased organic food to lose weight. For example, Participant # 1 pointed out that he was overweight and his doctor had advised him to be fitter, and he decided to purchase some organic Quinoa that would assist him to achieve these objectives. The following quotes from participants clearly show the priority of health concerns for the vast majority of consumers when purchasing organic food:

- *"I think it is got to be healthy" (Participant # 1)*
- *"The first reason is my healthy lifestyle" (Participant # 2)*
- *"It has a better health outcome" (Participant 3)*
- *"So it is actually the healthy sort of diet which we take" (Participant # 2)*
- *"They are good for our health" (Participant # 5)*
- *"I think they are healthy and chemical free and no harmful for our body" (Participant # 5)*
- *"Mainly it is the health reason" (Participant # 6)*
- *"Health benefits are the main reason" (Participant #7)*
- *"I am happy that we are eating meat that is free of the pesticides, and the benefits the reason to buy organic food is health driven" (Participant # 26)*
- *"Inorganic food may damage your health" (Participant # 9)*
- *"Organic food can prevent you for many diseases" (Participant # 29)*

- *"I do mention it is like healthier for you, so, I guess like living longer maybe healthier maybe it helps your immune system organic food would be good for weight. You wouldn't gain much weight" (Participant # 27)*
- *"Well we believe from what we have studied that what we take into our body is as natural as it possibly can be the body would not be receiving these chemicals and artificial hormones" (Participant # 22)*
- *"I consume organic quinoa trying to lose weight trying to be fitter" (Participant # 1)*

Thus, from the above quotes, it can be understood that the all the participants were buying organic food due to health reasons. Hence, this main theme was named Health concerns. The following Figure 4.7 reports the matrix coding query that shows the emergence of the Health concerns theme. Further, categories or sub-themes are also shown in the Figure 4.7.

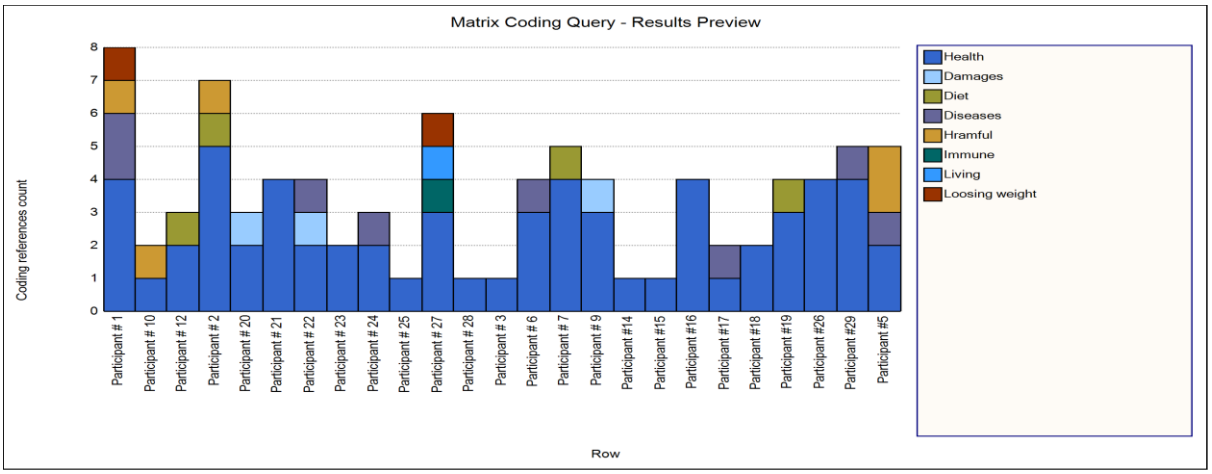

Figure 4.7 Matrix coding query of Health concerns theme

Source: Nvivo output

As shown in the coding matrix, 25 participants who were engaged in purchasing organic food reported that health concerns were one of the main determinants for purchasing and consuming organic food in Australian context.

4.4.6.2 Price

Based on the findings of the exploratory stage, it was found that the majority of the participants who were engaged in purchasing organic food agreed that the price of organic food products was one of the essential factors determining their purchasing decisions. As shown in Table 4.8, all participants (100%) believed that price is an important factor influencing their organic food purchasing decisions. The participants stated that price was

one of the important factors that they considered when purchasing organic food. For example, Participant #1 mentioned that when he did the shopping for his household, price was considered the key issue in the context of organic food. Participant # 22 also reported that he sought the cheapest organic food in the marketplace.

In this study, many of the participants used the term 'cost' to indicate the money they pay for organic food. Further, other participants reported that not all people are able to pay a higher price to purchase organic food. For instance, Participant #12 noted that she has some friends who prefer organic food but they are unable to pay a high price for it. It is very important for marketers and practitioners of organic food to understand the influence of continuity in price increases of organic food on consumers' purchase decisions. For example, Participant # 1 reported that if the prices of organic food continued to increase he would not keep purchasing organic food in the future. In addition, it was noted that some participants, such as Participant #26, used the term "budget" to indicate that they have limited purchasing power for organic food. Thus, in this stage of the research, it was found that price is one of the considerations taken into account in the context of purchasing organic food. The following are some examples of responses that show how price is one of the factors for consumers when purchasing organic food:

- *"I have got to say the price will be an important factor, If it is significantly more expensive that may deter me I probably will continue buying organic Quinoa but with other food products it would really depend on the price" (Participant # 1)*
- *"I will go for what is cheapest" (Participant # 22)*
- *"We all have a budget that we stick to so it's about being able to get a product at an affordable price" (Participant # 26)*
- *"I know people who would love to eat organic but cannot afford it" (Participant # 12)*
- *"I come down to cost you know a lot of people look at the cost of organic food compared to a conventional and conventional food is cheaper like if you look at organic wheat conventionally or selling wheat as organically it is nearly double, so, that is the price" (Participant # 18)*
- *"I think most people would go for the price that will be underlining, I will go for what is cheapest, if you run unformed you will go for the cheapest product, and we maybe mugs for paying money and we're in a position where we can afford we do that" (Participant # 22)*
- *"Not everyone has ability to buy organic food" (Participant # 12)*

- *"If it is significantly more expensive that may deter me I probably will continue buying organic Quinoa" (Participant # 1)*
- *"I do think it's better for us if you can afford it" (Participant # 12)*

The following Figure 4.8 reports the matrix coding query that shows the emergence of the price theme. Further, categories or sub-themes are also shown in the figure.

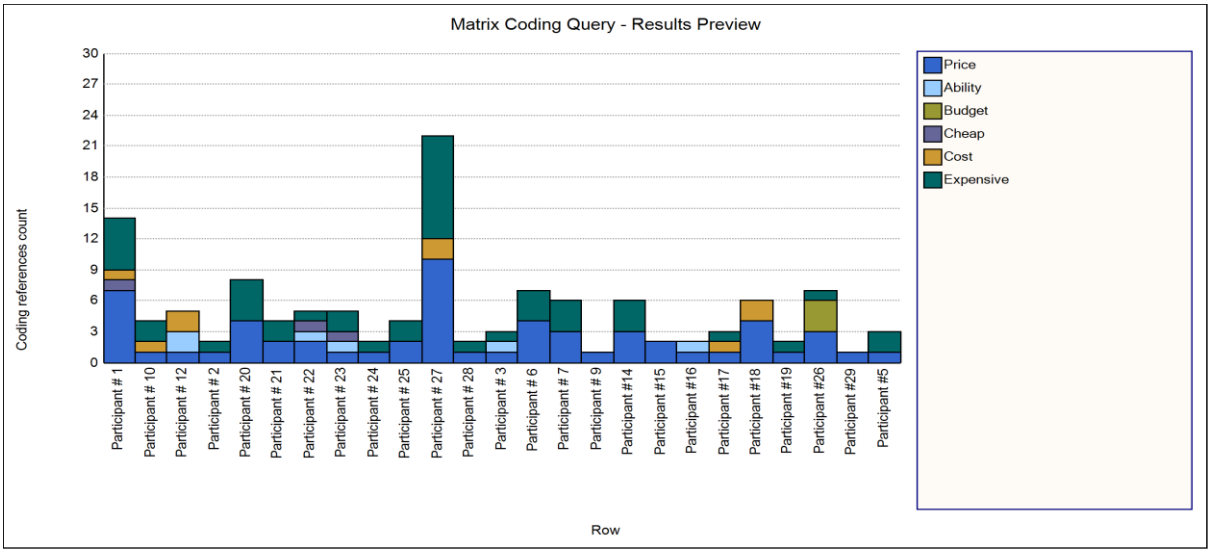

Figure 4.8 Matrix coding query of Price theme

Source: Nvivo output

As demonstrated in the coding matrix, the sub-themes or categories that created Price as a one of the main themes are as follows:

- Ability to pay
- Limited budget
- Cost of organic food
- Looking for the cheapest organic food

Additionally, the researcher asked the participants to mention their perspectives on the factors that contribute to increasing prices of organic foods. Some participants indicated the following main reasons for increases in the prices of organic food:

1. Because producing organic food adds extra expenses to the total amount of expenditures paid by producers. These include higher labour costs such as hiring more people to grow and

harvest the some crops such as organic fruits and vegetables, and this leads to paying more costs to the employees. The participants commented that:

- *"It is probably more expensive because it costs more to produce" (Participant # 27)*
- *"I would assume that it is got to do with the cost of production so that will probably be a reason why it is more expensive" (Participant # 1)*
- *"Well it can often be very labour intensive and that drives up the price" (Participant #13)*
- *"Because the problem with organic food is more expensive because you need more people to work and the paperwork is more expensive because you need to know everything you use for water you need to prove it" (Participant #15)*
- *"It is probably more expensive because it costs more to produce" (Participant # 27)*

2. Other participants stated that the price of organic food is high because of the nature of the production of such products. These participants reported that to produce some forms of organic food such as fruits and vegetables, there is a longer lead up time to harvest due to the absence of chemicals, pesticides, and fertilizers in their production. The participants pointed out that when producers do not use the chemicals in the production of organic food, this makes the production period longer and prices will be higher. Some participants indicated that the prices of organic food seem to be high because some kinds of organic foods do not have a long shelf life, which leads some consumers to purchase organic fruits and vegetables every day. For example, Participants # 12 stated that every day goes to the supermarket and purchases some organic fruit because such products expire quickly. The following are examples of quotes taken from participants:

- *"Because with the chemical we can grow things quickly and they grow bigger quickly, but if they are growing naturally they take a wide time to grow and they are usually expensive in the market" (Participant # 5)*
- *"Because they do not use the chemicals and fertilizers and they do not have to use extra stuff, except they have to protect the crops from neighbours who spray" (Participant # 24)*
- *"Mainly organic food is expensive and I understand why it is expensive because I can't just spray the whole crop with pesticides and you go through more manually" (Participant # 25)*
- *"Because they don't have chemicals in it that is why they go quick and they grow for long because they don't push it with the chemicals" (Participant # 29)*

- *"Sometimes organic food doesn't have a great shelf life" (Participant # 12)*

3. Some participants pointed out that the prices of organic food are high because the organic food market is still a niche market. The following are some quotes from participants:

- *"Just because of the farming practices, I think maybe because it's a niche market" (Participant # 12)*
- *"I would say it is very niche market at the moment" (Participant # 13)*
- *"It is a niche market" (Participant # 22)*
- *"Probably why it is more expensive because people do not consume it as much" (Participant # 27)*

As shown in these quotes, some participants stated that one of the reasons for not buying organic food is its relative expense which they considered is due to the number of people who consume organic food being less and the market for organic food being in its infancy. Conversely, some participants indicated that even though the price of organic food seems high, they purchase such products due to their health benefits. For instance, Participant # 2 stated that health benefits are more important than price in the context of organic food. The participants commented that:

- *"The price may be the one factor but not the deciding factor because there is no difference between the pricing and all that. So, for me, health is the key issue" (Participant # 2)*
- *"While it is expensive but I still prefer to eat organic food because I believe that it will have a longer-term health benefits as well as environmental benefits, so, these are a couple of reasons that I would like to purchase of any food" (Participant # 3)*

Another regular buyer pointed out that the prices of some organic foods such as vegetables are not always expensive. This participant indicated that she bought some organic cabbage and it was inexpensive. She commented that:

- *"It is not always expensive, I bought organic cabbage yesterday it is the same price" (Participant # 24)*

Other participants reported that if the prices of organic food decreased, they would definitely continue to purchase them. They stated that the price of organic food products encourages them to buy organic food in the meantime. The participants commented that:

- *"I will go for what is cheapest" (Participant # 22)*
- *"Well if the organic food would be cheaper I will buy it because at the moment it is too expensive and with the student budget it is hard to buy "(Participant # 23)*

This finding suggests that, whenever prices of organic food are reduced, more consumers would be likely to purchase such products. Hence, this finding could be used as a suggestion to organic food producers to decrease the price to make non-buyers of organic food able to purchase such products.

4.4.6.3 Labelling

In this study, labelling was another factor found to be essential when purchasing organic food. Approximately 88% of participants who were engaged in buying organic food products, considered labelling to be an important factor when buying such products. The participants indicated that before they decided to buy organic food they read labels carefully to ensure that the food was organically produced. Furthermore, due to the importance of labelling for the vast majority of participants, the researcher asked a separate question (see Section 4.4.10) to probe how organic labels were important for them. The participants stated that they read labels for different reasons: some mentioned that labels helped them to better understand the ingredients in the food they bought. In addition, some participants reported that reading labels is necessary to know the source of organic food. For instance, Participant #10 stated that she always read the labels of organic food products to identify the producer of the product. Further, some participants such as Participant #12, indicated that organic labelling leads her to search for information about the company that produced the organic food. The following are examples of quotes from the interviews:

- *"Yes label is important usually if you want to buy anything we look for the labelling of the food and if we are buying anything we look at the content of the food and if we find this thing is good for us so we are buying those things"(Participant #5)*
- *"I can see the label of the product, it is clearly written that it is organic" (Participant # 9)*

- *"Organic labelling is important because it differentiates between organic and inorganic food, and I think it is the requirement by the government as well to disclose what food we are having, if it is organic it should be mentioned on the package, and if it is not organic you need to mention because organic like on a separate shelf so it is easy to identify this is organic and the other one not organic food" (Participant # 6)*
- *"Organic label is very important for organic food, we need to know what are we eating even nowadays probably there is a carbon footprint also associated with the food production, so label is very important to know where is the food coming from, how is the food produced, and what is the carbon and environmental footprint associated with the food that we are consuming" (Participant # 3)*
- *"Label tells you that this is organic you know and it tells things in it so you as a consumer you are aware in the organic" (Participant # 28)*
- *"Label separates organic food from the generic food" (Participant # 25)*
- *"The organic labelling lead me probably to research a company if I picked up a new product" (Participant #12)*

As shown in the following Figure 4.9, all the participants who were engaged in purchasing organic food indicated that labelling is an essential factor when purchasing organic food.

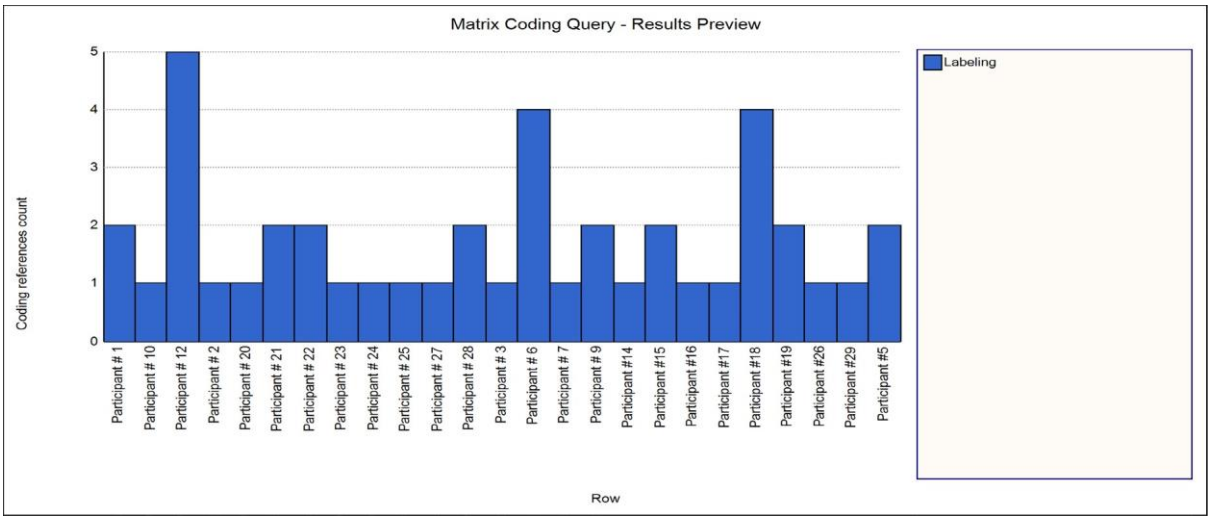

Figure 4.9 Matrix coding query of Labelling theme

Source: Nvivo output

4.4.6.4 Availability

Availability is another factor that influences consumers' organic food purchasing decisions. Approximately 68% of participants who purchased organic food products stated that their purchasing decisions were influenced by the availability of such products in the markets. Some participants pointed out that organic food is limited in availability in comparison with non-organic food and that there is a narrow range of organic food. Also, some of the participants indicated that it took longer to access organic food, limited sections of the market offered organic food. On the other hand, other participants mentioned that they could easily find organic food in the market. Moreover, another participant stated that he bought organic food as much as it was accessible in the market. Therefore, in this stage of the research, the availability of organic food was found to be an important factor. Below are some quotes about this theme:

- *"I think availability is another one because what I saw was there were only limited aisles with organic food whereas the supermarkets are dominated by conventional food, so, I would assume that they need to be more visible in the supermarkets and obviously people need to know more about them" (Participant #1)*
- *"I do buy organic food as much as it is available in the market" (Participant # 22)*
- *"There is only a limited section of organic food, so I think it is always in stock in supermarkets, I guess just the range of food that they have that is organic you can be Availability is something which actually pushes me to buy organic food" (Participant # 2)*
- *"Sometimes I do not have access to organic food" (Participant # 12)*
- *"Quite limiting to the consumer" (Participant # 20)*
- *"I can easily find these organic food" (Participant # 2)*
- *"I walk through Woolworths I don't necessarily see it and maybe if you did see it more you would be more inclined to buy" (Participant # 19)*
- *"For vegetables, no I would not because if there is a variety that I want organic I will buy it" (Participant # 17)*

As shown in Figure 4.10, the output of Nvivo indicates that there are five sub-themes or categories that emerged, creating Availability as one of main themes that play an important role in the consumers' choice of organic food products. Those themes are less variety of organic food, limited availability of organic food, organic food is not easily

accessible, and organic food is not readily visible in the market. Based on these sub-themes and categories, the main theme is named Availability.

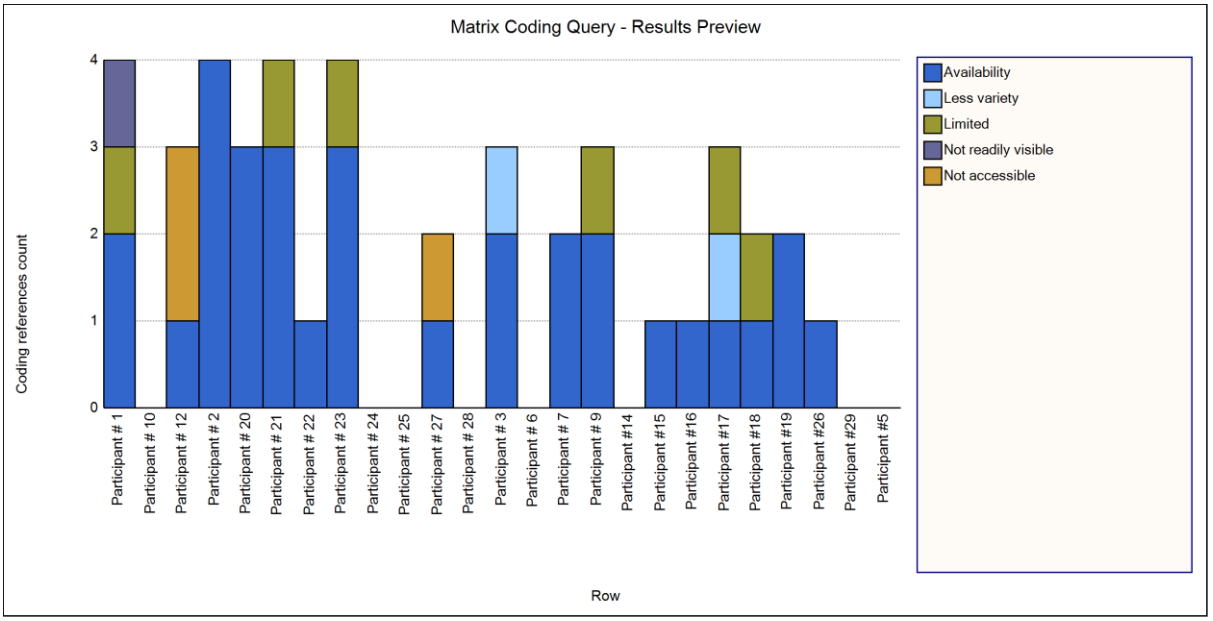

Figure 4.10 Matrix coding query of Availability theme

Source: Nvivo output

4.4.6.4 Trust

Approximately 68% of the participants who were engaged in purchasing organic food agreed that they trusted organic food, farmers, retailers, and some organic stores. They pointed out that the trust factor is essential in the context of organic food purchasing. They also reported that if they distrusted organic food and producers of organic food, they might not continue purchasing organic food because it might not be authentically organic. The following are some quotes about this theme:

- *"I am actually trusting the manufacturer of organic food" (Participant # 1)*
- *"Yes I believe it is organic*" *(Participant # 9)*
- *"I trust the supplier because the quality is good" (Participant # 14)*
- *"I think there is a trust" (Participant # 17)*
- *"Trust factor is really important because you know if you trust any brand you keep on purchasing" (Participant # 2)*
- *"I trust their organic farming system" (Participant # 2)*

- "*I guess some of the products and where I buy it I trust the supplier" (Participant # 14)*

On the other hand, other participants (32%) who were engaged in purchasing organic food stated that although they purchase organic food, they have some doubts about the claims that those products are actually organic. For example, Participant # 27 reported that some organic food sellers may have mislead her when purchasing organic food. She stated that she has doubts about people who produce or sell such products. Those participants said that:

- "*They could be misleading but you hope that is organic" (Participants # 27)*
- *"I don't think there is a lot of trust in the food industry" (Participants # 26)*
- *"Well first it will be difficult because I don't know the guy who does that or the girl who does that food" (Participants # 15)*
- *"No not always. I don't, and I am very careful when I buy it from a source that I trust" (Participants # 12)*
- *"I do a little bit but there is a little bit of doubt about it" (Participants # 28)*

The following Figure 4.11 shows the coding matrix query of the Trust theme. This theme was divided into two sub-themes (categories), one theme that indicated trust in organic food, and other sub-theme that indicated scepticism about organic food.

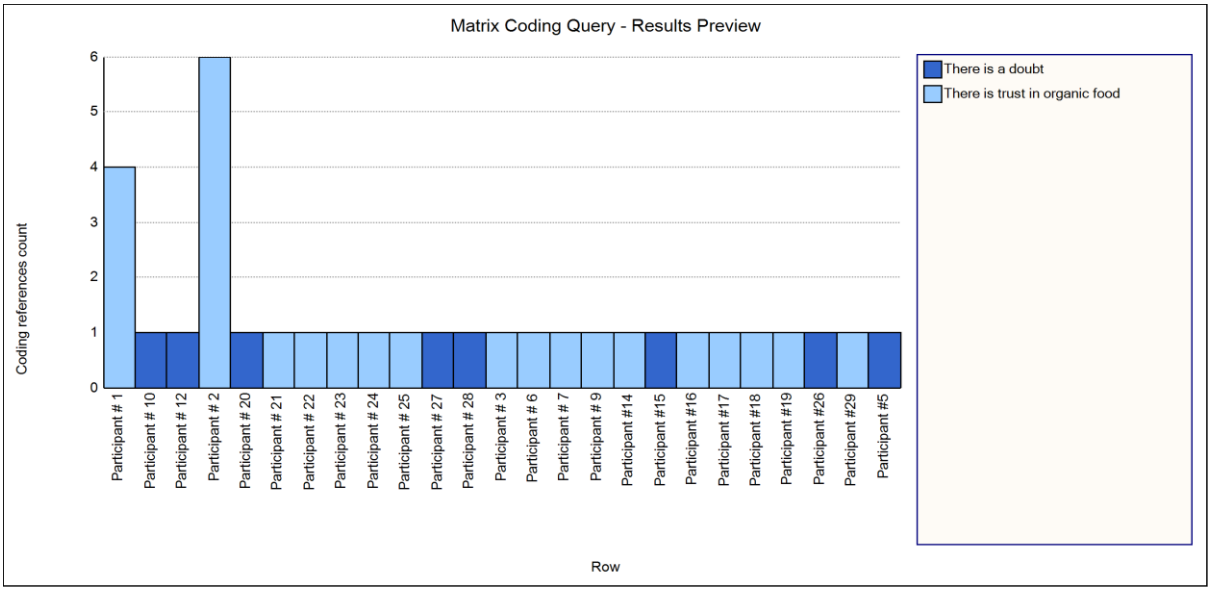

Figure 4.11 Matrix coding query of Trust theme

Source: Nvivo output

4.4.6.5 Environmental concerns

Another issue when purchasing organic food is the environmental issue related to its consumption. Around 60% of the participants who were engaged in purchasing organic food stated that environmental issues could potentially drive them to purchase organic food. Some participants indicated that purchasing organic food is a better choice to protect the environment. They reported that, through purchasing and consuming organic food, the number of harmful chemicals in the environment would decrease. For instance, one of the participants confirmed that organic food is better for the environment because when the farmers use fertilizers, pesticides, and other forms of chemicals, this could probably damage the environment. Further, one of the participants (Participant #26) reported that using organic methods in the farming process is considered a good strategy in agriculture. The following are some quotes from participants regarding this theme:

- *"I think it is better for the environment if people can be reducing the amount of chemicals that they are using" (Participant # 12)*
- *"Organic food probably does bring my mind more to the environment" (Participant #19)*
- *"Maybe environmental factors that not much stress for the environment with the chemicals" (Participant # 23)*
- *"Organic food is better for the environment" (Participant # 25)*
- *"I want to have environmentally sustainable food" (Participant # 3)*
- *"In terms of the environment as well it's better to be using organic methods for farming as well for cropping as well as for rearing meat" (Participant # 26)*
- *"It is environmental friendly, friendly for your health, and friendly for your family health as well" (Participant # 2)*
- *"Not saturating the soil with chemicals" (Participant #12)*
- *"It's the residues and I suppose when you go to soil test, all your chemicals probably letting to the soil a bit over a long period of time. So eventually the conventional will go down whereas organics will pick up because of the residues you know there's a lot of conjecture you know genetic modifies crops we can go anywhere because they are genetically modified" (Participant #18)*
- *"Like if you use pesticides in your farm land like when rain comes the pesticides go to the river even for the long time this degrees fatality of the soil, farming organic food is better for the environment" (Participant #9)*

Figure 4.12 demonstrates the coding matrix query that shows sub-themes used to create the main theme which is Environmental concerns.

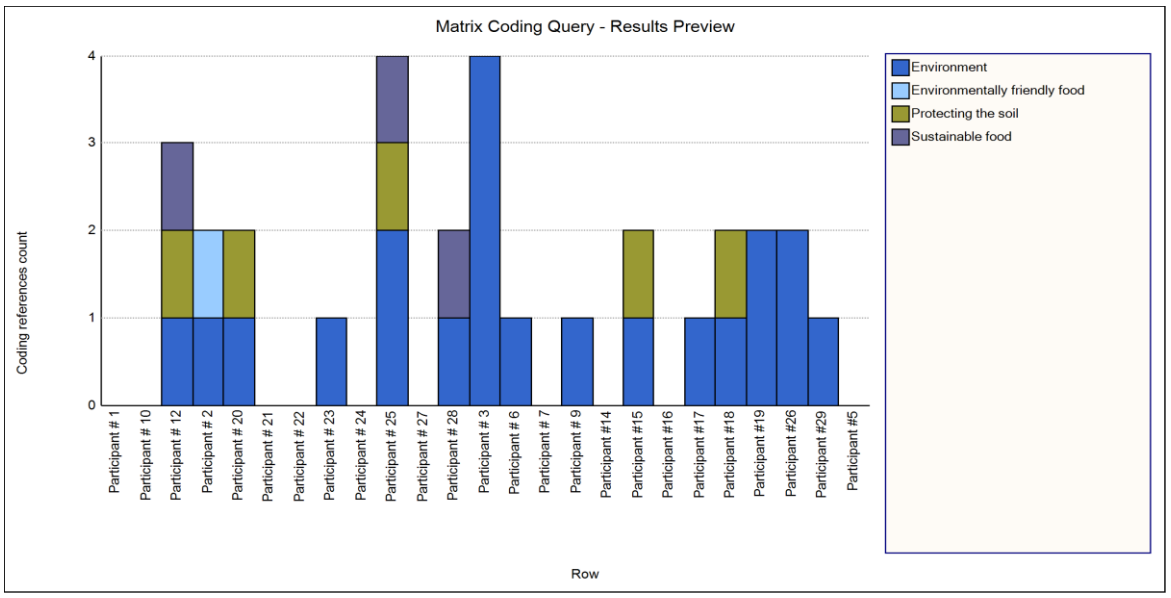

Figure 4.12 Matrix coding query of Environmental concerns theme

Source: Nvivo output

4.4.6.7 Certification

Certification was identified as one of the factors that influence consumers' organic food purchasing intentions. About 56% of participants who were engaged in purchasing organic food reported that they were aware of the certification of organic food and actively sought it out. Some participants indicated that they check for the certificate that guarantees that the food is produced organically. For example, one of the participants (Participant # 21) reported that she always looked for the certification, and that if the certification was not provided, she would not purchase the food.

The following are quotes from different participants:

- *"I look for the certification, if it has a certification then I buy" (Participant # 21)*
- *"You need to access who is a certified organic farming"(Participant # 10)*
- *"I guess the best I can do is that I generally buy my organic food from shops where it's certified organic" (Participant # 12)*
- *"Organic food would have to be something like a certified thing rather than just buzz words" (Participant # 19)*
- *"I think what is organic should have a certification sometimes I see stickers that say it is organic that has been certified" (Participant # 14)*

In addition, some of the participants used the term “seal”, “sign” and “sticker” to indicate the certificate of organic food. They reported that if the organic food has a stamp or seal confirming that the food is organically produced, they will definitely purchase it. The following are quotes from those participants:

- *“I bought it I think it was on special funny, I bought it for 7 dollars, it was on special because there was a yellow sticker on it” (Participant # 1)*
- *“I think what is organic should have a certification sometimes I see stickers that say it is organic” (Participant # 14)*
- *“If you see the sign of them and they confirm that if it is organic I think we should go about it” (Participant # 7)*
- *“I know they have a seal of international law” (Participant # 15)*

Figure 4.13 demonstrates the coding matrix query that shows sub-themes (categories) that were used to create the main theme of Certification.

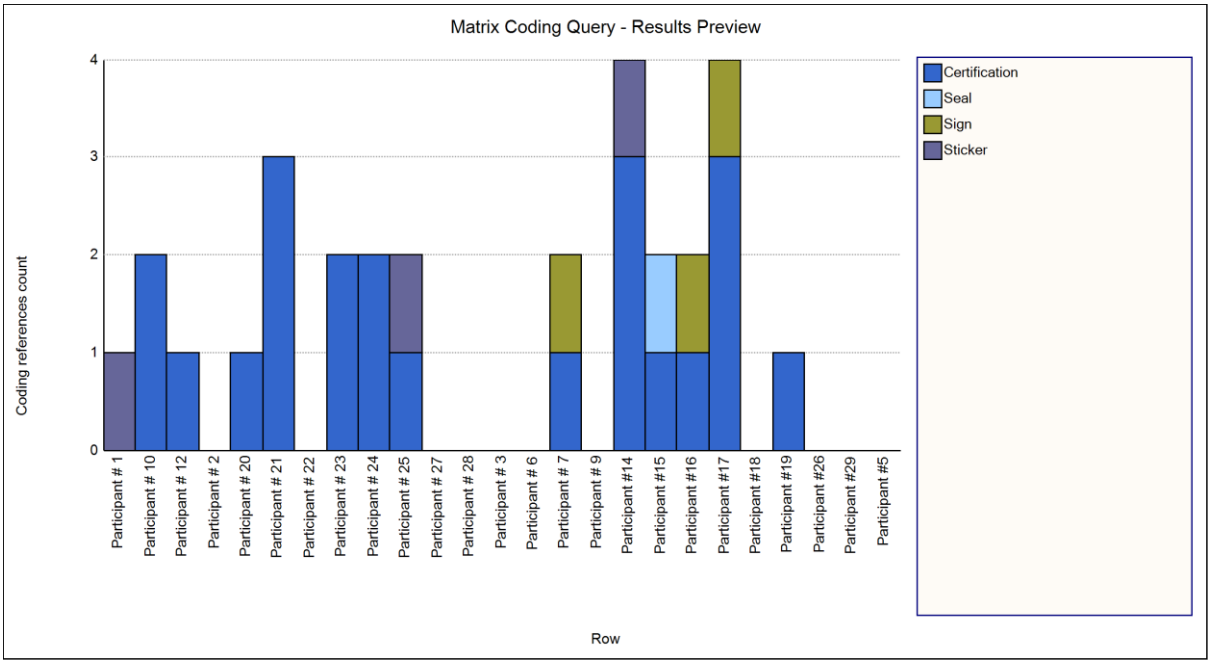

Figure 4.13 Matrix coding query of Certification theme

Source: Nvivo output

4.4.6.8 Taste

Approximately 52% of the participants who were engaged in purchasing organic food reported that taste is another reason to buy organic food. These participants stated that the superior taste of organic food encourages them to purchase and consume it. For example, Participant #16 reported that she bought organic strawberries because they are tasty. Also,

when the researcher asked Participant #3 about the reason for purchasing organic food, he responded that he purchased organic food because it tastes better. The participants commented that:

- *"I think that the somethings that organic taste better" (Participant # 16)*
- *"The tastes of organic food is beautiful" (Participant # 22)*
- *"Organic food might be better tasting" (Participant # 23)*
- *"I just like because organic food tastes better" (Participant # 3)*
- *"In terms of taste I guess organic food is better" (Participant # 9)*
- *"Organic food is tasty too" (Participant # 29)*

The following Figure 4.14 shows the coding matrix query of taste theme.

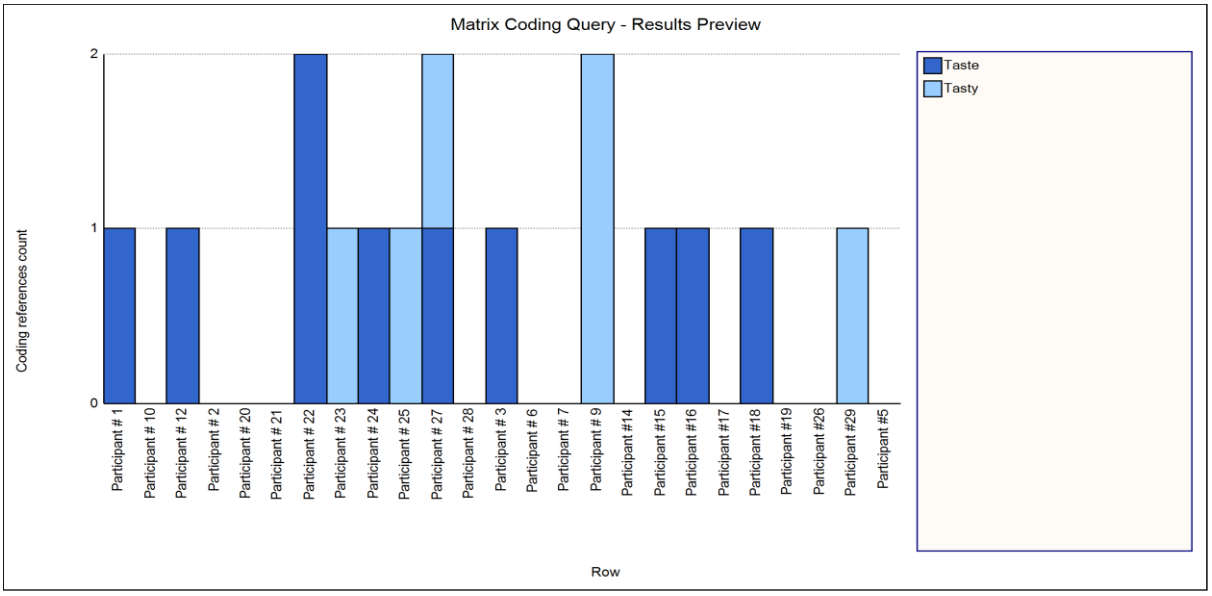

Figure 4.14 Matrix coding query of Taste theme

Source: Nvivo output

4.4.6.9 Packaging

Approximately 44% of the total buyers of organic food stated that packaging had to be one of the influential factors in their organic food purchase decisions. Packaging was seen as an important theme for many participants. For instance, Participant #14 confirmed that when she shopped, she found some vegetables in the fridge of the supermarket that claimed to be organic food but, because they were not packaged, she did not buy that food. Also, another participant (Participant #2) reported that packaging of products influenced his decision towards buying organic food. Additionally, some participants mentioned that

if organic food is packaged then they buy it. So, they use packaging as a motive to decide on buying organic food. Some participants indicated that if organic food was packaged they definitely trusted that the food was organically produced. Another participant (Participant #10) confirmed that she used packaging to obtain information about organic food. The following are some quotes about this theme:

- *"I believe that packaging is very important as a source of information about organic food" (Participant # 10)*
- *"Sometimes the packaging of organic food attracts me to buy it" (Participant # 2)*
- *"If organic food is packaged I will buy it" (Participant # 21)*
- *"I think that is the only criteria is just go to the packaging of the food and we see who has produced that food and what are the key ingredients or what are the criteria to produce organic foods" (Participant # 3)*
- *"I think I would assume it is organic because the packaging says organic" (Participant # 27)*
- *"I look at packaging" (Participant # 18)*

Figure 4.15 presents the matrix coding that reports the participants who talked about Packaging as one of the essential motives for their buying for organic food.

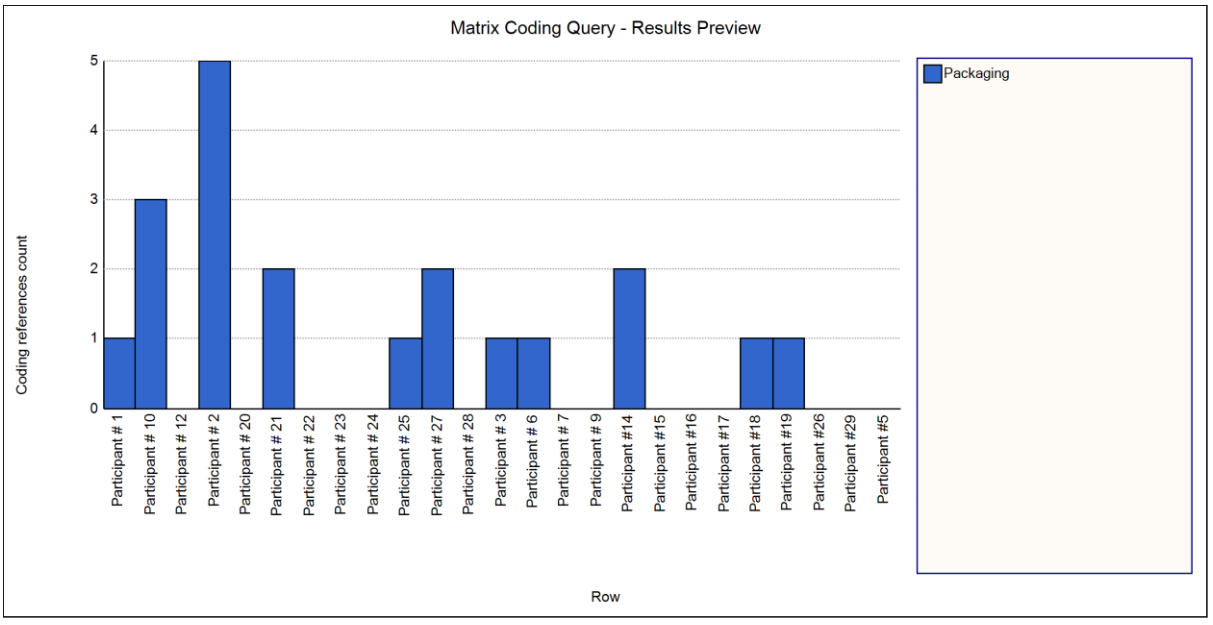

Figure 4.15 Matrix coding query of Packaging theme

Source: Nvivo output

2.6.1.1 Nutrition

The nutritional content of organic food was reported as another factor taken into consideration by approximately 28% participants who were engaged in purchasing organic food products. These participants pointed out that organic food is nutritious. For some participants, the nutrition content of the food, including its vitamin and mineral content, was one of the reasons to consume it. Further, some participants talked about the proteins that organic food provides for their body. In this context, nutritional experts state that proteins and vitamins are terms that relate to human nutrition (Campbell et al. 2007; Combs Jr & McClung 2016). Thus, this theme was named Nutrition. The following quotes from participants show the importance of nutrition in consumers' organic food purchase decisions:

- *"Organic food seems to be more nutrition than nonorganic food" (Participant # 26)*
- *"Actually, I try to increase nutrition through my food" (Participant # 12)*
- *"Well I guess it is a better nutrition for you, and also I have done a little bit of research and I have compiled recently finished a course on health improvement and the evidence seems to be that you can have organic foods" (Participant # 21)*
- *"I mean like before nonorganic food was made everybody did consume organic food and anyone who does not consume organic food probably needs more of things in it probably more proteins" (Participant # 28)*
- *"Organic foods have a lot of vitamins and minerals" (Participant # 7)*

Figure 4.16 shows the matrix coding of the Nutrition theme.

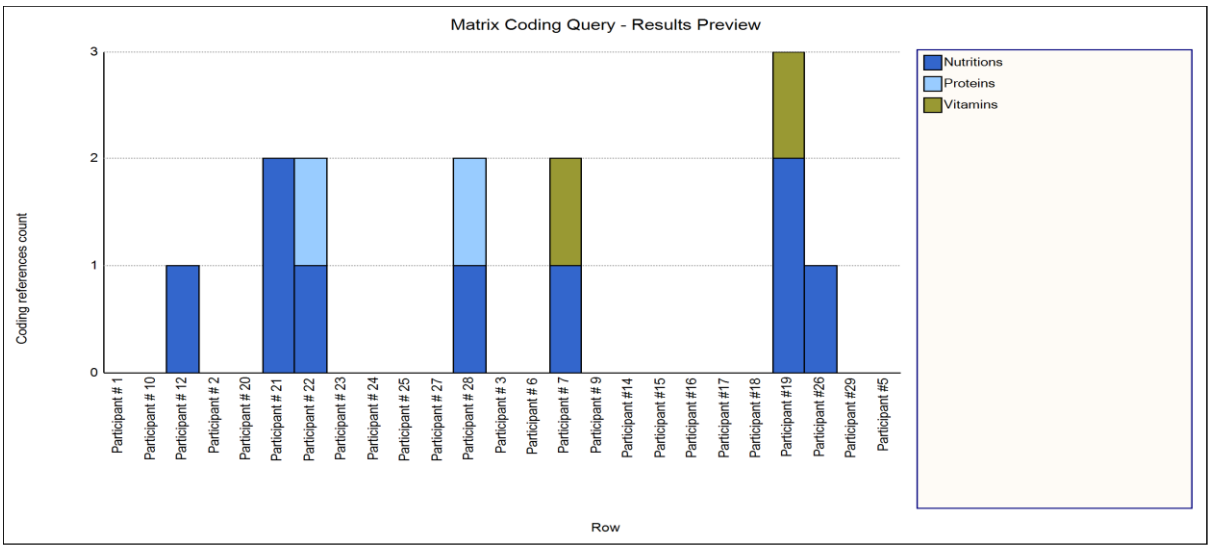

Figure 4.16 Matrix coding query of Nutrition theme

Source: Nvivo output

2.6.1.2 Subjective norms

Twenty-four percent of participants who were engaged in purchasing organic food products were influenced by their social relationships. These participants revealed that one of the reasons that influenced their buying decision towards organic food was a recommendation from their friends and relatives, and medical advisors. For instance, Participant # 27 indicated that some of her friends recommended that she buy and consume organic fruits due to their health benefits. Another participant pointed out that he decided to buy some organic grains based on advice from his physician, as he was obese and unfit. The participants commented that:

- *"I've seen my friends take this food for dinner and lunch, and so yeah this morning I was at Woollies and I actually bought organic Quinoa, and I think a couple of weeks ago we bought some organic vegetables or some form of spinach food I'm assuming because I really didn't pay attention, but I knew it was organic, but that purchase was a bit forced because the non-organic wasn't available, but today I actually made it a point to buy organic Quinoa, simply because I have been told by my doctor that I need to be fitter" (Participant # 1)*
- *"I've got good recommendation from my friends, my own research I've been using it, I am a consumer, I buy organic" (Participant # 2)*
- *"I've been recommended by friends, actually some friends have recommended to eat some organic food" (Participant # 27)*
- *It's actually because of my dad. He has been listening to this audio book on healthy living and it's particularly about food in America and how a lot of people purchase fast food when their diet is fast food and the damages that they can have on the body. So he was motivated after listening to that to try just organic milk to start with to really go back to I guess the natural way. So I've only ever purchased organic milk but it's because I think being aware of yeah particularly in America where they purchased so much fast food in kids growing up on fast food" (Participant # 20)*

The following Figure 4.17 presents the matrix coding of the Subjective norm theme.

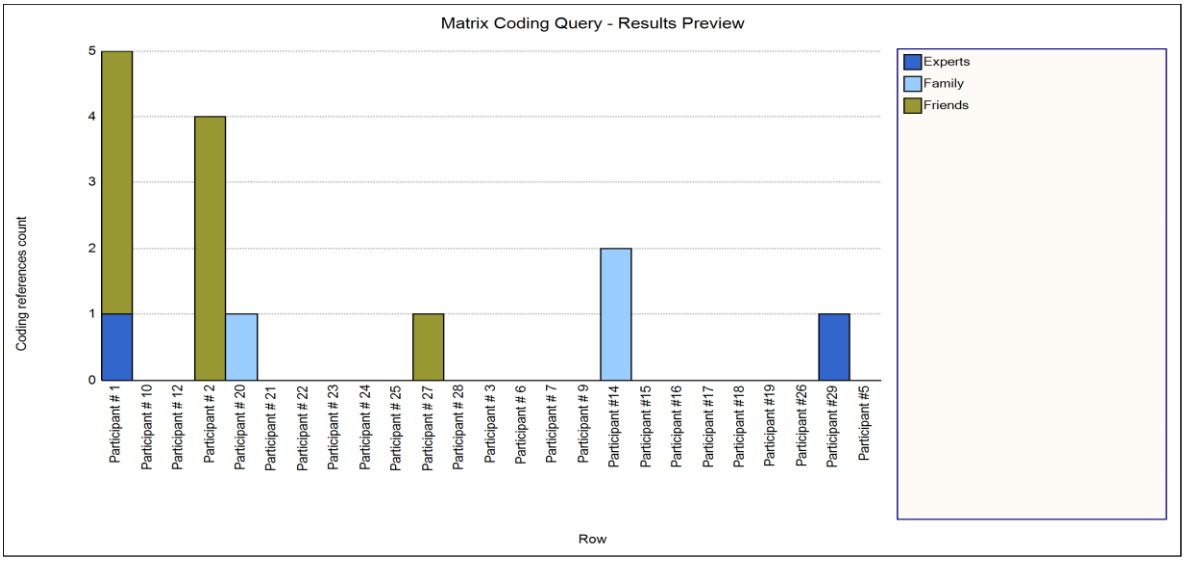

Figure 4.17 Matrix coding query of Subjective norms theme

Source: Nvivo output

As can be seen from the figure, the participants who were influenced by subjective norms indicated that they were driven to purchase organic food because of a recommendation from their friends, family members or experts such as physicians.

2.6.1.3 Quality

Quality was identified as one of the motives that plays an important role in consumers' choice of organic food. Twenty-four percent of the buyers reported that the quality of organic food was a factor that influenced their purchase decisions. Participants who focused on quality indicated that they can have good quality when they consume organic food, and one of the participants pointed out that she linked her organic food purchasing decisions to the quality factor. Further, this finding confirms that the participants were convinced about the quality of organic food in comparison with non-organic food. The participants commented that:

- *"Quality is important for me when I buy organic food" (Participant # 12)*
- *"Sometimes organic food is better quality than non-organic food" (Participant # 14)*
- *"If the quality of organic food is not good I will not buy it" (Participant # 17)*
- *"I want to consume quality food especially when it comes to organic meat" (Participant # 2)*

Figure 6.18 shows the matrix coding query of Quality theme.

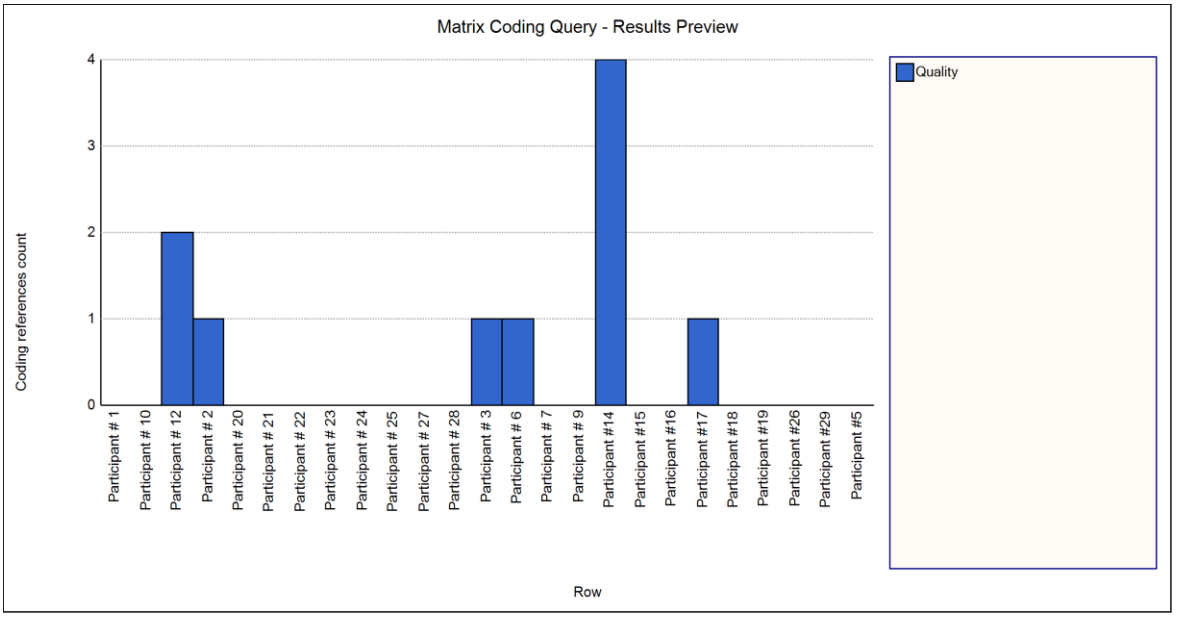

Figure 4.18 Matrix coding query of Quality theme

Source: Nvivo output

2.6.1.4 Social media

Social media sites used by the firms that market organic food was a new factor (theme) not identified by previous studies as influencing consumers' organic food purchasing intentions. Approximately 8% of the participants who purchased organic food pointed out that their decision to buy organic food was affected by various forms of social media related to companies that produced and marketed organic food products. In addition, these participants stated that using social media assisted them to take a decision to buy organic food. For instance, one of the participants reported that information available on the sellers' websites enticed him into buying organic meat. Furthermore, this participant indicated that his decision to purchase organic food was based on the information on the website. Another participant (Participant #1) stated that using the producers' social media pushed him to buy organic food. The two participants commented that:

- *"I get all this information on the internet, nowadays so I've been doing a bit of reading as well, so I think the information I got from various social media outlets that have really pushed me over the edge and at this stage organic food is only a very small portion of my overall shopping, but I anticipate in the coming days in the coming months it will gradually increase" (Participant # 1)*
- *"I do some research, I go to the website and producers' social media, and I see how the organic chicken actually produced, how or what kind of procedures they follow.*

I recheck it, I confirmed their finding from the website. The website saying all how they produce how the manufacture and all that" (Participant # 2)

The following Figure 4.19 illustrates the matrix coding query of the Social media theme.

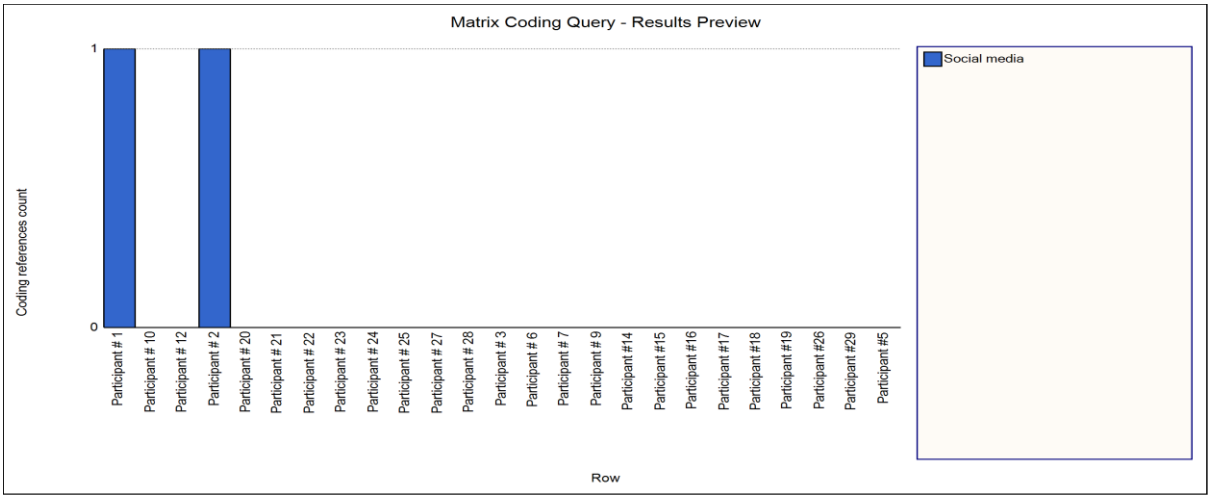

Figure 4.19 Matrix coding query of Social media theme

Source: Nvivo output

Further, for more details of how the main themes used in the qualitative stage of the study were created, please see Appendix J.

4.4.7 Why do some consumers avoid purchasing organic food?

Five participants did not buy organic food products. The researcher felt that it was necessary to determine the reasons that constrained consumers' organic food purchasing intentions. The following Table 4.7 summarises the factors that restrained some of the participants from purchasing organic food.

Table 4.7: Obstacles that restrain buying organic food

No	Theme	Frequency	% of sample
1	High price	5	100%
2	Scepticism/distrust	5	100%
3	Limited availability	4	80%
4	Lack of information	1	20%

4.4.7.1 High price

Participants who did not purchase organic food products were negatively influenced by the factors listed in Table 4.7. All of those participants (100%) reported that they did not

engage in purchasing organic food products because of the high cost of such products. They used the terms 'cost' and 'expensive' to indicate the high price of organic food. The following Figure 4.20 reports the matrix coding query of the first theme (High price).

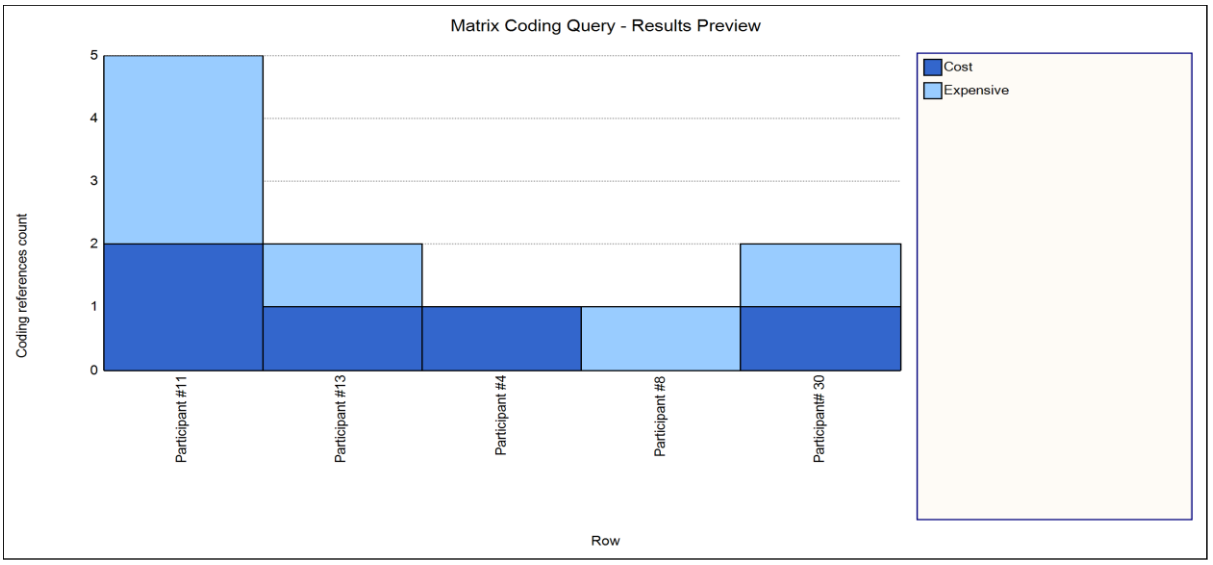

Figure 4.20 Matrix coding query of High price theme

Source: Nvivo output

Below are some quotes from the participants regarding this theme:

- *Organic food is not easy to find organic food and I think maybe it costs more" (Participant #. 30)*
- *"Organic food costs more" (Participant # 4)*
- *"I guess I really thought about that I guess I may go shop a lot of the time I think about cost. So generally speaking I would consider organic food to be more expensive" (Participant # 11)*
- *"Well I can't see the point in buying organic food because the cost benefit ratio just isn't there" (Participant # 13)*
- *" Generally speaking you would consider organic to be more expensive" (Participant # 11)*
- *"I think sometimes it is too expensive" (Participant # 30)*

4.4.7.2 Scepticism

One hundred percent of the non-buyers had doubts about food products that claimed to be organically produced and this influenced their decision not to buy organic food products. Some of the participants pointed out that even if the food has a label or certification to prove that it is organically produced, they doubted the authenticity of the claim, and did

not buy them. Further, one of the participants stated that he did not trust the people who produce organic food products, reporting that some of the people who produce organic food have no qualifications, and therefore he was not one of the buyers of such products. Figure 4.21 demonstrates the matrix coding query of the second theme (Scepticism/distrust).

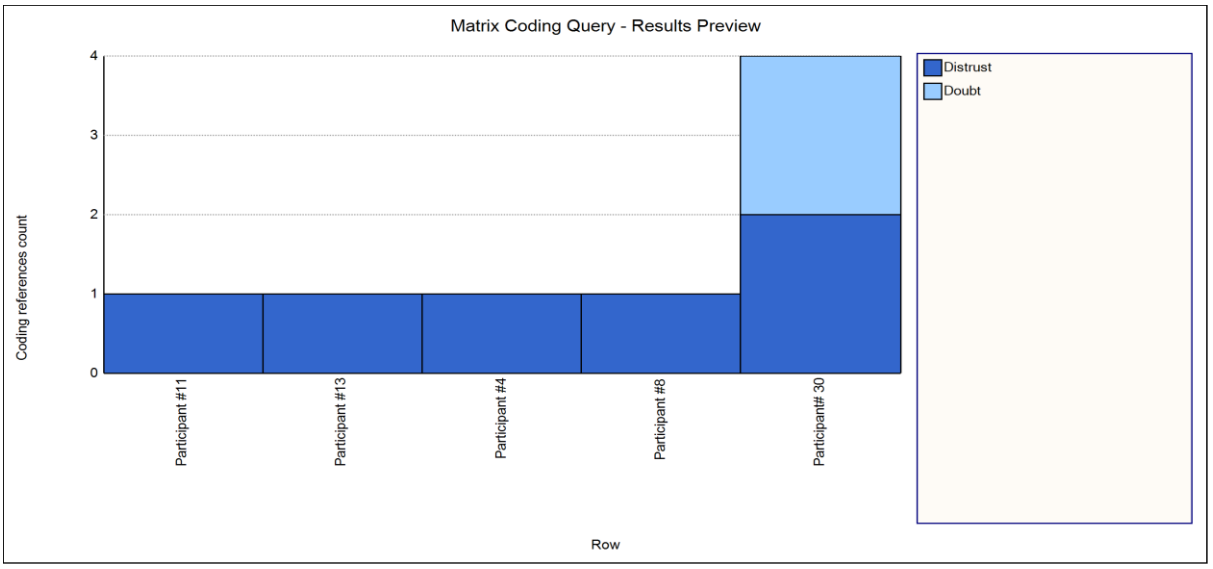

Figure 4.21 Matrix coding query of Sceptisim/distrust theme

Source: Nvivo output

The following are quotes from those participants:

- *"I don't think it's or I don't always believe what they say it is" (Participant # 30)*
- *"Well a lot of times in Australia organics is just done terribly and terribly wrong and too many people with no agricultural qualifications go and start organic farms and it leads to weeds spreading diseases outbreaks. So it leads to all sorts of quarantine issues in the local areas because then I did a research they don't know what they're doing and they watched on some video somewhere or really Hebei Boggle magazine once when are that they do it in the travel is it organic when done right can be quite good but often it is done very poorly"(Participant # 13)*

4.4.7.3 Limited availability

Limited availability of organic food was another factor that restricted the desire of this group to purchase organic food. Approximately 80% of participants who have never bought organic food products reported that when they went shopping they did not see such products in the shops. Further, one of the participants indicated that her ability to buy organic depended on

the availability of such products. Another participant indicated that there should be more items of organic food available in the shops. The following Figure 4.22 shows the matrix coding query of the third theme (Limited availability).

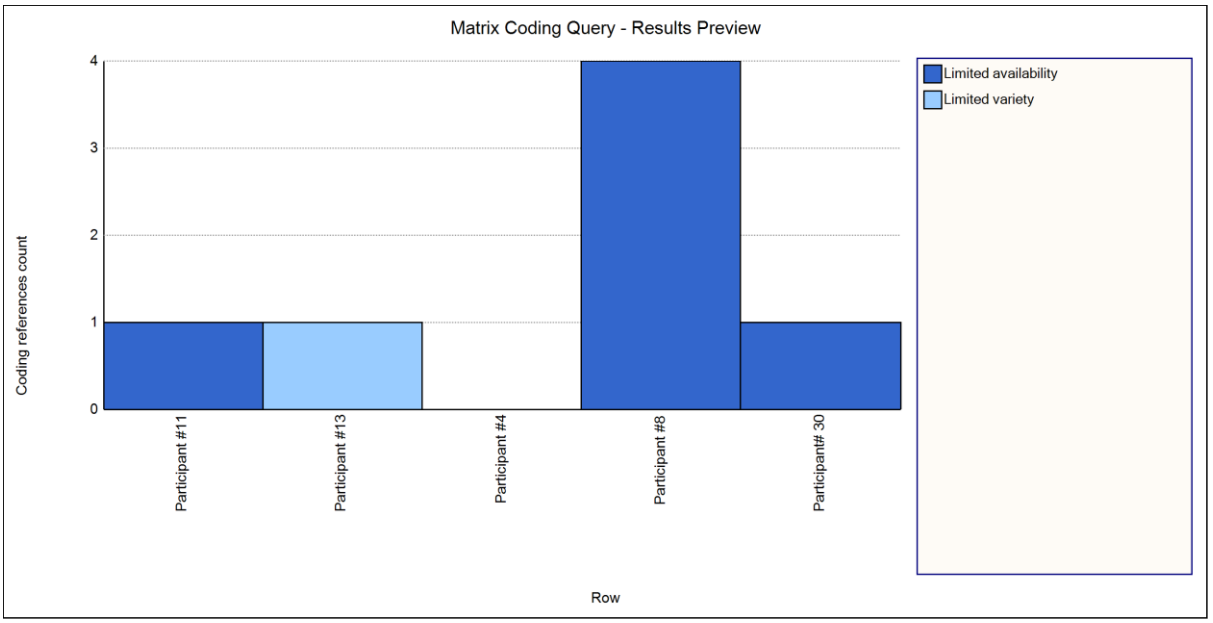

Figure 4.22 Matrix coding query of Limited availability theme

Source: Nvivo output

Below are examples of quotes from those interviews:

- *"I think it is availability, so there's not a great variety of organic foods. There's a cost factor. Generally, it is more expensive" (Participant # 8)*
- *"I guess it also depends on the availability" (Participant # 11)*
- *"It is not easy to find organic food" (Participant # 30)*

4.4.7.4 Lack of information

One of the participants (20%) who had never purchased organic food revealed that he had no detailed information about organic food products, stating that he needed to be more knowledgeable about the benefits of organic food products to be able to decide to buy them in the future. This indicates the importance of online advertising to increase the level of consumers' knowledge about organic food (Yang et al. 2018). Accordingly, in this research, social media will be examined in the confirmatory stage of the research as a kind of promotional tool that may influence consumers' intentions to purchase organic food. The following Figure 4.23 presents the matrix coding query for the fourth theme (Lack of information).

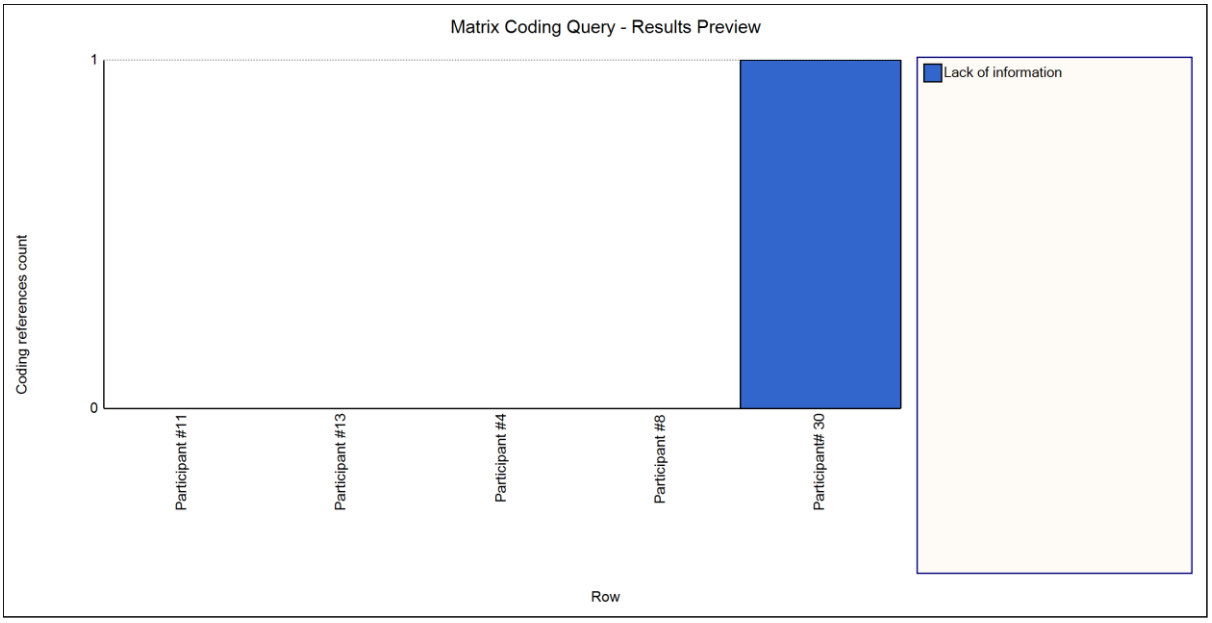

Figure 4.23 Matrix coding query of the Lack of information theme

Source: Nvivo output

The following quote shows the comments of this participant about this theme:

- *"I should be more informed and maybe I'm not informed myself enough that is my problem" (Participant # 30)*

4.4.8 Benefits and drawbacks of organic food

The researcher probed the participants' perspectives on the advantages and disadvantages of organic food. The participants agreed that organic food has many benefits for consumers and society. They indicated that organic food helps people to avoid some diseases and has no harmful effects on the human body. Further, organic food is seen as nutritional food. Also, participants pointed out that organic food was considered beneficial to the environment as well. Other benefits of organic food are its superior quality and taste. On the other hand, when the participants were asked about the disadvantages of organic food, some participants reported that it is expensive and not readily available in the market. Below are some quotes from the participants:

- *"It is actually the lack of artificial substances going into your body that's the main advantage" (Participant # 1)*
- *"I think it is perceived to be healthier because it is lacking all pesticides and chemicals" (Participant # 10)*

- *"It has more nutrition" (Participant # 19)*
- *"In terms of the environment it wouldn't be having a chemical impact on their environment. I'm actually a beekeeper. So chemicals are bad" (Participant # 11)*
- *"If there were a lot more organic farming practices it just would be a much more sustainable" (Participant # 12)*
- *"I guess sometimes it can be better quality" (Participant # 14)*
- *"It is limited you really have to look for it and it is also usually more expensive" (Participant # 21)*
- *"I think price is a major limiting factor, they seem to be higher priced than regular items which are non-organic" (Participant # 1)*
- *"As far as disadvantages would be it is more expensive and it also in some cases the item especially fruit and vegetables doesn't perhaps look as nice as highly treated product" (Participant # 22)*
- "*Probably not enough of it, you know the disadvantages would be price because probably a lot of people would steer away from it because as I said with the grains it is double the price" (Participant # 18)*

4.4.9 Consumers' trust in organic food

To understand participants' trust in organic food, and due to the importance of the trust factor in the context of organic food, the researcher asked a question about the reasons for trusting organic food. As discussed in Section 4.4.6.5, approximately 68 % of participants trust organic food manufacturers, certifying bodies, supermarkets, organic stores, farmers, and suppliers. In contrast, the findings showed that about 32% of participants who bought organic food were either regularly or occasionally sceptical towards some aspects of organic food. The researcher investigated the reasons that lead to building trust in organic food and, conversely, the factors that contributed to not trusting in organic food. For participants who trust organic food, some of them pointed out that they trust the well-known brands when they buy organic food. For example, Participant # bought organic Quinoa for the first time to cook it as an accompaniment with rice. He responded that he was new to organic food, so, he trusted just the well-known brands. On the other hand, other participants indicated that the trust factor was very important in their organic food purchasing decisions. Other participants indicated that they needed to check the source of food in terms of who produced the organic food. Below, Table 4.8 summarises the factors that build trust in organic food.

Table 4.8: Reasons to trust in organic food

No	Reason of trust	No. of participants	% of sample
1	Certification, Labelling, and Packaging	14	82%
2	Knowledge of seller/ producers	2	11.7%
3	Following guidelines	2	11.7%
4	The high price	1	5.8%

Certification, Labelling, and Packaging: As shown in the Table 4.8, 82% of participants who trust organic food, built trust in organic food because of the certification, labelling, and packaging. They reported that, if organic food is certified, they would definitely purchase it. So, certification led the consumers to trust organic food. Other participants pointed out that labelling and packaging are a key condition for building trust in organic food products. Many of the participants, such as Participant #5, reported that to trust in organic food, labels are essential to guarantee that the food is organically produced. Other participants stated that packaging is another reason to build trust in organic food products. They mentioned that organic food needs to be packaged to be trusted. Below are some examples of quotes about this theme:

- *"I trust just whatever they label on the product" (Participant # 6)*
- *"If it is labelled and Australian government is confirming it is organic, then we need to believe it is organic" (Participant # 5)*
- *"I just trust in the label, if it has label it must be organic" (Participant # 25)*
- *"When I see certified organic I have to trust" (Participant # 24)*
- "*Well if it is packaged and it has the certification on it yes I do trust" (Participant #21)*
- "*Well I believe the word organic itself creates trust towards organic" (Participant # 2)*

Knowing the producers: For the participants who are sceptical about organic food, the researcher asked them to explain what led them to be sceptical about organic food and what things would them to eliminate their doubts about organic food. Some participants underlined their need to check who produced the food. For example, Participant # 27 indicated that she has some doubt about the process of producing organic food, indicating that even if the organic food was packaged, she did not completely trust organic food. When the researcher asked for her reasons, she responded that she needed to visit the farm or people who produce organic food to verify authenticity and this is to some extent very difficult. The participants said that:

- *"I can't fully hundred percent trust them but I would hope that it is but they could easily put a package on and say it is organic and you think it is organic and sell it for a bit more, I just hope that it is, I can't really trust 100 percent, so, I have little bit doubt, I can't really trust unless I go to the farm or the person who produces them directly" (Participant # 27)*
- *"I would trust it but it depends where is the food coming from if the food is coming from reliable sources I would trust it otherwise I would have my doubts on the food" (Participant # 3)*

Following guidelines: Some of participants reported that they would trust in organic food if the producers followed the production rules and guidelines. For example, Participant # 10 stated that she was somewhat sceptical of the people who produce organic food. She indicated that even though organic food has a certification, she still had some doubts. The participants commented that:

- *"Not completely because to be truly organic there are strict guidelines to follow in organic growers they may follow some of the guidelines but not all of them so they try to say they are organic but they have not fully followed the process that they need to do and I think even it is very easy just to state that it is organic when they haven't process on packaging it very easy just to put it on" (Participant # 10)*
- *"Well you can only trust as much as that they're following the guidelines of what the government really requires them to do" (Participant # 22)*

The high price: Another participant, participant #6 pointed out that he trusted organic food because of the high price which led him to feel that the food was organically produced. This participant commented that:

- *"Well these supermarkets, they have separate shelves for organic foods and inorganic foods so like these separate organic food and they sell organic food separately and they charge more price for it. So when they are charging more price for it, I feel like it is I am buying organic food" (Participant # 6)*

4.4.10 Consumers' perspectives on organic labelling

Due to the importance of an organic label for enhancing consumers' organic food purchasing (Lee et al. 2018), the researcher asked participants about their perspectives on the organic label and its importance. The majority of the participants (88%) who

purchased organic food either regularly or occasionally considered labelling to be extremely important when they bought organic food. The participants pointed out that, before they decide to buy organic food, they read the labels carefully to ensure that the food is organically produced. The participants stated that they read the labels for different reasons. The different responses are shown in the following Table 4.9.

Table 4.9: Reasons to use a label in the context of organic food purchasing

No	Theme	No. of participants	% of sample
1	To differentiate organic from non-organic food	12	48%
2	Identify the producer/s	8	32%
3	Building trust	2	8%

As shown in the above table, approximately 48% of the regular and non-regular buyers of organic food reported that the labels helped them to better differentiate between organic and nonorganic food. For example, Participant # 6 indicated that he always reads the label to check that the food was produced in an organic way. Furthermore, some participants (32%) reported that reading the labels is very important for determining the manufacturers who are certified to produce organic food. For example, Participant #10 stated that she always read the labels on organic food products to identify the producer of this product. Further, some of the participants (8%), such as Participant #12, indicated that organic labelling lead them to investigate the company that produced the food. So, based on these comments, the labels provided more information about the manufacturers of organic food. The following are examples of quotes from the interviews:

- *"Yes label is important usually if you want to buy anything we look for the labelling of the food and if we are buying anything we look at the content of the food and if we find this thing is good for us so we are buying those things"(Participant # 5)*
- *"I can see the label of the product, it is clearly written that it is organic" (Participant # 9)*
- *"Organic labelling is important because it differentiates between organic and inorganic food, and I think it is the requirement by the government as well to disclose what food we are having, if it is organic it should be mentioned on the package, and if it is not organic you need to mention because organic like on separate shelf so it is easy to identify this is organic and the other one not organic food" (Participant # 6)*

- *"The organic labelling lead me probably to research a company if I picked up a new product" (Participant # 12)*
- *"Label separates organic food from the generic food" (Participant # 25)*
- *"Organic label is very important for organic food, we need to know what are we eating even nowadays probably there is a carbon footprint also associated with the food production, so label is very important to know where is the food coming from, how is the food produced, and what is the carbon and environmental footprint associated with the food that we are consuming" (Participant # 3)*
- *"Yes it is important, because it tells you that this is organic you know and it tells things in it so you as a consumer you are aware in the organic" (Participant # 28)*

4.4.11 Negative experiences with organic food

The researcher felt that it was important to know if there were any negative experiences or criticisms about organic food. Nine participants (36%) who purchased organic food pointed out some negative experience with some organic food products. The following Table 4.10 illustrates the participants' negative experience regarding organic food products.

Table 4.10: Negative experience with organic food

No	Theme	No. of participants	% of sample
1	Expiration date	5	20%
2	Poor appearance	4	16%

Expiry date: Five participants (20%) who purchased organic food commented that the expiry date is one of the negative experiences with some forms of organic food, especially organic fruits and vegetables. This group of participants indicated that they had to buy the newest organic vegetables due to the quick expiration date. They reported that some kinds of organic food had short shelf life. This group of participants commented that:

- *"Sometimes organic food doesn't have a great shelf life. It goes rotten quickly, you have to buy newest" (Participant # 12)*
- *"They don't live long, they expire quickly, they go bad quicker, and so, I need to provide it every day" (Participant # 29)*
- *"They got bad quickly compared to nonorganic food because they with nonorganic food they have things are put in it" (Participant # 28)*

The following Figure 4.24 illustrates the matrix coding query of this theme.

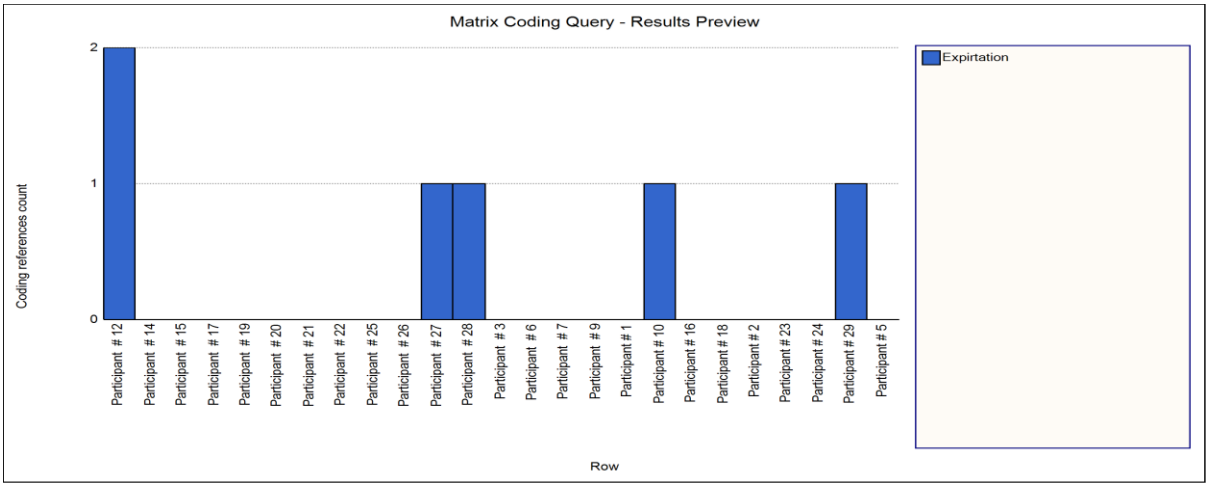

Figure 4.24: Matrix coding query of Expiry date of organic food

Source: Nvivo output

Poor appearance: As illustrated in the Table 4.12, four of the participants (16%) who purchased organic food reported that the size and shape of some forms of organic food were not as good as regular foods. Even though the organic food was considered as a healthy food, they mentioned that one of the negative experiences with organic food was its bad shapes and sizes. These participants confirmed that some kinds of organic food, such as organic fruits, do not have an attractive appearance. For instance, Participant # 10 reported that when she did buy some organic fruits, she found that the appearance of that fruit was not as good. The researcher specifically wanted to understand the reasons participants' thought that organic food's shape and size were not so appealing. The participants confirmed that organic food had this size and shape due to the absence of chemicals and fertilizers in the production process. The following are some quotes about this theme:

- *"Also their appearance when you go to the fruit shop the appearance of some of the organic foods doesn't look as good sometimes it looks a little bit rotten I guess because it has not had preservatives added to it. So it doesn't last as long" (Participant # 10)*
- *"In some cases the item especially fruit and vegetables doesn't perhaps look as nice as highly treated product" (Participant # 22)*
- *"I find that organic food doesn't look as good as food which gets inorganic like organic food are when we see the organic food it is not big in size, it is small in size, it doesn't look as good as inorganic food it looks bit different in shape" (Participant # 6)*

The following Figure 4.25 illustrates the matrix coding query of this theme.

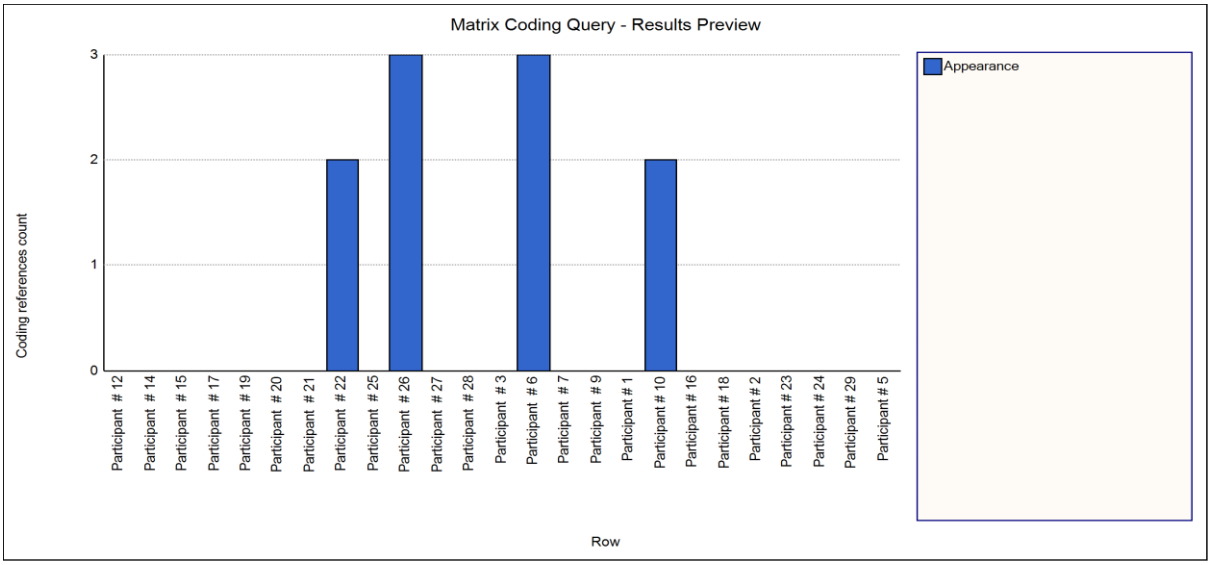

Figure 4.25: Matrix coding query of Poor appearance of organic food

Source: Nvivo output

4.4.12 How to attract new consumers

The researcher wanted to understand how to attract new consumers to purchase organic food. The researcher asked the five participants who were not engaged in purchasing organic food about the factors that may motivate new consumers to actively seek and purchase such products. The participants pointed out that there are a number of factors that restrict consumers purchasing of organic food. They provided different suggestions to encourage new consumers to purchase such products. These factors are shown in the following Table 4.11.

Table 4.11: Factors motivating new consumers to purchase organic food

No	Theme	No. of participants	% of sample
1	More availability	5	100%
2	Lowering the prices	4	80%
3	More restrictions	2	40%
4	Effective promotional campaigns	1	20%

More availability: The participants who were not engaged in purchasing organic food stated that organic food products were not readily available in the markets. For example, two of the non-buyers (Participant #11, and Participant #13) reported that purchasing organic food depends on the availability and variety of organic food. They commented that:

- *"I guess it also depends on the availability of things as well" (Participant # 11)*
- *"If there is a broader range and a broad diversity of plants available in organics"*

(Participant # 13)

The following Figure 4.26 shows the matrix coding query of this theme.

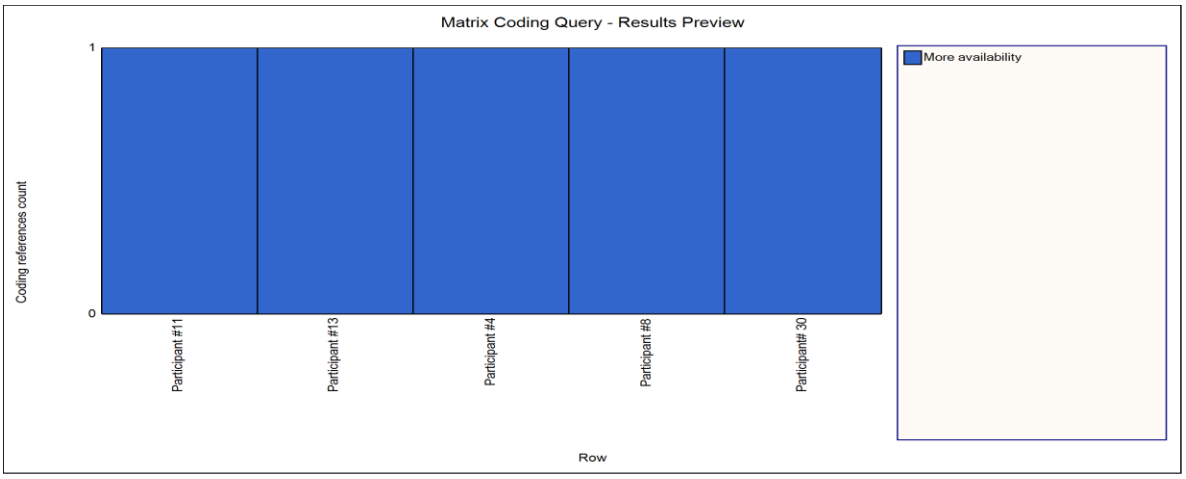

Figure 4.26: Matrix coding query of more Availability

Source: Nvivo output

Further, one of the regular buyers of organic food pointed out that one of her friends wanted to buy organic food but she was not able to find it in the market. She commented that:

- *"I know people who would love to eat organic but I guess they don't have access to it" (Participant# 12)*

It was clear that there were people who were interested in buying organic food but, as shown in the above quotes, they could not access them easily in the shops.

Lowering the price: Some participants who did not purchase organic food stated that it is expensive and there is a need to decrease the prices of such food. The participants commented that:

- *"I think life is expensive, it is expensive to live in Australia. People struggle and so you don't need an increase in costs for organic food" (Participant # 8)*
- *"In terms of as a consumer it could be quite costly, they are not necessarily everyone can afford food that costs more" (Participant # 11)*

The following Figure 4.27 shows the matrix coding query of this theme.

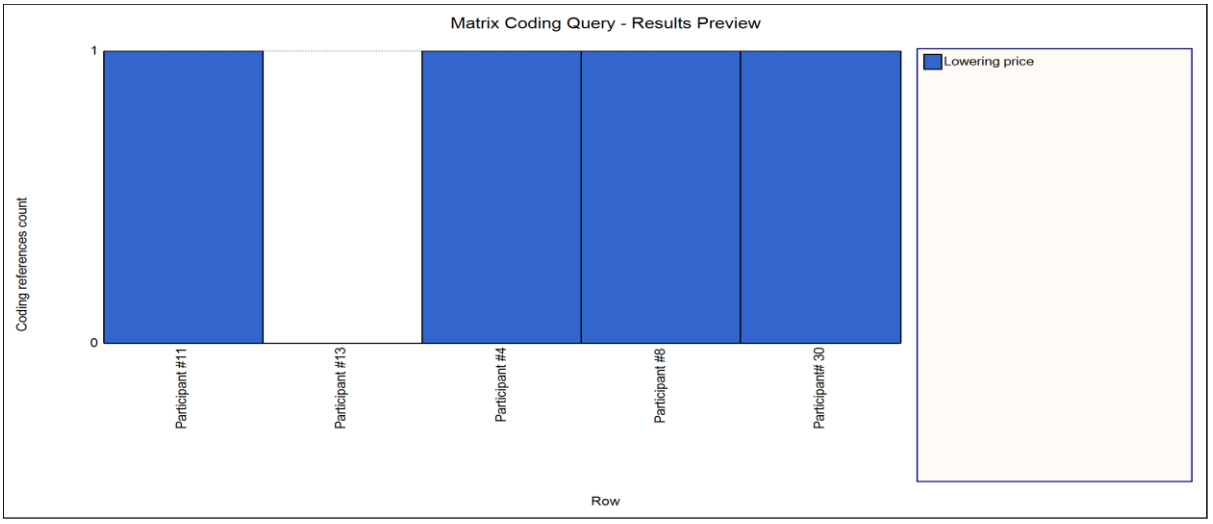

Figure 4.27: Matrix coding query of Lowering price

Source: Nvivo output

More restrictions: Approximately 40% of participants indicated that it was necessary to have some control over the production processes of organic food. These participants who were not engaged in purchasing organic food mentioned that there should be an agency or body to monitor and evaluate the manufacturing of organic food. For example, Participant #13 reported that if there were some kinds of national standards to check the production of organic food. The participant commented that:

- *"I think if there was probably a better national standard for organic" (Participant # 13)*

Another participant who was non-buyer of organic food stated that he needed to make sure that there was an independent agency or authority that monitored the organic food industry. The following is quoted from his interview:

- *"If there is a government body who is independent of the industry then they can they can look at it objectively" (Participant # 8)*

The following Figure 4.28 shows the matrix coding query of this theme.

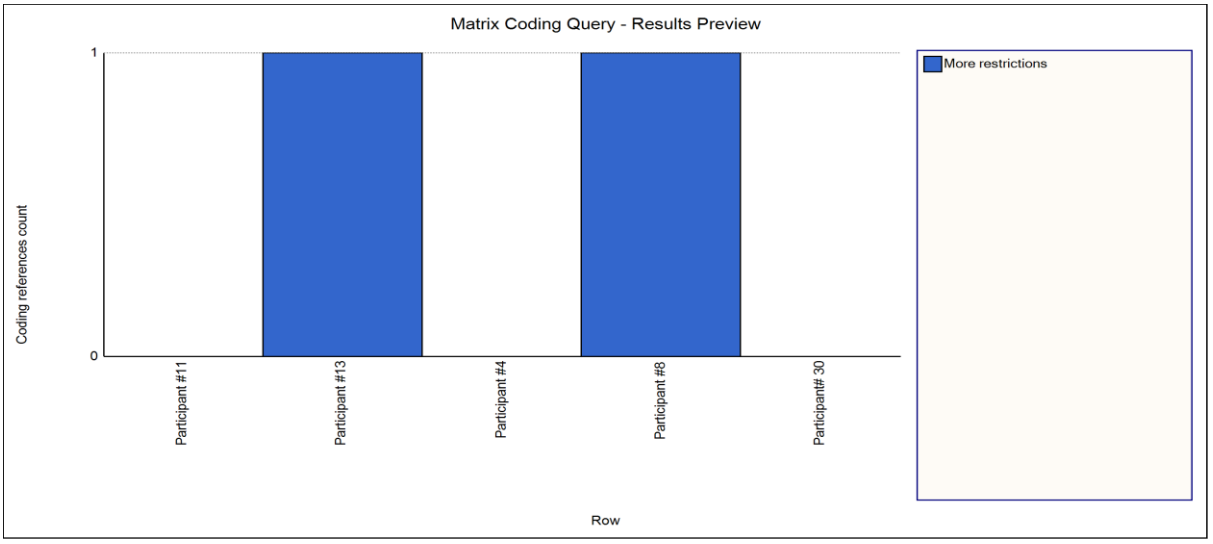

Figure 4.28: Matrix coding query of More restrictions

Source: Nvivo output

Effective promotional campaigns: One of the participants confirmed that organic foods were not well marketed. He mentioned that there was a need to have more effective marketing campaigns to inform people about organic food. This participant stated that organic foods were not clearly advertised. The participant commented that:

- "*Well organic food is not easily advertised or seen, you don't see it very clearly, and you have to look for it" (Participant # 30)*

The following Figure 4.29 shows the matrix coding query of this theme.

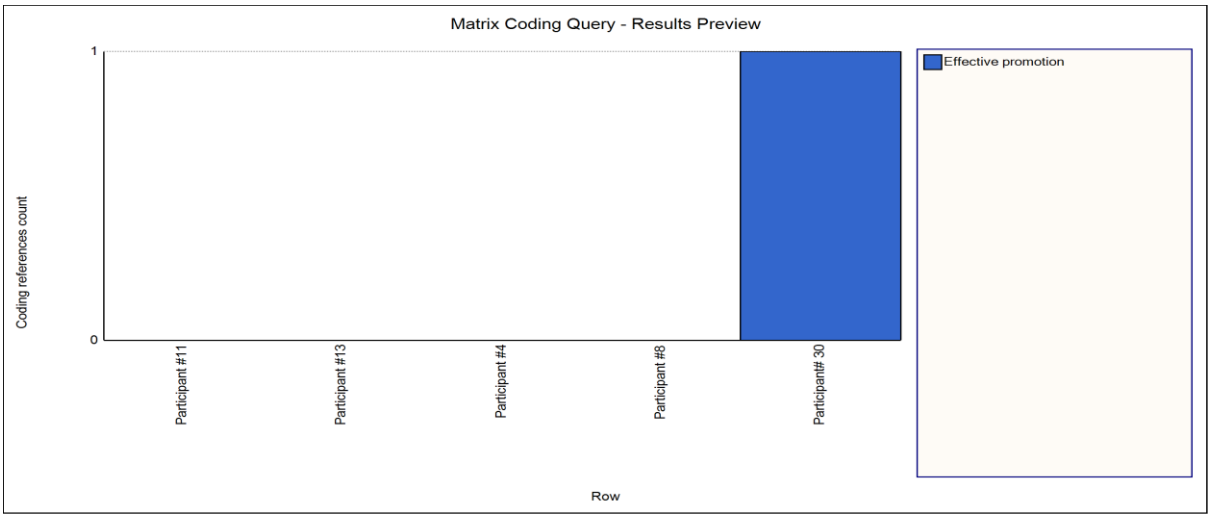

Figure 4.29: Matrix coding query of Effective promotion

Source: Nvivo output

4.4.13 Consumers' willingness to recommend organic food

As previously confirmed in prior studies, subjective norms played a very important role in influencing consumers' organic food purchasing decisions. The researcher believed that it was necessary to ask the participants who were engaged in purchasing organic food if they would recommend that their relatives, friend, colleagues, and others buy organic food. The findings showed that the majority of participants who bought various forms of organic food were very willing to recommend to their friends and family, the benefits of organic food, and to convince them to buy this food as soon as possible. Moreover, some participants, for example Participant #7, strongly recommended that his friends eat organic food due to its health benefits. Participant # 2 was also very happy to mention his experience in persuading one of his friends to switch from eating conventional food to organic food. Conversely, some of the participants were not willing to recommend that their family, friends and others buy organic food due its high price. Further, two of the buyers of organic food were not sure whether to recommend or not. Two participants (Participant # 12 and Participant # 6) pointed out that they were willing to recommend organic food just to their friend who can pay more to buy it. One of the participants (Participant #1) indicated that he was a new consumer of organic food, but when his experience of organic food was heightened he would be likely to recommend that others buy organic food. The following Table 4.12 summarises the participants' willingness to recommend organic food.

Table 4.12: Consumers' willingness to recommend organic food

No	Theme	No. of participants	% of sample
1	Yes	19	76%
2	No	4	16%
3	Not sure	2	8%

The participants commented that:

- "*Yes I recommend the family and my friends because I try to convince them to purchase organic food because it is very healthy, protect you from any disease"*
  (Participant # 29)
- *"I suddenly want to recommend them to switch them from the conventional food to organic food, but again it depends on their understanding of organic food, I would like them to use organic food because the procedures are quite different, it is environmentally friendly, friendly for your health, and friendly for your family health*

as well. So yes I would like to recommend, I would like to give the positive side of the organic food" (Participant # 2)

- *"I certainly do that, because I am consuming organic food I can see the benefits of that and I have experience of those benefits so I advise my friends to consume this food and obviously you will have results, but consistently if you eat organic food you have good health benefits in comparison of whatever you consuming if it is nonorganic" (Participant # 7)*
- *"Well my friends and family who can spend more on food I defiantly will recommend them to buy organic food instead of inorganic" (Participant # 6)*
- *"I would recommend to my friends if they could afford to buy organic food" (Participant # 12)*
- *"If I have a good experience with this organic Quinoa definitely recommend as I do with anything I like really that would tell people about interest" (Participant # 1)*
- *"I haven't gone out of my way to recommend it but I've been recommended by friends actually some friends have recommended me like the cafe there and yeah they are really good, but if eat something I don't tell the other this is organic" (Participant # 27)*
- *"No I don't recommend because Intelligent people cook for themselves and we probably so call friends like minded" (Participant # 22)*
- *"No, because they have their own choice, there is enough information out there" (Participant # 21)*
- *"Probably not, I guess because I know my family hasn't got time to go to the shop more frequently and the cost I have spoken to my daughter and she does not buy that because she said it is too expensive and she can only go to the shop once a week so going two or three and four times a week is just not possible" (Participant # 10)*

4.5 Findings of the qualitative study in the theoretical context of TPB and SCT

Based on the findings of the qualitative stage of the research, all participants who participated in the study indicated that the most important reason to buy organic food is the health benefits of such products. Many of the participants reported that they buy and consume organic food to avoid some health risks such as the prevention of various diseases such as cancer. In addition, the findings of the qualitative stage also found that consumers who bought organic food looked at the environmental benefits of organic food. Many of the interviewees stated that they buy such products to protect the environment because they consider organic food to be environmentally friendly. Thus, according to the

SCT, this issue is outcome expectation (Bandura 1994, 1999, 2001, 2004). In addition, according to Li & Zhong (2017) the concept 'outcome expectation' in the SCT is similar to that of 'attitudes' in the TPB.

Furthermore, as indicated in this chapter, many of the participants mentioned that one of the reasons to buy organic food is the influence of their social networks such as friends, family and health experts. Some of them indicated that they bought such products as a result of recommendations or influence from those people. Hence, according to the TPB this issue is called 'subjective norms' and according to the SCT it is called 'social support' (Ajzen 1991; Bandura 1999, 2001, 2004).

Moreover, the findings of the qualitative interviews showed that some of the participants indicated that the high price and limited availability of organic food products made them less likely to continue purchasing those products. Further, most of the participants who did not purchase organic food confirmed that price and availability of such items are barriers that make them avoid buying these foods. Thus, based on the SCT, this issue is called 'self-efficacy', and in the TPB it is called 'perceived behavioural control' (PBC).

Furthermore, based on the findings of the qualitative interviews, two of the participants reported that one of the important drivers that motivated them to buy organic food is the electronic platforms of the companies that market organic food, i.e. social media. As mentioned in this chapter, those who are influenced by social media indicated that they visit the social media of sellers of organic food and read advertisements published on these sites. Further, they receive a lot of information about organic food from such sources. In this regard, the originator of the SCT, Bandura (2004), asserted that media plays an important role in influencing humans behaviour. Further, Pajares et al. (2009) asserted the intersection between SCT and media. Moreover, Shephard et al. (2016) pointed out that SCT was employed to examine the influence of media on consumers' buying behaviours. Hence, social media is one of the media tools.

Based on TPB, consumers' tendency to perform a certain behaviour depends on their behavioural intention. Similarly, SCT uses the term goal as indication to intention to act (Li & Zhong 2017). In addition, this study employed the influence of consumers' demographic characteristics as control variables. Thus, as explained in Chapter Two, one of the variables of the SCT is the individual's demographic characteristics such as gender, age, education and income. Thus, SCT and TPB are the most appropriate theories for the existing study and, therefore, they are selected as guiding theories for this study.

4.6 Chapter summary

This chapter has discussed and analysed the various issues related to consumers' purchases of organic food products. The chapter began by presenting the demographic characteristics and shopping traits of the participants. It then provided information about how consumers have heard about organic food products. Also, discussed consumers' perceptions of the meaning of organic food. Participants were classified and categorised based on their organic food shopping patterns. In addition, this chapter has shown the various forms of organic food products purchased by the consumers. The main objective of the qualitative phase of the research is to explore the essential factors that influence consumers' purchases in the context of organic food. Accordingly, this chapter has explored the essential motives and drivers that encourage consumers to buy organic food products. Furthermore, the chapter has investigated the reasons that some of the participants did not buy organic foods, which helps in understanding the barriers that restrict consumers' purchase of these products. The benefits and drawbacks of buying organic food products were also highlighted. This chapter also has provided insights into consumers' trust in organic food products.

Moreover, consumers' perspectives towards organic labelling were investigated. Finally, related issues such as negative experience with organic food, how to attract new consumers to buy organic food, and consumers' willingness to recommend that others buy organic food have been investigated. Further, this chapter discussed the findings of the qualitative phase in relation to the theoretical context of TPB and SCT. The findings of the exploratory stage of the current research will be addressed in the next chapter (Chapter Five) to develop a proposed conceptual framework and formulate the relevant hypotheses to be tested through an empirical investigation in the confirmatory stage (Chapter Six) of the study.

CHAPTER FIVE: DEVELOPMENT OF CONCEPTUAL FRAMEWORK AND RESEARCH HYPOTHESES

5.1 Introduction

The previous chapter discussed the findings of the qualitative focused interviews. The fundamental objective of the previous chapter was to explore the key factors that potentially influence consumers' organic food purchasing intentions .Hence, the themes extracted from the qualitative stage of the current research were utilised to develop the initial conceptual framework. In addition, the findings of previous studies were also used in the development of the initial conceptual framework. This chapter presents and discusses the development of the proposed conceptual framework. The conceptual framework of this research will be examined in the quantitative stage. The main purpose of the conceptual framework is to examine the influence of various factors on consumers' organic food purchasing intentions. Further, the conceptual framework aims to examine the mediating role of trust in influencing consumes' organic food purchasing intentions.

The literature indicates that the findings of a qualitative phase of any research can be used to create and develop a conceptual framework that will be statistically tested in the quantitative phase (Saunders et al. 2009). Additionally, the results of previous studies can also be adopted in the development of a conceptual framework (Kumar 2019; Sekaran & Bougie 2016). Consequently, the findings of both the qualitative stage and past studies were adopted to create and develop the conceptual framework of the research.

5.2 The constructs of the proposed conceptual framework and related hypotheses

The initial conceptual framework of this research consists of factors extracted from the exploratory stage of the research as well as the findings of past studies. These factors are discussed in detail in Chapter Four of the thesis. Further, the factors are in line with the previous studies found in the literature. The following is a discussion of the constructs of the conceptual framework and related hypotheses.

5.2.1 Certification

Organic certification is defined as a certification process for producers of organic food and other organic agricultural products (Madar & Neacsu 2013). In general, any business directly involved in food production can be certified, including seed suppliers, farmers, food processors, retailers and restaurants (Madar & Neacsu 2013b, p. 103). This construct was

included in the proposed conceptual framework and hypothesised as an influential factor for both consumers' trust and consumers' organic food purchasing intentions. The justification to include this construct in the initial conceptual framework is discussed below.

First, the findings of the qualitative interviews pointed out that certification was one of the factors that influences consumers' organic food purchasing intentions. As discussed in detail in the previous chapter, about 56% of the consumers who were engaged in purchasing different forms of organic food stated that they use certification as a reason to take a decision to purchase organic food. In addition, consumers pointed out that trust towards organic food was completely determined by the certification of organic food. The following are examples of quotes that show how consumers (participants) talked about certification construct:

Participant #21 commented that *"I look for the certification, if it has a certification then I buy"*

Participant #12 reported that *"I guess the best I can do is that I generally buy my organic food from shops where it's certified organic"*

Participant #14 stated that *"I think what is organic should have a certification sometimes I see stickers that say it is organic that has been certified"*

Participant #24 said that *"When I see certified organic I have to trust"*

Participant #21 indicated that "*Well if it has certification on it yes I do trust"*

Second, besides the findings of the qualitative interviews, previous studies indicated that certification is considered an essential factor in the context of organic food purchases (Misra & Singh 2016; Escobar-López et al. 2017; Rana & Paul 2017). Additionally, certification is deemed an important driver towards purchasing organic food because it introduces an element of trust towards organic food products (O'Mahony & Lobo 2017; Rahnama et al. 2017). Also, it is argued that the certification construct is required to reduce the level of distrust in the organic food products (Dumortier et al. 2017). Therefore, the certification construct is employed in this study. Hence two hypotheses were developed. The first hypothesised that the certification construct has a positive influence on consumers' trust towards purchasing organic food, whilst the second hypothesis is that the certification construct directly and positively influences consumers' organic food purchasing intentions. Thus, the two hypothesis were postulated as follows:

H1a: Certification has a positive influence on consumers' trust towards purchasing organic food.

H1b: Certification has a positive influence on consumers' organic food purchasing intentions.

5.2.2 Packaging and labelling

Packaging is defined as "all products made of any materials of any nature to be used for the containment, protection, handling, delivery and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer" (Olsson et al. 2004, p. 98). Labelling is also defined as "any words, particulars, trademarks, brand name, pictorial matter or symbol relating to a foodstuff and placed on any packaging, document, notice, label, ring or collar accompanying or referring to such foodstuff " (Cheftel 2005, p. 533).

As outlined in the previous chapter, packaging and labelling were presented as a themes or factors that consumers (participants) took into consideration when they purchased organic food. As discussed, about 88% of the consumers who were engaged in purchasing organic food products stated that they used a label as an evidence that the product is organically produced. According to some of the participants, the label played a vital role in building trust towards organic food, and so they purchased it. Further, a number of participants indicated that labels are important for them to understand organic products. The findings of the qualitative interviews also reported that the label was one of the drivers that influences them to purchase different forms of organic food. In addition, in the qualitative interviews, approximately 44% of participants talked about the importance of packaging in the choice of organic food. They pointed out that packaging is one of the influential factors in the decision to purchase organic food. The following quotes clearly show that labelling and packaging were deemed as important factors in building trust towards purchasing organic food, and directly influence consumers' organic food purchasing intentions. The participants commented that:

Participant #5 mentioned that "label is important usually if you want to buy anything we look for the labelling of the *food and if we are buying anything we look at the content of the food and if we find this thing is good for us so we are buying those things"*

Participant #3 stated that *"Organic label is very important for organic food, we need to know what are we eating even nowadays probably there is a carbon footprint also associated with the food production, so label is very important to know where is the food coming from, how is the food produced, and what is the carbon and environmental footprint associated with the food that we are consuming"*

Participant #6 indicated that *"I trust just whatever they label on the product"*

Participant #25 reported that *"I just trust in the label, if it has label it must be organic"*

Participant #2 stated that *"Sometimes the packaging of organic food attracts me to buy it"*

Participant #21 said that *"If organic food is packaged I will buy it"*

Participant #3 confirmed that *"I think that is the only criteria is just go to the packaging of the food and we see who has produced that food and what are the key ingredients or what are the criteria to produce organic foods"*

In line with the findings of the qualitative interviews of this research, prior studies also highlighted the importance of labels and packaging in the context of organic food products. For instance, with regards to labelling, scholars argued that the use of labels helps and supports the firms to compete in the market and, therefore, increases the market share and sales of these firms (Fuerst & McAllister 2011). In addition, the literature indicated that the label of organic food plays a very important role in attracting consumers' attention to the product (Drexler et al. 2018). Moreover, the level of consumers' trust towards organic food is strongly influenced by the label (Hamzaoui Essoussi & Zahaf 2008; Yin et al. 2016; Ayyub et al. 2018). Pandey and Khare (2017) argued that, to decrease the level of mistrust in organic food, consumers tend to use labels as a reliable source to ensure that the product is organically produced. Lee et al. (2018) and Teng and Wang (2015) also investigated the effect of organic labels on consumers' intentions to consume organic food. In contrast, Drexler et al. (2018) argued that German consumers of organic foods were not interested in the labels of organic food and, it was difficult to persuade those consumers to purchase such products.

With respect to packaging, the literature shows that packaging is essential for modern fast-moving consumer goods as it prevents damage that can occur to the food, thereby maintaining the value of food and protecting consumers' health (Coles et al. 2003; Marsh & Bugusu 2007; Hawkes 2010). Moreover, packaging plays a very important role in

distinguishing organic food from non-organic food (Salgado-Beltrán et al. 2013). Additionally, the use of packaging leads consumers to trust the product (Cahyorini & Rusfian 2011). In the food domain, packaging influences consumers to trust food products (Buzby & Ready 1996; Shah et al. 2013). In contrast, Vehapi and Dolićanin (2016) found that the packaging construct was not considered an important factor when purchasing organic food products. Therefore, due to the essential role of both packaging and labelling in the context of organic food, packaging and labelling were employed in this study and were also merged into one construct (Kotler et al. 2016). This research hypothesised that packaging and labelling have a positive influence on both consumers' trust of organic food and consumers' organic food purchasing intentions. Thus, **H2a** and **H2b** were postulated as follows:

H2a: Packaging and labelling have a positive influence on consumers' trust in purchasing organic food.

H2b: Packaging and labelling have a positive influence on consumers' organic food purchasing intentions.

5.2.3 Social media

Social media is a form of online advertising that that uses social networks such as Facebook, Twitter, and YouTube for the purpose of communication between the company and consumers (Ismail et al. 2018). The qualitative interviews found that social media motivated consumers' organic food purchasing intentions. As discussed in the preceding chapter, approximately 8% of interviewees reported that information published on firms' social media sites marketing organic food products, enticed and influenced them to purchase such products. Hence, based on the findings of the qualitative interviews, social media is deemed a means of communication and interaction among consumers and producers or manufacturers of organic food. The following are examples of quotes extracted from the interviews:

Participant #1 reported that *"I get all this information on the internet, nowadays so I've been doing a bit of reading as well, so I think the information I got from various social media outlets that have really pushed me over the edge and at this stage organic food is only a very small portion of my overall shopping, but I anticipate in the coming days in the coming months it will gradually increase"*

Participant #2 commented that *"I do some research, I go to the website and I see how the organic chicken actually produces how or what kind of you know procedure they follow. I recheck it, I confirmed their finding from the website. The website saying all how they produce how the manufacture and all that"*

As shown in the qualitative stage of the research, the participants confirmed that they read about organic food products via different social media sites of the manufacturers, and sellers of organic food. Past studies indicate that companies place considerable value on the way in which social media can be exploited to shape consumers brand perception and influence their buying intentions (Kosarizadeh & Hamdi 2015; Pütter 2017). With regards to marketing, social media leads to an increased level of consumers' trust and intention to purchase products (Hajli 2014). In addition, as shown in Chapter Two, in the field of food marketing, Šerić and Praničević (2018) argued that little is known about the influence of social media on consumers' trust of food products. More specifically, in the context of organic food, Ayyub et al. (2018) suggested that further research is needed to examine the influence of the social media of the firms that market organic food on consumers' trust of organic food. Further, consumers can use social media as a source of information about organic food products (Wang et al. 2019). Thus, marketers need to manage their social media sites to better send positive messages to the consumers about different products (Kudeshia & Kumar 2017).

In addition, as mentioned in Chapter Two, there is a need to conduct research to investigate the influence of social media on the purchase of organic food (Muhammad et al. 2016; Persaud & Schillo 2017; Fathelrahman & Basarir 2018). Conversely, in case of food products, Kuttschreuter et al. (2014) argued that consumers were not likely to use social media channels to obtain information about food products.

This study examines the influence of the social media of companies that market organic food on both consumers' trust of organic food and organic food purchasing intentions. Therefore, due to the importance of the role of social media in the marketing of organic food, the social media construct was used and hypothesised to positively influence both consumers' trust of organic food and consumers' organic food purchasing intentions. Hence, the two hypotheses were postulated as:

H3a: Social media has a positive influence on consumers' trust in purchasing organic food.

H3b: Social media has a positive influence on consumers' organic food purchasing intentions.

5.2.4 Sensory food attributes

In the qualitative stage of the research, participants reported that their decision to purchase organic food was determined by various factors such as the taste, nutrition, and quality of organic food products. With regards to the taste of organic food, approximately 52% of participants stated that organic food is tasty food, and some pointed out that they prefer to purchase organic food because it is tasty. This finding is confirmed by past studies (Bryła 2016; Grzybowska-Brzezinska et al. 2017; Rahnama 2017). About 28% of participants purchased organic food due to its nutritional value. They indicated that they purchased organic food to increase the level of nutrition in their overall diet. Past studies have confirmed nutrition as a major influence on organic food purchases (Ergönül & Ergönül 2015; Dumortier et al. 2017).

Additionally, the findings of the qualitative interviews indicated that about 24% of participants used quality as a driver to purchase organic food. They stated that quality is considered an important motive for purchasing different forms of organic food. This finding is in line with previous studies that found that quality is one of the essential factors influencing consumers' purchases of organic food (Ozguven 2012; Rahnama 2016). Furthermore, about 53 % of participants reported that organic food is considered to be natural food. On the other hand, as shown in Chapter Four, the findings of qualitative stage reported that approximately 20% of participants confirmed that one of the drawbacks of organic food is its short shelf life. They indicated that some forms of organic food expire quickly. Also, about 16% of participants who were purchasing organic food, stated that there was another negative experience with organic food which is that some of forms of organic food, such as fruits and vegetables, have poor appearance. The following are examples of quotes that show the importance of product attributes in the purchases of organic food:

Participant #3 stated that *"I just like it because organic food tastes better"*

Participant #9 said that *"In terms of taste I guess organic food is better"*

Participant #26 indicated that *"Organic food seems to be more nutrition than nonorganic food"*

Participant #12 pointed out that *"Actually, I try to increase nutrition through my food"*

Participant #12 also stated that *"Quality is important for me when I buy organic food"*

Participant #2 asserted that *"I want to consume quality food especially when it comes to organic meat"*

Participant #6 said that *"When you consume organic food you are getting good quality of food"*

Participant #6 mentioned that *"Organic is thing which grows naturally"*

Participant #4 reported that *"For me, organic means derived from nature"*

Participant #12 indicated that *"Sometimes organic food doesn't have a great shelf life. It goes rotten quickly, you have to buy newest"*

Participant #10 stated that *"Also their appearance when you go to the fruit shop the appearance of some of the organic foods doesn't look as good sometimes it looks a little bit rotten I guess because it has not had preservatives added to it. So it doesn't last as long" (Participant # 10)*

Participant #6 outlined that *"I find that organic food doesn't look as good as food which gets inorganic like organic food are when we see the organic food it is not big in size, it is small in size, it doesn't look as good as inorganic food it looks bit different in shape"*

Researchers have argued that the taste, flavour, quality, natural food, appearance, and nutritional value of organic food are classified as food sensory attributes (Jumba et al. 2012; Sangkumchaliang & Huang 2012; Shafie & Rennie 2012; Lee & Yun 2015; Lagerkvist et al. 2016; Grzybowska-Brzezinska et al. 2017). Therefore, in this research, the taste, flavour, nutrition, quality, and appearance of organic food were merged into one construct named Sensory organic food attributes. Further, several studies investigated the influence of product attributes on consumers' organic food purchasing intentions (Lee & Yun 2015; Grzybowska- Brzezinska et al. 2017; Prentice et al. 2019). In addition, Chen and Lobo (2012) investigated the positive influence of product attributes on the consumers' purchase intention of organic food in China. Further, future research should investigate the relationship between product attributes and trust in the context of organic food products (Prentice et al. 2019). Furthermore, quality, nutritional value and taste of organic food are instrumental in establishing trust in organic food (Shih-Tse Wang & Tsai 2014). Thus, based on the aforementioned along with the findings of the qualitative interviews, **H4a** and **H4b** hypothesis were developed and postulated as follows:

H4a: The sensory attributes of organic food have a positive influence on consumers' trust in organic food.

H4b: The sensory attributes of organic food have a positive influence on consumers' organic food purchasing intentions.

5.2.5 Trust

In this research, trust relates to consumers' trust in the organic food product itself, producers and sellers of such products, and the certifying body that confirm that the product is organically produced. The Trust construct is one of the factors extracted from the qualitative interviews. Approximately 68% of participants in the first stage of the research reported that they trusted organic food and the producers and retailers who are associated with the manufacturing and marketing of such products. On the other hand, about 32% of participants in the qualitative interviews pointed out that they have doubts about organic food. Here are some of the quotes taken from the interviews:

Participant #1 reported that *"I am actually trusting the manufacturer of organic food"*

Participant #12 stated that *"I trust the supermarkets with their organic branding, hopefully they're doing the right thing"*

Participant #17 indicated that *"I think there is a trust"*

Participant #2 commented that *"Trust factor is really important because you know if you trust any brand you keep on purchasing"*

Participant #26 stated that *"I don't think there is a lot of trust in the food industry"*

In addition, the literature indicates that purchasing and consuming organic food is an act of trust (Escobar-López et al. 2017). Also, trust factor is deemed as important factor in the decision of purchasing organic (Dumortier et al. 2017). Trust has been identified as a key factor in increasing consumers' purchases of organic food (Anisimova 2016; Misra & Singh 2016; Slamet et al. 2016). Further, prior studies used trust as a mediating factor in their conceptual frameworks (Shih-Tse Wang & Tsai 2014; Teng & Wang 2015; Nuttavuthisit & Thøgersen 2017; Pandey & Khare 2017). As well as using trust as a mediator, several studies have used trust as independent factor that influences consumers' organic food purchasing intentions (Kouy et al. 2016; Nandi et al. 2017).

In contrast, Padel and Foster (2005), in their study conducted in the United Kingdom, argued that consumers did not trust the organic food products in supermarkets. Additionally, as discussed in Chapter Two, there is a need to conduct further research to understand the effect of trust on consumers' purchases of organic food. Therefore, based on the findings of the qualitative interviews and what is known from the literature, and in to response to the gap in the literature, the Trust construct was included in the proposed conceptual framework of the research and dealt with as a mediator between the Certification, Packaging and labelling, and Social media constructs for consumers' organic food purchasing intentions. The Trust

construct was also employed as an independent variable that directly influences consumers' organic food purchasing intentions. Thus, based on the aforementioned, the seventh hypothesis **H5** was postulated as:

H5: Trust has a positive influence on consumers' organic food purchasing intentions.

5.2.6 Health concerns

The findings of the qualitative stage of the current research found that health concerns were one of the most influential factors motivating the purchase of organic food in Australia. As shown in the previous chapter, all of the participants (100%) engaged in purchasing organic food reported that they purchased and consumed organic food due to their health benefits. The following are quotes from the interviews that show the importance of health concerns in the context of organic food:

Participant #1 said "*I think it is got to be healthy*"

Participant #2 stated that *"The first reason is my healthy lifestyle"*

Participant #5 reported that **"***They are good for our health"*

Participant #6 indicated that "*Mainly it is the health reason"*

Participant #7 outlined that "*Health benefits are the main reason"*

Participant #26 stated that *"I am happy that we are eating meat that is free of the pesticides, and the benefits the reason to buy organic food is health driven"*

Participant #27 mentioned that **"***I do mention it is like healthier for you, so, I guess like living longer maybe healthier maybe it helps your immune system organic food would be good for weight. You wouldn't gain much weight"*

Prior studies have debated several factors that influence consumers' organic food purchasing intentions over a period of time. Health concerns are one of the most important factors that influence consumers' intentions to purchase organic food (Lea & Worsley 2005; Gracia Royo & de- Magistris 2007; Oraman & Unakitan 2010; Paul & Rana 2012; Nasir & Karakaya 2014; Effendi et al. 2015; Misra & Singh 2016; Petrescu et al. 2017; Apaolaza et al. 2018; Asif et al. 2018; Ditlevsen et al. 2019). Further, prior studies have noted that consumers who are interested in health issues are more likely to purchase organic food (Lee et al. 2018). interestingly, the literature indicates that Australian consumers recognise health as the key reason for the purchase of organic food (Smith & Paladino 2010; Nguyen & Ha 2016; Anisimova 2016). Also, a number of studies conducted in the area of organic food have hypothesised that health concerns positively influence

consumers' organic food purchasing intentions (Dumea 2013; Yadav 2016; Asif et al. 2018). In contrast, a study conducted in Hong Kong by Cheung et al. (2015), found that the health factor did not have a significant influence on consumers' intentions to purchase organic food. Similarly, Michaelidou and Hassan (2008) reported that the health concerns factor played a small role in shaping consumers' organic food purchasing intentions. Accordingly, health concerns are deemed to be crucial factor in the area of organic food products, and hence, based on the above discussion, the eighth hypothesis was developed. This hypothesis deals with the Health concerns construct and organic food purchasing intentions.Thus, **H6** was postulated as follows*:*

H6: Health concerns have a positive influence on the consumers' organic food purchasing intentions.

5.2.7 Environmental concerns

The qualitative phase of the current research reported that environmental concerns were one of the themes that the interviewees took into consideration when purchasing organic food. As presented in the preceding chapter, about 60% of participants stated that they purchased organic food for environmental reasons. The following are quotes from the interviews:

Participant # 3 stated that *"I want to have environmentally sustainable food"*

Participant # 23 confirmed that *"Maybe environmental factors that not much stress for the environment with the chemicals"*

Participant #19 said that *"Organic food probably does bring my mind more to the environment"*

Participant #12 commented that **"***I think it is better for the environment if people can be reducing the amount of chemicals that they are using"*

On the other hand, the literature indicates that environmental concerns are one of the issues that influence consumers to purchase and consume various forms of organic food (Laureti & Benedetti 2018; Schrank & Running 2018; Ditlevsen et al. 2019). Further, it states that organic food is deemed to be an environmentally friendly product (Baudry et al. 2017; Peštek et al. 2018). Thus, consumers are more likely to purchase organic food products (De Toni et al. 2018). Moreover, past studies have investigated the positive influence of environmental concerns on intentions to purchase organic food (Hassan

et al. 2015; Leong & Paim 2015; Hwang 2016; Asif et al. 2018). In contrast, Hwang (2016) and Rahnama (2017) argued that environmental concerns are more likely to have a negative influence on consumers' intentions to purchase organic food. Therefore, environmental concerns are represented in the ninth hypothesis that was developed on the basis of the findings of the qualitative interviews and the above previous studies. Hence, the H7 hypothesis was postulated as:

H7: Environmental concerns have a positive influence on consumers' intentions to purchase organic food.

5.2.8 Subjective norms

In the qualitative stage of the current research, some interview participants reported that they were influenced by the opinions given by their social networks such as family members, relatives, and friends and other reference groups about the benefits of purchasing and consuming organic food. About 24% of interviewees were influenced by their relatives and friends when they decided to purchase various forms of organic food. According to the Theory of Planned Behaviour, this construct is called subjective norms (Ajzen 1991). As a result, in this study, this theme was named Subjective norms. The following quotes show that subjective norms is a motive for purchasing organic food for some of the participants:

Participant # 27 said that *"I've been recommended by friends actually some friends have recommended me like the cafe there and yeah they are really good, but if I eat something I don't tell the other this organic"*

Participant #1 mentioned that *"I've seen my friends take this food for dinner and lunch, and so yeah this morning I was at Woollies and I actually bought organic Quinoa, and I think a couple of weeks ago we bought some organic vegetables or some form of spinach food I'm assuming because I really didn't pay attention, but I knew it was organic, but that purchase was a bit forced because the non-organic wasn't available, but today I actually made it a point to buy organic Quinoa, simply because I have been told by my doctor that I need to be fitter"*

Participant #1 reported that *"I've got good recommendation from my friends, my own research I've been using it, I am a consumer, I buy organic"*

Along with the findings of the qualitative interviews, past studies also confirmed the influence of subjective norms on consumers' organic food purchasing intentions. For instance, Asif et al. (2018) stated that subjective norms significantly influenced consumers' intention to purchase organic food. Similarly, a study conducted by Laureti and Benedetti

(2018) found that consumers were strongly affected by subjective norms to purchase organic food in Italy. The same result was found by Teng & Wang (2015) and Scalco et al. (2017). Moreover, the mentioned studies hypothesised that subjective norms significantly influence consumers' intentions to purchase organic food. On the other hand, a number of past studies argued that subjective norms were not significant predictors of consumers' organic food purchasing intentions (Leong & Paim 2015; Yazdanpanah & Forouzani 2015). Therefore, and on the basis of the findings of the qualitative interviews and the findings of past studies, **H8** hypothesis was developed as:

H8: Subjective norms have a positive influence on consumers' organic food purchasing intentions.

5.2.9 Availability

The qualitative stage of the research and past studies both identified availability as one of the important factors that influence consumers' organic food purchasing intentions. To begin with, the findings of the qualitative stage indicated that availability is essential in the case of organic food products. About 76% of participants reported that availability influenced their organic food purchasing intentions . For instance, some participants stated that they try to purchase organic food as much as it is available in the market. Other the hand, a number of interviewees mentioned that they were unable to find some forms of organic food due to the limited availability of such products. Other participants claimed that they easily found some of organic food they desired. All of these experiences are strongly related to availability factors of such products. The below quotes show how availability was one of the important motives for or barriers to purchasing organic food:

Participant #1 asserted that *"I think availability is another one because what I saw was there were only limited aisles with organic food whereas the supermarkets are dominated by conventional food, so, I would assume that they need to be more visible in the supermarkets and obviously people need to know more about them"*

Participant #22 outlined that *"I do buy organic food as much as it is available in the market"*

Participant #12 stated that *"Sometimes I do not have access to organic food"*

Participant #19 indicated that *"I walk through Woolworths I don't necessarily see it and maybe if you did see it more you would be more inclined to buy"*

When reviewing the literature, it was found that the availability factor was widely investigated in the area of organic food marketing. For instance, Chen and Lobo (2012) argued that organic food products have to be more available to consumers. Furthermore, limited availability is considered as one of the reasons that consumers avoid purchasing organic food (Thøgersen et al. 2015; McReynolds et al. 2018; Sultan et al. 2018). In addition, an Australian study conducted by Lobo et al. (2014) argued that Australians are likely to purchase organic food products if they are conveniently available in the market. Several studies hypothesised the influence of availability on consumers' intentions to purchase organic food (Effendi et al. 2015; Misra & Singh 2016). In contrast, other scholars have argued that availability did not show any influence on the consumers' organic food purchasing intentions (Tarkiainen & Sundqvist 2005; Kazmi 2012). Accordingly, and due to the important role played by availability in the purchase of organic food, this construct was investigated in this research. Thus, and based on the above discussion, **H9** hypothesis was postulated as:

H9: Availability has a positive influence on consumers' organic food purchasing intentions.

5.2.10 Price

The findings of the qualitative phase of the current research showed that, for 100% of participants, price was one of the important dimensions when purchasing organic food. For instance, some participants indicated that they look to the price as a key determinant when deciding whether or not to purchase such products. Below are some of the quotes that show the importance of the price construct:

Participants #1 stated that *"I have got to say the price will be an important factor, If it is significantly more expensive that may deter me I probably will continue buying organic Quinoa but with other food products it would really depend on the price"*

Participant #22 reported that *"I will go for what is cheapest"*

Participant #26 confirmed that "*We all have a budget that we stick to so it's about being able to get a product at an affordable price"*

Participant #18 said that *"I come down to cost you know a lot of people look at the cost of organic food compared to a conventional and conventional food is cheaper like if you look at organic wheat conventionally or selling wheat as organically it is nearly double, so, that is the price"*

Theoretically, it is argued that consumers are willing to pay a higher price to purchase organic food items (Singh & Verma 2017). In addition, Rahnama (2017) reported that price is seen as an influential factor in consumers' choice of organic yogurt in Iran. In addition, several studies have examined the positive influence of price on consumers' organic food purchasing intentions (Tarkiainen & Sundqvist 2005; Rahnama 2017). In contrast, a number of studies have argued that the price of organic food, being more expensive than conventional food, is a barrier that restricts consumers' ability to purchase it (Slamet et al. 2016; Singh & Verma 2017; Sultan et al. 2018). In contrast, some studies found that there was no significant priority for price in the context of purchasing organic food products for many of the consumers (Hansen et al. 2018; Sobhanifard 2018). Consequently, and based on the findings of both the qualitative interviews delete space and past studies, and due to the importance of price in the context of organic food, the price construct was hypothesised to have a positive influence on consumers' organic food purchasing intentions. Thus, **H10** was postulated as follows:

H10: Price has a positive influence on consumers' organic food purchasing intentions.

5.3 Consumers' demographic characteristics as control variables

As discussed in detail in Chapters Two and Three, participants' demographic variables can be employed as control variables in research (Creswell 2009). Further, the demographic characteristics of participants play a vital role in quantitative research (Creswell 2009; Kumar 2019). In addition, in the context of organic food, there is a need to study the influence of demographic variables on consumers' purchases of organic food (Lee & Yun 2015; Chekima et al. 2017; Torres-Ruiz et al. 2018). Additionally, prior studies have investigated the influence of demographic variables on consumers organic food purchasing intentions, and those variables were used as control variables (Michaelidou & Hassan 2010; Paul & Rana 2012; Wee et al. 2014; Misra & Singh 2016; Singh & Verma 2017). Therefore, in this study, demographic characteristics were stated as control variables to examine the influence of those variables on organic food purchasing intentions in Australia. In this research, demographic characteristics include gender, age, income, education level, employment status, occupation, marital status, the number of children in the household, and ethnicity. Based on the above discussion, the eleventh hypothesis was postulated as:

H11: The different demographic variables produce significant differences in organic food purchasing intentions.

This hypothesis was divided into the following sub-hypotheses:

H11a: There are significant differences in organic food purchasing intentions for consumers of different genders.

H11b: There are significant differences in organic food purchasing intentions for consumers of different age groups.

H11c: There are significant differences in organic food purchasing intentions for consumers of different income levels.

H11d: There are significant differences in organic food purchasing intentions for consumers of different education levels.

H11e: There are significant differences in organic food purchasing intentions for consumers of different employment levels.

H11f: There are significant differences in organic food purchasing intentions for consumers of different occupations.

H11g: There are significant differences in organic food purchasing intentions for consumers of different marital status.

H11h: There are significant differences in organic food purchasing intentions for consumers with different numbers of children.

H11i: There are significant differences in organic food purchasing intentions for consumers of different ethnicities.

Based on the above discussion about the constructs and hypotheses of the current research, the following Figure 5.1 illustrates the proposed conceptual framework developed for this study.

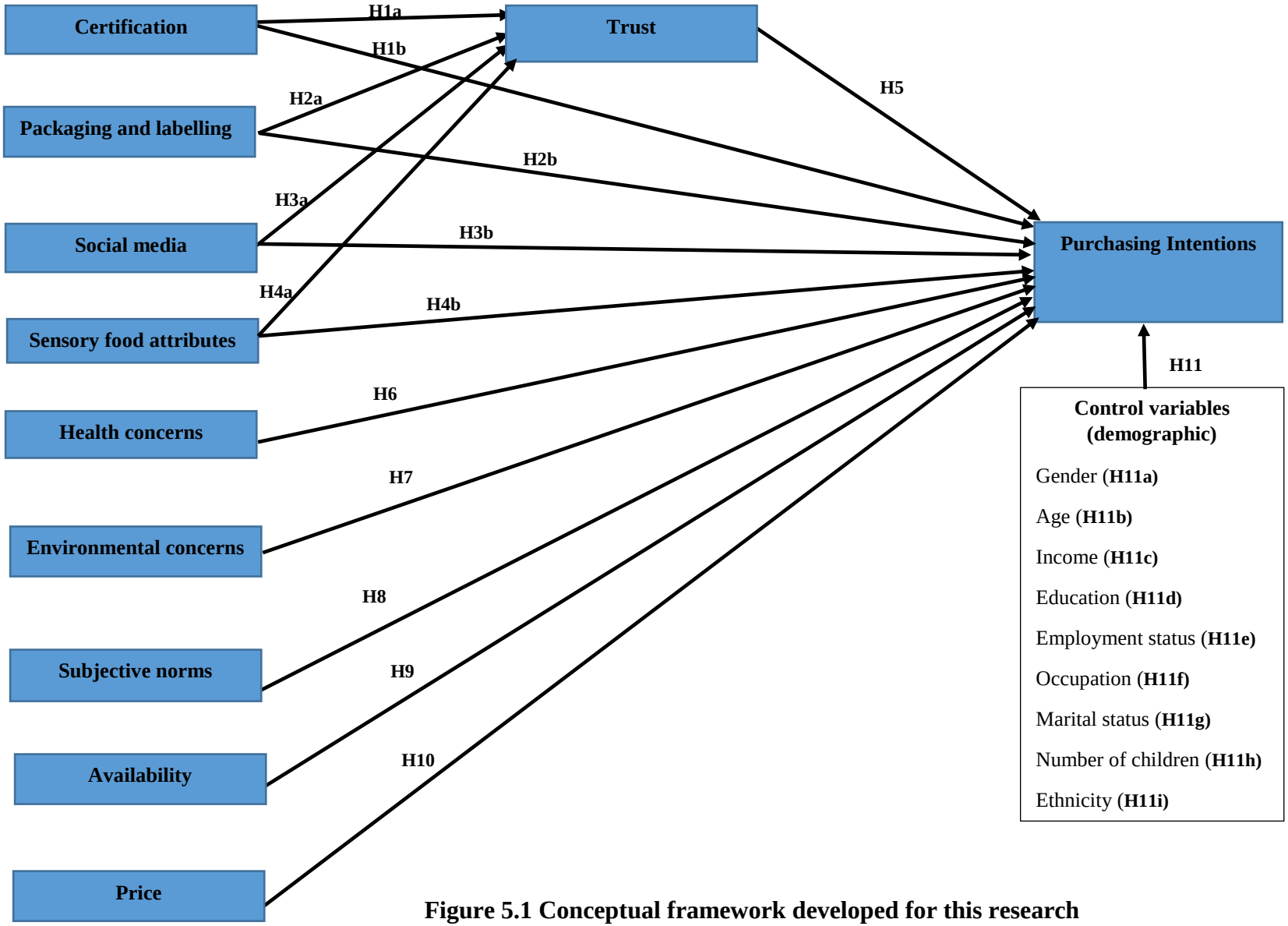

Figure 5.1 Conceptual framework developed for this research

As can be seen in the Figure 5.1, for the purpose of the existing study, and based on the findings of qualitative stage of the study and the previous studies, the researcher utilised four kinds of variables. In this respect, the researcher employed Certification, Packaging and labelling, Social media, Sensory food attributes, Health concerns, Environmental concerns, Subjective norms, Availability, Trust, and Price as independent variables that directly influence consumers' purchase intention of organic food. In addition, Trust was employed as a mediating variable between Certification, Packaging and labelling, and Social media for consumers' organic food purchasing intention. Further, consumers' demographic characteristics were used as control variables that influence consumers' purchase intention of organic food. Moreover, the purchase intention of organic food was employed as a dependent variable. Thus, the current study adopted various kinds of variables.

5.4 Chapter summary

This chapter addressed the process of the creation and development of the initial conceptual framework of the research. The constructs included in the proposed conceptual framework were adopted from both the findings of the qualitative focused interviews and past studies. In addition, along with the research's constructs, nineteen hypotheses were formulated and adopted from prior studies. Hypothesis H1a relates to the influence of certification on consumers' trust towards the purchase of organic food. Hypothesis H1b also deals with the influence of certification on consumers' organic food purchasing intentions. Hypothesis H2a was developed to test the influence of packaging and labelling on consumers' trust in organic food, while H2b relates to the influence of packaging and labelling on consumers' organic food purchasing intentions. H3a was developed to examine the influence of social media on consumers' trust in organic food. Moreover, H3b was developed to test the influence of social media on consumers' organic food purchasing intentions. H4a was suggested to examine the potential influence of sensory attributes on consumers' trust in organic food, while H4b was proposed to test its influence on consumers' intention to purchase organic food.

H5 tests the influence of trust on consumers' organic food purchasing intentions. Further, H6 was developed to test the influence of health concerns on consumers' organic food purchasing intentions. H7 was suggested to test the influence of environmental concerns on consumers' organic food purchasing intentions. H8 was formulated to investigate the influence of subjective norms on consumers' intentions to purchase organic food. Further,

the influence of availability on consumers' organic food purchasing intentions was hypothesised using H9. H10 was developed to examine the influence of price on consumers' organic food purchasing intentions. Finally, demographic variables as control variables are presented in H11 which was developed to determine whether there are any statistically significant differences between consumers' demographic characteristics and their intentions to purchase organic food. H11 was divided into nine sub-hypotheses that include gender H11a, age H11b, income H11c, education H11d, employment status H11e, occupation H11f, marital status H11g, number of children in the household H11h and ethnicity H11i. To verify and examine the abovementioned hypotheses, the next chapter presents the findings and analysis of the confirmatory stage of the thesis, which is the quantitative study using the self-administered survey.

CHAPTER SIX: QUANTITATIVE DATA ANALYSIS

6.1 Introduction

The previous chapter discussed the process of developing the initial conceptual framework of the study. It also discussed the formulation of the hypotheses to be tested. This chapter presents the results of the quantitative data analysis. The survey employed in this stage aimed to confirm the findings of the qualitative stage of the study. This chapter is divided into eight sections. The first section begins with a discussion about the process that was followed by the researcher to prepare the data for analysis, including data editing, handling the blank response, data coding, and data entry into SPSS software version 25. Next is a section analysing the demographic and behavioural characteristics of the survey respondents, followed by the methods utilised to check missing data, outliers, and the normality of the quantitative data of the study. Further, this chapter provides the results of the descriptive statistical analysis such as mean and standard deviation for all variables. Further, this chapter demonstrates the validation of the measurement scale using item-total correlation and reliability coefficient (Cronbach's alpha) for all the variables used in the study to check the internal consistency. The chapter presents the findings of factor analysis (FA) which includes the exploratory factor analysis (EFA) using IBM SPSS Statistics 25, followed by the implementation of the confirmatory factor analysis (CFA) using AMOS software to ensure the reliability and validity of the data and to achieve model fit indices for both the measurement model and structural model.

The next step was to ensure the final and revised conceptual framework of the study, followed by the testing of the stated hypotheses using path analysis in SEM to examine the influence of independent variables on the dependent variable, as well as one-way ANOVA using SPSS version 25 to determine if there were any significant statistical differences between the respondents' demographic variables in accordance with the purchasing intention of organic food. Finally, a summary of the chapter is also presented.

6.2 Data preparation

In quantitative research, after the questionnaires are obtained, the researchers need to prepare data for statistical analysis (Sekaran & Bougie 2016). Data preparation includes several steps such as checking the missing values, editing, coding, and entering data into certain software for analysis (Saunders et al. 2009; Sekaran & Bougie 2016). Therefore, in this research, the researcher followed several steps to prepare the data for statistical analysis. As suggested by Sekaran and Bougie (2016), these steps are as follow:

- **Editing data**

According to Kothari (2004, p. 122), data editing is defined as "a process of examining the collected raw data (especially in surveys) to detect errors and omissions and to correct these when possible". Thus, in this research, the researcher edited the data by reviewing and checking all the collected questionnaires in order to ascertain whether all the questionnaires were completed. In this step, it was found that there were 21 incomplete questionnaires. The next step shows how the researcher treated this issue.

- **Non-response**

In survey research, some respondents may leave a number of questions in questionnaires blank (Sekaran & Bougie 2016). In this case, scholars suggest that the incomplete questionnaires can be discarded from the survey (Creswell 2009; Sekaran & Bougie 2016). In this research, after 390 questionnaires were distributed and collected from the respondents, the researcher found that there were 21 incomplete questionnaires. Those questionnaires were discarded. To reach the required number of the sample size, the researcher distributed another 21 questionnaires.

- **Data coding**

Data of the current research are classified as nominal data, ordinal data, and interval data (Brace 2018). Table 6.1 illustrates the type of data used in this research as they relate to the questions included in the questionnaire.

Table 6.1: The types of data used in the research

No	Question in the survey	Type of data
1	The question relates to gender of the respondents.	Nominal data
2	The question relates to age of the respondents.	Ordinal data
3	The question relates to annual income of the respondents.	Ordinal data
4	The question relates to education level of the respondents.	Nominal data
5	The question relates to employment status of the respondents.	Nominal data
6	The question relates to occupation of the respondents.	Nominal data
7	The question relates to marital status of the respondents.	Nominal data
8	The question relates to the number of children in the household.	Ordinal data
9	The question relates to ethnicity of the respondents.	Nominal data
10	The question relates to place where the respondents shop.	Nominal data
11	The question relates to the person who does shopping in the household.	Nominal data
12	The question relates to the frequency of grocery shopping.	Nominal data

13	The question relates to the influencer (s) of purchasing decisions.	Nominal data
14	The question relates to the sources of information about organic food.	Nominal data
15	The question relates to the advantages of organic food.	Nominal data
16	The question relates to the disadvantages of organic food.	Nominal data
17	The question relates to the frequency to intent to purchase organic food.	Nominal data
18	The question relates to the percentage of organic food purchases.	Ordinal data
19	The question relates to the forms of organic food might be purchased.	Nominal data
20	The question relates to the reasons to trust in organic food.	Nominal data
21	The question relates to the importance of organic food labels.	Nominal data
22	The question relates to the willingness to recommend organic food.	Nominal data
23	Attitudinal questions (items) that measure the constructs of the study.	Interval data

After checking the questionnaires for blank responses, the next step is to code the respondents' responses to the questions included in the questionnaire (Saunders et al. 2009; Sekaran & Bougie 2016). To code the quantitative data, researchers need to code the data into the computer using a statistical software such as SPSS (Kumar 2019). Accordingly, in this research, the researcher coded the data related to demographic characteristics (nominal and ordinal data) into SPSS version 25 software by using numbers from (1) to (11), while other behavioural questions were coded using numbers from (1) to (8). In addition, the data related to interval scale were coded using a five-point Likert Scale. Below is a discussion about the coding process of each part of the survey.

In the first part of the questionnaire, demographic characteristics of the respondents were coded using numbers from [1] to [11]. Gender was coded as follows: [1] represents (Male), [2] represents (Female), [3] represents (Other), and [4] represents (Would rather not say). Age was coded as follows: [1] represents (18-25), [2] represents (26-35), [3] represents (36-45), [4] represents (46-55), [5] represents (56-65), and [6] represents (66 and above). Annual income was coded as follows: [1] represents (less than $20,000), [2] represents ($20.001-$50,000), [3] represents ($50,001-$80,000), [4] represents ($80,001-$110,000), [5] represents ($110,001-$140,000), [6] represents ($140,001 and above). Education level was coded as follows: [1] represents (Secondary education), [2] represents (Diploma), [3] represents (Undergraduate), [4] represents (Postgraduate), and [5] represents (Other). Employment status was coded as follows: [1] represents (Full-time), [2] represents (Part-time), [3] represents (Casual), [4] represents (Unemployed), [5] represents (Retired), and [6] represents (Other). Occupation was coded as follows: [1] represents (Manager), [2] represents (Professional), [3] represents (Technician), [4] represents (Clerical and

Administrative worker), [5] represents (Labourer), and [6] represents (Other). Marital status was coded as follows: [1] represents (Married/de-facto), [2]represents (Divorced/separated), [3] represents (Widowed), and [4] represents (Single).The number of children in the household was coded as follows: [1] represents (0), [2] represents (1), [3] represents (2), [4] represents (3), and [5] represents (More than 3). Respondents' ethnicity was coded as follows: [1] represents (Australian-Aboriginal), [2] represents (Pacific and Torres Strait Islander), [3] represents (Anglo–Australian), [4] represents (New Zealander), [5] represents (European), [6] represents (African**),** [7] represents (Asian), [8] represents (Middle Eastern), [9] represents (North American), [10] represents (South American), [11] represents (Other).

The second part of the questionnaire includes shopping behaviour questions. The first question was coded as follows: [1] represents (Coles), [2] represents (Woolworths), [3] represents (ALDI), [4] represents (Convenience store), [5] represents (Organic / Health Store), and [6] represents (Other). The second question was coded as follows: [1] represents (Parents), [2] represents (Yourself), [3] represents ("Yourself and Spouse"), [4] represents (Spouse/Partner), and [5] represents (Other).The third question was coded as follows: [1] represents (Daily), [2] represents (Weekly), [3] represents (Fortnightly), and [4] represents (Monthly). The fourth question was coded as follows: [1] represents (Spouse/ Partner), [2] represents (Parents), [3] represents (Children), [4] represents (Friends), [5] represents (Colleagues), [6] represents (Relatives), [7] represents (None), and [8] represents (Other). This part is presented in Section 6.3 of this chapter.

The third part of the questionnaire includes questions about the respondents' knowledge of organic food products. The first question was coded as follows: [1] represents (Articles and books), [2] represents (Friends, family and relatives), [3] represents (Media such as TV, newspapers), [4] represents (From advertising), [4] represents (Taught in school/ University), [5] represents (Social media such as Facebook, Twitter etc.), [5] represents (Not sure), and [6] represents (Other). The second question in this section was coded as follows: [1] represents (Health and nutrition benefits), [2] represents (Good for the environment), [3] represents (Good quality food), and [4] represents (Tasty food). The third question was coded as follows: [1] represents (Expensive food), [2] represents (Short shelf life), [3] represents (Limited availability), and [4] represents (Poor appearance). These responses are discussed in Section 6.4 of this chapter.

The fourth part of the questionnaire includes questions about the respondents' organic food purchasing intentions.The first question was coded as follows: [1] represents (Never), [2] represents (Rarely), [3] represents (Sometimes), [4] represents (Often), and [5] represents (Always). The second question of this part was coded as follows: [1] represents (0 % - 10%), [2] represents (11% - 30%), [3] represents (31% - 50%), and [4] represents (51% - 70%), and [5] represents (71% - 100%). The third question was coded follows: [1] represents (Fruits and vegetables), [2] represents (Dairy), [3] represents (Meat and chicken), and [4] represents (Eggs), [5] represents (Grains), [6] represents (Bakery products), [7] represents (Other), and [8] represents (None). The fourth question was coded as follows: [1] represents (Certification), [2] represents (Government regulations), [3] represents (Reputation), and [4] represents (High price of organic food). The fifth question was coded as follows: [1] represents (Label helps consumers better understand what is in the food they purchase), [2] represents (Label helps consumers to differentiate between organic and nonorganic food), [3] represents (Label informs the consumers about the certification of organic food), and [4] represents (Not sure). The last question of this part was coded as follows: [1] represents (Yes), [2] represents (No), and [3] represents (Not sure). This part is presented in Section 6.4 of this chapter. The final part of the questionnaire included attitudinal questions that related to the potential factors that influence consumers' organic food purchasing intentions. This part was measured using a five-point Likert Scale, and those measures are as follows: [1] represents (strongly disagree), [2] represents (disagree), [3] represents (neither agree nor disagree), [4] represents (agree), and [5] represents (strongly agree). Each item in the survey was also coded as shown in the following Table 6.2.

Table 6.2: Coding of measurement items in the survey

Construct	Item code	Number of question in the questionnaire
Health concerns	HC1, HC2. HC3, HC4, HC5, HC6	1,2,3,4,5,6
Environmental concerns	EC1,EC2,EC3,EC4,EC5	7,8,9,10,11
Subjective norms	SN1,SN2,SN3,SN4,SN5	12,13,14,15,16
Price	PR1,PR2,PR3,PR4,PR5,PR6	17,18,19,20,21,22,
Trust	TR1,TR2,TR3,TR4,TR5,TR6,T7	23,24,25,26,27,28,29
Social media	SM1,SM2,SM3,SM4,SM5,SM6	30,31,32,33,34,35
Packaging and labelling	PL1,PL2,PL3,PL4,PL5,PL6,PL7	36,37,38,39,40,41,42
Availability	AV1,AV2,AV3,AV4	43,44,45,46

Sensory food attributes	SFAtt1,SFAtt2,SFAtt3,SFAtt4,SFAtt5,SFAtt6, SFatt7,SFatt8	47,48,49,50,51,52,53,54
Certification	CR1,CR2,CR3,CR4,CR5	55,56,57,58,59
Intention	INT1,INT2,INT3,INT4,INT5, INT6	60,61,62,63,64,65

- **Data entry**

After data are collected, edited, and coded, the last step is to enter the data into the computer software for analysis (Sekaran & Bougie 2016). In this research, the first part of the questionnaire (demographic characteristics) and the final part of the questionnaire were analysed using SPSS version 25, whilst parts 2, 3, and 4 of the questionnaire were analysed using Microsoft Excel software. Along with SPSS, AMOS version 25 was also used to analyse the final part of the questionnaire. The following are discussions of analysis for each part of the questionnaire.

6.3 Analysis of respondents' demographic characteristics

The survey was distributed using a self-administered questionnaire to 390 respondents. Respondents were chosen using the mall intercept method (see Chapter Three). The researcher has taken into account several demographic variables in this stage of the research. All details about the demographic characteristics were discussed in detail in Chapter Three of the thesis. The following Table 6.3 illustrates the demographic characteristics of the respondents.

Table 6.3: Respondents' demographic characteristics

	Characteristics	Frequency	% of sample
Gender	[1] Male	185	47.4%
	[2] Female	201	51.5%
	[3] Other	0	0%
	[4] Would not to say	4	1%
Age	[1] 18-25	45	11.5%
	[2] 26-35	105	26.9%
	[3] 36-45	83	21.3%
	[4] 46-55	97	24.9%
	[5] 56-65	39	10%
	[6] 66 and above	21	5.4%
Education level	[1] Secondary education	150	38.5%
	[2] Diploma	107	27.4%
	[3] Undergraduate	75	19.2%
	[4] Postgraduate	32	8.2%
	[5] Other	26	6.7%
Employment	[1] Full-time	174	44.6%
	[2] Part-time	102	26.2%
	[3] Casual	68	17.4%
	[4] Unemployed	13	3.33%
	[5] Retired	33	8.5%

	Characteristics	Frequency	% of sample
Occupation	[1] Manager	53	13.6%
	[2] Professional	76	19.5%
	[3] Technician	73	18.7%
	[4] Clerical /administrative worker	49	12.6%
	[5] Labourer	80	20.5%
	[6] Other	59	15.1%
Annual income	[1] Less than $20,000	73	18.7%
	[2] $20,001-$50,000	185	47.4%
	[3] $50,001- $80,000	83	21.3%
	[4] $80,001- $110,000	39	10%
	[5] $110,001- $ 140,000	3	0.8%
	[6] $140,001 and above	7	1.8%
Marital status	[1] Married	223	57.2%
	[2] Divorced	16	4.1%
	[3] Widowed	5	1.3%
	[4] Single	146	37.4%
Number of children	[1] 0	221	56.7%
	[2] 1	85	21.8%
	[3] 2	53	13.6%
	[4] 3	19	4.9%
	[5] More than 3	12	3.1%
Ethnicity	[1] Australian Aboriginal	7	1.8%
	[2] Pacific and Torres Strait Islander	2	0.5%
	[3] Anglo-Australian	154	39.5%
	[4] New Zealander	12	3.1%
	[5] European	25	6.4%
	[6] African	50	12.8%
	[7] Asian	106	27.2%
	[8] Middle Eastern	23	5.9%
	[9] North American	2	0.5%
	[10] South American	9	2.3%

Table 6.3 indicates that about 52% of respondents were female while remaining 48% of respondents were male. The majority of respondents were between 26 and 55 years of age, accounting for around 73% of the sample's respondents. The majority of respondents (65.89%) had completed secondary education and diploma followed by tertiary education (27.4%). The highest proportion of respondents (44.6%) were employed on a full-time basis, followed by 43% of respondents who had either casual or part-time jobs. Twelve percent of respondents were retired or unemployed. The respondents worked in a variety of jobs, and the majority of them (68.7%) earned between AUD 20,001 and AUD 80,000 annually, and the highest proportion of them (57.2%) were married. About 56.6% of respondents had no children, whilst 40% of them had between one and three children. The highest percentage of respondents (39.5%) were Anglo-Australian, followed by Asian (27.2%).

6.4 Analysis of behavioural questions

- **Analysis of Part 2 of the questionnaire**

As previously mentioned in Chapter Three, in a marketing survey, it is important to employ behavioural questions in the questionnaire which must be answered prior to the attitudinal questions (Brace 2018). Thus, the second part of the survey contained generic questions such as behavioural questions related to shopping behaviour. These questions relate to place of grocery shopping, the person who buys the groceries, the frequency of grocery shopping, the influencer on the buying decisions in the household. The following are discussions of those questions.

The first question: Where do you usually do your grocery shopping?

In this question, the researcher asked the respondents to indicate the place where they shop. Various shopping places were listed in the survey, such as Coles, Woolworths, ALDI, convenience stores, and organic and health stores. The following Figure 6.1 presents the responses to this question.

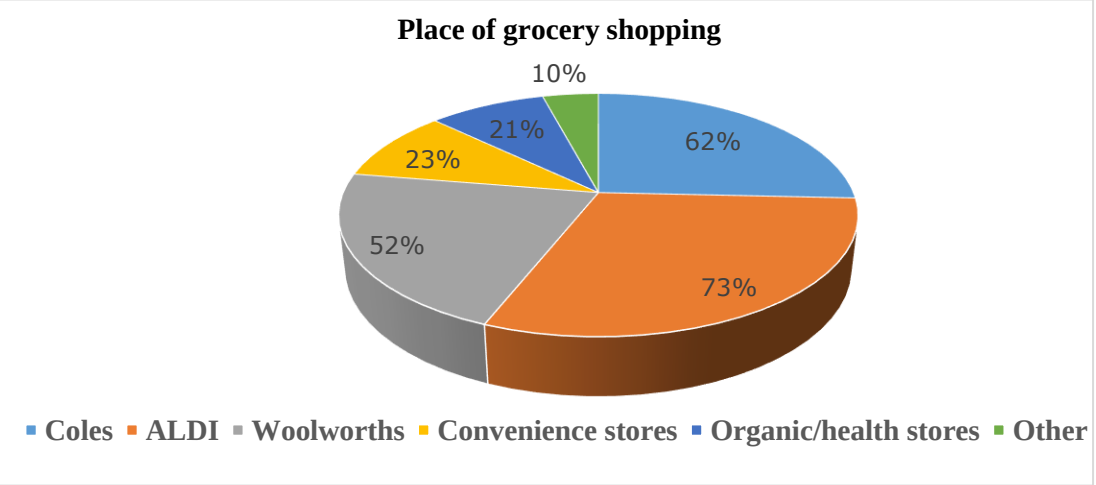

Figure 6.1 Where the respondents did their grocery shopping

As shown in the Figure 6.1, ALDI, Coles, and Woolworths were the main places for grocery goods shopping for the majority of the respondents, followed by convenience stores, organic/health stores, and Other.

The second question: Who does the grocery shopping in your household?

As previously mentioned in Chapter Three of this thesis, this kind of question is widely used by many researchers in the Marketing discipline (Shamsudeen & Aldhamiri 2017; Wong &

Nair 2018). Thus, the researcher asked this question to understand who buys the grocery products in the households. In this question, the researcher asked respondents to mention the person who does the shopping in the household. Several options were listed in the questionnaire namely, parents, the respondent him/her self, jointly (the respondent and his/her spouse), spouse/partner, and Other. The following Figure 6.2 shows the responses to this question.

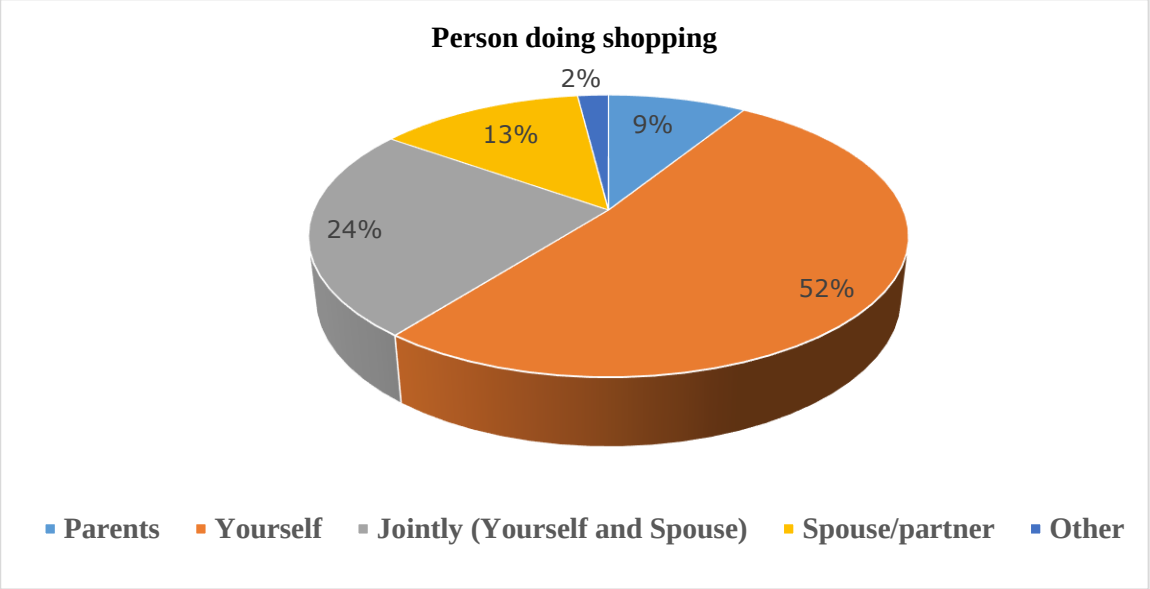

Figure 6.2 The person who does the shopping in the household

It is clearly shown in the above figure that the majority of respondents (52%) confirmed that they shopped for the groceries by themselves. Twenty-four percent of respondents mentioned that they do shopping for their household jointly with their partners or spouses. Other respondents (13%) indicated that the spouse or partner is the person who does shopping in the household, followed by parents and others (11%) as buyers of the groceries for their household.

The third question: How often do you shop for grocery products?

The researcher asked respondents about the frequency of grocery shopping. Four options were listed in the questionnaire: daily, weekly, fortnightly, and monthly. The following Figure 6.3 shows the responses to this question.

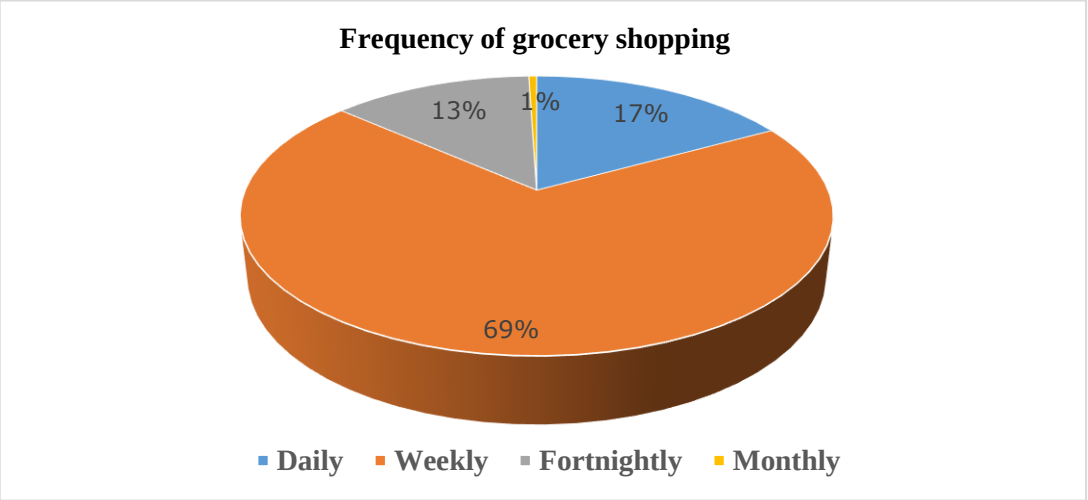

Figure 6.3 Frequency of buying grocery products in the household.

As shown in the figure, the majority of the respondents (69%) stated that they shop for grocery products weekly, whereas 17% of the respondents indicated that they buy their groceries daily, followed by fortnightly (13%), and only (1%) of the respondents responded that they buy grocery products on a monthly basis.

The fourth question: Which of the following influence your purchasing decision?

According to Kotler (2000), marketers have to understand the key purchasing influencers on consumers' choices. Therefore, in this survey, the researcher asked questions about the people who influenced the respondents' buying decision. Various options were given. Those options were as follow: Spouse/partner, Parents, Children, Friends, Colleagues, and Relatives. Further, the researcher added (None) and (Other) as additional options. The following Figure 6.4 shows the responses to this question.

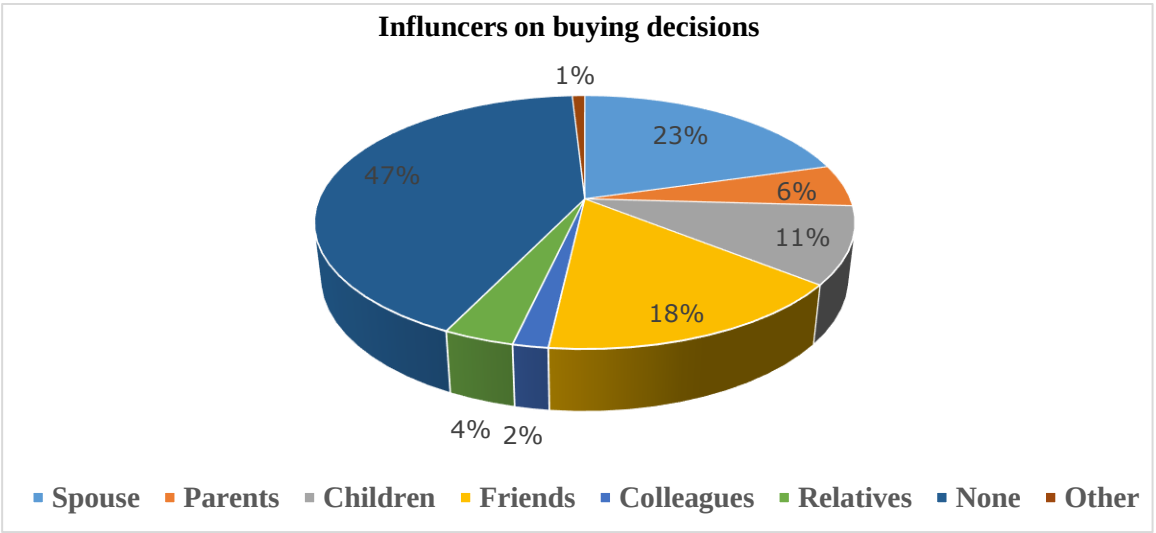

Figure 6.4 Influencers of buying decisions in the household

As can be seen in Figure 6.4, the majority of respondents (47%) confirmed that no-one influenced their purchasing decisions. On the other hand, more than a fifth of the respondents (23%) indicated that their purchasing decisions were influenced by their spouses. Others (18%) stated that their friends influenced their purchasing decisions, whereas 11% of the respondent reported that their purchasing decisions were influenced by their children. Some respondents (6%) pointed out that their purchasing decisions were influenced by their parents, whilst 4% of respondents indicated that their relatives played a role in influencing their purchasing decisions. Two percent of respondents confirmed that colleagues influenced their purchasing decisions. Finally, just 1% of the respondents reported that their purchasing decisions were influenced by others.

- **Analysis of Part 3 of the questionnaire**

In this part of the survey, respondents were asked questions related to their understanding of organic food. As discussed in Chapter Three, this part included three questions. Below is the analysis of those questions.

The first question: Where do you usually get information about organic food?

In this question, the researcher asked respondents about the sources of information about organic food products. Figure 6.5 summaries the responses to these questions.

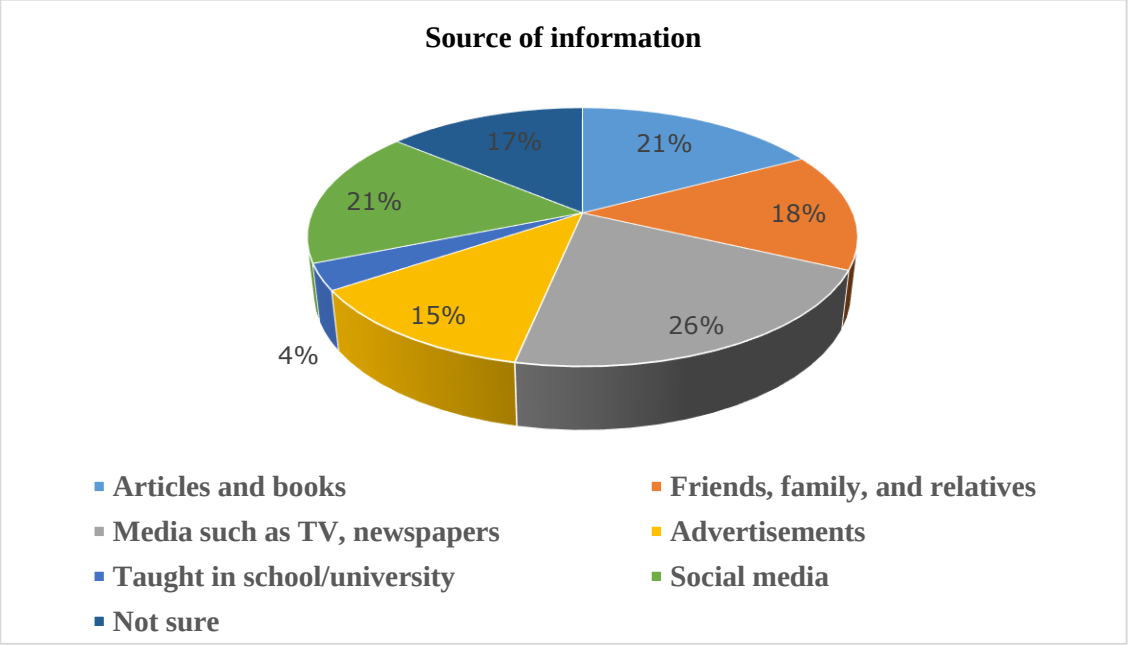

Figure 6.5 Sources of information about organic food

As can be seen in the figure, 26% of the respondents pointed out that mass media, such TV and newspapers, were used as sources of information about organic food products. Twenty-one percent of respondents stated that they read books and journals to learn about such products. The same percentage of respondents knew about organic food products through social media such as Facebook, and using the social media of the manufacturers of organic foods. Eighteen percent of the respondents indicated that they knew about organic food products through their friends, family, and relatives. Seventeen percent of respondents indicated that they were unsure about the sources of information about organic food. Advertising helped 15% of the respondents to learn about organic food products, whereas 4% of respondents found information about organic food from education institutes such as school or university.

The second question: What do you think is the greatest benefit of consuming organic food?

In this question, the researcher intended to understand the respondents' perspectives about the advantage of organic food. The following Figure 6.6 illustrates the responses to this question.

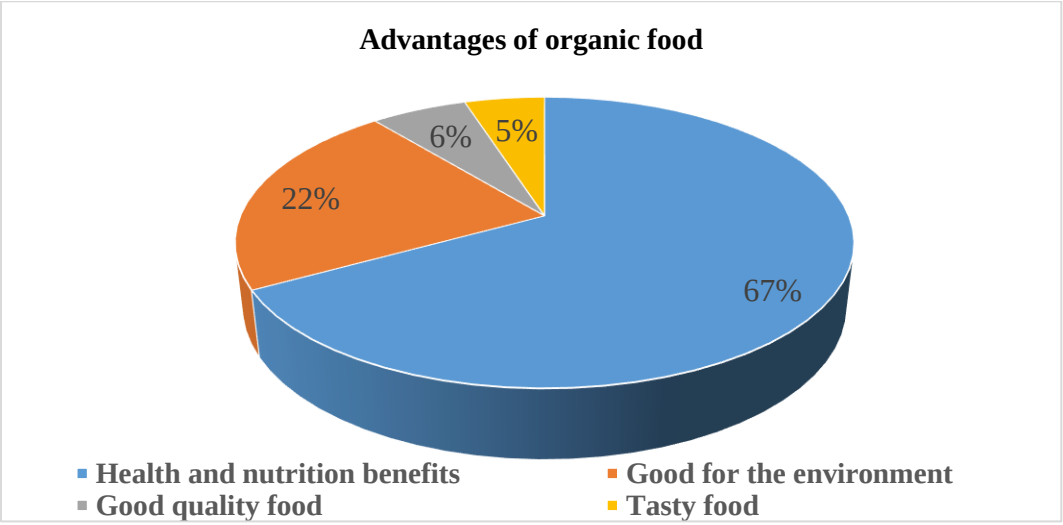

Figure 6.6 Advantages of organic food

The majority of the respondents (67%) stated that health and nutrition were the greatest benefits of organic food. Twenty-two percent of respondents confirmed that organic food is beneficial for the environment. Six percent of the respondents pointed out that quality of

food is one of its advantages. Finally, just 5% of respondents indicated that taste is the greatest benefit of organic food.

The third question: What do you think is the greatest drawback of consuming organic food?

As previously discussed in Chapter Three, the respondents were asked to identify the greatest disadvantage of organic food. As shown in Figure 6.7, the majority of the respondents (61%) pointed out that organic food is expensive. Thirty percent of respondents stated that organic food is not readily available. On the other hand, 6% of respondents reported that one of the disadvantages of organic food is its poor appearance, whilst just 3% of respondents indicated that organic food has short shelf-life.

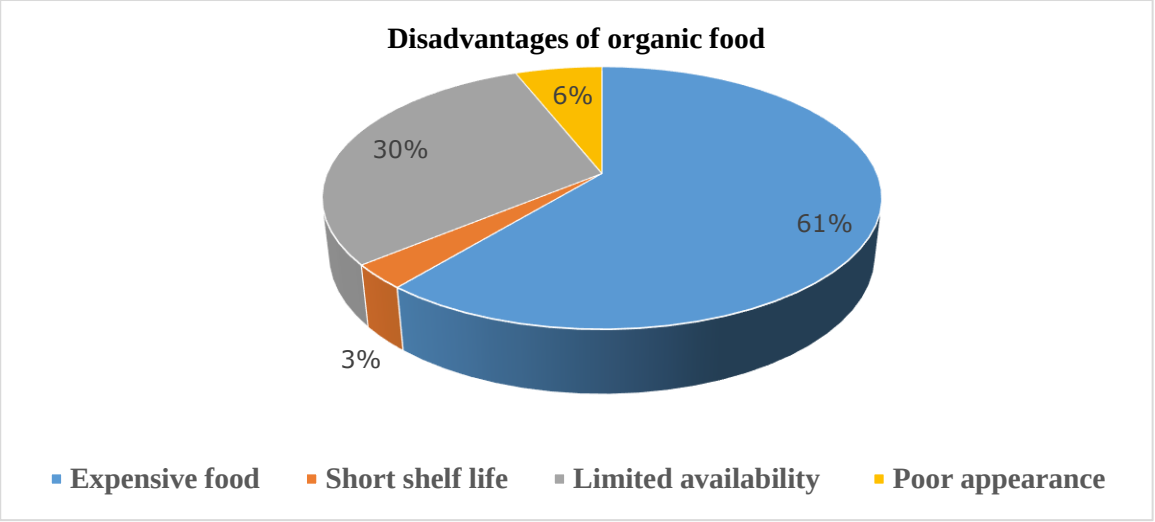

Figure 6.7: Disadvantages of organic food

- **Analysis of Part 4 of the questionnaire**

As previously discussed in Chapter Three, in this part of the survey, six questions were asked to understand organic food purchasing intentions. Next is the discussion and analysis of those questions.

The first question: How often do you intend to purchase organic food?

In this question, the researcher asked about the respondents' intention to buy organic food. In this question, the researcher used a frequency-five point scale: Never, Rarely, Sometimes, Often, and Always. The following Figure 6.8 presents the responses to this question.

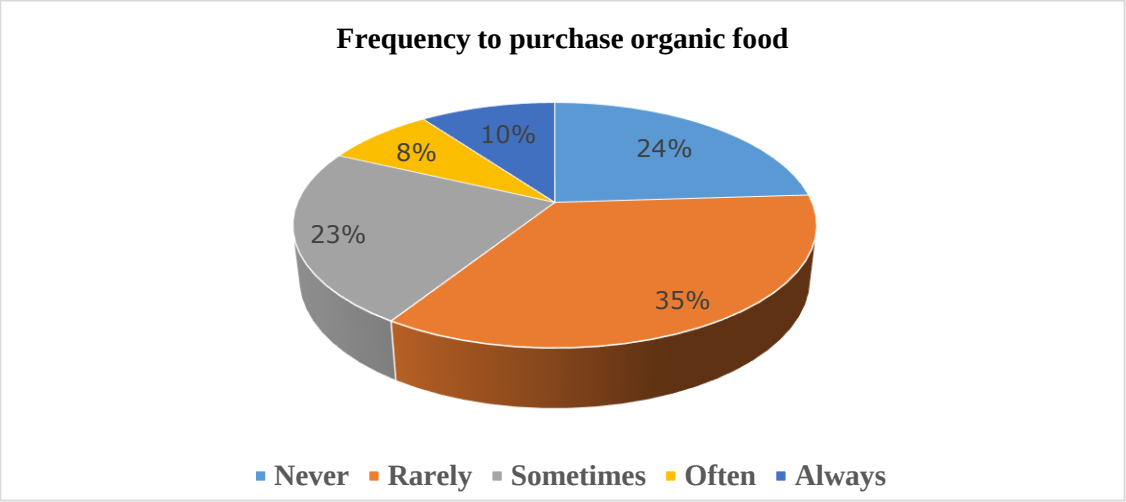

Figure 6.8 Frequency of purchasing organic food

As illustrated in the figure, 35% of respondents indicated that they rarely intend to purchase organic food, whilst 24% of respondents reported that they will never purchase organic food. On the other hand, 23% of respondents indicated that they sometimes intend to purchase organic food. Eight percent of respondents intend to purchase organic food often, and 10% of respondents indicated that they intend to always purchase organic food.

The second question: What percentage of the food you buy could be classified as organic? This question measures the percentage of food purchased as organic food in the household. Different answers were listed in the survey. The following Figure 6.9 shows the responses of the respondents to this question.

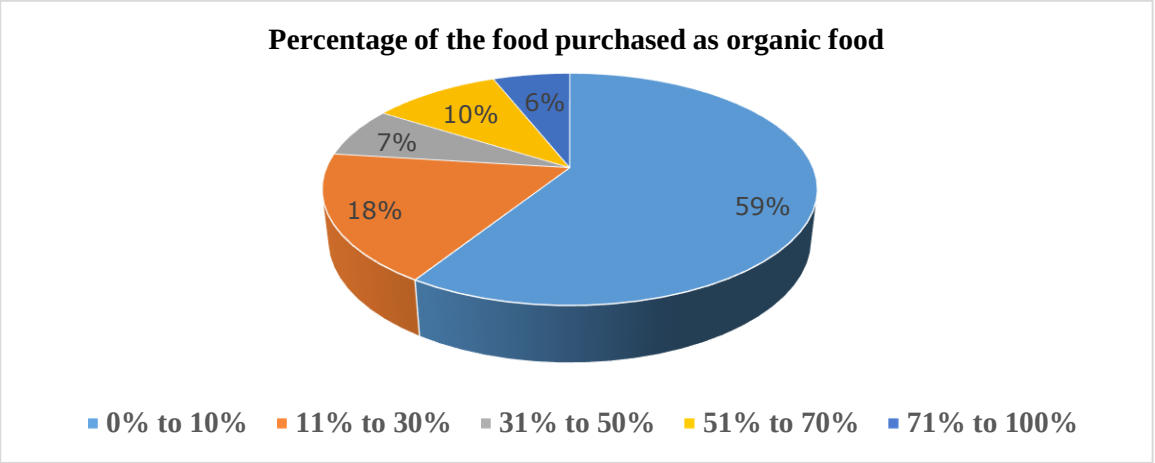

Figure 6.9 Percentage of the food purchased as organic food

The majority of the respondents (59%) stated that 0% to 10% of their food purchases could be classified as organic. In this stage, 18% of respondents indicated that 11% to 30% of their food purchases could be classified as organic. Ten percent of respondents reported that they purchased from 51% to 70% organic food, whereas 7% of respondents purchase from 31% to 50% organic food. Finally, 6% of respondents reported that they purchase from 71% to 100% organic food.

The third question: Which of the following organic products would you buy in the future?
With this question, the researcher was seeking to understand the forms of organic food products that respondents would purchase in the future. Figure 6.10 demonstrates the different kinds of organic foods that would be purchased by respondents in the future. As shown in the pie chart, 52% of respondents confirmed that they would purchase organic fruits and vegetables. Twenty-seven percent of the respondents stated that they would purchase organic meat and chicken. Also, organic dairy would be purchased by 23% of respondents. Organic grains such as rice, seed, and wheat would be purchased by 21% of respondents. Some of respondents (16%) reported that they would purchase organic eggs. Fourteen percent of respondents stated that would not purchase any kind of organic food. Eight percent of the respondents would purchase organic bakery products, and just 2% of respondents would purchase other forms of organic food.

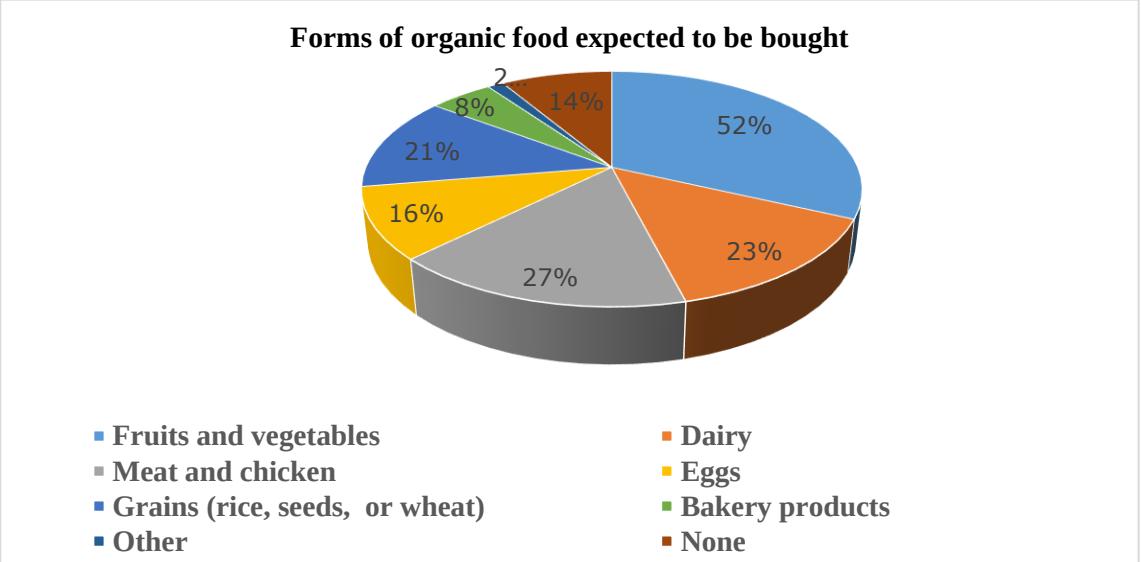

Figure 6.10 Forms of organic food products that would be purchased

The fourth question: What enhances your level of trust in organic food products?

With this question, the researcher sought to understand what contributes to increasing level of trust in organic food products. The following Figure 6.11 illustrates the various reasons for increasing trust in organic food products.

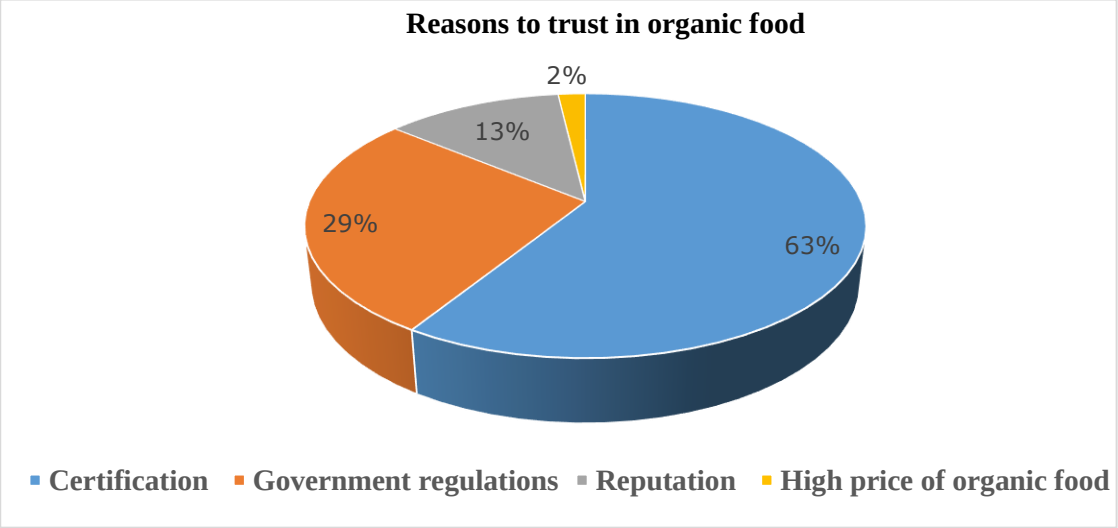

Figure 6.11 Reasons to trust organic food

The majority of the respondents (63%) pointed out that they use certification as evidence that the food is produced organically, whereas 29% of the respondents stated that government regulations were one of the factors that contribute to establishing trust in organic food. Thirteen percent of respondents reported that the reputation of the people associated with the production of organic food is a reason to trust organic food. Finally, 2% of respondents indicated that the high price of organic food leads them to trust organic food.

The fifth question: How important is the organic food label to you?

In this question, the researcher sought to understand the importance of organic food labels. Figure 6.12 shows the responses to this question.

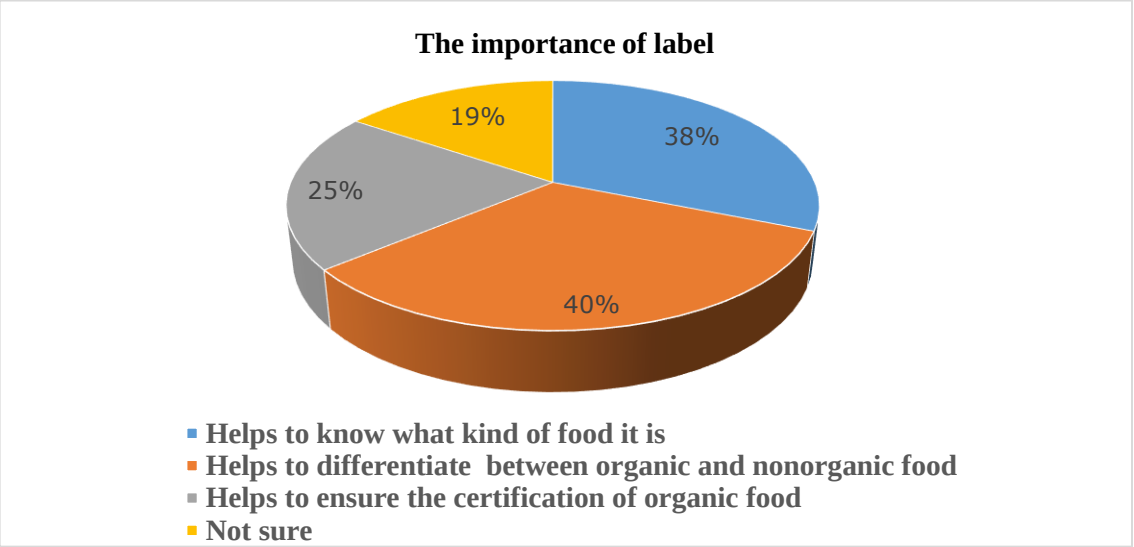

Figure 6.12 The importance of organic label

As illustrated in the above figure, 40% of respondents pointed out that labels assist them to distinguish between organic and non-organic food and to ensure that they purchase organic food. Thirty-eight percent of respondents reported that they use labels as a way of identifying the kind of food they purchase. Twenty-five percent of respondents stated that they use the labels to ensure the certification of organic food. Finally, 19% of the respondents were unsure about how to answer this question.

The last question: Would you be willing to recommend others (family, friends, colleagues, etc.) to consume organic food?

The researcher asked this question to investigate the willingness of respondents to recommend organic foods to others such as family, friends, or others. The following Figure 6.13 shows the responses to this question

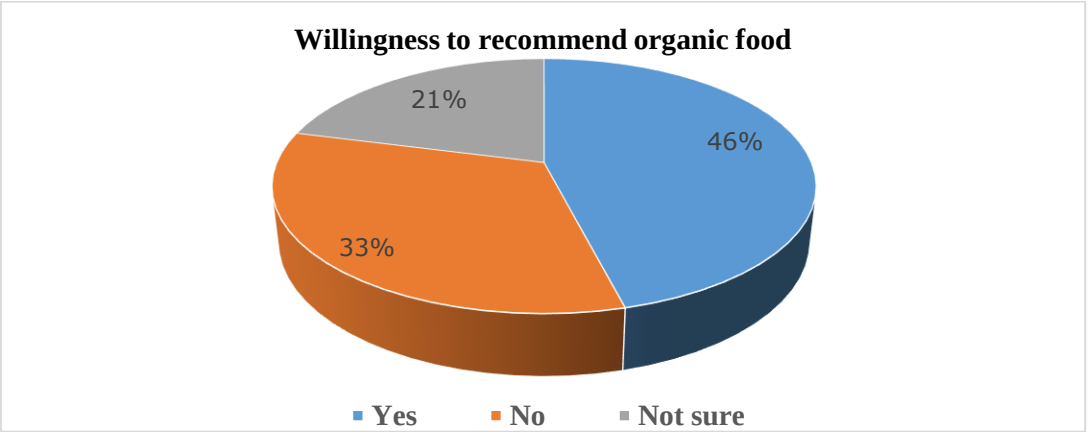

Figure 6.13 The respondents' willingness to recommend organic food

In this survey, three answers were listed: (Yes, No, Not sure). As illustrated in the figure, 46% of respondents reported that they would recommend that their friends, family or others purchase organic food. Thirty-three percent of respondents would not recommend that others purchase organic food, whilst 21% of respondents stated that they were unsure whether to recommend the purchasing of organic food to others.

6.5 Analysis of the interval data of the survey

6.5.1 Checking missing data, outliers, and normality of data

In an analysis of quantitative data, scholars argue that data has to be free of missing values and outliers, and must also be normally distributed (Kothari 2004; Von Hippel 2004; Hair et al. 2010; Sekaran & Bougie 2016). With regards to missing data, it is important for researchers to check for missing values in the data set (Hair et al. 2010). One of the statistical methods for determining values missing from data sets is Missing Value Analysis which is available in SPSS software (Pigott 2001; Von Hippel 2004; Hair et al. 2010). Thus, in the current research, after collecting all the questionnaires including the additional 21 questionnaires, the researcher utilised SPSS software version 25 and performed the option 'Missing Value Analysis' for all the data included in the survey; either interval data scale, ordinal data scale, and nominal data scale. The output of this test reported that there were no missing values in this study. For more details, see Appendix H.

Detecting outliers is important (Zimmerman & Williams 2000; Walfish 2006). Outliers can be defined as "scores that are different from the rest" (Kline 2011, p. 54). Similarly, Hair et al. (1998, p. 64) defined outliers as "observations with a unique combination of characteristics identifiable as distinctly different from the other observations". Statistically, various methods are used to detect the outliers in quantitative data (Walfish 2006; Kline 2011). One of the commonly used methods for detecting outliers is checking the value of Z scores (Thompson 2006; Cousineau & Chartier 2010; Hair et al. 2010; Kline 2011). In addition, to ensure that there are no outliers in the data of a study, the value of Z score for the sample size greater than 80 observations should not be greater than 4 (Hair et al. 2010). For this purpose, SPSS version 25 was employed to detect whether there were any outliers in the data set. The output indicated that all the values of Z score for all the study observations were less than 4 as recommended by Hair et al. (2010).Thus, there were no outliers in the current data set.

Normality of data can be performed using two methods: graphical analysis and statistical techniques (Hair et al. 2010). Graphically, the researchers can check the normality of the data by checking a histogram. On the other hand, statically, researchers can use two essential statistical techniques to check for the normal distribution of data, namely skewness and kurtosis (Kothari 2004; Kline 2011; Sekaran & Bougie 2016). In this research, skewness and kurtosis were used to assess the normality of the data. Moreover, to judge that the data were normally distributed, the Z-value for both skewness and kurtosis should be between + 2.58 and -2.58 (Kothari 2004; Hair et al. 2010; Ghasemi & Zahediasl 2012). In contrast, Kim (2013) argued that for large samples (greater than 300), researchers do not need to use Z-value of skewness and kurtosis hence, the absolute value of skewness and kurtosis have to be calculated to ensure normally of data. Kim (2013) stated that, for large samples (more than 300), the absolute value of skewness should be 2 or less, and the absolute value of kurtosis should be 7 or lower. Peat and Barton (2005) argued that, for skewness and kurtosis, any values above +3 or below -3 are a good indication that the data are not normally distributed. Based on these arguments, the data shown in the following Table 6.4 illustrates that all the variables are normally distributed. In terms of a histogram, the researcher visually checked the shapes of the histogram. All histogram shapes were nearly normal. The following Table 6.4 shows the value of skewness and kurtosis for all the variables (items) used in the survey.

Table 6.4: Normal distribution of the variables

Construct	Item	Skewness	Kurtosis
Health concerns	HC1: Organic food keeps me healthy.	-.144	.022
	HC2: Organic food contains a lot of vitamins and minerals.	-.688	1.802
	HC3: I buy food that helps maintain my weight and appearance.	-.190	-.694
	HC4: When I do shopping, I carefully choose products without any additives.	-.045	-.907
	HC5: Organic food reduces the risk of illness.	-.169	-.140
	HC6: Organic food has no harmful side effects.	-.290	-.078
Environmental concerns	EC1: Organic foods have been prepared in an environmentally friendly way.	-.252	.754
	EC2: Organic food is beneficial for the environment.	-.264	.264
	EC3: Producing organic food reduces the use of herbicides and pesticides in agriculture.	-.565	.488
	EC4: Organic food is produced in a more environmentally friendly manner than conventional foods.	-.121	-.392
	EC5: Organic food helps to achieve biological equilibrium in nature.	-.116	-.019

Construct	Item	Skewness	Kurtosis
Subjective norms	SN1: My friends and family consume organic food.	-.816	.146
	SN2: My family thinks that I should buy organic food rather than non-organic food.	-.323	-.486
	SN3: Most people I value would buy organic food rather than non-organic food.	-.316	-.432
	SN4: My friends and family members would appreciate if I buy organic food.	-.526	-.386
	SN5: The trend of buying organic food among people around me is increasing.	-.608	-.251
Price	PR1: Organic food is expensive.	-1.652	2.272
	PR2: Only consumers with high income can afford organic food.	-.138	-1.172
	PR3: The price of a product is very important to me.	-.553	.281
	PR4: The benefits of organic food justify its price.	-.433	-.532
	PR5: I would buy more organic food if they were cheaper.	-.999	1.425
	PR6: I am not willing to pay more to buy organic food.	-.338	-.571
Trust	TR1: I trust organic food.	-.978	1.564
	TR2: I have doubts about buying organic food.	.105	-1.112
	TR3: I trust Australian institutions certifying organic foods.	-.780	.850
	TR4: I trust Australian organic food manufacturers.	-.886	.714
	TR5: I trust sellers of certified organic foods.	-1.184	1.149
	TR6: I would buy organic food if I can trust it is really organic.	-.891	1.624
	TR7: I trust the organic certification logo on organic food labels.	-.818	.671
Social media	SM1: I am satisfied with the social media communications of the companies that market organic food products.	-.699	.371
	SM2: I get information about organic food from various kinds of social media.	-.623	.091
	SM3: Social media are informative about the company's products.	-.445	.914
	SM4: Social media communications of the companies that market organic food products are very attractive.	-.356	.644
	SM5: Advertising on social media sites of the companies that market organic food products impacts my decision to buy organic food.	-.597	-.318
	SM6: Social media provides me with an efficient platform to communicate with the companies that market organic food products.	-.708	.219
Packaging and labelling	PL1: I prefer to buy the products that have attractive packaging.	-.088	-.613
	PL2: The quality of the packaging material is important during buying process of organic food products.	-.094	-.596
	PL3: Packaging influences my purchasing decision towards organic food products.	-.110	-.482
	PL4: Organic labelling provides correct information on organic foods.	-.659	.357
	PL5: When I do shopping, I will pay more attention to food that has been certified with an organic label.	-.767	.380

	PL6: Organic labels are important because they guarantee that the products concerned really do come from organic production.	-.456	.281
	PL7: When I buy organic food product, I always read the label.	-.630	.133
Availability	AV1: I will purchase organic food products if they are available in the marketplace.	-.586	-.038
	AV2: Organic food is always readily available in the market place.	-.282	-.338
	AV3: I would buy more organic food if there were more varieties of such products.	-.454	.229
	AV4: I am able to find organic food products in shops.	-.324	-.429
Sensory food attributes	SFAtt1: I prefer organic foods because they are tasty.	-.425	-.274
	SFAtt2: Organic food has good flavour.	-.571	.477
	SFAtt3: Organic food contains natural ingredients.	-.775	1.669
	SFAtt4: I believe that organic food has superior quality.	-.352	-.226
	SFAtt5: I consume organic foods for their nutritional content.	-.729	.237
	SFAtt6: Organic food looks better/more appealing.	.044	-.468
	SFAtt7: Organic food is free of chemical and hormonal residues.	-.364	.152
	SFAtt8: Organic foods stay fresh for a shorter time.	-.540	.055
Certification	CR1: If organic food is certified, I will purchase it.	-.605	.291
	CR2: I look for an organic seal.	-.456	-.496
	CR3: Certificate guarantees that the food is produced organically.	-.543	.652
	CR4: Organic food producers should be certified.	-1.005	1.489
	CR5: I believe that organic food production certificate is important for my food purchases.	-1.124	1.777
Purchasing intention	INT1: I try to buy organic foods because they are the best choice for me.	-.520	-.381
	INT2: I intend to buy organic food in the near future.	-.660	-.504
	INT3: If I had to buy food today, I would buy certified organic food.	-.219	-.780
	INT4: I expect to consume organic food.	-.466	-.727
	INT5: For me, the probability to buy organic foods is high.	-.477	-.724
	INT6: I am interested in experiencing the benefits of consuming organic food.	-.519	-.519

6.5.2 Descriptive analysis

After the quantitative data are obtained, they are edited, checked in terms of incomplete questionnaires, coded, and entered. The next step is to analyse the data by reporting statistical frequencies about the population of the study. In addition, some central tendency measurements, such as the mean and standard deviation of the variables, must be used (Creswell 2009; Sekaran & Bougie 2016). Mean and standard deviation for all the variables

of the research were calculated using SPSS version 25. The following is a discussion about the level of the mean and standard deviation of the items of each construct.

6.5.2.1 Mean and standard deviation of Health concerns

In this construct, six items were used to measure Health concerns using a five-point Likert Scale. The mean values for the items of this construct are located in a range of 3.30 to 3.78. The values of standard deviation for each item are located in a range of 0.697 to 1.038. The following Table 6.5 illustrates the mean and standard deviation values for the items that measure this construct.

Table 6.5: The mean and standard deviation of Health concerns

No	The items	Mean	Standard deviation
1	HC1: Organic food keeps me healthy.	3.59	0.771
2	HC2: Organic food contains a lot of vitamins and minerals.	3.78	0.697
3	HC3: I buy food that helps maintain my weight and appearance.	3.43	0.988
4	HC4: When I do shopping, I carefully choose products without any additives.	3.30	1.038
5	HC5: Organic food reduces the risk of illness.	3.56	0.898
6	HC6: Organic food has no harmful side effects.	3.62	0.812

6.5.2.2 Mean and standard deviation of Environmental concerns

In this construct, five items were used to measure Environmental concerns using a five-point Likert Scale. The mean values of the items for this construct are located in a range of 3.68 to 3.99. The values of standard deviation of each item are located in a range of 0.69 to 1.03. The following Table 6.6 illustrates the mean and standard deviation values for the items that measure this construct.

Table 6.6: The mean and standard deviation of Environmental concerns

No	The items	Mean	Standard deviation
1	EC1: Organic foods have been prepared in an environmentally friendly way.	3.68	0.759
2	EC1: Organic food is beneficial for the environment.	3.79	0.796
3	EC3: Producing organic food reduces the use of herbicides and pesticides in agriculture.	3.99	0.814
4	EC4: Organic food is produced in a more environmentally friendly manner than conventional foods.	3.77	0.854
5	EC5: Organic food helps to achieve biological equilibrium in nature.	3.71	0.862

6.5.2.3 Mean and standard deviation of Subjective norms construct

Five items were used to measure the Subjective norms construct using a five-point Likert Scale. The mean values of the items for this construct are located in a range of 2.95 to 3.27. The values of standard deviation of each item are located in a range of 0.963 to 1.007. The

following Table 6.7 illustrates the mean and standard deviation value for the items that measure this construct.

Table 6.7: The mean and standard deviation of Subjective norms

No	The items	Mean	Standard deviation
1	SN1: My friends and family consume organic food.	3.25	0.963
2	SN2: My family thinks that I should buy organic food rather than non-organic food.	2.95	0.997
3	SN3: Most people I value would buy organic food rather than non-organic food.	3.01	0.993
4	SN4: My friends and family members would appreciate if I buy organic food.	3.02	1.007
5	SN5: The trend of buying organic food among people around me is increasing.	3.27	1.003

6.5.2.4 Mean and standard deviation of Price construct

Price was measured by six items using a five-point Likert Scale. The mean values for the items of this construct are located in a range of 3.04 to 4.36. The values of standard deviation of each item are located in a range of 0.810 to 1.339. The following Table 6.8 illustrates the mean and standard deviation values for the items that measure this construct.

Table 6.8: The mean and standard deviation of Price

No	The items	Mean	Standard deviation
1	PR1: Organic food is expensive.	4.36	0.875
2	PR2: Only consumers with high income can afford organic food.	3.04	1.339
3	PR3: The price of a product is very important to me.	3.93	0.810
4	PR4: The benefits of organic food justify its price.	3.12	0.984
5	PR5: I would buy more organic food if they were cheaper.	4.08	0.839
6	PR6: I am not willing to pay more to buy organic food.	3.31	1.104

6.5.2.5 Mean and standard deviation of Trust construct

This construct was measured by seven items using a five-point Likert Scale. The mean values of the items for this construct are located in a range of 2.53 to 3.72. The values of standard deviation of each item are located in a range of 0.696 to 1.157. The following Table 6.9 illustrates the mean and standard deviation values for the items that measure this construct.

Table 6.9: The mean and standard deviation of Trust

No	The items	Mean	Standard deviation
1	TR1: I trust organic food.	3.69	0.893
2	TR2: I have doubts about buying organic food.	2.53	1.157
3	TR3: I trust Australian institutions certifying organic foods.	3.58	0.792
4	TR4: I trust Australian organic food manufacturers.	3.57	0.825
5	TR5: I trust sellers of certified organic foods.	3.51	0.871

6	TR6: I would buy organic food if I can trust it is really organic.	3.72	0.696
7	TR7: trust the organic certification logo on organic food labels.	3.63	0.770

6.5.2.6 Mean and standard deviation of Social media construct

This construct was measured by six items using a five-point Likert Scale. The mean values of the items for this construct are located in a range of 3.17 to 3.33. The values of standard deviation of each item are located in a range of 0.758 to 1.020. The following Table 6.10 illustrates the mean and standard deviation values for the items that measure this construct.

Table 6.10: The mean and standard deviation of Social media

No	The items	Mean	Standard deviation
1	SM1: I am satisfied with the social media communications of the companies that market organic food products.	3.31	0.758
2	SM2: I get information about organic food from various kinds of social media.	3.33	0.965
3	SM3: Social media are informative about the company's products.	3.20	0.852
4	SM4: Social media communications of the companies that market organic food products are very attractive.	3.32	0.884
5	SM5: Advertising on social media sites of the companies that market organic food products impacts my decision to buy organic food.	3.17	1.020
6	SM6: Social media provides me with an efficient platform to communicate with the companies that market organic food products.	3.30	1.014

6.5.2.7 Mean and standard deviation of Packaging and labelling construct

This construct was measured by seven items using a five-point Likert Scale. The mean values of the items for this construct are located in a range of 2.82 to 3.63. The values of standard deviation of each item are located in a range of 0.765 to 1.009. The following Table 6.11 illustrates the mean and standard deviation values for the items that measure this construct.

Table 6.11: The mean and standard deviation of Packaging and labelling

No	The items	Mean	Standard deviation
1	PL1: I prefer to buy the products that have attractive packaging.	2.82	0.985
2	PL2: The quality of the packaging material is important during buying process of organic food products.	2.91	0.998
3	PL3: Packaging influences my purchasing decision towards organic food products.	2.85	1.009
4	PL4: Organic labelling provides correct information on organic foods.	3.56	0.823
5	PL5: When I do shopping, I will pay more attention to food that has been certified with an organic label.	3.40	0.912

6	PL6: Organic labels are important because they guarantee that the products concerned really do come from organic production.	3.63	0.765
7	PL7: When I buy organic food product, I always read the label.	3.55	0.833

6.5.2.8 Mean and standard deviation of Availability construct

This construct was measured by four items using a five-point Likert Scale. The mean values of the items for this construct are located in a range of 3.37 to 3.59. The values of standard deviation of each item are located in a range of 0.875 to 0.961. The following Table 6.12 illustrates the mean and standard deviation for the items that measure this construct.

Table 6.12: The mean and standard deviation of Availability

No	The items	Mean	Standard deviation
1	AVA1: I will purchase organic food products if they are available in the marketplace.	3.57	0.886
2	AVA2: Organic food is always readily available in the market place.	3.37	0.961
3	AVA3: I would buy more organic food if there were more varieties of such products.	3.59	0.875
4	AVA4: I am able to find organic food products in shops.	3.47	0.939

6.5.2.9 Mean and standard deviation of Sensory food attributes construct

This construct was measured by eight items using a five-point Likert Scale. The mean values of the items for this construct are located in a range of 3.11 to 3.87. The values of standard deviation of each item are located in a range of 0.710 to 1.019. The following Table 6.13 illustrates the mean and standard deviation values for the items that measure this construct.

Table 6.13: The mean and standard deviation of Sensory food attributes

No	The items	Mean	Standard deviation
1	SFAtt1: I prefer organic foods because they are tasty.	3.19	0.996
2	SFAtt2: Organic food has good flavour.	3.32	0.850
3	SFAtt3: Organic food contains natural ingredients.	3.82	0.710
4	SFAtt4: I believe that organic food has superior quality.	3.53	0.958
5	SFAtt5: I consume organic foods for their nutritional content.	3.65	1.019
6	SFAtt6: Organic food looks better/more appealing.	3.11	0.923
7	SFAtt7: Organic food is free of chemical and hormonal residues.	3.87	0.780
8	SFAtt8: Organic foods stay fresh for a shorter time.	3.48	1.010

6.5.2.10 Mean and standard deviation of Certification construct

This construct was measured by five items using a five-point Likert Scale. The mean values of the items for this construct are located in a range of 3.21 to 3.81. The values of standard deviation of each item are located in a range of 0.859 to 1.116. The following Table 6.14 illustrates the mean and standard deviation values for the items that measure this construct.

Table 6.14: The mean and standard deviation of Certification

No	The items	Mean	Standard deviation
1	CR1: If organic food is certified, I will purchase it.	3.41	0.968
2	CR2: I look for an organic seal.	3.21	1.116
3	CR3: Certificate guarantees that the food is produced organically.	3.58	0.864
4	CR4: Organic food producers should be certified.	3.81	0.873
5	CR5: I believe that organic food production certificate is important for my food purchases.	3.67	0.859

6.5.2.11 Mean and standard deviation of Purchasing intention construct

This construct was measured by six items using a five-point Likert Scale. The mean values of the items for this construct are located in a range of 3.20 to 3.49. The values of standard deviation of each item are located in a range of (1.031 to 1.172). The following Table 6.15 shows the mean and standard deviation values for the items that measure this construct.

Table 6.15: The mean and standard deviation of Purchasing intention

No	The items	Mean	Standard deviation
1	INT1: I try to buy organic foods because they are the best choice for me.	3.34	1.031
2	INT2: I intend to buy organic food in the near future.	3.42	1.107
3	INT3: If I had to buy food today, I would buy certified organic food.	3.20	1.094
4	INT4: I expect to consume organic food.	3.42	1.139
5	INT5: For me, the probability to buy organic foods is high.	3.30	1.172
6	INT6: I am interested in experiencing the benefits of consuming organic food.	3.49	1.130

6.6 Validation of measurement scale

This section presents the procedures carried out to validate the measurement scale used in this study. Reliability coefficient and item-total correlation were performed to validate the quantitative data. Additionally, other statistical techniques that ensure the reliability and validity of quantitative data such as composite reliability, construct reliability, convergent validity, and construct validity are discussed in Section 6.6.5 because they depend on the findings of the confirmatory factor analysis. Below is a discussion of the first two techniques. In line with previous studies (Hair et al. 2006; Hair et al. 2010), the researcher first used item-total correlation and then the coefficient of reliability (Cronbach's alpha) as the first procedure validating the measurement scales of the study. Below are the results and discussion for the two techniques for each construct.

6.6.1 Item-total correlation

Item-total correlation is considered to be the first technique used to indicate the degree of correlation of items with a composite of other items used in the scale (Hair et al. 2010; Kline 2011). In this research, all the manifest variables (items) are analysed to check the values of item-total correlation. SPSS version 25 was used to calculate the value of item-total correlation. The acceptable value of item-total correlation for each item is 0.30 or greater (Sternberg 1997; Hair et al. 2010). Next is a discussion of the findings of item-total correlation for each construct.

6.6.1.1 Item-total correlation of Health concerns scale

As shown in Table 6.16, the value of item-total correlation for all the items in the measurement scale of the Health concerns construct are greater than 0.30. Thus, all the items of this construct are acceptable for analysis in this stage.

Table 6.16: Item-total correlation of Health concerns scale

No	The items	Corrected Item-total correlation
1	HC1: Organic food keeps me healthy.	.657
2	HC2: Organic food contains a lot of vitamins and minerals.	.649
3	HC3: I buy food that helps maintain my weight and appearance.	.501
4	HC4: When I do shopping, I carefully choose products without any additives.	.444
5	HC5: Organic food reduces the risk of illness.	.755
6	HC6: Organic food has no harmful side effects.	.486

6.6.1.2 Item-total correlation of Environmental concerns scale

As shown in Table 6.17, the value of item-total correlation for all the items in the measurement scale of the Environmental concerns construct are greater than 0.30. Thus, all the items of this construct are acceptable for analysis in this stage.

Table 6.17: Item-total correlation of Environmental concerns scale

No	The items	Corrected Item-total correlation
1	EC1: Organic foods have been prepared in an environmentally friendly way.	.765
2	EC2: Organic food is beneficial for the environment.	.832
3	EC3: Producing organic food reduces the use of herbicides and pesticides in agriculture.	.794
4	EC4: Organic food is produced in a more environmentally friendly manner than conventional foods.	.862
5	EC5: Organic food helps to achieve biological equilibrium in nature.	.793

6.6.1.3 Item-total correlation of Subjective norms concerns scale

Table 6.18 shows the value of item-total correlation for all the items in the measurement scale of this construct. The values are greater than 0.30. Thus, all of the items of this construct are at an acceptable level of reliability.

Table 6.18: Item-total correlation of Subjective norms scale

No	The items	Corrected Item-total correlation
1	SN1: My friends and family consume organic food.	.764
2	SN2: My family thinks that I should buy organic food rather than non-organic food.	.794
3	SN3: Most people I value would buy organic food rather than non-organic food.	.811
4	SN4: My friends and family members would appreciate if I buy organic food.	.801
5	SN5: The trend of buying organic food among people around me is increasing.	.708

6.6.1.4 Item-total correlation of Price scale

The values of all items that measure the Price construct were analysed using item-total correlation. According to the obtained results, the values of the item-total correlation for all the variable are greater than 0.30 except the value of PR4 which is 0.117. This value is less than 0.30. As a result, this variable is removed from the scale. The following Table 6.19 presents the results of item-total correlation for the Price construct.

Table 6.19: Item-total correlation of Price scale

No	The items	Corrected Item-total correlation
1	PR1: Organic food is expensive.	.538
2	PR2: Only consumers with high income can afford organic food.	.352
3	PR3: The price of a product is very important to me.	.539
4	PR4: The benefits of organic food justify its price.	.117
5	PR5: I would buy more organic food if they were cheaper.	.404
6	PR6: I am not willing to pay more to buy organic food.	.376

6.6.1.5 Item-total correlation of Trust scale

The values of the item-total correlation for all the items of the Trust construct are greater than 0.30 except TR2 which is less than 0.30. Therefore, this item is removed from the scale. Table 6.20 demonstrates the value of item-total correlation of the Trust construct.

Table 6.20: Item-total correlation of Trust scale

No	The items	Corrected Item-total correlation
1	TR1: I trust organic food.	.510
2	TR2: I have doubts about buying organic food.	.229
3	TR3: I trust Australian institutions certifying organic foods.	.781
4	TR4: I trust Australian organic food manufacturers.	.803
5	TR5: I trust sellers of certified organic foods.	.812
6	TR6: I would buy organic food if I can trust it is really organic.	.555
7	TR7: I trust the organic certification logo on organic food labels.	.787

6.6.1.6 Item-total correlation of Social media scale

As shown in Table 6.21, all the values of item-total correlation of the Social media construct are greater than 0.30. Thus, this construct is considered to be reliable in terms of item-total correlation.

Table 6.21: Item-total correlation of Social media scale

No	The items	Corrected Item-total correlation
1	SM1: I am satisfied with the social media communications of the companies that market organic food products.	.643
2	SM2: I get information about organic food from various kinds of social media.	.751
3	SM3: Social media are informative about the company's products.	.831
4	SM4: Social media communications of the companies that market organic food products are very attractive.	.553
5	SM5: Advertising on social media sites of the companies that market organic food products impacts my decision to buy organic food.	.708
6	SM6: Social media provides me with an efficient platform to communicate with the companies that market organic food products.	.705

6.6.1.7 Item-total correlation of Packaging and labelling scale

The values of item-total correlation of the Packaging and labelling construct are greater than 0.30. Thus, in this stage, this construct is reliable in terms of item-total correlation. The following Table 6.22 shows the values of item-total correlation of the Packaging and labelling scale.

Table 6.22: Item-total correlation of Packaging and labelling scale

No	The items	Corrected Item-total correlation
1	PL1: I prefer to buy the products that have attractive packaging.	.737
2	PL2: The quality of the packaging material is important during buying process of organic food products.	.730
3	PL3: Packaging influences my purchasing decision towards organic food products.	.703
4	PL4: Organic labelling provides correct information on organic foods.	.573

5	PL5: When I do shopping, I will pay more attention to food that has been certified with an organic label.	.645
6	PL6: Organic labels are important because they guarantee that the products concerned really do come from organic production.	.580
7	PL7: When I buy organic food product, I always read the label.	.494

6.6.1.8 Item-total correlation of Availability scale

All the items that measure the Availability construct were analysed using item-total correlation techniques. Table 6.23 presents the values of this technique. The values of all the items are greater than 0.30. Thus, this construct is reliable based on this finding.

Table 6.23: Item-total correlation of Availability scale

No	The items	Corrected Item-total correlation
1	AV1: I will purchase organic food products if they are available in the marketplace.	.573
2	AV2: Organic food is always readily available in the market place.	.425
3	AV3: I would buy more organic food if there were more varieties of such products.	.518
4	AV4: I am able to find organic food products in shops.	.493

6.6.1.9 Item-total correlation of Sensory food attributes scale

The values of item-total correlation of the Sensory food attributes construct are higher than 0.30. As recommended by scholars, this value is acceptable for reliability. Table 6.24 shows the values of item-total correlation for all the items of this construct.

Table 6.24: Item-total correlation of Sensory food attributes scale

No	The items	Corrected Item-total correlation
1	SFAtt1: I prefer organic foods because they are tasty.	.691
2	SFAtt2: Organic food has good flavour.	.551
3	SFAtt3: Organic food contains natural ingredients.	.678
4	SFAtt4: I believe that organic food has superior quality.	.776
5	SFAtt5: I consume organic foods for their nutritional content.	.712
6	SFAtt6: Organic food looks better/more appealing.	.491
7	SFAtt7: Organic food is free of chemical and hormonal residues.	.603
8	SFAtt8: Organic foods stay fresh for a shorter time.	.301

6.6.1.10 Item-total correlation of Certification scale

It is shown that the values of item-total correlation of the Certification construct are greater than 0.30. Hence, the reliability of this construct according to this statistical technique is achieved. The following Table 6.25 illustrates the findings of this test.

Table 6.25: Item-total correlation of Certification scale

No	The items	Corrected Item-total correlation
1	CR1: If organic food is certified, I will purchase it.	.790
2	CR2: I look for an organic seal.	.736
3	CR3: Certificate guarantees that the food is produced organically.	.569
4	CR4: Organic food producers should be certified.	.635
5	CR5: I believe that organic food production certificate is important for my food purchases.	.644

6.6.1.11 Item-total correlation of Purchasing intention scale

The final construct in the survey is consumers' Purchasing intention. All the manifest variables (items) of this construct were analysed using item-total correlation. The values are shown in the following Table 6.26. The values of all items are greater than 0.30. Therefore, these findings are acceptable for the reliability of this stage.

Table 6.26: Item-total correlation of Purchasing intention scale

No	The items	Corrected Item-total correlation
1	INT1: I try to buy organic foods because they are the best choice for me.	.889
2	INT2: I intend to buy organic food in the near future.	.893
3	INT3: If I had to buy food today, I would buy certified organic food.	.854
4	INT4: I expect to consume organic food.	.907
5	INT5: For me, the probability to buy organic foods is high.	.880
6	INT6: I am interested in experiencing the benefits of consuming organic food.	.890

6.6.2 Reliability coefficient

As argued by Hair et al. (2006) and Hair et al. (2010), coefficient of reliability is considered to be the second step to ensure the reliability of quantitative data. As discussed in Chapter Three, reliability coefficient assesses the internal consistency of the entire scale (Hair et al. 2010; Saunders et al. 2009; Sekaran & Bougie 2016). Therefore, all the manifest variables (items) were analysed using Cronbach's alpha using SPSS version 25. According to Hair et al. (2010), Cronbach's alpha with a value of .0.6 and more is acceptable.

6.6.2.1 Reliability coefficient of Health concerns

The overall value of Cronbach's alpha (α) of the Health concerns construct is 0.808. Therefore, this value is greater than 0.60. The following Table 6.27 demonstrates the values of coefficient of reliability of all the manifest variables (items) of the Health concerns construct.

Table 6.27: Reliability coefficients of the scale items of Health concerns

No	The items	Cronbach's alpha If-Item-Deleted
1	HC1: Organic food keeps me healthy.	.761
2	HC2: Organic food contains a lot of vitamins and minerals.	.766
3	HC3: I buy food that helps maintain my weight and appearance.	.796
4	HC4: When I do shopping, I carefully choose products without any additives.	.813
5	HC5: Organic food reduces the risk of illness.	.732
6	HC6: Organic food has no harmful side effects.	.795

6.6.2.2 Reliability coefficient of Environmental concerns

The overall value of Cronbach's alpha (α) of the Environmental concerns construct is 0.927. Thus, this value is greater than 0.60. The following Table 6.28 shows the values of coefficient of reliability of all the manifest variables (items) of the Environmental concerns construct.

Table 6.28: Reliability coefficients of the scale items of Environmental concerns

No	The items	Cronbach's alpha If-Item-Deleted
1	EC1: Organic foods have been prepared in an environmentally friendly way.	.919
2	EC2: Organic food is beneficial for the environment.	.906
3	EC3: Producing organic food reduces the use of herbicides and pesticides in agriculture.	.913
4	EC4: Organic food is produced in a more environmentally friendly manner than conventional foods.	.900
5	EC5: Organic food helps to achieve biological equilibrium in nature.	.914

6.6.2.3 Reliability coefficient of Subjective norms

The overall value of Cronbach's alpha (α) of the Subjective norms construct is 0.912. Therefore, this value is greater than 0.60. The following Table 6.29 illustrates the values of coefficient of reliability of all the manifest variables (items) of the Subjective norms construct.

Table 6.29: Reliability coefficients of the scale items of Subjective norms

No	The items	Cronbach's alpha If-Item-Deleted
1	SN1: My friends and family consume organic food.	.894
2	SN2: My family thinks that I should buy organic food rather than non-organic food.	.888
3	SN3: Most people I value would buy organic food rather than non-organic food.	.884
4	SN4: My friends and family members would appreciate if I buy organic food.	.886

5	SN5: The trend of buying organic food among people around me is increasing.	.906

6.6.2.4 Reliability coefficient of Price

The overall value of Cronbach's alpha (α) of the Price construct is 0.680. Therefore, this value is greater than 0.60. The following Table 6.30 summarises the values of coefficient of reliability of all the manifest variables (items) of the Price construct.

Table 6.30: Reliability coefficients of the scale items of Price

No	The items	Cronbach's alpha If-Item-Deleted
1	PR1: Organic food is expensive.	.601
2	PR2: Only consumers with high income can afford organic food.	.639
3	PR3: The price of a product is very important to me.	.600
4	PR5: I would buy more organic food if they were cheaper.	.653
5	PR6: I am not willing to pay more to buy organic food.	.664

6.6.2.5 Reliability coefficient of Trust

The overall value of Cronbach's alpha (α) of the Trust construct is 0.912. Thus, this value is greater than 0.60. The following Table 6.31 illustrates the values of coefficient of reliability of all the manifest variables (items) of the Trust construct**.**

Table 6.31: Reliability coefficients of the scale items of Trust

No	The items	Cronbach's alpha If-Item-Deleted
1	TR1: I trust organic food.	.913
3	TR3: I trust Australian institutions certifying organic foods.	.889
4	TR4: I trust Australian organic food manufacturers.	.882
5	TR5: I trust sellers of certified organic foods.	.882
6	TR6: I would buy organic food if I can trust it is really organic.	.921
7	TR7: I trust the organic certification logo on organic food labels.	.885

6.6.2.6 Reliability coefficient of Social media

The overall value of Cronbach's alpha (α) of the Social media construct is 0.883. Thus, this value is greater than 0.60. The following Table 6.32 demonstrates the values of coefficient of reliability of all the manifest variables (items) of the Social media construct.

Table 6.32: Reliability coefficients of the scale items of Social media

No	The items	Cronbach's alpha If-Item-Deleted
1	SM1: I am satisfied with the social media communications of the companies that market organic food products.	.871
2	SM2: I get information about organic food from various kinds of social media.	.852
3	SM3: Social media are informative about the company's products.	.841
4	SM4: Social media communications of the companies that market organic food products are very attractive.	.884
5	SM5: Advertising on social media sites of the companies that market organic food products impacts my decision to buy organic food.	.861
6	SM6: Social media provides me with an efficient platform to communicate with the companies that market organic food products.	.861

6.6.2.7 Reliability coefficient of Packaging and labelling

The overall value of Cronbach's alpha (α) of the Packaging and labelling construct is 0.866. Thus, this value is greater than 0.60. The following Table 6.33 shows the values of coefficient of reliability of all the manifest variables (items) of the Packaging and labelling construct**.**

Table 6.33: Reliability coefficients of the scale items of Packaging and labelling

No	The items	Cronbach's alpha If-Item-Deleted
1	PL1: I prefer to buy the products that have attractive packaging.	.832
2	PL2: The quality of the packaging material is important during buying process of organic food products.	.833
3	PL3: Packaging influences my purchasing decision towards organic food products.	.837
4	PL4: Organic labelling provides correct information on organic foods.	.855
5	PL5: When I do shopping, I will pay more attention to food that has been certified with an organic label.	.845
6	PL6: Organic labels are important because they guarantee that the products concerned really do come from organic production.	.854
7	PL7: When I buy organic food product, I always read the label.	.864

6.6.2.8 Reliability coefficient of Availability

The overall value of Cronbach's alpha (α) of the Availability construct is 0.713. Accordingly, this value is greater than 0.60. The following Table 6.34 presents the values of coefficient of reliability of all the manifest variables (items) of the Availability construct**.**

Table 6.34: Reliability coefficients of the scale items of Availability

No	The items	Cronbach's alpha If-Item-Deleted
1	AV1: I will purchase organic food products if they are available in the marketplace.	.608
2	AV2: Organic food is always readily available in the market place.	.698
3	AV3: I would buy more organic food if there were more varieties of such products.	.641
4	AV4: I am able to find organic food products in shops.	.655

6.6.2.9 Reliability coefficient of Sensory food attributes

The overall value of Cronbach's alpha (α) of the Sensory food attributes construct is 0.851. Thus, this value is greater than 0.60. The following Table 6.35 demonstrates the values of coefficient of reliability of all the manifest variables (items) of the Sensory food attributes construct**.**

Table 6.35: Reliability coefficients of the scale items of Sensory food attributes

No	The items	Cronbach's alpha If-Item-Deleted
1	SFAtt1: I prefer organic foods because they are tasty.	.820
2	SFAtt2: Organic food has good flavour.	.837
3	SFAtt3: Organic food contains natural ingredients.	.827
4	SFAtt4: I believe that organic food has superior quality.	.809
5	SFAtt5: I consume organic foods for their nutritional content.	.817
6	SFAtt6: Organic food looks better/more appealing.	.845
7	SFAtt7: Organic food is free of chemical and hormonal residues.	.832
8	SFAtt8: Organic foods stay fresh for a shorter time.	.870

6.6.2.10 Reliability coefficient of Certification

The overall value of Cronbach's alpha (α) of the Certification construct is 0.856. Therefore, this value is greater than 0.60. The following Table 6.36 shows the values of coefficient of reliability of all the manifest variables (items) of the Certification construct**.**

Table 6.36: Reliability coefficients of the scale items of Certification

No	The items	Cronbach's alpha If-Item-Deleted
1	CR1: If organic food is certified, I will purchase it.	.794
2	CR2: I look for an organic seal.	.811
3	CR3: Certificate guarantees that the food is produced organically.	.851
4	CR4: Organic food producers should be certified.	.836
5	CR5: I believe that organic food production certificate is important for my food purchases.	.834

6.6.2.11 Reliability coefficient of Purchasing intention

The overall value of Cronbach's alpha (α) of the Purchasing intention construct is 0.964. Thus, this value is greater than 0.60. The following Table 6.37 shows the values of coefficient of reliability of all the manifest variables (items) of the Purchasing intention construct**.**

Table 6.37: Reliability coefficients of the scale items of Purchasing intention

No	The items	Cronbach's alpha If-Item-Deleted
1	INT1: I try to buy organic foods because they are the best choice for me.	.957
2	INT2: I intend to buy organic food in the near future.	.956
3	INT3: If I had to buy food today, I would buy certified organic food.	.960
4	INT4: I expect to consume organic food.	.955
5	INT5: For me, the probability to buy organic foods is high.	.958
6	INT6: I am interested in experiencing the benefits of consuming organic food.	.957

As previously mentioned, the values of composite reliability, construct reliability, convergent validity, and construct validity that ensure reliability and validity of quantitative data depend on the findings of confirmatory factor analysis (CFA). These findings are presented in Section 6.6.5.

6.6.3 Exploratory Factor Analysis (EFA)

Exploratory factor analysis (EFA) is the statistical technique that is most commonly used and widely applied in the Social Sciences (Costello & Osborne 2005; Williams et al. 2010). EFA is one of the essential statistical methods utilised in quantitative research to refine and evaluate the measurement scale (Williams et al. 2010; Kline 2011). Additionally, EFA is a useful technique for extracting information from a large set of data (Hair et al. 2010). One of the primary purposes of EFA is to define the underlying structure of the variables (Hair et al. 2006). Moreover, according to Henson and Roberts (2006), EFA explains how to divide a large set of measured variables into a smaller set of constructs. Accordingly, an exploratory factor analysis was performed in this study to refine, evaluate and reduce the large number of measured variables that were used to create the constructs of the study.

Scholars have argued that sample size is an important issue in EFA (Costello & Osborne 2005; Williams et al. 2010), though there are variations in their recommendations. For instance, Goldberg and Velicer (2006) recommended that 200 cases would be sufficient to

conduct an EFA. On the other hand, Suhr (2006) stated that 100 cases is the minimum number for performing an EFA. In contrast, Tabachnick and Fidell (2007) recommended 300 cases is adequate for exploratory factor analysis. In this study, as explained in Chapter Three, the researcher used 390 cases based on the recommendation of Hair et al. (2006) and Hair et al. (2010).Thus, this number exceeds the suggested number and therefore, the sample size of this study is adequate for conducting an EFA.

Additionally, when performing an EFA, several criteria and procedures have to be taken into account. As argued by Williams et al. (2010), the first criteria in an EFA is that the researcher needs to make sure that the data are suitable for analysis. This can be achieved by checking the value of Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity. KMO is a tool that measures whether the sample is adequate for EFA, and the value of this test should be 0.50 or greater (Williams et al. 2010). Further, Bartlett's Test of Sphericity has to be significant ($p<.05$) for EFA to be suitable (Hair et al. 2010; Yong & Pearce 2013). Another essential criteria in EFA is the correlation matrix (Williams et al. 2010). A correlation matrix illustrates and determines the relationships between the variables used in the study (Osborne 2015). Scholars have argued that the value of the correlation coefficient for each manifest variable should be 0.30 or more (Goldberg & Velicer 2006; Williams et al. 2010; Beavers et al. 2013). Moreover, in EFA, researchers are required to inspect the eigenvalue for variables used in the study (Goldberg & Velicer 2006). This test is used to determine the number of factors to retain. Moreover, an eigenvalue of 1 or greater is considered to be related to the variables used in the study (Hayton et al. 2004). In addition, in EFA, the value of communalities should be included in the analysis, and the value of communalities is also used to assess how much variance in certain variable is accounted for by the factor solution (Hair et al. 2010). The acceptable value of communalities is 0.40 or more, and any value less than 0.40 should be removed from the analysis (Costello & Osborne 2005).

In EFA, the researcher has to choose the extraction and rotation methods. There are several methods for extracting the factors: principal component analysis (PCA), principal axis factoring (PAF), image factoring, alpha factoring, maximum likelihood, and unweighted (Costello & Osborne 2005). It can be said that the method that is most commonly used to extract the factor is principal component analysis (PCA) (Williams et al. 2010). There are various methods for rotation in EFA, namely oblique oblimin/promax or orthogonal varimax/quartimax (Williams et al. 2010). Principal component as an extraction method and

Varimax as a rotation method are widely used in the studies of consumers' organic food purchasing intentions (Roitner-Schobesberger et al. 2008; Smith & Paladino 2010; Bravo et al. 2013; Goetzke et al. 2014; Wee et al. 2014). Hence, the researcher followed the same method of analysis using EFA. Furthermore, a number of essential steps should be performed when using EFA. One of the most important criteria in EFA is the loading value of the extracted factors which is 0.50 or more (Costello & Osborne 2005; Hair et al. 2010). In this research, the researcher followed all the suggestions recommended in the above literature about EFA procedures and the acceptable values of the tests used in EFA. The next section presents the results of the EFA for all the variable used in the study.

6.6.3.1 The results of exploratory factor analysis

This section presents the results of EFA for all the variables used in the study. To perform the exploratory factor analysis, the researcher utilised SPSS version 25. The researcher used principal component as the extraction method and Varimax as the rotation method.

6.6.3.1.1 Results of EFA for Health concerns

Six variables were used to measure Health concerns. Table 6.38 shows the results of the EFA for this construct.

Table 6.38: Results of EFA for Health concerns

Correlation matrix and factor loading								Communality
	Variable	HC1	HC2	HC3	HC4	HC5	HC6	
Correlation	HC1	1.000	.671	.301	.250	.664	.592	.687
	HC2	.671	1.000	.344	.262	.557	.576	.656
	HC3	.301	.344	1.000	.543	.427	.199	.357
	HC4	.250	.262	.543	1.000	.497	.062	.297
	HC5	.664	.577	.427	.497	1.000	.533	.740
	HC6	.592	.576	.199	.062	.533	1.000	.495
Loading		.829	.810	.597	.545	.860	.703	
Percentage of variance								53.830
KMO								.783
Bartlett's test								.000 significant
Eigenvalue								3.230

As shown in the above table, the value of coefficient of correlation of the variables is greater than 0.30, except for variable HC4, which means that this variable is not strongly correlated with other the variables of Health concerns. Thus, HC4 was removed from the analysis. The value of KMO is .783 which indicates that the sample size is adequate for EFA analysis. Moreover, the Bartlett's test of sphericity correlates with p<.05. The values of communalities of the variables is greater than the acceptable value 0.40, except the value of HC3 which is .357. Therefore, HC3 was also removed as explained in paragraph four of Section 6.6.3. The loading of the variables HC1, HC2, HC5, and HC6 is greater than the acceptable level 0.50. Additionally, the eigenvalue is more than 1, which is in line with the recommended level. In addition, the EFA results of Health concerns produced an average variance accounting for 53.830%.

6.6.3.1.2 Results of EFA for Environmental concerns

Five variables were used to measure Environmental concerns. Table 6.39 illustrates the results of the EFA for this construct.

Table 6.39: Results of EFA for Environmental concerns

Correlation matrix and factor loading							Communality
	Variable	EC1	EC2	EC3	EC4	EC5	
Correlation	EC1	1.000	.808	.642	.675	.628	.723
	EC2	.808	1.000	.707	.748	.686	.806
	EC3	.642	.707	1.000	.781	.693	.755
	EC4	.675	.748	.781	1.000	.812	.837
	EC5	.628	.686	.693	.812	1.000	.754
Loading		.915	.898	.869	.868	.851	
Percentage of variance							77.499
KMO							.858
Bartlett's test							.000 significant
Eigenvalue							3.875

As illustrated in the above table, the value of coefficient of correlation of the variables is greater than 0.30, which means that all variables are correlated with the other variables of Environmental concerns. The value of KMO is .858 which means the sample size is adequate for EFA analysis. Also, the Bartlett's test of sphericity correlates with p<.05. The values of communalities of the variables is greater than the acceptable value of 0.40. Factor

loading of the variables is greater than the acceptable level of 0.50. Additionally, the eigenvalue is more than 1 which is in line with the recommended level. In addition, the EFA results of Environmental concerns produced an average variance that accounting for 77.499% of the construct.

6.6.3.1.3 Results of EFA for Subjective norms

Five variables were utilised to measure Subjective norms. Table 6.40 presents the results of the EFA for this construct.

Table 6.40: Results of EFA for Subjective norms

Correlation matrix and factor loading							Communality
	Variable	SN1	SN2	SN3	SN4	SN5	
Correlation	SN1	1.000	.732	.667	.611	.653	.724
	SN2	.732	1.000	.659	.729	.630	.763
	SN3	.667	.659	1.000	.837	.630	.784
	SN4	.611	.729	.837	1.000	.589	.774
	SN5	.653	.630	.630	.589	1.000	.653
Loading		.885	.880	.874	.851	.808	
Percentage of variance							73.967
KMO							.811
Bartlett's test							.000 significant
Eigenvalue							3.698

As presented in the above table, the value of coefficient of correlation of the variables is greater than 0.30, which means that all variables are correlated with the other variables of Subjective norms. The value of KMO is .811 which means the sample size is adequate for EFA analysis. Also, the Bartlett's test of sphericity is highly significant with $p<.05$. The values of communalities of the variables is greater than the acceptable value 0.40. Factor loading of the variables is greater than the acceptable level 0.50. Additionally, the eigenvalue is more than 1 which is in line with the recommended level. In addition, EFA results of Subjective norms produced an average variance which accounting for 73.967%.

6.6.3.1.4 Results of EFA for Price

After removing PR4 from the study due to low value of item-total correlation, five variables were used to measure Price. Table 6.41 presents the results of the EFA for this construct.

Table 6.41: Results of EFA for Price

Correlation matrix and factor loading							Communality
	Variable	PR1	PR2	PR3	PR5	PR6	
Correlation	PR1	1.000	.339	.388	.347	.406	.558
	PR2	.339	1.000	.298	.255	.276	.450
	PR3	.388	.398	1.000	.443	.247	.567
	PR5	.347	.255	.443	1.000	.101	.400
	PR6	.406	.276	.247	.101	1.000	.323
Loading		.747	.671	.753	.632	.569	
Percentage of variance							45.962
KMO							.726
Bartlett's test							.000 (significant)
Eigenvalue							2.298

As demonstrated in the above table, the value of coefficient of correlation of the variables is greater than 0.30, except for variables PR2 and PR6, which means that this variable is not strongly correlated with the other variables of the Price construct. Thus, PR2 and PR6 were removed from the analysis. The value of KMO is .726 which means that the sample size is adequate for EFA analysis. Also, the Bartlett's test of sphericity is highly significant with $p<.05$. The values of communalities of the variables is greater than the acceptable value 0.40, except for the value of PR6 which is .323 therefore, as mentioned above, PR6 was also removed as explained in paragraph four of Section 6.6.3. The loading of variables PR1, PR3, and PR5 is greater than the acceptable level 0.50. Additionally, the eigenvalue is more than 1, which is in line with the recommended level. In addition, EFA results of Price produced an average variance accounting for 45.962%.

6.6.3.1.5 Results of EFA for Trust

As shown in Section 6.6.1.5, TR2 was removed from the analysis due to the low value of item-total correlation for this variable. Therefore, six variables were used to measure the Trust construct. Table (6.42) shows the results of the EFA for this construct.

Table 6.42: Results of EFA for Trust

Correlation matrix and factor loading								Communality
	Variable	TR1	TR3	TR4	TR5	TR6	TR7	
Correlation	TR1	1.000	.536	.557	.601	.471	.633	.558
	TR3	.536	1.000	.824	.791	.435	.745	.771
	TR4	.557	.824	1.000	.838	.503	.779	.831
	TR5	.601	.791	.838	1.000	.480	.767	.820
	TR6	.471	.435	.503	.480	1.000	.526	.427
	TR7	.633	.745	.779	.767	.526	1.000	.802
Loading		.747	.878	.911	.906	.654	.896	
Percentage of variance								70.162
KMO								.898
Bartlett's test								.000 significant
Eigenvalue								4.210

The above table shows that the value of coefficient of correlation for the variables is greater than 0.30, which indicates the suitability of EFA for analysis. The value of KMO is .898 which means the sample size is adequate for EFA analysis. Also, the Bartlett's test of sphericity is significant with $p<.05$. Also, the value of communalities of all the variables is greater than the acceptable level of 0.40. Further, factor loading of all the variables is greater than the cut-off level of 0.50. Additionally, the eigenvalue is more than 1, which is in line with the recommended level. In addition, EFA results of Trust produced an average variance accounting for 70.162%.

6.6.3.1.6 Results of EFA for Social media

Six variables were employed to measure Social media. Table 6.43 shows the results of EFA for this construct.

Table 6.43: Results of EFA for Social media

Correlation matrix and factor loading								Communality
	Variable	SM1	SM2	SM3	SM4	SM5	SM6	
Correlation	SM1	1.000	.689	.639	.337	.505	.451	.576
	SM2	.689	1.000	.787	.507	.513	.542	.725
	SM3	.639	.787	1.000	.616	.602	.623	.808
	SM4	.337	.507	.616	1.000	.427	.408	.453
	SM5	.505	.513	.602	.427	1.000	.771	.637

	SM6	.451	.542	.623	.408	.771	1.000	.633
Loading		.747	.878	.911	.906	.654	.896	
Percentage of variance								63.883
KMO								.817
Bartlett's test								.000 significant
Eigenvalue								3.833

The above table shows that all the values of coefficient of correlation of the variables are greater than 0.30, which indicates the suitability of EFA for analysis. The value of KMO is .817 which means the sample size is adequate for EF analysis. Also, the Bartlett's test of sphericity is significant with $p<.05$. In addition, the value of communalities of all the variables is greater than the acceptable level of 0.40. Further, factor loading of all the variables is greater than the cut-off level of 0.50. Additionally, the eigenvalue is more than 1, which is in line with the recommended level. In addition, EFA results of Social media produced an average variance which accounting for 63.883%.

6.6.3.1.7 Results of EFA for Packaging and labelling

Seven variables were used to measure Packaging and labelling. Table 6.44 shows the results of EFA for this construct.

Table 6.44: Results of EFA for Packaging and labelling

Correlation matrix and factor loading									Communality
	Variable	PL1	PL2	PL3	PL4	PL5	PL6	PL7	
Correlation	PL1	1.000	.810	.754	.398	.533	.353	.317	.681
	PL2	.810	1.000	.885	.390	.447	.309	.276	.671
	PL3	.754	.885	1.000	.344	.458	.381	.296	.638
	PL4	.398	.390	.344	1.000	.474	.697	.380	.477
	PL5	.533	.447	.458	.474	1.000	.512	.509	.563
	PL6	.353	.309	.281	.697	.512	1.000	.579	.476
	PL7	.317	.276	.296	.380	.509	.579	1.000	.425
Loading		.825	.819	.799	.691	.751	.690	.613	
Percentage of variance									55.481
KMO									.788
Bartlett's test									.000 significant
Eigenvalue									3.884

The above table shows that all the values of coefficient of correlation of the variables are greater than 0.30. Although the values of PL7 (.276) and PL3 (.296) are below 0.30, the relationships with other variables exceeds the value of .30 (Beavers et al. 2013), which indicates the suitability of EFA for analysis. The value of KMO is .788 which means the sample size is adequate for EFA analysis. The Bartlett's test of sphericity is highly significant with p<.05 and the value of communalities of all the variables is greater than the acceptable level of 0.40. Further, factor loading of all the variables is greater than the cut-off level 0.50. Additionally, the eigenvalue is more than 1, which is in line with the recommended level. In addition, EFA results for Packaging and labelling produced an average variance which accounting for 55.481%.

6.6.3.1.8 Results of EFA for Availability

In this study, four variables were used to measure Availability. Table 6.45 shows the results of EFA for this construct.

Table 6.45: Results of EFA for Availability

Correlation matrix and factor loading						Communality
	Variable	AV1	AV2	AV3	AV4	
Correlation	AV1	1.000	.315	.654	.337	.656
	AV2	.315	1.000	.220	.464	.415
	AV3	.654	.220	1.000	.331	.599
	AV4	.337	.464	.331	1.000	.500
Loading		.810	.774	.707	.644	
Percentage of variance						54.238
KMO						.628
Bartlett's test						.000 significant
Eigenvalue						2.170

The above table shows that the value of coefficient of correlation of the variables is greater than 0.30, which indicates the suitability of EFA for analysis. Although the value of AV2 is less than 0.30, the relationships with other variables exceeds .30. The value of KMO is .628 which means the sample size is adequate for EF analysis. Additionally, the Bartlett's test of sphericity is highly significant with p<.05 and the value of communalities of all the variables is greater than the acceptable level of 0.40. Further, factor loading of all the variables is greater than the cut-off level of 0.50. Additionally, the eigenvalue is more than 1, which is

in line with the recommended level. In addition, EFA results of Availability produced an average variance which accounting for 54.238%.

6.6.3.1.9 Results of EFA for Sensory food attributes

In this study, eight variables were used to measure the sensory food attributes. Table 6.46 shows the results of the EFA for this construct.

Table 6.46: Results of EFA for Sensory food attributes

Correlation matrix and factor loading										Communality
	Variable	SFAtt 1	SFAtt 2	SFAtt 3	SFAtt 4	SFAtt 5	SFAtt 6	SFAtt 7	SFAtt 8	
Correlation	SFA 1	1.000	.691	.520	.646	.637	.395	.405	.109	.647
	SFA 2	.691	1.000	.396	.448	.467	.326	.286	.129	.445
	SFA 3	.520	.396	1.000	.688	.541	.356	.601	.249	.617
	SFA 4	.646	.448	.688	1.000	.678	.480	.581	.252	.751
	SFA 5	.637	.467	.541	.678	1.000	.367	.520	.266	.657
	SFA 6	.395	.326	.356	.480	.367	1.000	.291	.267	.347
	SFA 7	.405	.286	.601	.581	.520	.291	1.000	.337	.506
	SFA 8	.109	.129	.249	.252	.266	.267	.337	1.000	.148
Loading		.804	.667	.786	.867	.810	.589	.710	No value	
Percentage of variance										51.470
KMO										.858
Bartlett's test										.000 significant
Eigenvalue										4.118

As demonstrated in the above table, the value of coefficient of correlation of the variables is greater than 0.30, except for variable SFA 8, which means that this variable is not strongly correlated with the other variables of the sensory food attributes construct. Thus, SFA 8 was removed from the analysis. Despite the value of SFA 7 (.291) and (.286), the relationships with other variables exceeds .30 (Beavers et al. 2013). The value of KMO is .858 which means the sample size is adequate for EFA analysis. The Bartlett's test of sphericity is highly significant with $p<.05$. The values of communalities of the variables are greater than the acceptable value 0.40, except for the value of SFA 8 and SFA6 which is .148 for SFA 8 and .347 for SFA6. Therefore as mentioned above SFA 6 was removed as explained in paragraph four of Section 6.**6**.3. Loading of the variables SFA 1, SFA 2, SFA 3, SFA 4, SFA 5 and SFA 7 is greater than the acceptable level 0.50. Additionally, the eigenvalue is more than 1,

which is in line with the recommended level. In addition, EFA results of Sensory food attributes produced an average variance which accounting for 51.470%.

6.6.3.1.10 Results of EFA for Certification

In this study, eight variables were used to measure Certification**.** Table 6.47 shows the details of the results of EFA for this construct.

Table 6.47: Results of EFA for Certification

Correlation matrix and factor loading							Communality
	Variable	CR1	CR2	CR3	CR4	CR5	
Correlation	CR1	1.000	.830	.469	.480	.663	.770
	CR2	.830	1.000	.496	.507	.495	.718
	CR3	.469	.496	1.000	.548	.383	.502
	CR4	.480	.507	.548	1.000	.567	.590
	CR5	.663	.495	.383	.567	1.000	.609
Loading		.878	.847	.780	.768	.709	
Percentage of variance							63.783
KMO							.708
Bartlett's test							.000 significant
Eigenvalue							3.189

The above table shows that the value of coefficient of correlation of the variables is greater than 0.30, which indicates the suitability of EFA for analysis. The value of KMO is .708 which means the sample size is adequate for EF analysis. The Bartlett's test of sphericity is also highly significant with $p<.05$ and the value of communalities of all the variables is greater than the acceptable level of 0.40. Further, factor loading of all the variables is greater than the cut-off level of 0.50. Additionally, the eigenvalue is more than 1, which is in line with the recommended level. In addition, EFA results of Certification produced an average variance which accounting for 63.783%.

6.6.3.1.11 Results of EFA for Purchase intention

In this study, eight variables were used to measure Purchase intention**.** Table 6.48 shows the results of EFA for this construct.

Table 6.48: Results of EFA for Purchase intention

Correlation matrix and factor loading								Communality
	Variable	INT1	INT2	INT3	INT4	INT5	INT6	
Correlation	INT1	1.000	.849	.801	.831	.809	.820	.854
	INT2	.849	1.000	.780	.828	.784	.884	.680
	INT3	.801	.780	1.000	.812	.834	.743	.806
	INT4	.831	.828	.812	1.000	.845	.860	.877
	INT5	.809	.874	.834	.845	1.000	.803	.842
	INT6	.820	.884	.743	.860	.803	1.000	.855
Loading		.924	.927	.898	.937	.917	.925	
Percentage of variance								84.920
KMO								.913
Bartlett's test								.000 significant
Eigenvalue								5.095

As illustrated in the above table, the value of coefficient of correlation of the variables is greater than 0.30, which indicates the suitability of EFA for analysis. The value of KMO is .913 which means the sample size is adequate for EF analysis. The Bartlett's test of sphericity is significant with $p<.05$, the value of communalities of all the variables is greater than the acceptable level of 0.40. Further, factor loading of all the variables is greater than the cut-off level of 0.50. Additionally, the eigenvalue is more than 1, which is in line with the recommended level. In addition, EFA results of Purchase intention produced an average variance which accounting for 84.920%.

6.6.4 Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis is one of the statistical techniques of Structural Equation Modelling (SEM) that deals with the relationships between the manifest variables and latent variables (construct) used in a particular study (Kline 2011; Brown 2014). CFA can be used for various purposes such as evaluating and achieving fitness of both the measurement model and structural model, CFA is required (Hair et al. 2010; Kline 2011). The measurement model is a set of variables that represents a particular latent construct, whereas the structural model is a path model that groups all the latent constructs (independent and dependent variables) used in the study (Hair et al. 2010). Further, the values of composite reliability, construct reliability, convergent validity, and construct validity depend on the

findings of CFA (Hair et al. 2010; Brown 2014). Additionally, CFA is widely used in social and applied research (Brown 2014). Also, CFA is commonly used in organic food studies (Lee & Yun 2015; Pandey & Khare 2017; Ryan & Casidy 2018; Shin et al. 2018; Sultan et al. 2018). In this research, CFA was employed to refine the measurement scales, achieve fitness for both the measurement model and the structural model used in the study, and to calculate and achieve some of the reliability and validity measures such as construct reliability, construct validity, and convergent validity. Statistically, CFA should be performed after EFA (Kline 2011; Kline 2015). Therefore, in this study, the researcher used the Analysis of Moment Structure (AMOS) software to perform CFA.

6.6.4.1 Measurement model fit indices

To achieve the fitness of the measurement model, several fit indices or measures were analysed. According to Kline (2011), there are three main measures for analysis of measurement model fitness. These measures are absolute fit indices, incremental fit indices, and parsimony fit indices. Absolute fit indices enable the researcher to determine how well the research model fits the observed data (Hooper et al. 2008). Absolute fit indices include the following measures (Hair et al. 1998; Sun 2005):

Absolute fit indices:

- Chi-square ($\chi 2$): is one of the most important statistical techniques for checking the overall fit (Hair et al. 1998), but this test is not applied if the sample size exceeds 200 cases. Therefore, the Chi-square is ignored in this stage of analysis due to the sample size of 390 cases which is greater than 200 (Hair et al. 1998; Hoe 2008).
- Root Mean Square Residual (RMR), the value of RMR should be ≤ 0.08 (Hu & Bentler 1999; Kline 2011).
- Root Mean Square Error of Approximation (RMSEA), the value of RMSEA should be ≤ 0.08 (Hair et al. 1998; Hair et al. 2006; Brown 2014).
- Goodness-of-Fit Index (GFI): This index is one of the absolute fit measures, but the recent development of other fit indices has led to less usage of GFI (Hair 2010).

Incremental fit indices

Incremental fit Indies include the following indices:

- Normed Fit Index (NFI): The acceptable value of (NFI) is > 0.90 (Hair et al. 1998; Hu & Bentler 1999; Hair et al. 2010).

- Comparative Fit Index (CFI): The acceptable value of (NFI) is > 0.90 (Hair et al. 1998; Hooper et al. 2008; Hair et al. 2010). CFI is one of the most reported values of fit (Hair et al. 2010).
- Tucker Lewis Index (TLI): The cut-off value of this index is > 0.90 (Heubeck & Neill 2000). Further, TLI is the most widely reported of the fit indices (Hair et al. 2010).
- Incremental Fit Index (IFI): IFI is one of other incremental fit indices (Hair et al. 1998). The acceptable value of this index is > 0.90 (Bride et al. 2004).

Parsimonious fit indices

Incremental fit Indices include the following indices:

- Normed Chi Square (CMIN/DF): this is one of the most important fit indices which belongs to the parsimonious fit indices. The value of this index should be ≤ 5.0 (Hair et al. 1998). In contrast, Kline (2011) argued that the acceptable value of normed chi square ranges between 2 and 3.

There is no agreement on the best fit indices (Hartman et al. 1999) however, it is not important to report every fit index included in the AMOS software (Hooper et al. 2008). Thus, utilising three to four fit indices is considered to provide sufficient evidence for model fitness (Hair et al. 2010). Typically, the most important indices that provide adequate information about the best model fit are CFI, Normed Chi Square, TLI, RMSEA, and RMR (Hooper et al. 2008; Hair et al. 2010). Accordingly, in this research, the researcher utilised the following fit indices to achieve both measurement model fitness, and structural model fitness:

- Normed Chi Square (CMIN/DF)
- Root Mean Square Residual (RMSR)
- Root Mean Square Error of Approximation (RMSEA)
- Normed Fit Index (NFI)
- Tucker Lewis Index (TLI)
- Comparative Fit Index (CFI)
- Incremental Fit Index (IFI)

Another essential issue in the CFA is the value of factor loading. The ideal value of the standardised factor loading is 0.70 or greater (Hair et al. 2010; Kline 2011). Accordingly, the researcher followed this value as the cut-off level of standardised factor loading.

Furthermore, in this study, the regression weights for each manifest variable for each construct are also presented. In this regard, critical value (critical t-value) should be reported and the value of this test must be 1.96 or greater, with a P-value no greater than 0.05 (Hair et al. 2010; Kline 2011).

6.6.4.2 The initial and final findings of CFA for each construct

In this research, AMOS version 25 software was used to perform the CFA of the measurement model and structural model. The researcher used the maximum likelihood method as an estimation method. Further, the initial measurement model of the CFA is developed based on the findings of EFA. Below is a discussion of the findings of CFA for each construct (Shah & Goldstein 2006).

6.6.4.2.1 Initial and final findings of CFA for Health concerns

In this stage of the analysis, four manifest variables were utilised to measure the Health concerns construct. The initial and final findings of CFA showed that the model achieved a good fit and all the fit indices were achieved as well. The following Table, 6.49 and 6.50 illustrate the initial and final findings of CFA and regression weights for the Health concerns construct.

Table 6.49: CFA findings for Health concerns

Items code	Items wording	Initial standardised loadings	Final standardised loadings
HC1	Organic food keeps me healthy.	.859	.859
HC2	Organic food contains a lot of vitamins and minerals.	.782	.782
HC5	Organic food reduces the risk of illness.	.759	.759
HC6	Organic food has no harmful side effects.	.705	.705

	Fit Indices							
	CMIN/DF	**GFI**	**NFI**	**RMR**	**IFI**	**TLI**	**CFI**	**RMSEA**
CFA Initial Findings	1.467	.996	.996	.007	.999	.996	.999	.035
CFA Final Findings	1.467	.996	.996	.007	.999	.996	.999	.035

Table 6.50: Regression weights for Health concerns items

			Estimate	S.E.	C.R. (t-value)	P
HC1	<---	HC	1.000			
HC2	<---	HC	.823	.049	16.673	***
HC5	<---	HC	1.029	.064	16.117	***
HC6	<---	HC	.865	.059	14.740	***

Note: ***p< 0.001

As shown in the above tables, all the values of standardised loading for all the items used to measure the Health concerns construct are greater than the ideal value of 0.70. Further, the values of all fit indices have met the cut-off level. In addition, as shown in the second table, the t-values of all the items are more than acceptable as value 1.96, and P- values of all the items is significant at $p < 0.001$.

6.6.4.2.2 Initial and final findings of CFA for Environmental concerns

Five manifest variables were used to measure the Environmental concerns construct. The initial findings of CFA showed that the model achieved poor fit. The following Tables 6.51 and 6.52 show the initial and final findings of CFA and regression weights for the Environmental concerns construct.

Table 6.51: CFA findings for Environmental concerns

Items code	Items wording	Initial standardised loadings	Final standardised loadings
EC1	Organic foods have been prepared in an environmentally friendly way.	.792	.732
EC2	Organic food is beneficial for the environment.	.855	.808
EC3	Producing organic food reduces the use of herbicides and pesticides in agriculture.	.837	.835
EC4	Organic food is produced in a more environmentally friendly manner than conventional foods.	.909	.937
EC5	Organic food helps to achieve biological equilibrium in nature.	.844	.857

	Fit Indices						
	CMIN/DF	GFI	NFI	RMR	IFI	TLI	CFI	RMSEA
CFA Initial Findings	22.687	.891	.928	.026	.931	.862	.931	.237
CFA Final Findings	2.282	.991	.994	.009	.997	.992	.997	.057

Table 6.52: Regression weights for Environmental concerns items

Initial findings of regression weights						
			Estimate	S.E.	C.R. (t-value)	P
EC5	<---	EC	1.000			
EC4	<---	EC	1.067	.045	23.568	***
EC3	<---	EC	.936	.046	20.544	***
EC2	<---	EC	.935	.044	21.275	***
EC1	<---	EC	.826	.044	18.819	***
Final findings of regression weights						
			Estimate	**S.E.**	**C.R. (t-value)**	**P**
EC5	<---	EC	1.000			
EC4	<---	EC	1.084	.043	25.282	***
EC3	<---	EC	.920	.044	21.003	***
EC2	<---	EC	.871	.044	19.856	***
EC1	<---	EC	.752	.044	16.979	***

Note: ***p< 0.001

As shown in the first table, all the values of standardised loading for all the items used to measure the Environmental concerns construct are greater than the ideal value of 0.70. The initial findings of CFA for the Environmental concerns construct achieved poor fit with the data due to the low value of some of the fit indices such as CMIN/DF, GFI, TLI, and RMSEA. Thus, the researcher followed the modification indices provided by the AMOS software to improve the model fit. The modification indices of the AMOS software suggested the possibility of drawing covariance between (e4 and e5) to improve the value of some of the fit indices. After performing the suggested drawing, the final model fit of Environmental concerns achieved a good fit, and the values of all fit indices were improved. Further, the values of standardised factor loading were also modified. Additionally, as presented in the second table, although there was drawing covariance between (e4 and e5), the t-values of all the items was still more than the acceptable value 1.96, and the P-values of all the items was still significant at p< 0.001.

6.6.4.2.3 Initial and final findings of CFA for Subjective norms

In this research, five manifest variables were used to measure the Subjective norms construct. The initial findings of CFA showed that the model achieved poor fit and most of the fit indices did not achieve the cut-off level of acceptance. The following Tables 6.53 and 6.54 demonstrate the initial and final findings of CFA and regression weights for the Subjective norms construct.

Table 6.53: CFA findings for Subjective norms

Items code	Items wording	Initial standardised loadings	Final standardised loadings
SN1	My friends and family consume organic food	.774	.861
SN2	My family thinks that I should buy organic food rather than non-organic food	.818	.841
SN3	Most people I value would buy organic food rather than non-organic food	.886	.789
SN4	My friends and family members would appreciate if I buy organic food	.886	.726
SN5	The trend of buying organic food among people around me is increasing	.725	.763

	Fit Indices							
	CMIN/DF	**GFI**	**NFI**	**RMR**	**IFI**	**TLI**	**CFI**	**RMSEA**
CFA Initial Findings	27.308	.879	.903	.048	.906	.812	.906	.260
CFA Final Findings	1.817	.994	.996	.013	.998	.994	.998	.046

Table 6.54: Regression weights for Subjective norms items

Initial findings of regression weights						
			Estimate	**S.E.**	**C.R. (t-value)**	**P**
SN1	<---	SN	1.000			
SN2	<---	SN	1.094	.063	17.289	***
SN3	<---	SN	1.179	0.62	19.034	***
SN4	<---	SN	1.196	.063	19.037	***
SN5	<---	SN	.975	.065	14.948	***
Final findings of regression weights						
			Estimate	**S.E.**	**C.R. (t-value)**	**P**
SN1	<---	SN	1.000			
SN2	<---	SN	1.011	.052	19.598	***
SN3	<---	SN	.944	.052	18.009	***
SN4	<---	SN	.883	.056	15.888	***
SN5	<---	SN	.923	.054	17.216	***

Note: ***p< 0.001

As illustrated in the first table, all the values of standardised loading for all the items used to measure the Subjective norms construct are greater than the ideal value of 0.70. In addition, the initial findings of CFA for the Subjective norms construct achieved poor fit with the data due to the low value of some of fit indices such as CMIN/DF, GFI, TLI, and RMSEA. Thus, the researcher followed the modification indices provided by AMOS software to improve the model fit. The modification indices of AMOS software suggested to draw covariance between (e2 and e4) to improve the value of some fit indices. After implementing the suggested drawing, the final model fit of the Subjective norms construct achieved a good fit, and the values of all fit indices were improved. Further, the values of standardised factor loading were also changed. Additionally, as presented in the second table, although there was drawing covariance between (e2 and e4), the t-values of all the items was still more than the acceptable value of 1.96, and the P- values of all the items was still significant at p< 0.001.

6.6.4.2.4 Initial and final findings of CFA for Price

Based on the findings of EFA, three manifest variables were used to measure the Price construct. The initial and final findings of CFA showed that the values of factor loading of PR1 and PR3 were lower than the ideal value of 0.70. Further, there were no values of a number of fit indices for the Price construct measurement model, while some of the fit indices such as RMR, GFI, NFI, IFI, and CFI achieved fit criteria, but the AMOS software did not show any value about Chi-square/df, and TLI. Furthermore, RMSEA was 0.374 which is greater than 0.08. In addition, when looking at modification indices, there were no suggestions found to improve the value of fit indices. In this respect, scholars argued that,

in order to have a good fit for a measurement model, any latent variable (construct) should have at least four manifest variables (items) to enable software to compute the values of fit indices (Raubenheimer 2004; Afthanorhan 2013). Thus, because Price has only three items, this case occurred, and to overcome this problematic situation, Price was removed from the analysis. The following Tables 6.55 and 6.56 present the findings of CFA and regression weights for the Price construct.

Table 6.55: CFA findings for Price

Items code	Items wording	Initial standardised loadings	Final standardised loadings
PR1	Organic food is expensive.	.551	.551
PR2	Only consumers with high income can afford organic food.	.704	.704
PR3	The price of a product is very important to me.	.629	.629

Fit Indices								
	CMIN/DF	GFI	NFI	RMR	IFI	TLI	CFI	RMSEA
CFA Initial Findings	-	1.000	1.000	0.000	1.000	-	1.000	0.374
CFA Final Findings	-	1.000	1.000	0.000	1.000	-	1.000	0.374

6.56: Regression weights for Price items

Initial and findings of regression weights						
			Estimate	S.E.	C.R. (t-value)	P
PR5	<---	PR	1.000			
PR3	<---	PR	1.080	.159	6.810	***
PR1	<---	PR	.914	.129	7.102	***

Note: ***p< 0.001

6.6.4.2.5 Initial and final findings of CFA for Trust

To perform CFA, six manifest variables (items) were used to measure the Trust construct. The initial and final findings of CFA for the Trust construct showed that the model achieved some of the fit indices such as GFI, NFI, IFI, TLI, CFI and NFI. As shown in Table 6.57, the values of RMR, CMIN/FD, and RMSEA did not achieve the required fitness. Further, all the values of factor loading were greater than 0.70 except TR1 and TR6 which were lower than 0.70. Therefore, TR1 and TR6 were removed to improve the value of other fit indices. After removing TR1 and TR6 all the fit indices were achieved and the measurement model of the Trust construct had a good fit. Additionally, as presented in Table 6.58, although TR1 and TR6 were removed, the t-values of all the items was still more than the acceptable value 1.96, and the P- values of all the items was still significant at p< 0.001.

Table 6.57: CFA findings for Trust

Items code	Items wording	Initial standardised loadings	Final standardised loadings
TR1	I trust organic food.	.651	Removed
TR3	I trust Australian institutions certifying organic foods.	.876	.883
TR4	I trust Australian organic food manufacturers.	.922	.929
TR5	I trust sellers of certified organic foods.	.904	.901
TR6	I would buy organic food if I can trust it is really organic.	.551	Removed
TR7	I trust the organic certification logo on organic food labels.	.857	.843

	Fit Indices						
	CMIN/DF	GFI	NFI	RMR	IFI	TLI	CFI	RMSEA
CFA Initial Findings	5.857	.953	.970	.023	.975	.958	.975	.112
CFA Final Findings	0.496	.999	.999	.002	1.000	.1.000	1.000	.000

Table 6.58: Regression weights for Trust items

Initial findings of regression weights						
			Estimate	S.E.	C.R. (t-value)	P
TR1	<---	TR	1.000			
TR3	<---	TR	1.195	.081	14.799	***
TR4	<---	TR	1.309	.085	15.356	***
TR5	<---	TR	1.355	.089	15.144	***
TR6	<---	TR	.660	.066	10.016	***
TR7	<---	TR	1.135	.078	14.546	***
Final findings of regression weights						
			Estimate	S.E.	C.R. (t-value)	P
TR3	<---	TR	1.078	.047	22.733	***
TR4	<---	TR	1.182	.048	24.829	***
TR5	<---	TR	1.209	.051	23.561	***
TR7	<---	TR	1.000			

Note: ***p< 0.001

6.6.4.2.6 Initial and final findings of CFA for Social media

In this stage of the analysis, six manifest variables were used to perform CFA for the Social media construct. As illustrated in Table 6.59, the initial findings of CFA showed that the factor loading for the items was greater than the ideal value 0.70, except for the values of SM4 and SM5 (less than 0.70), therefore, SM4 and SM5 were deleted. Moreover, all the fit indices were not achieved. After removing SM4 and SM5, the final results of CFA showed that all the fit indices achieved the acceptable levels of a good fit. In addition, as shown in Table 6.60, although SM4 and SM5 were deleted, the t-values of all the items was still more than the acceptable value of 1.96, and the P-values of all the items was still significant at p<0.001.

Table 6.59: CFA findings for Social media

Items code	Items wording	Initial standardised loadings	Final standardised loadings
SM1	I am satisfied with the social media communications of the companies that market organic food products.	.715	
SM2	I get information about organic food from various kinds of social media.	.848	
SM3	Social media are informative about the company's products.	.913	
SM4	Social media communications of the companies that market organic food products are very attractive.	.622	Removed
SM5	Advertising on social media sites of the companies that market organic food products impacts my decision to buy organic food.	.694	Removed
SM6	Social media provides me with an efficient platform to communicate with the companies that market organic food products.	.704	

	Fit Indices						
	CMIN/DF	GFI	NFI	RMR	IFI	TLI	CFI	RMSEA
CFA Initial Findings	24.402	.853	.846	.072	.852	.752	.851	.245
CFA Final Findings	2.109	.989	.991	.015	.995	.988	.995	.053

Table 6.60: Regression weights for Social media items

Initial findings of regression weights						
			Estimate	S.E.	C.R. (t-value)	P
SM1	<---	SM	1.000			
SM2	<---	SM	1.508	.094	16.020	***
SM3	<---	SM	1.433	.084	17.035	***
SM4	<---	SM	1.012	.086	11.769	***
SM5	<---	SM	1.306	.099	13.149	***
SM6	<---	SM	1.316	.099	13.336	
Final findings of regression weights						
			Estimate	**S.E.**	**C.R. (t-value)**	**P**
SM6	<---	SM	1.000			
SM3	<---	SM	1.214	0.87	13.878	***
SM2	<---	SM	1.481	0.123	12.055	***
SM1	<---	SM	0.946	0.084	11.264	***

Note: ***p< 0.001

6.6.4.2.7 Initial and final findings of CFA for Packaging and labelling

The Packaging and labelling construct was analysed using CFA. As demonstrated in the first Table 6.61, the initial findings of CFA showed that the values of factor loading of PL4 (.438), PL6 (.374), PL5 (.538) and PL7 (.346) were lower than 0.70. Thus, those variables were removed. In addition, the values of all the fit indices were not achieved. In the second Table 6.62, the t-values of the variables before and after removing PL4, PL6, PL5 and PL7

were still acceptable. Further, the P-values of all the items was still significant at p< 0.001. After removing the low values of loading, all the fit indices were achieved.

Table 6.61: CFA findings for Packaging and labelling

Items code	Items wording	Initial standardised loadings	Final standardised loadings
PL1	I prefer to buy the products that have attractive packaging.	.849	.840
PL2	The quality of the packaging material is important during buying process of organic food products.	.951	.963
PL3	Packaging influences my purchasing decision towards organic food products.	.915	.915
PL4	Organic labelling provides correct information on organic foods.	.438	Removed
PL5	When I do shopping, I will pay more attention to food that has been certified with an organic label.	.538	Removed
PL6	Organic labels are important because they guarantee that the products concerned really do come from organic production.	.374	Removed
PL7	When I buy organic food product, I always read the label.	.346	Removed

	Fit Indices						
	CMIN/DF	GFI	NFI	RMR	IFI	TLI	CFI	RMSEA
CFA Initial Findings	34.870	.711	.724	.117	.730	.594	.729	.295
CFA Final Findings	3.117	.984	.988	.022	.992	.975	.992	.074

Table 6.62: Regression weights for Packaging and labelling items

Initial findings of regression weights						
			Estimate	S.E.	C.R. (t-value)	P
PL1	<---	PL	1.000			
PL2	<---	PL	1.135	.043	26.151	***
PL3	<---	PL	1.104	.045	24.708	***
PL4	<---	PL	.431	.048	8.939	***
PL5	<---	PL	.574	.052	11.061	***
PL6	<---	PL	.343	.046	7.510	***
PL7	<---	PL	.344	.050	6.887	***
Final findings of regression weights						
			Estimate	S.E.	C.R. (t-value)	P
PL1	<---	PL	1.000			
PL2	<---	PL	1.163	.045	25.906	***
PL3	<---	PL	1.117	.046	24.363	***

Note: ***p< 0.001

After removing PL4, PL5, PL6, and PL7 due to the low factor loading, there is a need to rename the construct to Packaging, and therefore, the researcher decided to use (PA) as new code for this construct.

6.6.4.2.8 Initial and final findings of CFA for Availability

Four manifest variables (items) were used to measure the Availability construct. As shown in the first Table 6.63, the values of factor loading of AV2 (.386) and AV4 (.449) were lower than the acceptable value 0.70. As a result, AV2 and AV4 were removed. After removing the two items, the Availability construct included only two items AV1 and AV3. With regard to this case, scholars argued that using two items is not sufficient to measure a construct (Kim et al. 1998; Raubenheimer 2004; Eisinga et al. 2013). Therefore, in this stage of CFA analysis, the Availability construct was removed from the analysis due to the low number of items used to measure this construct. In addition, in the second Table 6.64, after deleting the two items, the Table of regression weights did not identify any value for t-value, and P- value, because Availability cannot be measured using two items.

Table 6.63: CFA findings for Availability

Items code	Items wording	Initial standardised loadings	Final standardised loadings
AV1	I will purchase organic food products if they are available in the marketplace	.838	
AV2	Organic food is always readily available in the market place.	.386	Removed
AV3	I would buy more organic food if there were more varieties of such products.	.763	
AV4	I am able to find organic food products in shops.	.449	Removed

	Fit Indices							
	CMIN/DF	**GFI**	**NFI**	**RMR**	**IFI**	**TLI**	**CFI**	**RMSEA**
CFA Initial Findings	30.657	.931	.840	.086	.844	.528	.843	.276
CFA Final Findings	-	-	-	-	-	-	-	-

Table 6.64: Regression weights for Availability items

Initial findings of regression weights						
			Estimate	**S.E.**	**C.R. (t-value)**	**P**
AV4	<---	AV	1.000			
AV3	<---	AV	1.585	.203	7.816	***
AV2	<---	AV	.882	.156	5.640	***
AV1	<---	AV	1.763	.231	7.628	***
Final findings of regression weights						
			Estimate	**S.E.**	**C.R. (t-value)**	**P**
AV1	<---		unidentified	unidentified	unidentified	unidentified
AV3	<---		unidentified	unidentified	unidentified	unidentified

6.6.4.2.9 Initial and final findings of CFA for Sensory food attributes

Based on the findings of EFA, six manifest variables were used to measure the Sensory food attributes construct. As shown in the first Table 6.65, the values of factor loading of SFAtt1,

SFAtt3, PAtt4, and SFAtt5 were greater than 0.70, except for SFAtt2 and SFAtt7. Therefore, SFAtt2 and SFAtt7 were removed. Moreover, the initial findings showed that all the fit indices were not achieved. After removing SFAtt2 and SFAtt7, the values of the fit indices achieved a good fit for the measurement model of this construct. Further, although SFAtt2 and SFAtt7 were removed, the t-values of all the manifest variables were acceptable and the P-values of all the variables were significant at p< 0.001.

Table 6.65 CFA findings for Sensory food attributes

Items code	Items wording	Initial standardised loadings	Final standardised loadings
SFAtt1	I prefer organic foods because they are tasty.	.772	.744
SFAtt2	Organic food has good flavour.	.598	Removed
SFAtt3	Organic food contains natural ingredients.	.751	.742
SFAtt4	I believe that organic food has superior quality.	.862	.889
SFAtt5	I consume organic foods for their nutritional content.	.784	.775
SFAtt7	Organic food is free of chemical and hormonal residues.	.651	Removed

Fit Indices								
	CMIN/DF	GFI	NFI	RMR	IFI	TLI	CFI	RMSEA
CFA Initial Findings	17.374	.877	.874	.054	.880	.799	.880	.205
CFA Final Findings	3.380	.984	.984	.021	.988	.971	.988	.078

Table 6.66: Regression weights for Sensory food attributes items

Initial findings of regression weights						
			Estimate	S.E.	C.R. (t-value)	P
SFAtt1	<---	SFAtt	1.000			
SFAtt2	<---	SFAtt	.661	.056	11.722	***
SFAtt3	<---	SFAtt	.693	.046	15.130	***
SFAtt4	<---	SFAtt	1.072	.061	17.579	***
SFAtt5	<---	SFAtt	1.038	.065	15.875	***
SFAtt7	<---	SFAtt	.659	.051	12.857	***
Final findings of regression weights						
			Estimate	S.E.	C.R. (t-value)	P
SFAtt1	<---	SFAtt	1.000			
SFAtt3	<---	SFAtt	.711	.050	14.199	***
SFAtt4	<---	SFAtt	1.149	.070	16.495	***
SFAtt5	<---	SFAtt	1.065	.072	14.840	***

Note: ***p< 0.001

6.6.4.2.10 Initial and final findings of CFA for Certification

Five manifest variables (items) were utilised to measure the Certification construct. As shown in Table 6.67, the initial findings of CFA for this construct showed that the factor

loading of CR3 and CR4 were less than 0.70 therefore, these variables were removed. Additionally, the initial findings presented a poor fit for this model. The final results of CFA showed that all the fit indices were achieved. The second Table 6.68 illustrated that after removing CR3 and CR4, the t-values of other variables were still acceptable, and the P-values of all the variables were still significant at p< 0.001.

Table 6.67: CFA findings for Certification

Items code	Items wording	Initial standardised loadings	Final standardised loadings
CR1	If organic food is certified, I will purchase it.	.938	.986
CR2	I look for an organic seal.	.871	.841
CR3	Certificate guarantees that the food is produced organically.	.542	Removed
CR4	Organic food producers should be certified.	.572	Removed
CR5	I believe that organic food production certificate is important for my food purchases.	.700	.774

Fit Indices							
	CMIN/DF	GFI	NFI	RMR	IFI	TLI	CFI	RMSEA
CFA Initial Findings	31.701	.875	.851	.065	.855	.708	.854	.281
CFA Final Findings	.050	1.000	1.000	.002	1.000	1.000	1.000	0.000

Table 6.68: Regression weights for Certification items

Initial findings of regression weights						
			Estimate	S.E.	C.R. (t-value)	P
CR1	<---	CR	1.000			
CR2	<---	CR	1.071	.046	23.505	***
CR3	<---	CR	.516	.044	11.618	***
CR4	<---	CR	.550	.044	12.454	***
CR5	<---	CR	.645	.041	15.873	***
Final findings of regression weights						
			Estimate	S.E.	C.R. (t-value)	P
CR1	<---	CR	1.000			
CR2	<---	CR	.860	.050	17.291	***
CR3	<---	CR	.529	.041	12.980	***

Note: ***p< 0.001

6.6.4.2.11 Initial and final findings of CFA for Purchase intention

In this stage of the analysis, the Purchase intention was measured using six variables. The initial findings of CFA for this construct illustrated that all the values of factor loading are greater than 0.70. Moreover, the model in the first run of CFA achieved many of the fit indices except the values of CMIN/DF, RMR, and RMSEA. The researcher used a modification index given by AMOS software to improve the values of fit indices. A

modification of the indices suggested the need to draw a covariance between (e5 and e6). When the researcher drew the suggested covariance, all the fit indices were achieved. In addition, the initial and final findings of t-values of all variables of this construct were acceptable when they were greater than 1.96, and the P-values of all the variable were also significant at p< 0.001. Tables 6.69 and 6.70 show the findings of CFA for this construct.

Table 6.69: CFA findings for Purchase intention

Items code	Items wording	Initial Standardised loadings	Final standardised loadings
INT1	I try to buy organic foods because they are the best choice for me.	.908	.897
INT2	I intend to buy organic food in the near future.	.916	.881
INT3	If I had to buy food today, I would buy certified organic food.	.868	.892
INT4	I expect to consume organic food.	.926	.929
INT5	For me, the probability to buy organic foods is high.	.894	.906
INT6	I am interested in experiencing the benefits of consuming organic food.	.917	.911

	CMIN/DF	GFI	NFI	RMR	IFI	TLI	CFI	RMSEA
CFA Initial Findings	13.962	.902	.959	.029	.959	.931	.959	.183
CFA Final Findings	2.852	.986	.994	.012	.996	.990	.996	.069

Table 6.70: Regression weights for Purchase intention items

Initial findings of regression weights						
			Estimate	**S.E.**	**C.R. (t-value)**	**P**
INT1	<---	INT	1.000			
INT2	<---	INT	1.011	.035	28.978	***
INT3	<---	INT	1.018	.032	32.172	***
INT4	<---	INT	.916	.034	26.758	***
INT5	<---	INT	.979	.031	31.125	***
INT6	<---	INT	.903	.030	30.240	***
Final findings of regression weights						
			Estimate	**S.E.**	**C.R. (t-value)**	**P**
INT1	<---	INT	1.000			
INT2	<---	INT	1.032	.035	27.208	***
INT3	<---	INT	1.029	.033	31.315	***
INT4	<---	INT	.949	.039	24.151	***
INT5	<---	INT	.947	.027	32.075	***
INT6	<---	INT	.889	.032	28.396	***

Note: ***p< 0.001

6.6.4.2.12 Overall structural model fit

After the measurement model fit had been completed for each construct, the final stage in CFA was to achieve an overall fit for the structural model. In this stage of analysis, nine constructs (latent variables) were grouped into a structural model. The initial findings of

CFA for the structural model indicated that all the values of factor loading were greater than the ideal value 0.70, except for SM6 (.613) and SFAtt3 (.691). Therefore, SM6 and SFAtt3 were removed. Moreover, as shown in Table 6.72, the t-values for all the variables were acceptable (more than 1.96). In addition, the P-value for all the variables were also significant at p< 0.001. The final version of the survey is provided in (Appendix G). The following Tables 6.71 and 6.72 illustrate the values of factor loading, t-values, and P-values for all the variables.

Table 6.71: Factor standardised loading for all the manifest variables (items)

No	Manifest variables (items)	Standardised loadings	
1	HC1	.839	
2	HC2	.779	
3	HC5	.788	
4	HC6	.702	
5	EC1	.812	
6	EC2	.871	
7	EC3	.827	
8	EC4	.900	
9	EC5	.831	
10	SN1	.789	
11	SN2	.826	
12	SN3	.876	
13	SN4	.867	
14	SN5	.746	
15	TR3	.879	
16	TR4	.926	
17	TR5	.903	
18	TR7	.852	
19	SM1	.763	
20	SM2	.888	
21	SM3	.884	
22	SM6	.613	Removed
23	PA1	.843	
24	PA2	.959	
25	PA3	.918	
26	SFAtt1	.797	
27	SFAtt3	.691	Removed

28	SFAtt4	.851
29	SFAtt5	.804
30	CR1	.961
31	CR2	.852
32	CR5	.700
33	INT1	.914
34	INT2	.916
35	INT3	.870
36	INT4	.922
37	INT5	.892
38	INT6	.916

Table 6.72: t-values and P-values of all the variables (items)

No	Item			Estimate	S.E.	C.R. (t-value)	P
1	HC5	<---	HC	1.000			
2	HC2	<---	HC	.782	.042	18.828	***
3	HC1	<---	HC	.950	.044	21.354	***
4	EC5	<---	EC	1.000			
5	EC4	<---	EC	1.058	.039	27.223	***
6	EC3	<---	EC	.982	.050	19.816	***
7	EC2	<---	EC	.961	.048	19.973	***
8	EC1	<---	EC	.863	.048	18.062	***
9	SN5	<---	SN	1.000			
10	SN4	<---	SN	.916	.055	16.675	***
11	SN3	<---	SN	.991	.055	18.124	***
12	SN2	<---	SN	1.041	.055	19.061	***
13	SN1	<---	SN	1.012	.052	19.279	***
14	TR3	<---	TR	.947	.034	27.886	***
15	TR4	<---	TR	1.003	.033	30.838	***
16	TR5	<---	TR	1.000			
17	SM2	<---	SM	1.588	.081	19.698	***
18	SM3	<---	SM	1.271	.069	18.452	***
19	PA1	<---	PA	1.000			
20	PA2	<---	PA	1.184	.044	26.634	***
21	PA3	<---	PA	1.140	.046	24.999	***
22	SFAtt 5	<---	SFAtt	1.045	.048	21.878	***
23	SFAtt 4	<---	SFAtt	1.000			
24	CR2	<---	CR	1.000			
25	INT4	<---	INT	1.009	.033	30.930	***
26	INT3	<---	INT	.934	.031	30.188	***
27	INT2	<---	INT	.952	.035	27.417	***
28	INT6	<---	INT	.984	.034	28.912	***
29	TR7	<---	TR	.864	.035	24.972	***
30	SM1	<---	SM	1.000			
31	INT1	<---	INT	.895	.032	27.645	***
32	INT5	<---	INT	1.000			
33	CR1	<---	CR	1.000			
34	SFAtt 1	<---	SFAtt	1.000			
35	CR5	<---	CR	.640	.038	16.730	***
36	HC6	<---	HC	.734	.050	14.713	***
Total: 36 variables (items)							

The initial findings of CFA for the overall structural model fit indicated that none of the fit indices were achieved except for RMR (.063) which is less than 0.08. Hence, it is essential to use the modification indices provided by the AMOS software to improve the fit indices. Table 6.73 shows the initial findings of CFA for the overall structural model fit.

Table 6.73: Initial overall measurement CFA initial model findings

Fit category	Fit Index	Initial finding	Decision
Absolute fit	RMR	.063	Satisfactory
	RMSEA	.105	Not satisfactory
Incremental fit	IFI	.833	Not satisfactory
	TLI	.812	Not satisfactory
	NFI	.801	Not satisfactory
	CFI	.832	Not satisfactory
Parsimonious fit	CMIN/DF	5.254	Not satisfactory

As seen in the above table, the value of the majority of the fit indices are not acceptable, except for the value of RMR which acceptable. Thus, the overall model fitness should be improved. To enhance the values of the structural model fit indices, the researcher used a modification indices that are suggested by the AMOS software. These suggestions relate to the covariance between the variables. As a result, as explained previously in Section 6.6.4.1 there is no need to report all the fit indices. However, the researcher has to report at least one absolute index and one incremental index. Thus, in this research, the final model fit achieved two absolute fit indices, four incremental fit indices, and one parsimonious fit index, which is more than one incremental and one absolute fit index. The following Table 6.74 illustrates the findings of overall structural model fit.

Table 6.74: Final overall measurement CFA structural model findings

Fit category	Fit Index	Final finding	Decision
Absolute fit	RMR	.064	Satisfactory
	RMSEA	.070	Satisfactory
Incremental fit	IFI	.932	Satisfactory
	TLI	.912	Satisfactory
	NFI	.901	Satisfactory
	CFI	.932	Satisfactory
Parsimonious fit	CMIN/DF	2.931	Satisfactory

6.6.5 Reliability and validity of the quantitative data

As discussed in Section 6.6, the measurement scale of the study was validated using the first two initial reliability tests, namely Cronbach's Alpha (internal consistency) and item-total correlation (Hair et al. 2010). In this section, other reliability and validity tests of quantitative data are addressed. Further, as explained in Chapter Three, the researcher uses composite reliability, construct reliability, convergent validity and construct validity. Further still, although face validity is not determined by statistical techniques, face validity is discussed in this section. Below is a discussion of the reliability and validity tests used in this stage of the study.

1. Reliability tests

- **Composite reliability**

Composite reliability is driven from the findings of CFA (Hair et al. 2010). Further, the researchers must report the value of composite reliability for each construct in the study, and the value of composite reliability should not be lower than 0.070 (Hair et al. 2006; Hair Jr et al. 2016). In this research, to calculate composite reliability, the researcher used the composite reliability calculator using the following formula (Raykov 1997; Colwell 2016):

$$CR = \frac{(\sum \lambda_i)^2}{(\sum \lambda_i)^2 + (\sum \epsilon_i)}$$

Further, here is the link to the composite reliability calculator:
(http://www.thestatisticalmind.com/calculators/comprel/composite_reliability.htm)

From Table 6.75 it can be seen that the value of composite reliability of all the constructs is more that the acceptable value of 0.70.

- **Construct reliability**

As discussed in Chapter Three, construct reliability is utilised in this research to ensure the values of this test. According to Hair et al. (2010), construct reliability has to be calculated before construct validity. Thus, in this research, the researcher used construct reliability prior to construct validity. The formula of construct reliability is (squared sum of the standardised factor loading divided by squared sum of standardised factor loading plus the sum of the measurement error of the indicator). The value of construct reliability should be 0.70 or greater (Maditinos et al. 2010; Nusair & Hua 2010). To calculate the value of

construct reliability for each construct, the researcher employed Microsoft Excel software. As shown in Table 6.75, the value of construct reliability for the nine constructs is greater than the acceptable level 0.70.

2. Validity tests

- **Face validity (content validity)**

As mentioned in Chapter Three, face or content validity is utilised as a first procedure to achieve the validity of quantitative studies (Zikmund et al. 2013). Also, as discussed in Chapter Three, face or content validity means that people who are not skilled in research, or lay persons, can judge that the method is valid for researching the question. Further, face validity is essential in research because it encourages respondents to participate in the survey (Greener 2008). In this research, face or content validity was established in the pre-test phase of the study. Please refer to Section 3.5.3.5 of the thesis.

- **Convergent validity**

Convergent validity is performed to evaluate the extent to which a set of items that measure a specific factor or construct correlates with this construct (Hair et al. 2006; Hair et al. 2010). Statistically, to calculate the value of convergent validity, researchers must compute the value of average variance extracted (AVE) (Hair et al. 2010). Convergent validity is achieved if the value of AVE is 0.50 or greater (Hair et al. 2006). To achieve the AVE, the following formula was used:

$$\mathrm{AVE} = \frac{\sum \lambda^2}{[\sum \lambda^2 + \sum(1 - \lambda^2)]}$$

Therefore, this technique was used to establish the convergent validity. In this stage of the analysis, AVE was calculated using Microsoft Excel software. The researcher used the output of CFA to estimate the value of AVE for each construct used in this study. As presented in Table 6.75, the values of AVE for each individual construct are greater than the acceptable level of 0.50. Thus, convergent validity is achieved in this study. The following Table 6.75 presents the values of composite reliability, construct reliability, and convergent validity of the nine constructs used in this study.

Table 6.75: Reliability and validity of the constructs

No	Construct	Composite reliability (CR)	Construct reliability	Convergent validity (AVE)
1	Health concerns	0.87	0.90	0.60
2	Environmental concerns	0.92	0.95	0.72
3	Subjective norms	0.90	0.91	0.67
4	Trust	0.93	0.95	0.79
5	Social media	0.88	0.91	0.71
6	Packaging	0.93	0.93	0.82
7	Sensory food product attributes	0.85	0.85	0.66
8	Certification	0.87	0.88	0.70
9	Intention	0.96	0.95	0.68

- **Construct validity**

Construct validity "refers to the extent to which your measurement questions actually measure the presence of those constructs you intended them to measure" (Saunders et al. 2009, p. 373). Construct validity can be achieved using the results of confirmatory factor analysis (CFA) of the measurement model using structural equation modelling (SEM) (Hair et al. 2010). Thus, the values of measurement model fit indices are adopted to achieve this form of validity. Table 6.76 summarises the value of the measurement model fit for each construct that is used to achieve construct validity.

Table 6.76: Measurement model fit for each construct in the study

Constructs	Fit Indices							
	CMIN/DF	GFI	RMR	IFI	NFI	TLI	CFI	RMSEA
Health concerns	1.467	.996	.007	.999	.996	.996	.999	.035
Environmental concerns	2.282	.991	.009	.997	.994	.992	.997	.057
Subjective norms	1.817	.994	.013	.998	.996	.994	.998	.046
Trust	.496	.999	.002	1.000	.999	1.000	1.000	.000
Social media	2.109	.989	.015	.995	.991	.988	.995	.053
Packaging	3.117	.984	.022	.992	.988	.975	.992	.074
Sensory food attributes	3.380	.984	.021	.988	.984	.971	.988	.078
Certification	.050	1.000	.002	1.000	1.000	1.000	1.000	.000
Intention	2.852	.986	.012	.996	.994	.990	.996	.069

6.6.6 Revised conceptual framework

Based on the findings of CFA, the Price and Availability constructs were removed from the study for the following reasons:

1. In relation to Availability, as discussed in Section 6.6.4.2.8, two variables (items) were removed because of the low values of standardised factor loading. After the two items had been removed, only two items were used to measure the Availability construct. Two variables are not adequate to measure this construct (Kim et al. 1998; Raubenheimer 2004; Eisinga et al. 2013). As a result, the Availability construct was removed from the analysis.

2. With respect to Price, as explained previously in Section 6.6.4.2.4, the output of CFA did not show the values of TLI, and CMIN/DF for Price. Further, two variables (items) of Price were lower than 0.70. Therefore, this construct was removed.

3. Packaging and labelling were merged into one construct named Packaging and labelling. However, as shown in Section 6.6.4.2.7, PL4, PL5, PL6 and PL7 were removed due to the low value of factor loading. The deleted items belonged to labelling. Therefore, after removing those items, the Packaging and labelling construct was renamed Packaging.

Thus, after the deletion of Price, Availability, and changes to create Labelling, the conceptual framework of this study is revised in the following Figure 6.14

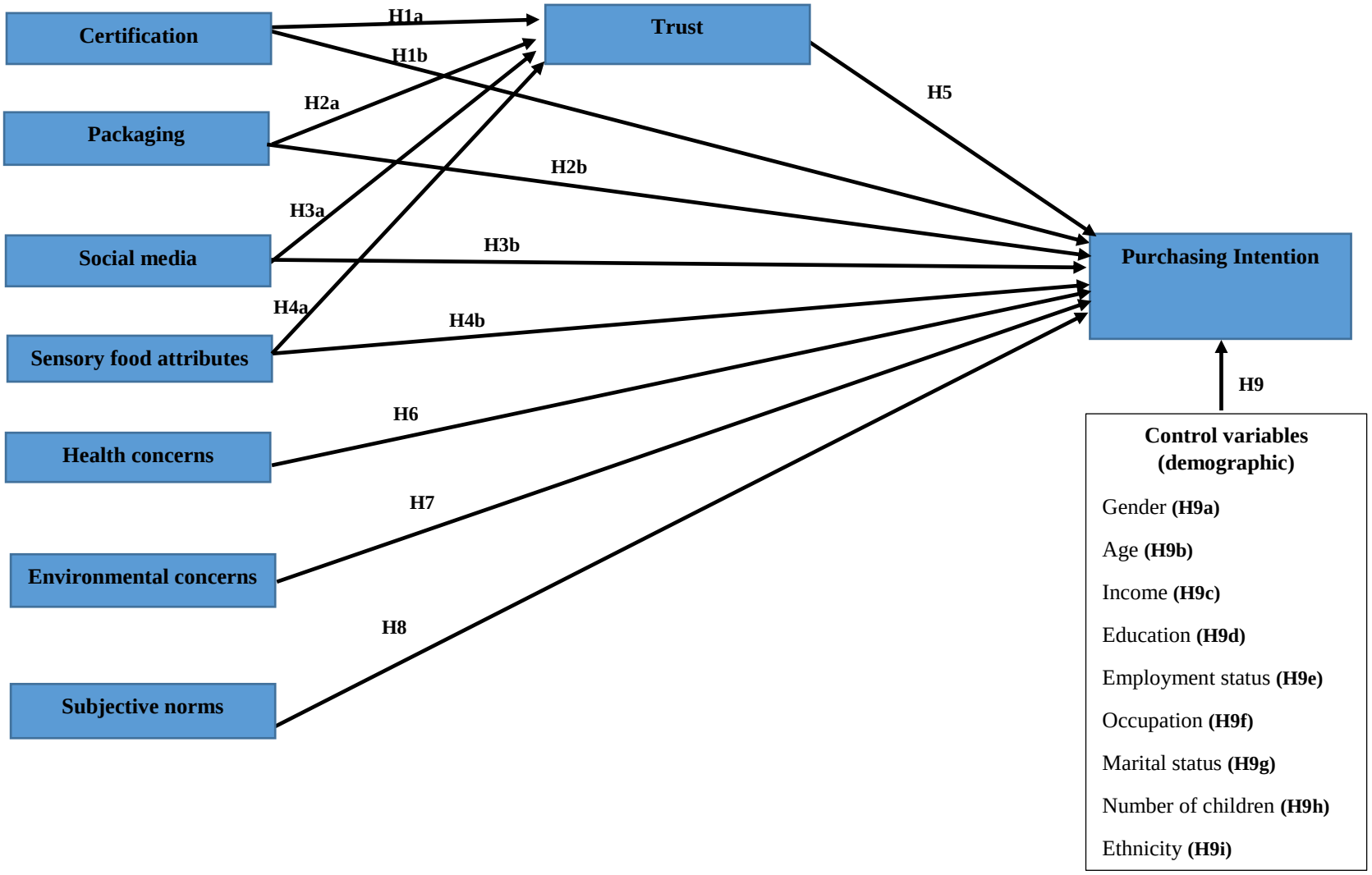

Figure 6.14 Revised conceptual framework

6.7 Path analysis

Path analysis is considered to be an extension of multiple regression analysis, which is employed by structural equation modelling (SEM) to examine the casual effects between the variables (Stage et al. 2004; Lleras 2005; Mardani et al. 2017; Pandey et al. 2019; Peng et al. 2019). One of the strengths of path analysis in social research is that it enables researchers and analysts to test the direct and indirect effects between independent variables and dependent variable simultaneously (Stage et al. 2004; Lleras 2005; Olobatuyi 2006). Path analysis is widely used in studies of organic food (Lockie et al. 2004; Teng & Wang 2015; Pandey et al. 2019). Thus, in this research, path analysis was conducted using maximum likelihood in AMOS software version 25 to test the research hypothesis. Further, in path analysis, a goodness of fit test was also utilised to confirm that the model of this research shows the best possible fit. The findings of maximum likelihood indicated that the model of the research achieved acceptable value of fitness. The following Table 6.77 shows the value of the fit indices that the model achieved.

Table 6.77: Fit indices of the path model

Fit category	Fit Index	Final finding	Decision
Absolute fit	RMR	0.003	Satisfactory
	RMSEA	0.036	Satisfactory
Incremental fit	IFI	1.000	Satisfactory
	TLI	.992	Satisfactory
	NFI	.999	Satisfactory
	CFI	1.000	Satisfactory
Parsimonious fit	CMIN/DF	1.501	Satisfactory

6.7.1 The findings of path analysis

As discussed in the previous section, the revised conceptual framework of the research showed that there were twelve hypotheses that should be examined. The first eleven hypotheses were analysed and tested employing path analysis using AMOS version 25, whilst the hypothesis relating to the demographic characteristics as control variables was analysed and tested using one-way ANOVA. The following Figure 6.15 illustrates the final path model of the study, and is followed by a discussion of the results of testing each hypothesis used in the study.

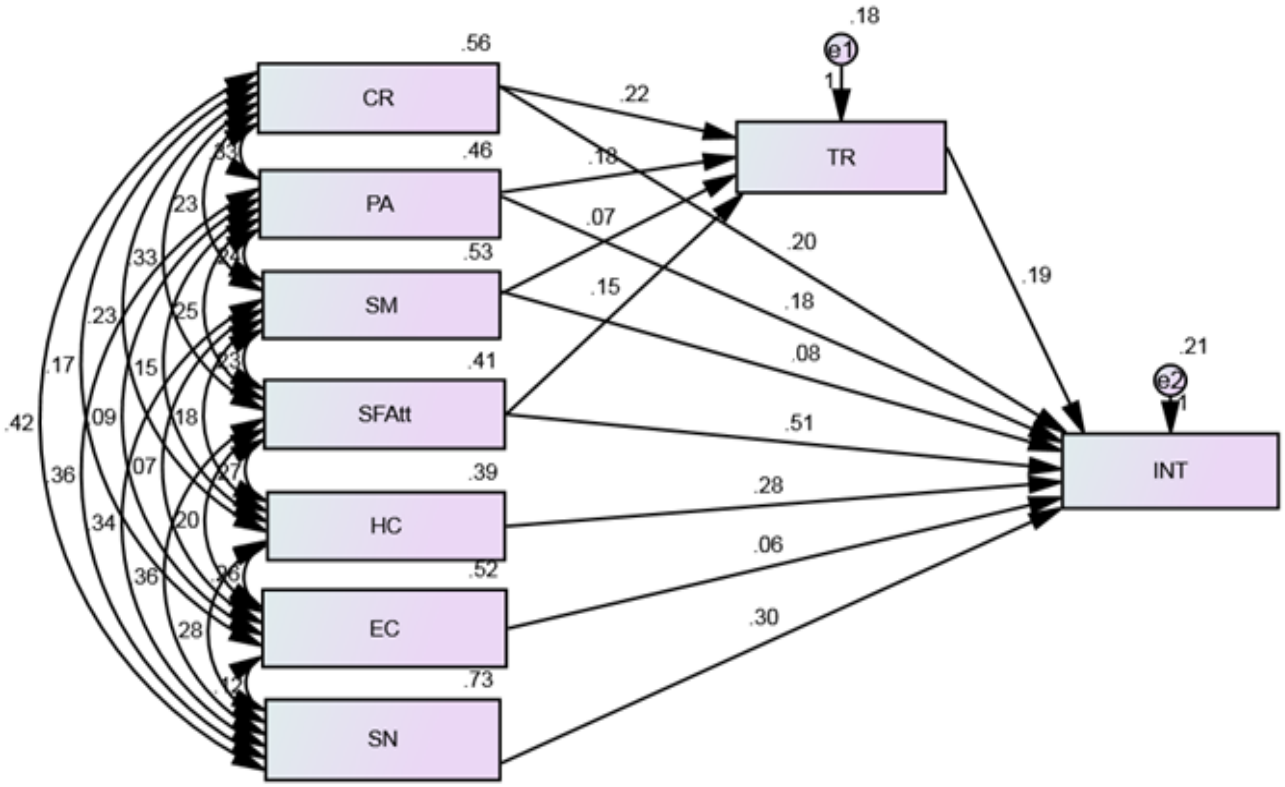

Figure 6.15: The final path model of the study

Note: ***CR****: Certification;* ***PA****: Packaging;* ***SM****: Social media;* ***HCs****: Health concerns;* ***ECs****: Environmental concerns;* ***SN****: Subjective norms;* ***SFAtt****: Sensory food attributes;* ***TR****: Trust and* ***INT****: Intention*

- **Hypotheses testing and the findings**

As discussed in the previous section, nine hypotheses should be tested. The first eight hypotheses were analysed and tested employing path analysis using AMOS version 25, while the hypothesis relating to demographic characteristics as control variables was analysed employing one-way ANOVA by using SPSS version 25. The following Table 6.78 summarises the results of hypotheses testing using path analysis performed in SEM. In this analysis, a version of the 't' test was used which performs the critical ratios from SEM. The

table is followed by a discussion of the results. Further, standard errors are shown in the SE Column, while the CR column stands for critical ratio with magnitude >1.96 indicating statistical significance at the 0.05 level (Hair et al. 2010; Kline 2011). In addition, *P* values indicate statistical significance at levels of 0.001, 0.01, and 0.05 respectively.

Table 6.78 Summary of hypotheses tests

Hypothesis No.	Path coefficient (β)	S.E.	C.R. (t-value)	P value	Results
H1a:CR⟶TR	0.224	0.044	5.146	0.000 ***	Supported
H1b:CR⟶INT	0.203	0.050	4.059	0.000 ***	Supported
H2a:PA⟶ TR	0.183	0.045	4.061	0.000 ***	Supported
H2b:PA⟶INT	0.176	0.051	3.456	0.000 ***	Supported
H3a:SM ⟶ TR	0.071	0.035	2.011	0.044 *	Supported
H3b:SM⟶INT	0.079	0.040	1.981	0.048 *	Supported
H4a:SFAtt⟶TR	0.153	0.050	3.086	0.002**	Supported
H4b:SFAtt⟶INT	0.506	0.063	7.977	0.000 ***	Supported
H5: TR⟶ INT	0.192	0.054	3.541	0.000 ***	Supported
H6: HC⟶ INT	0.277	0.058	4.800	0.000 ***	Supported
H7: EC⟶ INT	0.059	0.041	1.450	0.147	Not Supported
H8: SN⟶INT	0.299	0.044	6.858	0.000 ***	Supported

Note: ***p<.001; **p <.01; *p <.05

1. Result of hypothesis H1a examination

H1a: Certification has a positive influence on the consumers' trust towards purchasing organic food.

The results shown in the above table revealed that the Certification construct significantly influenced consumers' trust towards purchasing organic food (p value was significant at <0.001 level ***). In addition, the path coefficient (β) was 0.224 with critical ratio (t-value) 5.146. So, an increase in one unit of the Certification construct would lead to an increase in trust towards organic food by 0.224. Therefore, this hypothesis was supported.

2. Result of hypothesis H1b examination

H1b: Certification has a positive influence on consumers' organic food purchasing intentions.

The results of path analysis indicated that the Certification construct significantly influenced consumers' organic food purchasing intentions (p value was significant at <0.001 level ***).

Further, the path coefficient (β) was 0.203 with a critical ratio (t-value) of 4.059. Thus, an increase in one unit of the Certification construct would lead to an increase in organic food purchasing intentions by 0.203. Thus, this hypothesis was also supported.

3. Result of hypothesis H2a examination

H2a: Packaging has a positive influence on the consumers' trust in purchasing organic food.

After conducting path analysis, the results revealed that the Packaging construct had a significant influence on consumers' trust towards organic food (p value was significant at <0.001 level ***). Also, the path coefficient (β) was 0.183 with critical ratio (t-value) of 4.061. Hence, an increase in one unit of the Packaging construct contributes to an increase in trust towards organic food by 0.183. Therefore, this hypothesis was supported.

4. Result of hypothesis H2b examination

H2b: Packaging has a positive influence on consumers' organic food purchasing intention.

The testing of this hypothesis showed that there was a significant influence of the Packaging construct on consumers' organic food purchasing intentions (p value was significant at <0.001 level ***). In addition, the path coefficient (β) was 0.176 with critical ratio (t-value) 3.456. So, an increase in one unit of Packaging would lead to an increase in organic food purchasing intentions by 0.176. Therefore, this hypothesis was supported.

5. Result of hypothesis H3a examination

H3a: Social media has a positive influence on consumers' trust in purchasing organic food.

The results of path analysis showed that the social media construct significantly influenced consumers' trust towards organic food (*p* value was significant at <0.05 level *). Further, the path coefficient (β) was 0.071 with critical ratio (t-value) 2.011. Thus, an increase in one unit of the Social media construct contributes to an increased trust towards organic food by 0.071. Therefore, this hypothesis was supported.

6. Result of hypothesis H3b examination

H3b: Social media has a positive influence on consumers' organic food purchasing intentions.

The results revealed that the Social media construct had a significant influence on consumers' intentions to purchase organic food (p value was significant at <.05 level *). In addition, the path coefficient (β) was 0.079 with critical ratio (t-value) 1.981. Thus, an increase in one unit of the Social media construct would lead to an increase in organic food purchasing intentions by 0.079. Therefore, this hypothesis was supported.

7. Result of hypothesis H4a examination

H4a: The sensory attributes of organic food have a positive influence on consumers' trust in organic food

The results demonstrated that the Sensory organic food attributes construct had a significant influence on consumers' trust towards organic food (p value was significant at p <0.01 level **). In addition, the path coefficient (β) was 0.153 with critical ratio (t-value) 3.086. So, an increase in one unit of Sensory food attributes would lead to increased trust toward organic food by 0.153. Thus, this hypothesis was supported.

8. Result of hypothesis H4b examination

H4b: The sensory attributes of organic food have a positive influence on consumers' organic food purchasing intentions.

The results of path analysis revealed that the sensory organic food attributes construct significantly influenced consumers' organic food purchasing intentions (p value was significant at <0.001 level ***). Also, the path coefficient (β) was 0.506 with critical ratio (t-value) 7.977. Hence, an increase in one unit of the Sensory organic food attributes construct would lead to an increase in the intention to purchase organic food by 0.506. As a result, this hypothesis was supported.

9. Result of hypothesis H5 examination

H5: Trust has a positive influence on consumers' organic food purchasing intentions.

The results of path analysis reported that the Trust construct has a positive significant influence on consumers' intentions to purchase organic food (p value was significant at <0.001 level ***). Further, the path coefficient (β) was 0.192 with critical ratio (t-value) 3.541. This indicates that an increase in one unit of the Trust construct contributes to an increase in organic food purchasing intentions by 0.192. Consequently, this hypothesis was supported.

10. Result of hypothesis H6 examination

H6: Health concerns have a positive influence on consumers' organic food purchasing intentions.

The results showed that the Health concerns construct had a significant influence on consumers' intentions to purchase organic food (p value was significant at <.001 level ***). Moreover, the path coefficient (β) was 0.277 with critical ratio (t-value) 4.800.Thus, an increase in one unit of Health concerns would lead to an increase in organic food purchasing intentions by 0.277. Therefore, this hypothesis was supported.

11. Result of hypothesis H7examination

H7: Environmental concerns have a positive influence on consumers' intentions to purchase organic food.

As shown in Table 6.78, the results confirmed that the Environmental concerns construct did not have a significant influence on consumers' intentions to purchase organic food. As illustrated, the p value was not significant. The value was 0.147 which was greater than the significance levels at ***p<0.001; **p <0.01; or *p <0.05. Thus, this hypothesis was not supported.

12. Result of hypothesis H8 examination

H8: Subjective norms have a positive influence on consumers' organic food purchasing intentions.

The results of testing this hypothesis indicated that the Subjective norms construct had a significant influence on consumers' intentions to purchase organic food (p value was significant at <0.001 level ***). In addition, the path coefficient (β) was 0.299 with critical ratio (t-value) 6.858. Hence, an increase in one unit of Subjective norms contributes to an increase in organic food purchasing intentions by 0.299. Thus, this hypothesis was supported.

6.8 Results of hypothesis examination related to demographic variables

As argued by Creswell (2009), in quantitative studies, the demographic characteristics of respondents are analysed as control variables. Further, demographic characteristics play a vital role in the quantitative research (Creswell 2009; Kumar 2019). It is important to study the influence of demographic variables on consumers' intentions to purchase organic food (Lee & Yun 2015; Chekima et al. 2017; Torres-Ruiz et al. 2018). Therefore, in this study,

demographic characteristics were used as control variables to examine the influence of those variables on intentions to purchase organic food in Australia. In this research, demographic characteristics include gender, age, income, education level, employment status, occupation, marital status, the number of children in the household, and ethnicity.

To analyse demographics as control variables, one-way ANOVA with least significant difference (LSD) techniques were used to test if there is a significant difference between the control variables and the dependent variables. Further, this technique is useful and widely used in Business research to examine the significant difference between more than two sample means (groups) at the same time (Kothari 2004; Hair et al. 2010). In addition, one-way ANOVA is utilised when the research has only one dependent variable (Sekaran & Bougie 2016). Thus, one-way ANOVA is an appropriate technique to examine the influence of demographic characteristics (control variables) on organic food purchasing intentions. Additionally, LSD techniques enable the researcher to determine the true difference in means if it is performed when the F-test is significant (Williams & Abdi 2010; Sultana et al. 2013; Sauder & DeMars 2019). Consequently, LSD was used in this stage of analysis. To perform one-way ANOVA and LSD, SPSS software version 25 was adopted. As stated in Chapter Five, the researcher hypothesised the following whole hypothesis:

H9: The different demographic variables produce significant differences in organic food purchasing intentions.

In this research, nine demographic variables were used in the surveys. Thus, based on the above major hypothesis, nine sub-hypotheses are hypothesised as follow:

H9a: There are significant differences in organic food purchasing intentions for consumers of different genders.

As discussed in Chapter Three, the Attorney-General's Department of the Australian Government provide guidelines that recommend that gender is classified into Male, Female, Unspecified, Intermittent, or Intersex. Accordingly, in this research, the researcher followed those guidelines and hence used the options (Other) and (Would rather not say) to make the respondents free to choose the suitable answer. Gender is usually analysed using the T-test technique, because several studies analysed gender within two groups (males, females), but in this research, gender included more than two groups thus, one-way ANOVA is the suitable technique to examine this hypothesis. The following Table 6.79 shows the finding of one-way ANOVA for the Gender variable.

Table 6.79: One-way ANOVA results for (purchase intention, gender group)

	Sum of squares	df	Mean square	F	Sig.
Between groups	15.177	22	7.588	7.454	**.001**
Within groups	393.692	387	1.018		
Total	409.139	389			

The above table shows the statistical value of sig (0.001) was lower than 0.05, indicating that there were significant differences in the mean scores for organic food purchasing intentions among the three groups (Male, Female, Would rather not say and Other).Thus, H9a was supported. Further, as previously mentioned, least significant difference (LSD) was employed using SPSS to see which group has the largest difference. In this respect, one of the most important assumptions when performing LSD is that the F test should be significant (Sultana et al. 2013; Sauder & DeMars 2019). The results of LSD showed that female consumers were more likely to buy organic food in comparison with male consumers or with those who did not identify their gender in the survey. LSD reported that the value of mean difference (I-J) for females was higher than for males or those who did not identify their gender. In addition, the sig value for the female group was significant (0.000, p<.001).

H9b: There are significant differences in organic food purchasing intentions for consumers of different age groups.

One-way ANOVA was utilised to test whether there is a significant difference between age groups' intentions to purchase organic food. The following Table 6.80 illustrated the findings of this test.

Table 6.80: One-way ANOVA results for (purchase intention, age group)

	Sum of squares	df	Mean square	F	Sig.
Between groups	9.271	5	1.854	1.781	**.116**
Within groups	399.868	384	1.041		
Total	409.139	389			

As shown in the above table, the statistical value of sig is 0.116 which greater than 0.05, indicating that there were no significant differences in the mean scores for organic food purchasing intentions across the six age groups. Thus, H9b was not supported. Further, because the value of sig is not significant, LSD was not applied for this variable (Williams & Abdi 2010; Sultana et al. 2013; Sauder & DeMars 2019).

H9c: There are significant differences in organic food purchasing intentions for consumers of different income levels.

One-way ANOVA was performed to examine whether there is a significant difference in organic food purchasing intentions between annual income groups. The following Table 6.81 presented the findings of this test.

Table 6.81: One-way ANOVA results for (purchase intention, annual income group)

	Sum of squares	df	Mean square	F	Sig.
Between groups	14.489	5	2.898	2.820	**.016**
Within groups	394.650	384	1.028		
Total	409.139	389			

The findings of one-way ANOVA indicated that the statistical value of sig is 0.016 which is less than 0.05. This means that there is a significant difference in the mean scores for organic food purchasing intentions across the six annual income groups. Thus, H9c was supported. In addition, LSD results showed that consumers with a high income ($110.001-$140.000) were more likely to buy organic foods. In addition, LSD reported that the value of mean difference (I-J) for income group of ($110.001-$140.000) 1.44043 was higher than for other income groups. In addition, the sig value for income variable was significant at 0.000, $p<0.001$.

H9d: There are significant differences in organic food purchasing intentions for consumers of different education levels.

The results shown in Table 6.82 illustrate that the statistical value of sig is 0.035, which is lower than 0.05. Hence, there is a significant difference in the mean scores for organic food purchasing intentions across the five education levels groups. Thus, H9d was supported.

Table 6.82: One-way ANOVA results for (purchase intention, education)

	Sum of squares	df	Mean square	F	Sig.
Between groups	10.848	4	2.712	2.621	**.035**
Within groups	398.291	385	1.035		
Total	409.139	389			

In addition, the results of LSD test revealed that highly educated consumers who hold undergraduate degrees preferred to buy organic foods more than the less educated consumers. LSD reported that the value of mean difference (I-J) was 0.43000, and the sig value was significant 0.003

H9e: There are significant differences in organic food purchasing intentions for consumers of different employment levels.

One-way ANOVA was used to test the above hypothesis. As presented in Table 6.83, the statistical value of sig is 0.033. This value met the cut-off value 0.05, which indicates that there is there is a significant difference in the mean scores for organic food purchasing intentions across the six employment groups. Therefore, H9e was supported.

Table 6.83: One-way ANOVA results for (purchase intention, employment)

	Sum of squares	df	Mean square	F	Sig.
Between groups	12.708	5	2.542	2.462	**.033**
Within groups	396.431	384	1.032		
Total	409.139	389			

The results of LSD indicated that consumers who had full-time jobs were more likely to buy organic foods. The results showed that the value of mean difference (I-J) of the full-time group was .32680, which is considered the highest value of the employment status groups. Further, the value of sig is significant at 0.010.

H9f: There are significant differences in organic food purchasing intentions for consumers of different occupations.

The findings shown in the following Table 6.84 indicate that the statistical value of sig is 0.113 which is more than the cut-off value 0.05. In this case, the stated hypothesis should be rejected. Therefore, H9g was not supported.

Table 6.84: One-way ANOVA results for (purchase intention, occupation)

	Sum of squares	df	Mean square	F	Sig.
Between groups	9.346	5	1.869	1.795	**.113**
Within groups	399.793	384	1.041		
Total	409.139	389			

In this variable, LSD was not applied because the value of sig was not significant (Williams & Abdi 2010; Sultana et al. 2013; Sauder & DeMars 2019).

H9g: There are significant differences in organic food purchasing intentions for consumers of different marital status.

This hypothesis was tested using one-way ANOVA. Marital status was divided into four groups (Married, Divorced, Widowed, and Single). The output of this test indicated that there were no significant differences in the mean scores for organic food purchasing

intention across the four groups. This hypothesis has to be rejected because the value of sig is 0.881. This value is greater than 0.05. The following Table 6.85 illustrates the findings of this test.

Table 6.85: One-way ANOVA results for (purchase intention, marital status)

	Sum of squares	df	Mean square	F	Sig.
Between groups	.706	3	.235	.223	**.881**
Within groups	408.432	386	1.058		
Total	409.139	389			

Furthermore, LSD was not applied to analyse this variable because the value of sig was not significant (Williams & Abdi 2010; Sultana et al. 2013; Sauder & DeMars 2019).

H9h: There are significant differences in organic food purchasing intentions for consumers of different numbers of children.

The details presented in the following Table 6.86 illustrate that the value of sig is 0.000. This value is less than 0.05, which means there is a significant difference in the mean scores for organic food purchasing intentions across the five groups of this variable. Thus, this hypothesis was supported.

Table 6.86: One-way ANOVA results for (purchase intention, number of children)

	Sum of squares	df	Mean square	F	Sig.
Between groups	24.870	4	6.218	6.229	**.000**
Within groups	384.268	385	.998		
Total	409.139	389			

LSD suggested that consumers with two children in their household were more likely to buy more organic foods than consumers who had one, three, or more than three. The value of mean difference (I-J) for the group of consumers who have two children was 1.24561 which was the highest value amongst the group. In addition, the value of sig for this group was significant at 0.000.

H9i: There are significant differences in organic food purchasing intentions for consumers of different ethnicities.

The researcher hypothesised that there is a significant difference between the respondents' ethnic background and organic food purchasing intentions. The decision regarding

accepting or rejecting this hypothesis depends on the value of sig in one-way ANOVA. The following Table 6.87 shows the findings of this test.

Table 6.87: One-way ANOVA results for (purchase intention, ethnicity)

	Sum of squares	df	Mean square	F	Sig.
Between groups	14.358	9	1.595	1.536	**.133**
Within groups	394.781	380	1.039		
Total	409.139	389			

As can be seen in the above Table, the value of sig is 0.0133 which is greater than the acceptable level of 0.05. Therefore, there were no significant difference in the mean scores for organic food purchasing intentions across the eleven groups of ethnicity. Thus, this hypothesis was not supported. Moreover, LSD test was not applied to analyse this variable because the value of sig was not significant (Williams & Abdi 2010; Sultana et al. 2013; Sauder & DeMars 2019). The following Table 6.88 summarises the findings of the hypothesis related to control variables.

Table 6.88: Results of testing Hypotheses (H9a-H9i)

Hypothesis	Sig	Result
H9a: There are significant differences in organic food purchasing intentions for consumers of different genders.	0.001	Supported
H9b: There are significant differences in organic food purchasing intentions for consumers of different age groups.	0.116	Not supported
H9c: There are significant differences in organic food purchasing intentions for consumers of different income levels.	0.016	Supported
H9d: There are significant differences in organic food purchasing intentions for consumers of different education levels.	0.035	Supported
H9e: There are significant differences in organic food purchasing intentions for consumers of different employment levels.	0.033	Supported
H9f: There are significant differences in organic food purchasing intentions for consumers of different occupations.	0.113	Not supported
H9g: There are significant differences in organic food purchasing intentions for consumers of different marital status.	0.881	Not supported
H9h: There are significant differences in organic food purchasing intentions for consumers of different numbers of children.	0.000	Supported
H9i: There are significant differences in organic food purchasing intentions for consumers of different ethnicities.	0.133	Not supported

6.9 Chapter summary

This chapter presented the findings of the confirmatory stage of the study which was achieved using 390 self-administered surveys that were collected to address the second objective and the second question of the current research. Initially, this chapter shows the process of preparing the data for analysis, including data editing, checking blank response,

data coding, and data entry. Next, the descriptive of frequency and percentage were used to describe the demographic characteristics of the respondents and to analyse the behavioural questions of the survey. After that, Z score, Missing Data Analysis, skewness, and kurtosis were performed respectively via SPSS version 25 to check the outliers, missing values and normality of the data. Next, a series of central measurement tendency statistics such as mean and standard deviation were performed for data set. Then, item-total correlation and Cronbach's alpha were utilised to validate the measurement scale and ensure the internal consistency of the variables. After that, EFA was used to extract the constructs used in the study, and CFA was employed to confirm those constructs and ensure the goodness of the measurement models and the structural model. Next, reliability and validity tests were performed. In addition, all the stated hypotheses were examined using path analysis via AMOS version 25 and one-way ANOVA via SPSS version 25. The next chapter discusses the findings of the current study. It also discusses the theoretical and practical contribution of the research. Further, a discussion on the possible limitations and future research are presented.

CHAPTER SEVEN: DISCUSSION AND CONCLUSIONS

7.1 Introduction

This chapter aims to summarise the findings of this thesis in light of the research objectives and questions. Further, the chapter presents the theoretical and practical contribution of the research. In addition, the possible limitations of the study are also presented and, finally, some suggestions are provided as directions for future research to be conducted in this area.

7.2 Discussion of the findings

In this research, the researcher extensively reviewed the literature relating to the area of organic food marketing. Reviewing past studies enables the researcher to determine the research gaps and problems needing to be addressed. Based on the literature review, this research aimed to achieve four objectives and to answer four research questions. Below is a discussion of the findings of the current research in light of those objectives and questions. The first objective was as follows:

Research Objective One: ***To explore the key factors that influence consumers' organic food purchasing intentions.*** This objective was represented by the following research question:

- ***What are the factors that influence consumers' intentions to purchase organic food in Australia?***

In order to address the first objective and answer the first question of this research, an exploratory study using qualitative focused interviews was employed to explore and determine the main factors that influence consumers' organic food purchasing intentions in the Australian context. In this respect, 30 participants were interviewed to probe the essential drivers influencing their intention to purchase various forms of organic food. Thematic content analysis (TCA) was employed to analyse the data; the mall intercept method was utilised to target the participants. The participants were asked different questions using an interview protocol. As discussed in Chapter Three, the interview protocol includes questions that relate to the demographic characteristics of the participants and open questions to probe the participants' perspectives towards organic food. The researcher listened carefully to the recordings and transcribed the interviews into Word documents. Further, thematic content analysis was used to analyse the qualitative data. The findings of the exploratory study indicated that several factors motivated the purchase of different forms of organic food. The

key factors to be considered when purchasing organic food were recognised as (1) health concerns, (2) price, (3) labelling, (4) availability, (5) trust, (6) environmental concerns, (7) certification, (8) taste, (9) packaging, (10) nutrition, (11) subjective norms, (12) quality, and (13) social media. The findings of this stage of the research reported that health concerns was the most important reason for the purchasing of organic food products. At this stage of the research, the researcher also probed the reasons that restrict the purchase of organic food. The findings indicated that high price and limited availability were the main factors that limit some consumers from purchasing organic food. Further, it was found that some consumers had doubts about the food that claimed to be organic. Additionally, the participants were asked to explain the benefits and drawbacks of purchasing organic food. In relation to the advantages of purchasing organic food, the findings indicated that most of participants considered organic food to be healthy and nutritious food.

Further, in the exploratory stage of the research, the researcher probed participants' trust in organic food, including trust towards the producers of organic food, sellers, and certifying bodies that confirm that the food is organic or not. The findings showed that consumers' trust towards organic food is established by different factors such as availability of certification, labelling and packaging, knowledge of the sellers, ensuring that the producers follow the guidelines for producing organic food, and high price. In addition, participants' points of view regarding the importance of labels was also reported. With respect to labels, the participants stated that the labels help them to: (1) identify differences between organic and non-organic food, (2) know the producer, and also (3) to build trust towards organic food. Moreover, the researcher also investigated participants' perspectives relating to negative experiences with organic food. The findings reported that organic food does not have long expiry date, and some forms of organic food have a poor appearance.

In the qualitative stage of the research, the researcher reported on ways to attract new consumers to buy organic food. For this purpose, the researcher asked the participants who did not engage in purchasing organic food a question about how to attract new consumers towards purchasing organic food. The findings showed that there were several factors that played an important role in attracting new buyers for such products. These factors are: (1) increasing the availability of organic food, (2) lowering the price of organic food, (3) applying more restrictions over the production of organic food, and (4) employing more effective promotional campaigns to persuade potential consumers to purchase organic food. Finally, the researcher wanted to know if the buyers of organic food are willing to

recommend that others purchase organic food. The findings indicated that about 76% of participants were willing to recommend that their friends, family and others purchase organic food for their health, nutrition and environmental benefits, while 16% of participants confirmed that they would not recommend that others purchase such products because they are expensive in comparison with non-organic food. Eight percent of participants were unsure about recommending that others purchase organic food. Thus, based on the first objective, the current study has filled the gap related to exploring the key factors that motivate consumers to buy or not to buy organic food in regional Australia.

Research Objective Two: ***To examine the influence of various factors on consumers' organic food purchasing intentions.***

This objective was represented by the following Research Question:

- ***What is the influence of various factors on consumers' purchase intentions of organic food?***

The second objective and question were addressed using the confirmatory stage of the research. This stage of the research was conducted to confirm the findings of the exploratory stage of the research. For this purpose, a self-administered questionnaires was distributed to 390 respondents to explore how the various factors influence consumers' organic food purchasing intentions. To understand the influence of various factors on consumers' organic food purchasing intentions, eleven hypotheses were developed and tested using path analysis performed via AMOS version 25. The findings showed that all the hypotheses' path analysis were supported, except for H9. The following is a discussion on each of the significant constructs and related hypotheses.

- **Hypothesis relating to Certification and Trust constructs**

H1a: Certification has a positive influence on consumers' trust in purchasing organic food.

The first hypothesis was developed to examine the influence of the Certification construct on consumers' trust in organic food. As shown in the previous chapter (Chapter 6), the results of the path analysis revealed that certification significantly and positively influenced consumers' trust in organic food. The findings of past studies confirmed this result. For instance, O'Mahony and Lobo (2017), argued that certification is an essential factor for building trust in organic food products. Likewise, Rahnama et al. (2017) stated that

certification is deemed one of the reasons that drive consumers to trust in organic food. Thus, the finding of this hypothesis is in line with past studies. In addition, an Australian study conducted by Phuong (2013) found that the level of Australian consumers' trust in organic food was strongly influence by the certification, and that trust led them to purchase such products. Likewise, another Australian study carried out by Chang and Zepeda (2005) found that certification was an important tool to create trust in organic food. Thus, the result of path analysis for the first hypothesis was confirmed by prior studies.

- **Hypothesis relating to Certification and Purchase intentions of organic food**

H1b: Certification has a positive influence on consumers' organic food purchasing intentions.

As explained in Chapter Five, the second hypothesis was suggested to understand the direct influence of the Certification construct on consumers 'organic food purchasing intentions. The results of the path analysis indicated that there was a significant positive influence on consumers' purchasing intentions. The literature showed that there is a strong relationship between certification and purchasing intention in the context of organic food. For example, Rana and Paul (2017) argued that certification has been identified as one of the crucial factors that motivates consumers to purchase organic food. Similarly, Escobar-López et al. (2017) stated that Mexican consumers were concerned about certification when purchasing organic food products. Furthermore, Hwang and Chung (2019) also pointed out that certification was one of the drivers that played an important role in the purchase of organic food. Hence, it is confirmed that the finding of the path analysis for this hypothesis is in line with prior studies.

- **Hypothesis relating to Packaging and Trust**

H2a: Packaging has a positive influence on the consumers' trust in purchasing organic food.

This hypothesis was developed to understand the influence of packaging on consumers' trust in organic food. As shown in the previous chapter (Chapter 6), the results of the path analysis revealed that the Packaging construct significantly and positively influenced consumers' trust in organic food. Very few studies have been found to investigate the influence of packaging on consumers' organic food purchasing intentions. For example, Rana and Paul (2012) revealed that organic food purchasing is driven by the packaging of organic food. Similarly, Sharma et al. (2013) reported that 44% of consumers indicated that packaging is one of the factors that attracts them to organic food. In the same way, Lee and Hwang (2016)

reported that packaging helps consumers trust organic food. In the same way, Drexler et al. (2018), reported that consumers use packaging to check that food is organically produced.

- **Hypothesis relating to Packaging and Purchase intention**

H2b: Packaging has a positive influence on consumers' organic food purchasing intentions.

This hypothesis was developed to understand the influence of packaging on consumers' organic food purchasing intention. The results of the path analysis revealed that packaging significantly and positively influenced consumers' purchasing intentions. Tariq et al. (2019), also argued that packaging strongly influenced consumers' intentions to purchase organic food in China. Similarly, Chekima et al. (2017) stated that packaging stimulates consumers to buy and consume organic food products. Further, Bryła (2016), in his study conducted to understand the consumption of organic food in Poland, found that packaging influenced the non-buyers of organic food to purchase such products. Likewise, the availability of packaging and labelling showing information about organic food strongly influence consumers' organic food purchasing intentions (Rana & Paul 2017). Accordingly, the result of testing the above hypothesis is in line with prior studies.

- **Hypothesis relating to Social media and Trust**

H3a: Social media has a positive influence on consumers' trust in purchasing organic food.

As discussed in Chapter Five, the findings of the exploratory stage and past literature prompted the researcher to develop the fifth hypothesis which links social media (as platform for interactions between the company and consumers) and consumers' trust towards organic food. The path analysis clearly showed that social media significantly and positively influenced consumers' trust towards organic food. To date, and to the best of the researcher's knowledge, in the context of organic food, little is known about the influence of social media on consumers' trust in purchasing organic food products. The researcher found that there are some studies that examined the role of social media on consumers' trust in other products. In this respect, the literature indicated that social media significantly affected consumers' trust in various products (Hajli 2014; Tatar & Eren-Erdoğmuş 2016; Baglione & Tucci 2019). Further, consumers tend to follow advertisements on the social media of the company to benefit from information posted on the social media sites (Shareef et al. 2019). Hence,

consumers form different amounts of trustworthiness to assess the promotional campaigns of the companies that offer products (Shareef et al. 2019).

- **Hypothesis relating to Social media and Purchase intention**

H3b: Social media has a positive influence on consumers' organic food purchasing intentions.

This hypothesis was developed to examine the influence of the Social media construct on consumers' organic food purchasing intentions. As presented in the previous chapter, the path analysis indicated that social media has a significant positive influence on consumers' organic food purchasing intentions. The extensive literature review showed that there is very little academic literature about the influence of social media on organic food purchasing intentions, including in the Australian context. In this respect, there were however, the several relevant studies in different disciplines that supported and confirmed the findings of this hypothesis. For instance, literature indicated that the use of social media advertisements facilitates the shaping of consumers' intentions to purchase products (Alalwan 2018; Baum et al. 2018). Similarly, in the domain of fast food, Gaber and Wright (2014) found that advertising on social media influenced Egyptian consumers' fast food purchasing decisions. In the context of organic food, Wang et al. (2019) reported that consumers used social media to obtain information regarding products, but did not investigate the influence of social media on consumers' purchasing intentions.

Fathelrahman and Basarir (2018) conducted a study into the purchasing attitudes and behaviour of United Arab Emirates consumers towards the use of the World Wide Web to order food products in general and those consumers' perceptions of social media such as Facebook, Twitter, Instagram and WhatsApp. They showed that consumers were significantly influenced by the information provided by the marketers of organic food on social media. Hence, the sixth hypothesis is supported by the literature.

- **Hypothesis relating to Sensory food attributes and Trust**

H4a: The sensory attributes of organic food have a positive influence on consumers' trust in organic food.

As discussed in Chapter Two, there is a need to examine the influence of sensory food attributes on consumers' trust in organic food. Accordingly, the above hypothesis was

developed to examine the potential influence of sensory attributes of organic food on consumers' trust towards organic food. The result of the path analysis revealed that there is a positive influence of the sensory attributes of organic food on consumers' trust in it. In this regard, very few studies have examined the influence of food attributes on consumers' trust in organic food specifically. The researcher found some studies that examined the influence of sensory food attributes on consumers' trust in food in general. Del Giudice et al. (2018) argued that the sensory attributes of food products were a factor in consumers' trust in food. In addition, Musyimi and Omanwa (2014) found a relationship between product attributes and a building of trust towards generic drugs. Further, a study conducted in Poland by Żakowska-Biemans (2009) found that organic food attributes and the building of consumers' trust were connected. Similarly, various attributes of organic food such as taste and naturalness contributed to an improved trust towards such products (Khare & Pandey 2017).

- **Hypothesis relating to Sensory food attributes and Purchase intention**

H4b: The sensory attributes of organic food have a positive influence on consumers' organic food purchasing intentions.

In this research, as shown in the previous chapter, the results of the path analysis reported that the sensory attributes of organic food has a significant influence on consumers' purchasing intentions As mentioned in detail in Chapter Two, the sensory attributes of organic food include taste, quality, appearance, flavour, natural content and nutritional value. The aforementioned result is supported by several past studies. For instance, a study was conducted by Sumi and Kabir (2018) in Bangladesh to determine the factors that influence Bangladeshi consumers' organic tea purchasing intentions. The results of this study showed that product attributes significantly affected organic tea purchases. Furthermore, purchasing behaviour was found to be influenced by its naturalness, taste and nutrition. Similarly, Ali et al. (2018) identified the main factors influencing Indian consumers' purchases and consumption of organic food. They reported that food attributes were one of the most influential factors affecting the purchase of organic food. Additionally, Escobar-López et al. (2017), who conducted a study to identify consumers' characteristics of organic food in Mexico, argued that the sensory aspects of organic food (taste, aroma, appearance) have a significant impact on Mexicans' purchases of organic food. Likewise, Shafie and Rennie (2012) reported that the sensory attributes of organic food such as nutritional value, taste, freshness, and appearance were influential determinants in the purchase and consumption of organic food.

- **Hypothesis relating to Trust and Purchase intention**

H5: Trust has a positive influence on consumers' organic food purchasing intentions.

As indicated previously, the seventh hypothesis was suggested and developed to examine the influence of trust on consumers' organic food purchasing intentions. As shown in Chapter Six, the results of the path analysis showed that trust significantly and positively influenced consumers' organic food purchasing intentions. Past studies confirmed that trust significantly influenced consumers' purchasing intentions of organic food. For example, a recent study was conducted by Basha and Lal (2019) to determine the main drivers of organic food purchases in India. The results of this study revealed that trust positively and significantly influenced Indians' purchasing and consumption of organic food products. Similarly, Sobhanifard (2018) investigated the factors that drove Iranian consumers to purchase organic food products. They found several motives affecting Iranians' consumption of organic food, with one of these being trust. Likewise, Nuttavuthisit and Thøgersen (2017) identified trust as a distinct factor that influenced consumers' intentions to purchase and consume organic food in Thailand. Another study conducted in Poland by Grzybowska-Brzezinska et al. (2017) reported that Polish consumers confirmed that their trust in the producers and sellers of organic food influenced their choices when purchasing organic food. Accordingly, the finding of the present study is in line with those of past studies.

- **Hypothesis relating to Health concerns and Purchase intention**

H6: Health concerns have a positive influence on consumers' organic food purchasing intentions.

This hypothesis was proposed to explore a direct effect between health concerns and consumers' intentions to purchase organic food. The results of the path analysis demonstrated that the Health concerns construct significantly and positively influenced consumers' organic food purchasing intentions. This finding is similar to that of Popa and Dabija (2019). That study revealed that Romanian consumers were significantly influenced by health as one of the determining factors that encouraged the purchase of such products. This result was found in a study conducted by Wang et al. (2019) in Tanzania and Kenya. An Indian study conducted by Prakash et al. (2018) also found that the Health concerns construct was a significant factor in the purchase of organic food. Similarly, some Australian studies conducted to determine the factors that motivate Australians to purchase organic food, revealed that Australians were strongly influenced by health concerns (Lockie et al.

2002; Smith & Paladino 2010; Phuong 2013; Nguyen & Ha 2016). Thus, this hypothesis is consistent with prior studies.

- **Hypothesis relating to Environmental concerns and Purchase intention**

H7: Environmental concerns have a positive influence on consumers' intentions to purchase organic food.

After performing path analysis using AMOS, the findings showed that environmental concerns had no significant influence on consumers' organic food purchasing intentions. Thus, H9 was rejected. Past literature indicates that environmental concerns influenced the purchase of organic food for many consumers around the world (Escobar-López et al. 2017; Asif et al. 2018; Thøgersen et al. 2019). This finding contradicts those studies that found that environmental concerns do have a significant influence on consumers' organic food purchasing intentions. However, some past studies have found that environmental concerns have no significant influence on individuals' purchase intentions towards organic food. For instance, Hwang (2016) found that environmental concerns did not influence older consumers' intentions to purchase organic food. Further, the finding of the present study is supported by Yadav and Pathak (2016) who investigated Indian consumers' organic food purchasing intentions. The result revealed that environmental concerns did not have any significant influence on these consumers' intentions to purchase organic food. Similarly, an Iranian study conducted by Rahnama (2017) confirmed that environmental concerns had no positive influence on Iranian women's purchase of organic yogurt. Also, Kapuge (2016), in his study that investigated the drivers of consumers' intentions to purchase organic food in Sir Lanka, found that there was no significant impact of environmental concerns on consumers' intentions to purchase organic food.

- **Hypothesis relating to Subjective norms and Purchase intention**

H8: Subjective norms have a positive influence on consumers' organic food purchasing intentions.

As illustrated in the previous chapter, the results of the path analysis provide evidence to prove that there was a significant positive influence of subjective norms on consumers' purchase intentions to purchase organic food. Hypothesis ten showed that consumers were very concerned about subjective norms. This finding is supported by past research. For example, Basha and Lal (2019) investigated consumers' organic food purchasing intentions

in India. Their study found that subjective norms significantly and positively impacted Indians' purchase of organic food. Likewise, Asif et al. (2018) found a significant positive effect in Pakistan, Iran and Turkey. Further, another study conducted in Taiwan by Teng and Wang (2015) found that subjective norms was one of the factors significantly and positively affecting the consumption of organic food. Another Australian study conducted by Smith and Paladino (2010) reported that subjective norms influenced consumers' organic food purchasing intentions. Thus, the finding of the present study demonstrated that social pressure influenced consumers' intentions to buy organic food. Hence, this finding is consistent with past studies. Hence, and based on the second objective, the current study has contributed to the body of knowledge by investigating the influence of social media on both consumers' trust and purchasing intention of organic food. Further, the second objective filled up the gap related to the influence of organic food attributes on consumers' trust. In addition, this objective contributed to increase the body of knowledge regarding the influence of trust on consumers' purchase intention of organic food. Further, this study asserted the influence of packaging on purchase intention of organic food.

Research Objective Three: ***To investigate the role of Australian consumers' demographic characteristics in their behavioural intentions towards organic food purchases.***

This objective was represented by the following research question:

- ***What is the role of demographic variables (i.e. gender, age, income, education level, occupation, employment status, marital status, number of children and ethnicity) on Australian consumers' organic food purchasing intentions?***

In this research, the above research objective and question were addressed by the analysis of the conceptual framework's control variables, which were addressed in hypothesis number twelve. The demographic variables (control variables) in the conceptual framework are as follows:

- Gender
- Age
- Annual income
- Education level
- Employment status
- Occupation
- Marital status

- Number of children in the household
- Ethnicity

As discussed in Chapter Three, the demographic characteristics of the respondents were adapted from the Australian Bureau of Statistics (ABS). To analyse the role of demographic variables (as control variables), the researcher used SPSS version 25 to examine significant statistical differences between consumers and their organic food purchasing intentions in the Australian context. To do this, and as recommended by statisticians, the researcher employed one-way ANOVA to examine the role of demographic variables in the purchase intentions of organic food (Kothari 2004; Hair et al. 2010; Sekaran & Bougie 2016). A T-test is commonly used to analyse gender as a control variables, because the gender variable includes two groups: males and females (Hair et al. 2010; Saunders et al. 2009). But, as mentioned in Chapter Three, according to the report published by the Attorney General's Department of the Australian government, (2018), the gender variable was divided into more than two groups. In this respect, the word "sex" or "gender" could be classified as male, female or unspecified, indeterminate, and intersex. As a result, one-way ANOVA was used instead of a T-test (Hair et al. 2010; Sekaran & Bougie 2016). A discussion on each of the control variables and their related hypotheses is as follows:

The main hypotheses related to consumers' demographic variables (control variables) is postulated as:

- **Hypothesis relating to Demographic variables as control variables**

H9: The different demographic variables produce significant differences in organic food purchasing intentions.

This main hypothesis was divided into nine sub-hypotheses. The findings of one-way ANOVA for every single hypothesis is shown as follows:

H9a: There are significant differences in organic food purchasing intentions for consumers of different genders.

In the first sub-hypothesis, the researcher examined significant differences between consumers in terms of gender. The findings of one-way ANOVA revealed that the value of sig was (0.001) was lower than 0.05, indicating that there were significant differences in the mean scores for organic food purchasing intentions among the three groups (male, female, and would rather not say). Further, as discussed in the previous chapter, female consumers buy organic food more than male consumers. This finding is consistent with previous studies.

In this regard, the past literature indicates that females were more likely to purchase organic food (Aslihan Nasir & Karakaya 2014; Grubor & Djokic 2016). In addition, several studies have investigated the role of gender as a control variable for organic food purchases. For instance, Petrescu et al. (2017) stated that there was a statistically significant difference between gender and the purchase of organic food in Romania. They also found that female consumers were likely to buy organic food in larger quantities compared with male consumers. Similarly, Misra and Singh (2016) found that there was a significant difference between males and females in relation to the purchase of organic food in India. Further, they indicated that Indian females were more concerned about organic food than Indians males. A study conducted by Yazdanpanah et al. (2015) found that there were significant differences between males and females regarding willingness to purchase organic food in the Islamic republic of Iran. Thus, the first hypothesis of demographic variables is in line with past literature.

H9b: There are significant differences in organic food purchasing intentions for consumers of different age groups.

The results of one-way ANOVA reported that there was no a significant difference between the age of the respondents and organic food purchasing intentions. As shown in the previous chapter (Chapter Six), the value of sig was not significant. Generally speaking, past literature indicates that age, as a control variable, affects consumers' organic food purchasing intentions (Michaelidou & Hassan 2010; Singh & Verma 2017). The finding of this hypothesis is supported by several studies. For example, Denver and Jensen (2014) found that there was no significant difference between consumers' age and preferences to purchase organic food. Further, an Australian study carried out by Oates et al. (2012) argued that the age of Australian consumers did not differ with the level of organic food purchasing.

H9c: There are significant differences in organic food purchasing intentions for consumers of different income levels.

Arguably, income plays an important role in consumers' organic food purchases (Paul & Rana 2012; Baudry et al. 2017; Hansen et al. 2018). Further, in case of organic food, Orlando (2018) argued that consumers devote some of their income to purchasing organic food. In this study, it was found that there was a significant difference between the annual income of respondents and organic food purchasing intentions. As illustrated in Chapter Six, the value of F (2.820), and sig value was significant (0.016). In addition, the results of LSD indicated

that consumers who earned high annual incomes (from $110.001 to $140.000) were more likely to purchase organic food. This finding is supported by past studies. A study carried out by Singh and Verma (2017) found that there was a significant difference between consumers' incomes and organic food purchasing decisions. Similarly, Wee et al. (2014) reported a significant difference between Malaysian consumers' incomes and their organic food purchasing intentions. Further, Nandi et al. (2017) stated that individuals with high incomes preferred to buy organic food. Another study carried out in Russia by Bruschi et al. (2015) indicated that organic food was more frequently purchased by consumers who earned high incomes. Hence, this finding is consistent with past literature.

H9d: There are significant differences in organic food purchasing intentions for consumers of different education levels.

It can be argued that the education level of consumers plays a vital role in the choice of organic food products (Singh & Verma 2017; Sultan et al. 2018). In this study, it was reported that there was a significant difference between the education level and consumers' purchase intentions towards organic food. It was shown that F value was 2.621, and sig value was significant (0.035). Additionally, the LSD test suggested that consumers who hold undergraduate degrees had a statistically significantly higher score on intention to purchase organic food than the consumers who possess other educational levels such as postgraduate, diploma, or secondary education. This finding is consistent with previous studies. In this regard, many studies found that education level plays a crucial role in the purchase of organic food (Aryal et al. 2009). Moreover, several studies investigated the differences between respondents' education levels and buying organic food (Singh & Verma 2017; Ditlevsen et al. 2019). For instance, Singh and Verma (2017) argued that consumers' organic food buying decisions is affected by their level of education. They found that consumers who hold a Master degree were more interested in buying organic food than those who held other qualifications. Also, Dettmann and Dimitri (2009) found that United States' consumers with high education levels preferred to buy organic vegetables more than other groups who had different qualifications. Similarly, Tsakiridou et al. (2008) reported that consumers with higher education levels believed in the benefit and value of organic food in comparison with elementary and high school graduates. Likewise, Nandi et al. (2017) also indicated that highly educated people were more likely to purchase organic food.

H9e: There are significant differences in organic food purchasing intentions for consumers of different employment levels.

One-way ANOVA indicated that there was a statistically significant difference between consumers' employment status and their intentions to purchase organic food. The results reported that the value of F was 2.462, and sig value 0.033. Further, the LSD test indicated that consumers who were employed full-time preferred to buy and consume organic food more than the other employment status groups of the study. LSD reported the value of mean difference (I-J) was .32680 with a significant level at 0.10. This result is supported by earlier studies. Pearson et al. (2013), who conducted a study to explore purchasing frequency to explain Australian consumers' organic food purchasing behaviour, found that individuals who had a full-time job were more likely to buy organic foods. Mehra and Ratna (2014) also pointed out that there was a statistically significant difference between the employment status of the consumers and purchase of organic food; this time in India. The finding of the present study is also supported by Vukasovic (2015) who stated that, in Ghana, consumers who had full-time employment were willing to buy more for organic food compared with those who were unemployed.

H9f: There are significant differences in organic food purchasing intentions for consumers of different occupations.

The findings of one-way ANOVA indicated that the value of F (1.795) and the value of sig (0.113), show no statistically significant difference between consumers' occupation and organic food purchasing intentions. Several studies confirm this finding. For example, Waqas and Hong (2019) carried out a study in Pakistan to understand how the occupation status of consumers is associated with organic food purchasing intentions. They stated that there was no relationship between the occupation of the consumers and their organic food purchasing intentions. Further, Vehapi and Dolićanin (2016) found that consumers' occupation was an important variable in the context of organic food purchases in Serbia. Likewise, another study carried out by Nugroho et al. (2015) reported that there was no statistically significant difference between individuals' occupation and purchasing decision of organic tofu.

H9g: There are significant differences in organic food purchasing intentions for consumers of different marital status.

The literature shows that the marital status of consumers has an important role in their purchasing decisions (Richa 2012; Mazloumi et al. 2013). In the context of organic food,

several studies investigated the importance of consumers' marital status and buying intentions (Brčić-Stipčević et al. 2013; Sultan et al. 2018). The one-way ANOVA results reported that the F value was 0.223, with sig value (0.881) which means that there was no a statistically significant difference between marital status and consumers' organic food purchasing intentions. Past studies confirm this finding. For instance, Brčić-Stipčević et al. (2013) found that there was no statistically significant difference between consumers' marital status and organic food buying decisions. Also, another Australian study conducted by Sultan et al. (2018) indicated that respondents' marital status differences have no relationship with the purchase of organic food. In addition, Aygen (2012) argued that there was no statistically significant difference between marital status of Turkish consumers and their organic food buying decisions.

H9h: There are significant differences in organic food purchasing intentions for consumers with different numbers of children.

In this study, the researcher wanted to understand whether there are any differences in consumers' organic food purchasing intentions based on the number of children in their households. The results of one-way ANOVA suggest that the value of sig was 0.000, and F value was 6.229, indicating that there is a statistically significant difference between consumers' organic food purchasing intentions and the number of children in the consumer's household. In addition, the LSD test reported that consumers who have two children were willing to pay more for organic food. As illustrated in the previous chapter, the value of mean difference (I-J) was 1.24561, with sig value 0.000. The finding of this study is supported by Quah and Tan (2009) who reported that households with more children led the parents to buy more organic food due to the health benefits. Further, Janssen (2018) found that families with young children were more likely to buy organic food products. Similarly, Jose and Kuriakose (2016) confirmed that people who have children in the household were more concerned about buying organic food. In addition, Slamet et al. (2016) found that female consumers in Indonesia, who had children in their homes, were willing to buy more organic food.

H9i: There are significant differences in organic food purchasing intentions for consumers of different ethnicities.

The final hypothesis relates to whether there are a statistically significant differences among consumers' ethnicity and organic food purchasing intentions. As shown in Chapter Six, the

results of one-way ANOVA revealed that the F value is 1.536 and sig value is 0.133 which is not significant, thus indicating that there is no statistically significant difference between consumers' ethnicity and their intentions to purchase organic food. This finding is consistent with previous studies. Dardak et al. (2009) stated that there was no significant difference between consumers' ethnicity and buying organic fruits and vegetables. Therefore, and based on the third objective, the gap related to the need to further understanding of the differences between consumers' purchase intention of organic food based on demographical characteristics is addressed.

7.3 Research contribution

The current research provides several contributions to theory (body of knowledge), as well as to practice. The following is a discussion of those contributions.

7.3.1 Theoretical contribution

This research has contributed to the existing literature, theory and has increased the body of knowledge in a number of ways:

1. This study has explored the main factors that influence Australians' organic food purchasing intentions by conducting a qualitative study. It offers an empirical examination of the influence of various factors on consumers' purchasing intention using a quantitative study. Thus, due to the limited number of studies carried out to investigate consumers' purchases of organic food in Australia (Heller Willer 2007; Smith & Paladino 2010; Phuong 2013; Nguyen & Ha 2016; Anisimova 2016; O'Mahony & Lobo 2017; Wheeler et al. 2019). In addition, this study provides an important contribution by determining the essential factors and their influence on Australians' intentions to purchase organic food in regional Australia. Hence, this work increases the body of knowledge on this issue in the Regional Australian context.

2. As indicated in Chapter Two, the literature stated that there are some gaps that need to be addressed. Accordingly, this study has addressed those gaps. Hence, this study has contributed to the literature through the following:

    a As mentioned in Chapter Two, it is important to examine the influence of social media on consumers' organic food purchases (Muhammad et al. 2016; Persaud & Schillo 2017; Fathelrahman & Basarir 2018). Little is known about the influence

of companies' social media on consumers' trust in organic food (Ayyub et al. 2018). Surprisingly, the qualitative stage of this research confirmed that social media was found as a new factor (theme) that was not identified by previous studies as a factor that influences consumers' purchase intention of organic food. Accordingly, the current study empirically examined the influence of social media on both consumers' trust and consumers' purchasing intentions of organic food. Thus, this is a contribution to the body of knowledge on organic food.

b The literature reported that there is a need to conduct further qualitative research to obtain more insights into the main motives that influence consumers' purchases of organic food products (Lee 2016; Dumortier et al. 2017; Shin et al. 2019). In addition, past studies call for further mixed method studies in the Australian context for a greater understanding of the growth of the organic food market (O'Mahony & Lobo 2017). Consequently, this study has employed a mixed method approach to achieve the research objectives and answer the research questions.

c Past studies have pointed out that it is important to employ consumers' demographic characteristics to understand how the differences in consumers' demographic variables may influence their organic food purchasing intentions (Yadav 2016; Chekima et al. 2017; Yang et al. 2018; Tariq et al. 2019). Thus, this study utilised consumers' demographic characteristics as control variables.

d There are few empirical studies examining the influence of trust on consumers' organic food purchasing intentions (Yin et al. 2016; Nuttavuthisit & Thøgersen 2017; Lian & Yoong 2019; Nuttavuthisit & Thøgersen 2019). Further, little attention has been paid to measuring the influence of trust in tandem within the TPB for organic food purchasing intentions (Qi & Ploeger 2019). This study examined the influence of trust on intentions to purchase organic food within the TPB.

e The literature indicates that there is a need to investigate the influence of organic food attributes on consumers' trust in organic food (Prentice et al. 2019). Accordingly, this study contributed to the literature by examining the influence of

food attributes on consumers' trust in organic food.

f The literature noted that there is limited usage of Social Cognitive Theory (SCT) in the context of organic food (Li & Zhong 2017; Preko 2017). This study adopted SCT. Further, the current study extended the SCT and TPB through using additional variables such as social media, trust, and packaging.

g The association between packaging and consumers' organic food purchases has received little attention (Hemmerling et al. 2015; Meyerding & Merz 2018). As a result, this study empirically investigated the role of packaging on consumers' intentions to purchase organic food.

3. Several international research studies have argued that there is a need to undertake further research on the factors that influence consumers' organic food purchasing intentions (Lee & Yun 2015; Gakobo & Jere 2016; Hwang 2016; Chekima et al. 2017; Massey et al. 2018; Wang et al. 2019). The current research has explored the main factors that influence consumers' purchasing intentions in the context of organic food. Therefore, the findings of the current study increase the body of knowledge regarding various factors influencing consumers' organic food purchasing intentions.

4. The present study contributes to the literature by suggesting a new conceptual framework that might be used by future researchers to better understand organic food purchasing intentions in other countries.

7.3.2 Practical contribution

This research provides some useful practical implications for stakeholders in the organic food industry. These implications are as follows:

1. The findings of this study may help the stakeholders of the organic food industry such as marketers, policy makers, retailers and producers with insights that would help to create guidelines in the formulation of appropriate marketing strategies and campaigns to enable them to successfully target consumers. For example, they may focus on social media as a platform to attract new consumers to buy such products. Social media has not been fully utilised in this space. In this regard, more emphasis could be placed on digital media at the expense of traditional media.

2. The findings can assist the decision makers in institutions and organisations that can influence people's attitudes towards consuming organic food products by providing an in-depth understanding of the main drivers of organic food product purchases.

3. As argued by O'Mahony and Lobo (2017), investors who would invest their money in the organic food industry within the Australian context need accurate information about the market. Thus, the findings of this study may also support new investors by increasing their understanding and knowledge of the essential factors that play an important role in influencing Australians to purchase and consume organic food. Hence, they can successfully plan for their investment in this industry by taking note of these factors.

4. It is evident from the findings of the present study that large supermarkets such as Coles, Woolworths and ALDI are the main retail distribution outlets for groceries, including organic foods. In addition, this study also showed that the higher price and limited availability of organic food are the main obstacles that restrict non-buyers and some occasional buyers. Therefore, these outlets may benefit from the results of this study by making organic food more available on their shelves and taking into consideration how the pricing element can be reviewed in an attempt to attract more buyers.

5. This study revealed that social media is one of the main sources of organic food information as well as one of the factors that motivate consumers to purchase organic food. Thus, companies that market organic food need to improve and develop their online platforms for promoting such products due to the increasing use of such platforms by consumers.

7.4 Limitations and future research

This section provides a brief discussion about the limitations of the study, and suggests some directions for future research. The limitations and guidelines for future research are as follows:

1. The generalisability of the findings is one of the common limitations in scientific research (Parsons et al. 2011), and this study is not an exception. The current study has been carried out in Toowoomba, Australia. Therefore, to expand the validity of the findings, future studies need to be conducted in other places in Australia.

2. The existing study focused on organic food products in general. Future studies could focus on specific kinds of organic food products such as organic dairy and bakery.

3. Although the sample size of the current study was appropriate, future studies could use larger samples to enhance results' robustness.

4. The present study is limited to measuring consumers' purchasing intentions. There is no measurement for actual purchasing behaviour (Yadav & Pathak 2016). Therefore, future research may be conducted to investigate the actual organic food purchasing behaviour.

5. As discussed in Section 2.5.15, this study is one of the few studies that investigate the role of social media on consumers' organic food purchases. The other studies are Fathelrahman and Basarir (2018) and Wang et al. (2019). Hence, future research should be undertaken to understand the role of various social media platforms on consumers' choice of organic food products.

7.5 Concluding remarks

To conclude, this study has been carried out to determine the key factors that influence consumers' organic food purchasing intentions in the Australian context. This study employed a mixed method approach to achieve the research objectives and answer the research questions. First, a qualitative study was conducted to explore the main factors influencing Australians' organic food purchases. Next, the study empirically examined the influence of the various factors (that were found in the quantitative stage) on consumers' organic food purchasing intentions by employing a quantitative study. The findings of the study revealed that certification, packaging, sensory food attributes and social media positively influenced both consumers' trust and purchasing intentions towards organic food. Further, trust, health concerns and subjective norms were found to influence consumers' organic food purchasing intentions, whilst environmental concerns were found to have no significant influence on purchasing intentions. In addition, the influence of demographic variables was examined.

This study has provided several contributions to the body of knowledge, as well as to practice. First, the present study has addressed the gaps identified in the literature. Second, because little is known about Australians' organic food purchasing intentions, this study has

been conducted to explore and examine that context. Third, due to the need to keep exploring the essential factors that influence consumers' organic food purchases, this study has addressed this issue by exploring those factors. Finally, the current study has suggested a new conceptual framework that may be useful for future studies.

Furthermore, the findings of the current study could help the practitioners in the organic food industry by identifying the key factors that motivate Australian consumers to purchase and consume organic food. They may use the findings of this study in the formulation of marketing policies and development of marketing strategies to attract more consumers to purchase organic food products.

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Appendices

Appendix A: USQ HREC Approval Letter

OFFICE OF RESEARCH
Human Research Ethics Committee
PHONE +61 7 4631 2690| FAX +61 7 4631 5555
EMAIL human.ethics@usq.edu.au

UNIVERSITY OF SOUTHERN QUEENSLAND

6 September 2018

Mr Mohammad Almrafee

Dear Mohammad

The USQ Human Research Ethics Committee has recently reviewed your responses to the conditions placed upon the ethical approval for the project outlined below. Your proposal is now deemed to meet the requirements of the *National Statement on Ethical Conduct in Human Research (2007)* and full ethical approval has been granted.

Approval No.	H18REA043
Project Title	Marketing organic food in Australia: A study of factors influencing consumers' purchase intention
Approval date	21 March 2018
Expiry date	21 March 2021
Status	**Approved with standard conditions**

The standard conditions of this approval are:

(a) responsibly conduct the project strictly in accordance with the proposal submitted and granted ethics approval, including any amendments made to the proposal;
(b) advise the University (email: ResearchIntegrity@usq.edu.au) immediately of any complaint pertaining to the conduct of the research or any other issues in relation to the project which may warrant review of the ethical approval of the project;
(c) promptly report any adverse events or unexpected outcomes to the University (email: ResearchIntegrity@usq.edu.au) and take prompt action to deal with any unexpected risks;
(d) make submission for any amendments to the project and obtain approval prior to implementing such changes;
(e) provide a progress 'milestone report' when requested and at least for every year of approval;
(f) provide a final 'milestone report' when the project is complete;
(g) promptly advise the University if the project has been discontinued, using a final 'milestone report'.

Additional conditions of approval for this project are:

(a) Nil.

https://www.usq.edu.au/current-students/academic/higher-degree-by-research-students/conducting-research/human-ethics/forms-resources

Please note that failure to comply with the conditions of this approval or requirements of the Australian Code for the Responsible Conduct of Research, 2018, and the National Statement on Ethical Conduct in Human Research, 2007 may result in withdrawal of approval for the project.

Yours sincerely,

Mrs Nikita Kok
Ethics Officer

Appendix B: Interview Participant Information Sheet

University of Southern Queensland

Participant Information for USQ Research Project Interview

Project Details

Title of Project: Marketing Organic Food in Australia: A Study of Factors Influencing Consumers' Purchase Intention
Human Research Ethics Approval
Number: H18REA043

Research Team Contact Details

Principal Investigator Details

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Description

- This project is being undertaken as part of a Doctor of Philosophy.
- The purpose of this project is to investigate and understand the main factors that influence consumers' purchase intention of organic food in Australia.
- The research team requests your assistance because you meet the study criteria and can provide data which is important in this research.

Participation

- Your participation will involve participation in an interview that will take approximately 40-60 minutes of your time.
- The interview will take place at a time and venue that is convenient to you.
- Questions will include:

1. Do you purchase organic food?

2. What are your reasons for buying organic food?

3. Please explain what you understand by organic food?

- The interview will be audio recorded.

- Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. You may also request that any data collected about you be destroyed. If you do wish to withdraw from this project or withdraw data collected about you, please contact the Research Team (contact details at the top of this form).

- Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland.

Expected Benefits

- It is expected that this project will not directly benefit you. However, it may benefit people who work in organic food domain. It will provide better understanding of the key factors that influence consumers to purchase organic food in Australia. Also, it will assist marketers, organic food practitioners, retailers, and even new investors to know and understand how to target consumers to buy organic products.

Risks

- There are minimal risks associated with your participation in this project. The only risk is time imposition. However, participants will be given full freedom to withdraw at any time from this research.

Privacy and Confidentiality

- All comments and responses will be treated confidentially unless required by law.

- Audio will be recorded by the principal researcher. Further, the researcher will transcribe the recording. Also, the participants will be given a copy of transcribed data for the revisions.

- Data will be confidentially disposed after five years by deleting the data from computer.

- Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy.

Consent to Participate

- We would like to ask you to sign a written consent form (enclosed) to confirm your agreement to participate in this project. Please return your signed consent form to a member of the Research Team prior to participating in your interview.

Questions or Further Information about the Project

- Please refer to the Research Team Contact Details at the top of the form to have any questions answered or to request further information about this project.

Concerns or Complaints Regarding the Conduct of the Project

- If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au. The Ethics Coordinator is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

Thank you for taking the time to help with this research project. Please keep this sheet for your information.

Appendix C: Interview Consent Form

University of Southern Queensland

Consent Form for USQ Research Project Interview

Project Details

Title of Project: Marketing Organic Food in Australia: A Study of Factors Influencing Consumers' Purchase Intention

Human Research Ethics
Approval Number: H18REA043

Research Team Contact Details	
Principal Investigator Details	**Other Investigator/Supervisor Details**
Mr. Mohammad Almrafee Email: Mohammad.Almrafee@usq.edu.au Telephone: (07) 4631 1266 Mobile: 0435474594	Dr. Ranga Chimhundu Email: Ranga.Chimhundu@usq.edu.au Telephone: (07) 4687 5759 Dr. Rumman Hassan Email: Rumman.Hassan@usq.edu.au Telephone: (07) 4631 1296

Statement of Consent

By signing below, you are indicating that you:

- Have read and understood the information document regarding this project.
- Have had any questions answered to your satisfaction.
- Understand that if you have any additional questions you can contact the research team.
- Understand that the interview will be audio recorded.
- Understand that I will be provided with a copy of the transcript of the interview for my perusal and endorsement prior to inclusion of this data in the project.

- Understand that you are free to withdraw at any time, without comment or penalty.

- Understand that you can contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au if you do have any concern or complaint about the ethical conduct of this project.

- Are over 18 years of age.
- Agree to participate in the project.

Participant Name	
Participant Signature	
Date	

Please return this sheet to a Research Team member prior to undertaking the interview.

Appendix D: Interview Guide

University of Southern Queensland

Interview Guide

Title of research

Marketing Organic Food in Australia: A Study of Factors Influencing Consumers' Purchase Intention.

GENERIC QUESTIONS

Q1: Where do you do your grocery shopping?

- Coles
- Woolworth
- ALDI
- Convenience store
- Other (Please specify)_____

Q2: Who does the shopping in your household?

- Parents
- Yourself
- Jointly (Yourself and Spouse)
- Spouse/Partner
- Other (Please specify) _____

Q3: How often you shop for grocery?

- Daily
- Weekly
- fortnightly
- Monthly
- Other (Please specify) _____

DEMOGRAPHIC CHARACTERISTICS

Dear interviewee

I would like to invite you to fill up this quick survey about your demographic data. This will help us in our research. These questions can be simply answered by clicking on the suitable circle. All information and responses you provide will be treated confidentially.

Thanks for your time.

Gender: ☐ Male ☐ Female ☐ Would rather not to say ☐ Others

Age: ☐ 18-19 ☐ 20-24 ☐ 25- 29 ☐ 30-34 ☐ 35-39
☐ 40-44 ☐ 45-49 ☐ 50-54 ☐ 55-59 ☐ 60 years old or more

Education level ☐ Year 11 or below ☐ Year 12 ☐ Certificate III/IV
☐ Advanced diploma and Diploma ☐ Bachelor degree
☐ Graduate diploma / graduate certificate ☐ TAFE certificate
☐ Postgraduate degree ☐ Other (please specify)…….

Employment ☐ Full-time ☐ Part-time ☐ Self- employed
☐ Casual ☐ Unemployed

Occupation ☐ Technicians and Trades workers ☐ Machinery operators and drivers
☐ Clerical /administrative workers ☐ Professionals
☐ Managers ☐ Labourers
☐ Sales workers ☐ Community/personal service workers
☐ Other, please specify ……

Annual income ☐ $1-$19,999 ☐ $20,000-$30,999 ☐ $ 40,000- $50,999
☐ $ 60,000- $70,999 ☐ $ 80,000- $ 90,999 ☐ $ 100,000-$110,999
☐ $120,000-$ 130,999 ☐ $140,000 and over

Marital status ☐ Married/De-facto ☐ Divorced/Separated ☐ Widowed ☐ Single

Number of children/ Dependants ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ More than 3

Ethnic background ☐ Anglo - Australian ☐ African
☐ Asian ☐ Pacific and Torres Straight Islander
☐ Middle Eastern ☐ Other (Please specify) ----------

PARTICIPANTS DETAILS

Date of the interview: _____

Name of interviewee: _____

Place of interview: _____

Start time of interview: _____

Finishing time of interview: _____

OPEN ENDED QUESTIONS

Q1: *Have you heard about the term organic?*

- If yes, how do you hear about this term?

Q2: *What do you think organic means?*

- Please provide your opinion

Q3: *What do you understand by the term organic food?*

- Please tell me more about your understanding

Q4: Do you purchase organic food?

- If yes, *What are the reasons for purchasing organic food?*
- If no, *Please explain why you do not buy organic food?*

Q5: How often do you purchase organic food?

Q6: What do you believe are the advantages of purchasing organic food?

- Please tell me more about that.

Q7: What do you believe are the disadvantages of purchasing organic food?

- If there are any negatives, please tell me more about that.

Q8: Do you trust that organic food is truly organic?

- If yes, please explain why *Please explain why you trust organic food is truly organic?*
- If no, *Please explain why you do not you trust organic food is truly organic?*

Q9: Do you believe that organic labelling is important for you to decide to purchase organic food?

- If yes, *Please explain the reasons that make organic labelling important for you?*
- If no, *What are the reasons why organic labelling is not important for you?*

Q10: Would you recommend your family, friends or others to purchase or consume organic food?

- If yes, *Please tell me more why you would want to recommend others to buy organic food?*
- If no, *Please tell me more why you would not want to recommend others to buy organic food?*

Q11: Is there anything else you would like to add?

Thank you for your contribution in participating in this interview

Appendix E: Survey Participant Information Sheet

University of Southern Queensland

Survey Participant Information Sheet

Project Details

Title of Project: Marketing Organic Food in Australia: A Study of Factors Influencing Consumers' Purchase Intention.

Human Research Ethics

Approval Number: H18REA043

Research Team Contact Details

Principal Investigator Details

Mr. Mohammad Almrafee
Email: Mohammad.Almrafee@usq.edu.au
Telephone: (07) 4631 1266

Supervisor Details

Dr. Ranga Chimhundu
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Telephone: (07) 46875759

Dr. Rumman Hassan
Email:Rumman.Hassan@usq.edu.au
Telephone: (07)46311296

Description

- This project is being undertaken as part of A Doctor of Philosophy.
- The purpose of this project is to investigate and understand the main factors that influence consumers' purchase intention of organic food in Australia.
- The research team requests your assistance because you meet the study criteria and can provide data which is important in this research.

Participation

- Your participation will involve completion of a questionnaire that will take approximately 15 minutes of your time.

- Questions will include:

No	**Intention**	1 Strongly disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly agree
1	I try to buy organic foods because they are the best choice for me.	☐	☐	☐	☐	☐
2	I intend to buy organic food in the near future.	☐	☐	☐	☐	☐
3	If I had to buy food today, I would buy certified organic food.	☐	☐	☐	☐	☐
4	I expect to consume organic food.	☐	☐	☐	☐	☐

- Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. Please note that if you wish to withdraw from the project after you have submitted your responses, the Research Team are unable to remove your data from the project (unless identifiable information has been collected). If you do wish to withdraw from this project, please contact the Research Team (contact details at the top of this form).

- Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland.

Expected Benefits

- It is expected that this project will not directly benefit you. However, it may be of benefit to organic food marketers and consumers. It will provide a better understanding of the key factors that influence consumers to purchase organic food in Australia. Also, it will help marketers, organic food practitioners, retailers, and even new investors to know and understand how to target consumers to buy organic products.

Risks

- There are no anticipated risks beyond normal day-to-day living associated with your participation in this project.

Privacy and Confidentiality

- All comments and responses will be treated confidentially unless required by law.

- Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy.

Consent to Participate

- The return of the completed questionnaire is accepted as an indication of your consent to participate in this project.

Questions or Further Information about the Project

- Please refer to the Research Team Contact Details at the top of the form to have any questions answered or to request further information about this project.

Concerns or Complaints Regarding the Conduct of the Project

- If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au. The Ethics Coordinator is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

Thank you for taking the time to help with this research project. Please keep this sheet for your information.

Appendix F: The first version of the Questionnaire

University of Southern Queensland

Survey Questionnaire

Title of Project: Marketing Organic Food in Australia: A Study of Factors Influencing Consumers' Purchase Intention

Dear Participants,

This questionnaire relates to research on factors that potentially influence consumers' purchase intention in the context of organic food. This research forms part of a PhD study being conducted at the University of Southern Queensland, Australia. The information obtained using this questionnaire will be treated confidentially.

This project has met the requirements of National Statement on Ethical Conduct in Human Research, and the USQ Human Research Ethics Committee has granted ethics approval for this research (Approval Number: H18REA043).

The questionnaire takes approximately 10 to 15 minutes to complete. Should you have any questions or need further details or information about this research, please contact the researcher (Mohammad Almrafee) at the address given below.

Yours sincerely,

Mohammad Almrafee
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Faculty of Business, Education, Law and Arts
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Email: Rumman.Hassan@usq.edu.au

Part 1

Demographic Characteristics

Note: Please tick (✓) the most appropriate box

1. Please specify your gender

[1] Male

[2] Female

[3] Other

[4] Would rather not to say

2. Please indicate your age group

[1] 18-25

[2] 26-35

[3] 36- 45

[4] 46-55

[5] 56-65

[6] 66 and above

3. Please indicate your annual income

☐ Less than $20,000

☐ $20,001-$50,000

☐ $50,001- $80,000

☐ $80,001- $110,000

☐ $110,001- $140,000

☐ $140,001 and above

4. Please identify the highest level of education you have completed

☐ Secondary education

☐ Diploma

☐ Undergraduate

☐ Postgraduate

☐ Other(s), please specify…….

5. What is your employment status?

☐ Full-time

☐ Part-time

☐ Casual

☐ Unemployed

☐ Retired

☐ Other(s), please specify……..

6. Please specify your occupation

☐ Managers

☐ Professionals

☐ Technicians

☐ Clerical and Administrative Workers

☐ Labourers

☐ Other(s), please specify …….

7. Please indicate your marital status

☐ Married/De-facto

☐ Divorced/Separated

☐ Widowed

☐ Single

8. How many children/ dependants do you have in your household?

☐ 0

☐ 1

☐ 2

☐ 3

☐ More than 3

9. Please indicate which ethnic background you belong to

☐ Australian Aboriginal

☐ Pacific and Torres Strait Islander

☐ Anglo – Australian

☐ New Zealander

☐ European

☐ African

☐ Asian

☐ Middle Eastern

☐ North American

☐ South American

☐ Other(s), Please specify …….

Definition of organic food

Organic food is the food that is grown or produced without the use of artificial chemicals, herbicides or any other kinds of fertilizers.

Part 2

Grocery shopping behaviour for the household

Note: Please tick (✓) the most appropriate box

1. Where do you usually do your grocery shopping? (Tick all that apply)

- ☐ Coles
- ☐ Woolworths
- ☐ ALDI
- ☐ Convenience store
- ☐ Organic / Health Store
- ☐ Other(s), please specify…….

2. Who does grocery shopping in your household? (Tick only one)

- ☐ Parents
- ☐ Yourself
- ☐ Jointly (Yourself and Spouse)
- ☐ Spouse/Partner
- ☐ Other(s), please specify……..

3. How often do you shop for grocery products?

- ☐ Daily
- ☐ Weekly
- ☐ Fortnightly
- ☐ Monthly

4. Which of the following influence your purchase decision? (Tick all that apply)

- ☐ Spouse/ Partner
- ☐ Parents
- ☐ Children
- ☐ Friends
- ☐ Colleagues
- ☐ Relatives
- ☐ None
- ☐ Other(s), please specify……

Part 3

This part of the questionnaire relates to your general knowledge and understanding of

1. Where do you usually get information about organic food? (Tick all that apply)

☐ Articles and books

☐ Friends, family and relatives

☐ Media such as TV, newspapers

☐ From advertising

☐ Taught in school / University

☐ Social media (Facebook, Twitter ect.)

☐ Not sure

☐ Other(s), please specify…….

2. What do you think is the greatest benefit of consuming organic food? (Tick only one)

☐ Health and nutritious benefits

☐ Good for the environment

☐ Good quality food

☐ Tasty food

3. What do you think is the greatest drawback of consuming organic food? (Tick only one)

☐ Expensive food

☐ Short shelf-life

☐ Limited availability

☐ Poor appearance

Part 4

This part of the questionnaire relates to your purchasing intention of organic food

1. How often do you intend to purchase organic food? (Tick only one)

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Always

2. Approximately what percentage of the food you buy could be classified as organic?

- ☐ 0 % - 10%
- ☐ 11% - 30%
- ☐ 31% - 50%
- ☐ 51% - 70%
- ☐ 71% - 100%

3. Which of the following organic products would you buy in the future? (Tick all that apply)

- ☐ Fruits and vegetables
- ☐ Dairy
- ☐ Meat and chicken
- ☐ Eggs
- ☐ Grains (rice, seeds, or wheat)
- ☐ Bakery products
- ☐ Other(s), please specify…….
- ☐ None

4. What enhances your level of trust in organic food products? (Tick all that apply)

- ☐ Certification
- ☐ Government regulations
- ☐ Reputation
- ☐ High price of organic food

5. How important is the organic food label to you? (Tick all that apply)

- Label helps consumers better understand what is in the food they purchase
- Label helps consumers to differentiate between organic and nonorganic food
- Label informs the consumers about the certification of organic food
- Not sure

6. Would you be willing to recommend others (family, friends, colleagues, etc.) to consume organic food?

- Yes
- No
- Not sure

Part 5

The following section covers questions related to factors that potentially influence consumers' purchasing intention in the context of organic food. Please read the following questions and indicate your level of agreement or disagreement with each of the following statements on a five-point Likert scale by ticking (✓) the most appropriate box.

The scales below define the response number.

1 = Strongly Disagree

2 = Disagree

3 = Neither Agree Nor Disagree

4 = Agree

5 = Strongly Agree

Example:

	1 Strongly Disagree	2 Disagree	3 Neither Agree or Disagree	4 Agree	5 Strongly Agree
I am usually aware of my health	☐	☐	☐	☐	☐

No	Health Concerns	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
1	Organic food keeps me healthy.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
2	Organic food contains a lot of vitamins and minerals.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
3	I buy food that helps maintain my weight and appearance.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
4	When I do shopping, I carefully choose products without any additives.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
5	Organic food reduces the risk of illness.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
6	Organic food has no harmful side effects.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
No	**Environmental Concerns**					
7	Organic foods have been prepared in an environmentally friendly way.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
8	Organic food is beneficial for the environment.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
9	Producing organic food reduces the use of herbicides and pesticides in agriculture.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
10	Organic food is produced in a more environmentally friendly manner than conventional foods.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
11	Organic food helps to achieve biological equilibrium in nature.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
No	**Subjective norms**					
12	My friends and family consume organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
13	My family thinks that I should buy organic food rather than non-organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
14	Most people I value would buy organic food rather than non-organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
15	My friends and family members would appreciate if I buy organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
16	The trend of buying organic food among people around me is increasing.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
	Price					
17	Organic food is expensive.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
18	Only consumers with high income can afford organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
19	The price of a product is very important to me.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
20	The benefits of organic food justify its price.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
21	I would buy more organic food if they were cheaper.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
22	I am not willing to pay more to buy organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

No	Trust	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
23	I trust organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
24	I have doubts about buying organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
25	I trust Australian institutions certifying organic foods.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
26	I trust Australian organic food manufacturers.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
27	I trust sellers of certified organic foods.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
28	I would buy organic food if I can trust it is really organic.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
29	I trust the organic certification logo on organic food labels.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
No	**Social media**					
30	I am satisfied with the social media communications of the companies that market organic food products.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
31	I get information about organic food from various kinds of social media.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
32	Social media are informative about the company's products.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
33	Social media communications of the companies that market organic food products are very attractive.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
34	Advertising on social media sites of the companies that market organic food products impacts my decision to buy organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
35	Social media provides me with an efficient platform to communicate with the companies that market organic food products.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
No	**Packaging and Labelling**					
36	I prefer to buy the products that have attractive packaging.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
37	The quality of the packaging material is important during buying process of organic food products.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
38	Packaging influences my purchasing decision towards organic food products.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
39	Organic labelling provides correct information on organic foods.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
40	When I do shopping, I will pay more attention to food that has been certified with an organic label.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
41	Organic labels are important because they guarantee that the products concerned really do come from organic production.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
42	When I buy organic food product, I always read the label.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

No	Availability	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
43	I will purchase organic food products if they are available in the marketplace.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
44	Organic food is always readily available in the market place.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
45	I would buy more organic food if there were more varieties of such products.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
46	I am able to find organic food products in shops.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
No	**Product attributes**					
47	I prefer organic foods because they are tasty.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
48	Organic food has good flavour.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
49	Organic food contains natural ingredients.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
50	I believe that organic food has superior quality.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
51	I consume organic foods for their nutritional content.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
52	Organic food looks better/more appealing.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
53	Organic food is free of chemical and hormonal residues.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
54	Organic foods stay fresh for a shorter time.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
No	**Certification**					
55	If organic food is certified, I will purchase it.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
56	I look for an organic seal.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
57	Certificate guarantees that the food is produced organically.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
58	Organic food producers should be certified.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
59	I believe that organic food production certificate is important for my food purchases.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
No	**Intention**					
60	I try to buy organic foods because they are the best choice for me.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
61	I intend to buy organic food in the near future.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
62	If I had to buy food today, I would buy certified organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
63	I expect to consume organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
64	For me, the probability to buy organic foods is high.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
65	I am interested in experiencing the benefits of consuming organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

Appendix G: Final version of the Questionnaire

University of Southern Queensland

Survey Questionnaire

Title of Project: Marketing Organic Food in Australia: A Study of Factors Influencing Consumers' Purchase Intention

Dear Participants,

This questionnaire relates to research on factors that potentially influence consumers' purchase intention in the context of organic food. This research forms part of a PhD study being conducted at the University of Southern Queensland, Australia. The information obtained using this questionnaire will be treated confidentially.

This project has met the requirements of National Statement on Ethical Conduct in Human Research, and the USQ Human Research Ethics Committee has granted ethics approval for this research (Approval Number: H18REA043).

The questionnaire takes approximately 10 to 15 minutes to complete. Should you have any questions or need further details or information about this research, please contact the researcher (Mohammad Almrafee) at the address given below.

Yours sincerely,

Mohammad Almrafee
PhD Candidate
School of Management and Enterprise
Faculty of Business, Education, Law and Arts
University of Southern Queensland
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Email: Mohammad.Almrafee@usq.edu.au

The supervisors of this research are:
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Tel: +61 7 4687 5759
Email: Ranga.Chimhundu@usq.edu.au

Dr. Rumman Hassan (Associate Supervisor)
Tel: +61 7 4631 1296
Email: Rumman.Hassan@usq.edu.au

Part 1

Demographic Characteristics

Note: Please tick (✓) the most appropriate box

1. Please specify your gender

[1] Male

[2] Female

[3] Other

[4] Would rather not say

2. Please indicate your age group

[1] 18-25

[2] 26-35

[3] 36- 45

[4] 46-55

[5] 56-65

[6] 66 and above

3. Please indicate your annual income

☐ Less than $20,000

☐ $20,001-$50,000

☐ $50,001- $80,000

☐ $80,001- $110,000

☐ $110,001- $140,000

☐ $140,001 and above

4. Please identify the highest level of education you have completed

☐ Secondary education

☐ Diploma

☐ Undergraduate

□ Postgraduate

□ Other(s), please specify…….

5. What is your employment status?

□ Full-time

□ Part-time

□ Casual

□ Unemployed

□ Retired

□ Other(s), please specify……..

6. Please specify your occupation

□ Managers

□ Professionals

□ Technicians

□ Clerical and Administrative Workers

□ Labourers

□ Other(s), please specify …….

7. Please indicate your marital status

□ Married/De-facto

□ Divorced/Separated

□ Widowed

□ Single

8. How many children/ dependants do you have in your household?

□ 0

□ 1

□ 2

□ 3

□ More than 3

9. Please indicate which ethnic background you belong to

□ Australian Aboriginal

□ Pacific and Torres Strait Islander

□ Anglo – Australian

□ New Zealander

□ European

□ African

□ Asian

□ Middle Eastern

□ North American

□ South American

□ Other(s), Please specify …….

Definition of organic food

Organic food is the food that is grown or produced without the use of artificial chemicals, herbicides or any other kinds of fertilizers.

Part 2

Grocery shopping behaviour for the household

Note: Please tick (✓) the most appropriate box

1. Where do you usually do your grocery shopping? (Tick all that apply)

□ Coles
□ Woolworths
□ ALDI
□ Convenience store
□ Organic / Health Store
□ Other(s), please specify…….

2. Who does grocery shopping in your household? (Tick only one)

□ Parents
□ Yourself
□ Jointly (Yourself and Spouse)
□ Spouse/Partner
□ Other(s), please specify……..

3. How often do you shop for grocery products?

□ Daily
□ Weekly
□ Fortnightly
□ Monthly

4. Which of the following influence your purchase decision? (Tick all that apply)

□ Spouse/ Partner
□ Parents
□ Children
□ Friends
□ Colleagues

□ Relatives

□ None

□ Other(s), please specify……

Part 3

This part of the questionnaire relates to your general knowledge and understanding of organic food.

1. Where do you usually get information about organic food? (Tick all that apply)

☐ Articles and books

☐ Friends, family and relatives

☐ Media such as TV, newspapers

☐ From advertising

☐ Taught in school / University

☐ Social media (Facebook, Twitter ect.)

☐ Not sure

☐ Other(s), please specify…….

2. What do you think is the greatest benefit of consuming organic food? (Tick only one)

☐ Health and nutritious benefits

☐ Good for the environment

☐ Good quality food

☐ Tasty food

3. What do you think is the greatest drawback of consuming organic food? (Tick only one)

☐ Expensive food

☐ Short shelf-life

☐ Limited availability

☐ Poor appearance

Part 4

This part of the questionnaire relates to your purchasing intention of organic food

1. How often do you intend to purchase organic food? (Tick only one)

□ Never

□ Rarely

□ Sometimes

□ Often

□ Always

2. Approximately what percentage of the food you buy could be classified as organic?

□ 0 % - 10%

□ 11% - 30%

□ 31% - 50%

□ 51% - 70%

□ 71% - 100%

3. Which of the following organic products would you buy in the future? (Tick all that apply)

□ Fruits and vegetables

□ Dairy

□ Meat and chicken

□ Eggs

□ Grains (rice, seeds, or wheat)

□ Bakery products

□ Other(s), please specify…….

□ None

4. What enhances your level of trust in organic food products? (Tick all that apply)

□ Certification

□ Government regulations

□ Reputation

□ High price of organic food

5. How important is the organic food label to you? (Tick all that apply)

□ Label helps consumers better understand what is in the food they purchase

□ Label helps consumers to differentiate between organic and nonorganic food

□ Label informs the consumers about the certification of organic food

□ Not sure

6. Would you be willing to recommend others (family, friends, colleagues, etc.) to consume organic food?

□ Yes

□ No

□ Not sure

Part 5

The following section covers questions related to factors that potentially influence consumers' purchasing intention in the context of organic food. Please read the following questions and indicate your level of agreement or disagreement with each of the following statements on a five-point Likert scale by ticking (✓) the most appropriate box.

The scales below define the response number.

1 = Strongly Disagree

2 = Disagree

3 = Neither Agree Nor Disagree

4 = Agree

5 = Strongly Agree

Example:

	1 Strongly Disagree	2 Disagree	3 Neither Agree or Disagree	4 Agree	5 Strongly Agree
I am usually aware of my health	☐	☐	☐	☐	☐

No	Health Concerns	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
1	Organic food keeps me healthy.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
2	Organic food contains a lot of vitamins and minerals.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
3	Organic food reduces the risk of illness.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
4	Organic food has no harmful side effects.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
No	**Environmental Concerns**					
5	Organic foods have been prepared in an environmentally friendly way.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
6	Organic food is beneficial for the environment.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
7	Producing organic food reduces the use of herbicides and pesticides in agriculture.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
8	Organic food is produced in a more environmentally friendly manner than conventional foods.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
9	Organic food helps to achieve biological equilibrium in nature.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
No	**Subjective norms**					
10	My friends and family consume organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
12	My family thinks that I should buy organic food rather than non-organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
13	Most people I value would buy organic food rather than non-organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
14	My friends and family members would appreciate if I buy organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
15	The trend of buying organic food among people around me is increasing.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
	Trust					
16	I trust Australian institutions certifying organic foods.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
17	I trust Australian organic food manufacturers.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
18	I trust sellers of certified organic foods.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
19	I trust the organic certification logo on organic food labels.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

No	Social media	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
19	I am satisfied with the social media communications of the companies that market organic food products.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
20	I get information about organic food from various kinds of social media.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
21	Social media are informative about the company's products.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
No	**Packaging**					
22	I prefer to buy the products that have attractive packaging.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
23	The quality of the packaging material is important during buying process of organic food products.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
24	Packaging influences my purchasing decision towards organic food products.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
No	**Product attributes**					
25	I prefer organic foods because they are tasty.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
26	I believe that organic food has superior quality.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
27	I consume organic foods for their nutritional content.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
No	**Certification**					
28	If organic food is certified, I will purchase it.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
29	I look for an organic seal.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
30	I believe that organic food production certificate is important for my food purchases.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
No	**Intention**					
31	I try to buy organic foods because they are the best choice for me.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
32	I intend to buy organic food in the near future.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
33	If I had to buy food today, I would buy certified organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
34	I expect to consume organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
35	For me, the probability to buy organic foods is high.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
36	I am interested in experiencing the benefits of consuming organic food.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

Appendix H: Missing value analysis

* SPSS output: Missing Value Analysis

	N	Missing	
		Count	Percent
HC 1	390	0	.0
HC 2	390	0	.0
HC 3	390	0	.0
HC 4	390	0	.0
HC 5	390	0	.0
HC 6	390	0	.0
EC 1	390	0	.0
EC 2	390	0	.0
EC 3	390	0	.0
EC 4	390	0	.0
EC 5	390	0	.0
SN1	390	0	.0
SN2	390	0	.0
SN3	390	0	.0
SN4	390	0	.0
SN5	390	0	.0
PR 1	390	0	.0
PR 2	390	0	.0
PR 3	390	0	.0
PR 4	390	0	.0
PR 5	390	0	.0
PR 6	390	0	.0
TR1	390	0	.0
TR2	390	0	.0
TR3	390	0	.0
TR 4	390	0	.0
TR 5	390	0	.0
TR 6	390	0	.0
TR 7	390	0	.0
SM 1	390	0	.0
SM 2	390	0	.0
SM 3	390	0	.0
SM 4	390	0	.0
SM 5	390	0	.0
SM 6	390	0	.0

PL1	390	0	.0
PL2	390	0	.0
PL3	390	0	.0
PL4	390	0	.0
PL5	390	0	.0
PL6	390	0	.0
PL7	390	0	.0
AVA 1	390	0	.0
AVA 2	390	0	.0
AVA 3	390	0	.0
AVA 4	390	0	.0
SFAtt 1	390	0	.0
SFAtt 2	390	0	.0
SFAtt 3	390	0	.0
SFAtt 4	390	0	.0
SFAtt 5	390	0	.0
SFAtt 6	390	0	.0
SFAtt 7	390	0	.0
SFAtt 8	390	0	.0
CR 1	390	0	.0
CR 2	390	0	.0
CR 3	390	0	.0
CR 4	390	0	.0
CR 5	390	0	.0
INT 1	390	0	.0
INT 2	390	0	.0
INT 3	390	0	.0
INT 4	390	0	.0
INT 5	390	0	.0
INT 6	390	0	.0
Gender	390	0	.0
Age	390	0	0
Education	390	0	.0
Employment	390	0	.0
Occupation	390	0	.0
Marital	390	0	.0
Ethnicity	390	0	.0
Income	390	0	.0
Children	390	0	.0

Appendix I: Matrix showing the gap(s) in the literature

Author	Title of Study	Objectives	Methodology	Findings	Gap(s) in the literature (based on limitations)
Wheeler et al. 2019	Understanding the role of social desirability bias and environmental attitudes and behaviour on South Australians' stated purchase of organic foods	To examine the influence of social desirability bias and environmental attitudes on Australians' purchase behaviour of organic food.	The researchers used a survey to collect data from the respondents. Structural equation modelling was utilised to analyse the results.	Results indicate that self-deception has a significant and substantive impact on reported organic food purchasing frequency, but there was no evidence that image management bias directly or indirectly influences organic purchasing behaviour; confirming previous findings that people are motivated to purchase organic food primarily for unselfish reasons.	Australian consumer research on organic food is limited.
Prentice et al. 2019	The influence of product and personal attributes on organic food marketing	To understand the influnec of product and personal attributes on marketing organic food in China.	Survey was used to collect data from 578 consumers.	The results show that surface food attributes in general have no significant effect on either quality assessment or consumers' purchase intention; whereas the attributes that are reflective of food safety and environment have influence on both quality assessment and purchase intention of orgaric food.	Little attention has been paid to the influence of organic food attributes on consumers' trust.
Lian & Yoong 2019	Assessing the Young Consumers' Motives and Purchase Behavior for Organic Food: An Empirical Evidence from a Developing Nation	This study attempts to investigate consumers' motives to purchase organic food in Malaysia.	Survey was distributed among 398 respondents.	The findings revealed that food safety concern, health consciousness, and environment concern have significantly influenced purchase intentions of organic food. Further, purchase intention is positively correlated to the actual purchase of organic food. The study also found that there was no significant impact of affordability on purchase intention of organic food.	Future studies should focus on the influence of trust on purchase intention of organic food.
Nuttavuthisit & Thøgersen 2019	Developing-Economy preferences for imported organic food products	This study was carried out to understand why consumers in Thailand buy organic food.	Mixed method approach was adopted to collect and analyse the data. 67 interviews, 16 focus groups, and 965 questionnaires were used for data collection.	The qualitaitve study relvealed that food safety, taste, quality, price, trust, and country image are key factosr the consumers take into considerations when buying organic food. Further, the quantitative study confirmed the findings of qualitative study.	Further research on the effect of trust on buying behaviour of organic food is needed.
Shin et al. 2019	Motivations behind Consumers' Organic Menu Choices: The Role of Environmental Concern, Social Value, and Health Consciousness'	The objective of this study is to examine underlying motivations of consumers' intention to visit a restaurant featuring organic menu items and willingness to pay for organic menu items.	An online survey was undertaken with a self-administered questionnaire, and a total of 473 responses were analysed using structural equation modelling.	The outcomes reported that environmental concern was the strongest predictor of WTP, followed by social value and health consciousness, whereas health consciousness was the most influential factor on intention to visit, followed by social value and environmental concern.	Future studies need to carry out more qualitative research to further understanding of consumers' motives of organic food.
Tariq et al. 2019	Organic food consumerism through social commerce in China	The aim of this paper is to examine the effect of consumers' attitudes towards organic food on online impulse purchasing behaviour as well as the moderating effect of three website features (visual,	Online survey was employed to collect data from 365 respondents.	The outcomes indicated that consumers' attitudes towards organic food, certification, and product quality positively influence their buying intention of such products. Further, it was found that nutritional content organic food, production and processing methods also affect consumers' attitudes towards organic food.	More examination is needed on the influence of demographic variables on buying decision of organic food.

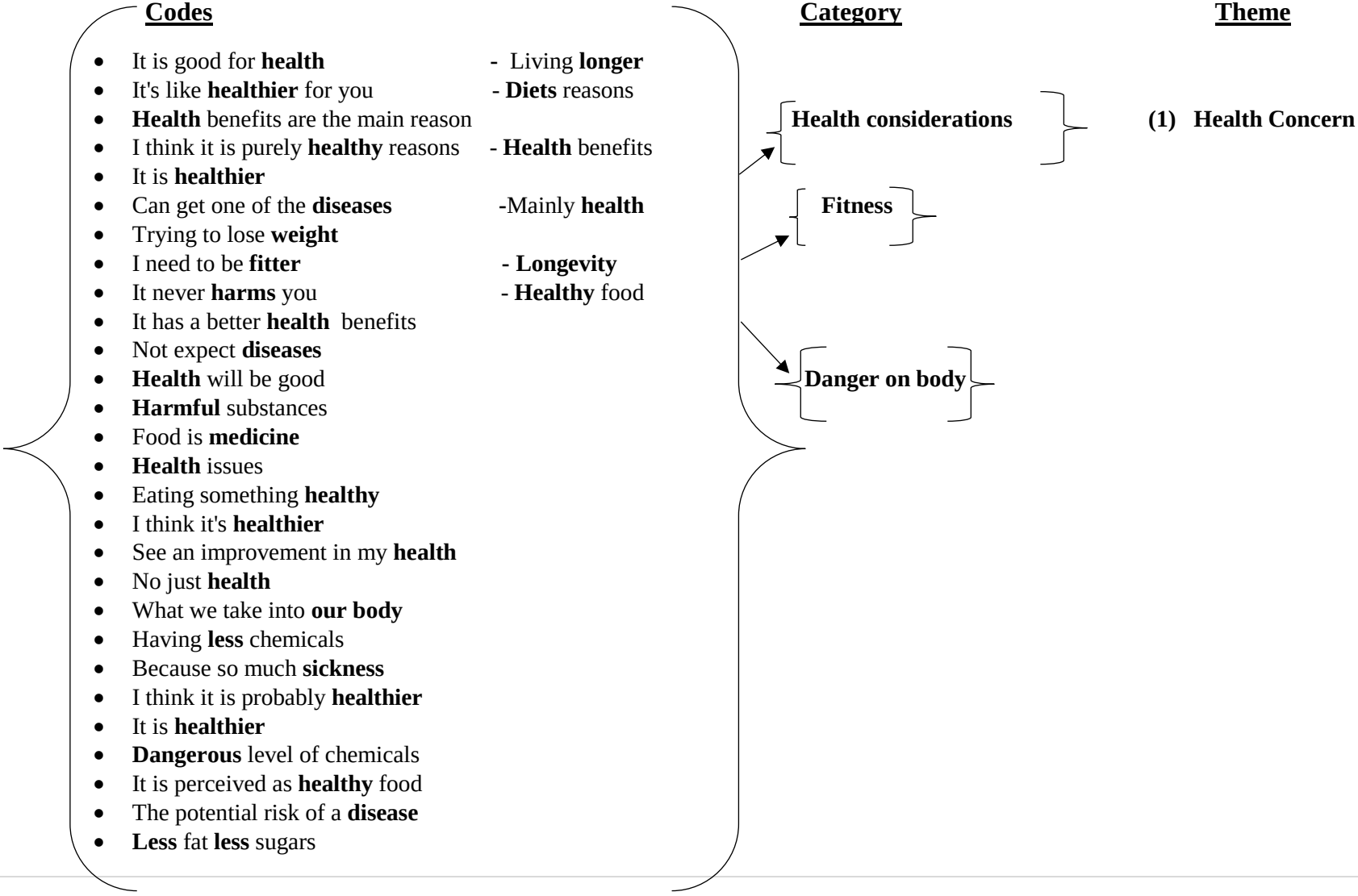
		information and navigation design) on this relationship.			
Qi & Ploeger 2019	Explaining consumers' intentions towards purchasing green food in Qingdao, China: The amendment and extension of the theory of planned behavior	This study aims to investigate consumers' green food purchase intentions using asurvey conducted in Qingdao, Shandong Province,China.	This study employed the quantitative method for data collection using survey questionnaire with 170 consumers.	The results indicated that attitude, perceived behavioral control, and subjective norms significantly influenced the consumers' intentions to purchase green food products.	Few studies have measured the influence of trust in tandem with the TPB for organic food purchase intentions.
Ayyub et al. 2018	Antecedents of trust in organic foods: The mediating role of food related personality traits	This study aims at identifying the key factors affecting consumers' trust in organic food.	Quantitaive study performed using questionniare distributed among 420 consumers.	The results indicated that consumer trust towards retailers was found to be highly significant in building trust of customers regarding organic food products, followed by information on the label. The trust of consumers towards food producers was also found to be a significant predictor, while the perceived knowledge of customers about organic food products was found to be a weak contributor towards creating trust.	Future studies may examine the role of commercial actors of social media in creating the trust of consumers towards organic food.
Meyerding & Merz 2018	Consumer preferences for organic labels in Germany using the example of apples–Combining choice-based conjoint analysis and eye-tracking measurements	This study aims to examine the visual attention patterns and preferences of consumers in a choice experiment by measuring their eye movements using eye-tracking technology and comparing the results with the findings from choice-based conjoint analysis and other stated preference methods.	This study employed field experiment and a computer-based survey was utilised to analyse data from 75 participants.	The study found that that visual attention plays an active part in building decisions to buy organic food. Further, the results also reported that there is no significant correlation between preference measures and visual attention.	Future research is needed to gain a better understating on the effect of packaging on consumers' choice of organic food.
Fathelrahman & Basarir 2018	Use of Social Media to Enhance Consumers' Options for Food Quality in the United Arab Emirates (UAE)	This study was conducted to understand the behavior and attitudes of consumers from the United Arab Emirates towards using the World Wide Web (WWW) for ordering food online.	A survey was conducted with 278 consumers in UAE.	The results showed a strong correlation between the frequency of food ordered online by consumers and the number of consumers who sought specific information about food quality, such as those who wished to obtain information about special diets for both medical and non-medical purposes. A strong correlation was also found to exist between the frequency of ordering food online and consumers who often inquired about buying organic food.	Further work on the effect of social media on consumers' buying behaviour of organic food is needed.
Yang 2018	Search engine advertising for organic food: The effectiveness of information concreteness on advertising performance	This study aims at exploring the effects of information concreteness on the performance of search engine advertising for organic food.	Data were collected using field experiment with organic food company.	Consumers were strongly affected by information provided in the advertising regarding organic food products.	Future research could examine the effect of personal characteristics on consumption of organic food.

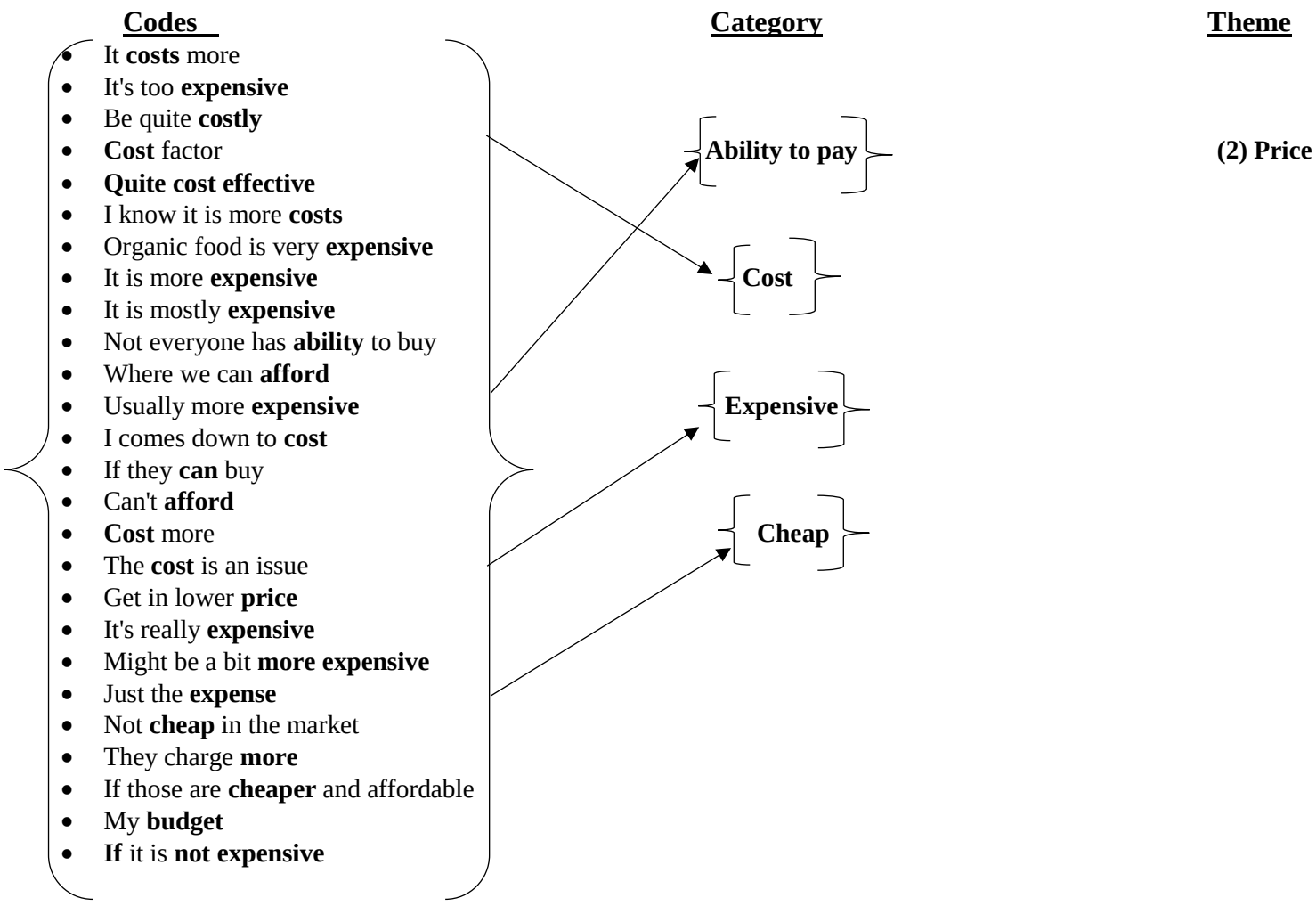
Chekima et al. 2017	Narrowing the gap: Factors driving organic food consumption	This study attempts to identify the factors that influence consumers' organic food consumption.	Quantitative study using survey was carried out to collect data from 133 consumers.	The findings indicated that product-specific attitude, sensory appeal and health orientation significantly and positively influence on individuals' organic food consumption.	There is a need to examine the influence of demographic variables on the purchase intention of organic food.
Dumortier et al. 2017	The Influence of Trust and Attitudes on the Purchase Frequency of Organic Produce	To identify the effect of trust and consumer's attitudes on buying frequency of organic food.	Online survey was applied to gather data from organic consumers, sample consisted 186 respondents.	Organic purchases are determined by health, nutrition, and taste. Trust in media is statistically significant, trust in institutions that are involved in the organic certification process is not statistically significant, and also attitudes show that (dis) trust in the organic certification and supply chain does not hinder organic food market growth.	Further qualitative research on consumers' purchases of organic food is needed.
Li & Zhong 2017	Factors driving consumption behavior for green aquatic products: Empirical research from Ningbo, China	The purpose of this study is to investigate the factors that influence consumers' consumption behaviour with regard to green aquatic products from a social cognitive theory perspective.	An online survey was conducted to collect data from 403.	The cognition of green aquatic products significantly positively influnces outcome expectancy, self-efficacy, perception of others' behaviour, and socio-structural conditions. Self-efficacy and outcome expectancy significantly positively influence consumption intention. Self-efficacy, perception of others' behaviour, and consumption intention significantly positively affect consumption behavior.	Few studies have employed Social Cognitive Theory (SCT) in the field of organic food purchasing behaviours.
Nuttavuthisit & Thøgersen 2017	The importance of consumer trust for the emergence of a market for green products: The case of organic food	This study focuses on the influence of trust on consumers' purchase decision of organic food In Thailand.	Mixed method approach was utilised to collect data from consumers. Data were gathered using qualitative interviews and survey.	The findings revealerd that lack of consumers trust in organic food is deemed as barrier to the growth of organic food in Thailand. Further, the findings indicated that there is a low knowledge and about and low trust in organic food products, certification, control,a nd labelling.	There is a need to conduct further studies on how trust impacts purchase intention of organic food.
Persaud & Schillo 2017	Purchasing organic products: role of social context and consumer innovativeness	The objective of this study is to investigate how individual innovativeness and social factors shape consumers' purchase decisions of organic products.	An online survey of 988 Canadian participants.	The results showed that the two social dimensions social identity and social influence influence purchase intention and the perceived value of organic products partially mediates these relationships. Morover, the personal characteristic, "consumer innovativeness" moderates these relationships.	Future work needed on how social media may influence consumers to buy organic food.
Anisimova 2016	Integrated Multiple Factors Affecting Consumer Behaviour Towards Organic Food: The role of Healthism and Hedonism, Trust in Consumer Purchase Intention of Organic Foods.	To identify the effect of healthism, hedonism and, trust on buying intention of organic food.	Online survey method with a sample of 1011 respondents.	The research outcomes indicated that all of the independent variables strongly influence the purchase intention of organic food. Factors are : Healthism, hedonism, and trust	Further research on consumer behaviour of organic food is needed.
Lee 2016	Individual and Situational Determinants of US Consumers' Buying Behaviour of Organic Foods	This study aims to study an individual and situational variables associated with attitudes and intentions to purchase organic foods, which will lead later to actual behaviour towards organic food.	The researcher used web survey to collect needed data, used AMOS19.0 to analyse data.	Outcomes of this study show that health and environmental consciousness were found to be individual factors which significantly affected attitudes towards purchasing organic food. Whilst children 'age and perceived convenience of purchase were known as strong situational factors that determined intention of purchasing organic food.	There is a need to carry out more qualitative studies to gain better insights into consumers' organic food purchasing behaviour.

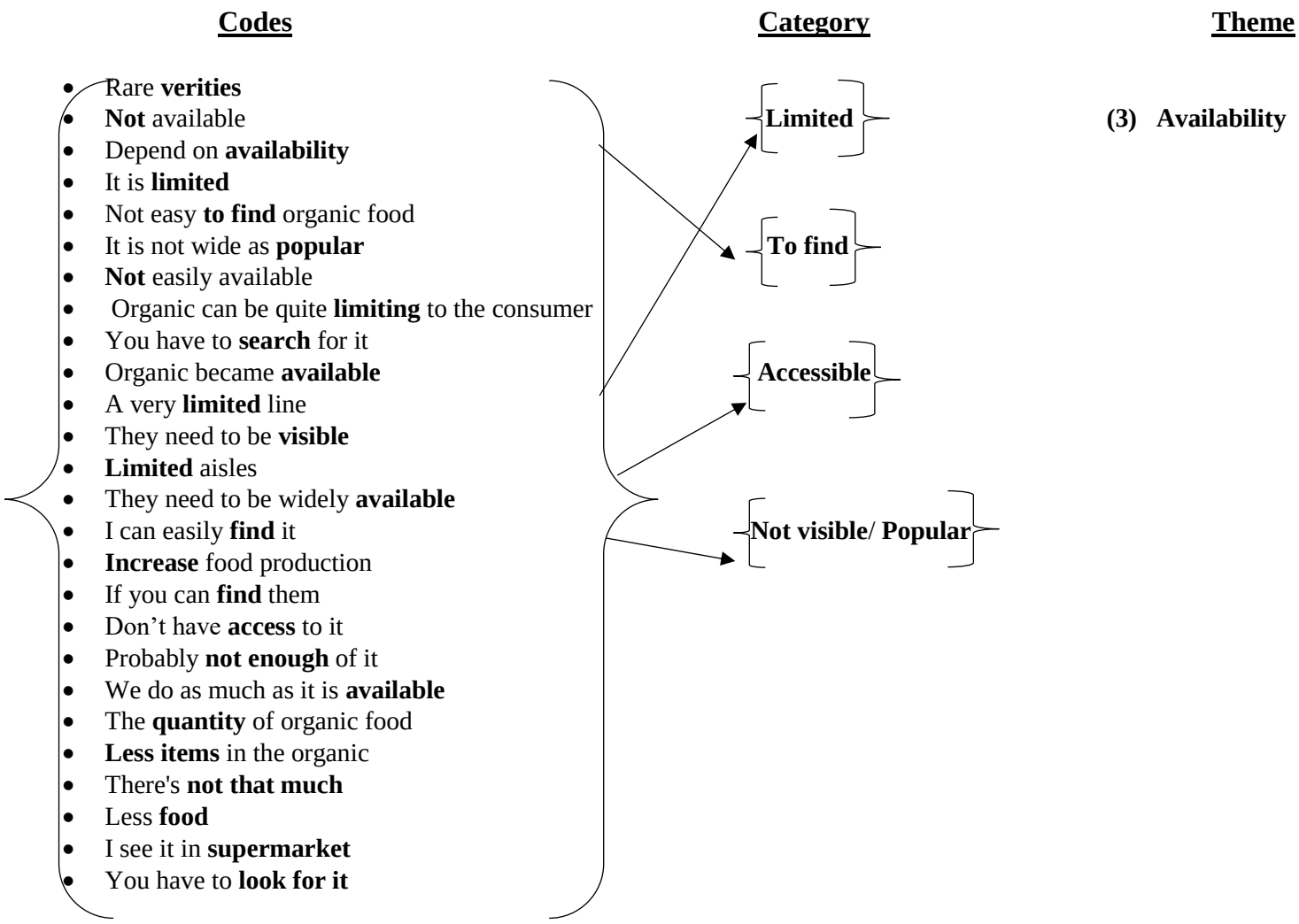
Liang 2016	Predicting intentions to purchase organic food: the moderating effects of organic food prices	To study the relationship among buying intention and the properties, certification mechanisms, retail channels, and the price of organic food from multiple theoretical perspectives.	The researcher distributed questionnaires to 507 respondents and used linear structural equation model.	The results showed that attitudes of consumers towards organic food labelling/certification firms had a positive influence on the trust in food labelling, channels dependence positively influenced the relational inclusion in a channel , the impact of nutritional value of organic food on environmental protection also had a positive effect on attitudes toward organic foods , attitudes toward trust in the organic label, relational embeddedness in distribution channel, and attitudes towards organic foods had a positive influence on consumer buying intention . Regarding price, consumers need confidence to justify higher prices.	There is a need to carry out more qualitative studies to gain better insights into consumers' organic food purchasing behaviour.
Muhummad et al. 2016	The Significance of Consumer's Awareness about Organic Food Products in the United Arab Emirates	This study was conducted to investigate the major factors that may influence consumer's awareness towards organic food.	This study applied the quantitative approach. Questionnaire used to gather data from 300 respondents. Most of the participants were males.	Outcome indicated that gender, nationality, and education were influential factors of an awareness toward organic food in UAE, while age income, occupation status, and size of household, were not significant.	Future studies may also consider changes of consumers' behaviour in response to expanding use of information through advanced information technology such as social media.
Nguyen & Ha 2016	Consumers' Perception Of Organic Food In A Peri-Urban Area In Queensland, Australia	The aim of this stidy is to understand peri-urban areas consumers' perception of organic food and the importance of organic certification in customers' decisions for obtaining insights into their consumption of organic food.	Survey used to collect data from Australian consumers.	Health protection was found to be the most important reason for Australian peri-urban consumers to purchase organic food. In addition, the more consumers are interested in, trust and are confident with the claimed benefits, the more likely will they purchase organic food. Further, organic labels and certification turned out to be important for the consumers when shopping organic food.	There is little research on consumers' purchase behaviour of organic food in Australian context.
Yadav 2016	Altruistic or egoistic: Which value promotes organic food consumption among young consumers? A study in the context of a developing nation	This research attempts to understand the importance of altruistic and egoistic value in determining the young consumers' intention to purchase organic food in Indian context.	Survey was conducted to collect data from 304 respondents.	Results indicated that, both altruistic as well as egoistic value influences the intention to buy organic food among young Indian consumers. However, egoistic value was found to have more impact on the consumers' organic food purchase intention.	Further research that employs consumers' demographic characteristics is needed to better understand the differences between consumers purchasing of organic food based on their personal characteristics.
Yin et al. 2016	Consumer trust in organic milk of different brands: the role of Chinese organic label	This study examining the factoors affecting consumesr' trust in organic milk in China.	Quantitative study was conducted using survey quastionnaire. Data were colleced from 876 consumers.	The findings reported that Chinese consumers generally lack trust in organic milk. Consumer trust for different brands of organic milk was different, and was not high in general. Various factors, namely, age, education years, food safety awareness, evaluation of government regulation policy, evaluation of organic milk price, and purchase convenience, have a significant influence on consumer trust. Factors, such as income, environmental protection consciousness, and risk consciousness, are not significant.	There is a lack of research investigating the influence of trust on consumers' intentions to purchase organic food.

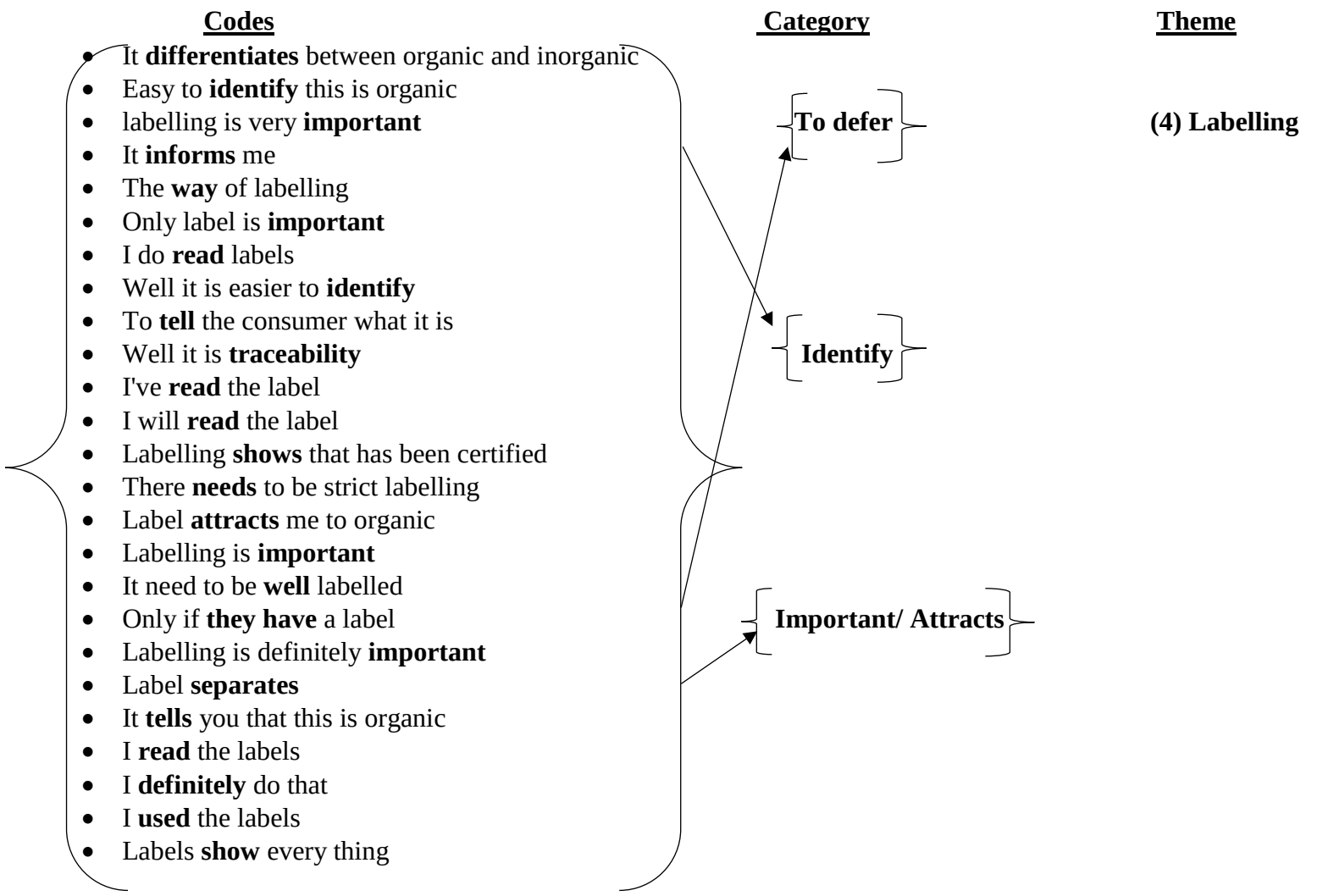
Hemmerling et al. 2015	Consumption behaviour regarding organic food from a marketing perspective: a literature	To provide an overview of marketing research for organic food consumption.	Review paper; the researchers used 277 articles published from 2000 to 2011.	There was a high density of publications, especially between 2008-2011. Cost to consumers, consumer value, and consumer benefits were the most investigated factors.	Little is known about the influence of packaging on consumers' consumption of organic food.
Phuong 2013	Consumers' perceptions of organic food in Australia and other countries: A review.	To understand consumers' perceptions of oragnic food in the Australin context.	Review paper.	The study found that there is a variation in people's understanding of organic agriculture and organic food, and differences in consumers' attitudes, motivations and behaviours within consumer groups and in different places. Further, Consumers' perceptions towards organic food have changed over time.	Further research is requited in Australia to understand the consumers' buying behaviour of organic food.
Smith & Paladino 2010	Eating clean and green? Investigating consumer motivations towards the purchase of organic food	This study aimts to explore the influnce of health consciousness, environmental concern, organic knowledge, availability, quality, price consciousness, subjective norms, risk aversion, perceived control and familiarity on organic attitudes, organic purchase intentions and organic purchase behaviour.	Data were collected using a survey with 157 consumers in Australia.	There is strong support for the relationship between organic knowledge, subjective norms and environmental concern on organic attitudes. Whilst health consciousness, quality, subjective norms and familiarity were found to influence purchase intentions, familiarity was the only factor found to exhibit a significant relationship with organic purchasing behaviour.	There is a need to conduct more studies related to consumers purchase intention of organic food in Australian context.

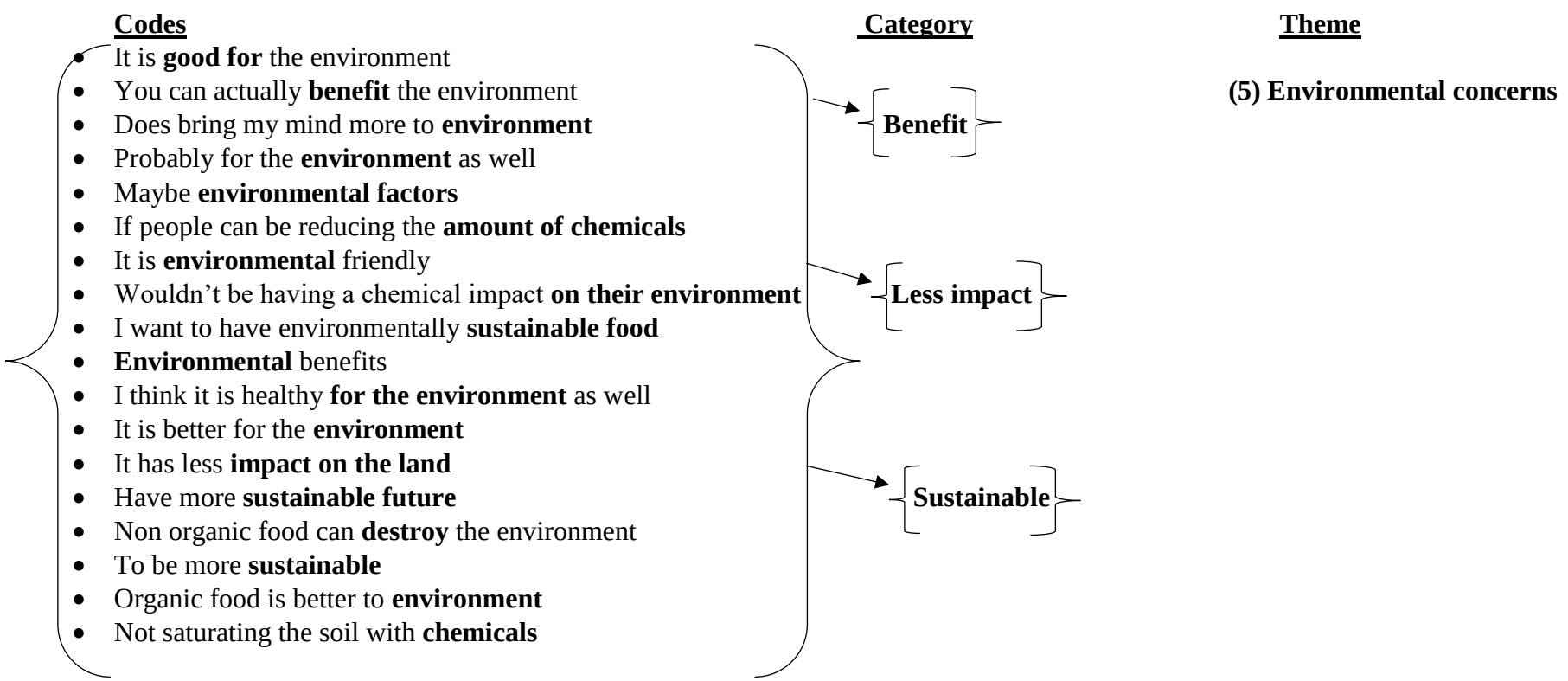
Appendix J: How themes were derived from the interview data in the qualitative study

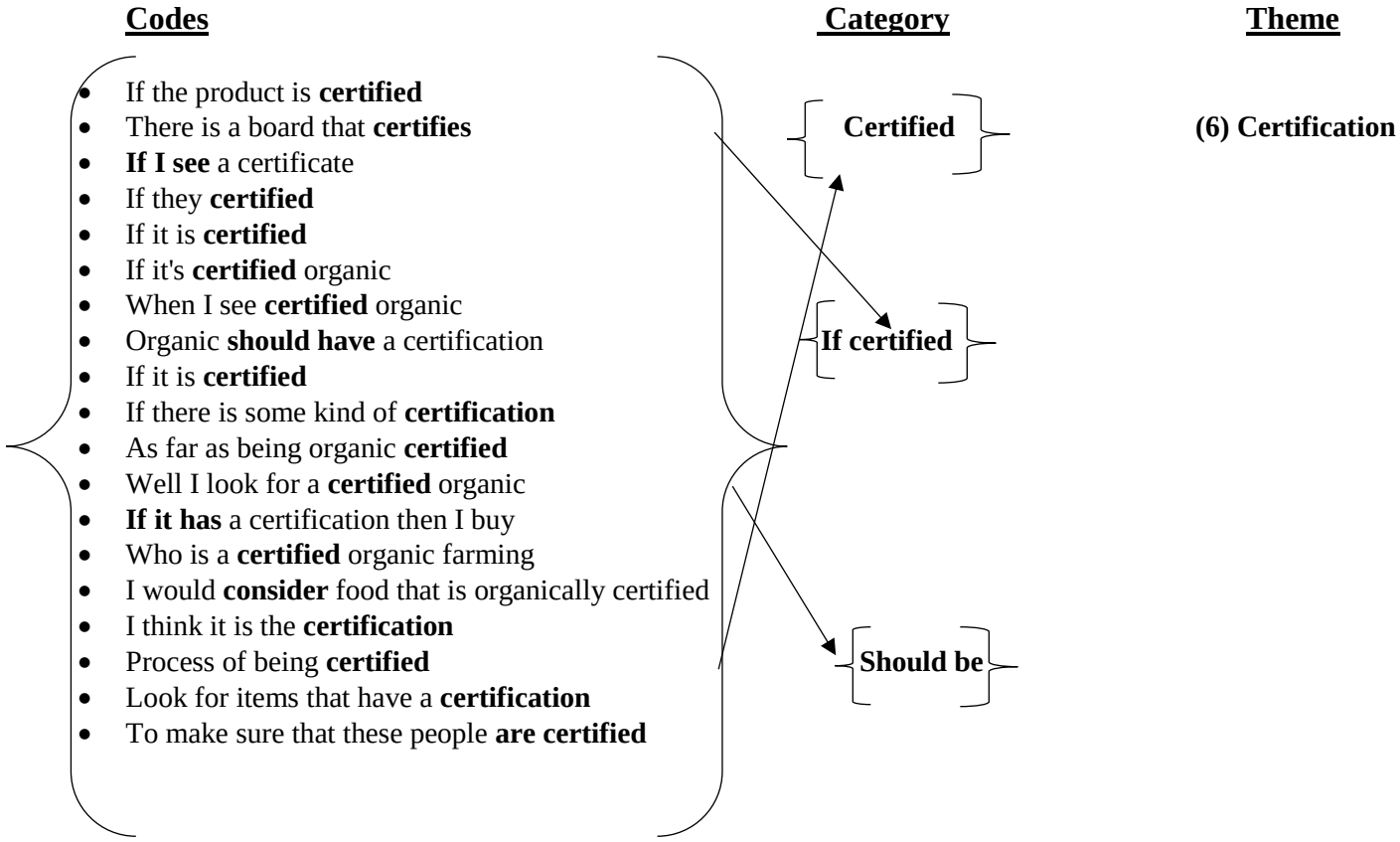


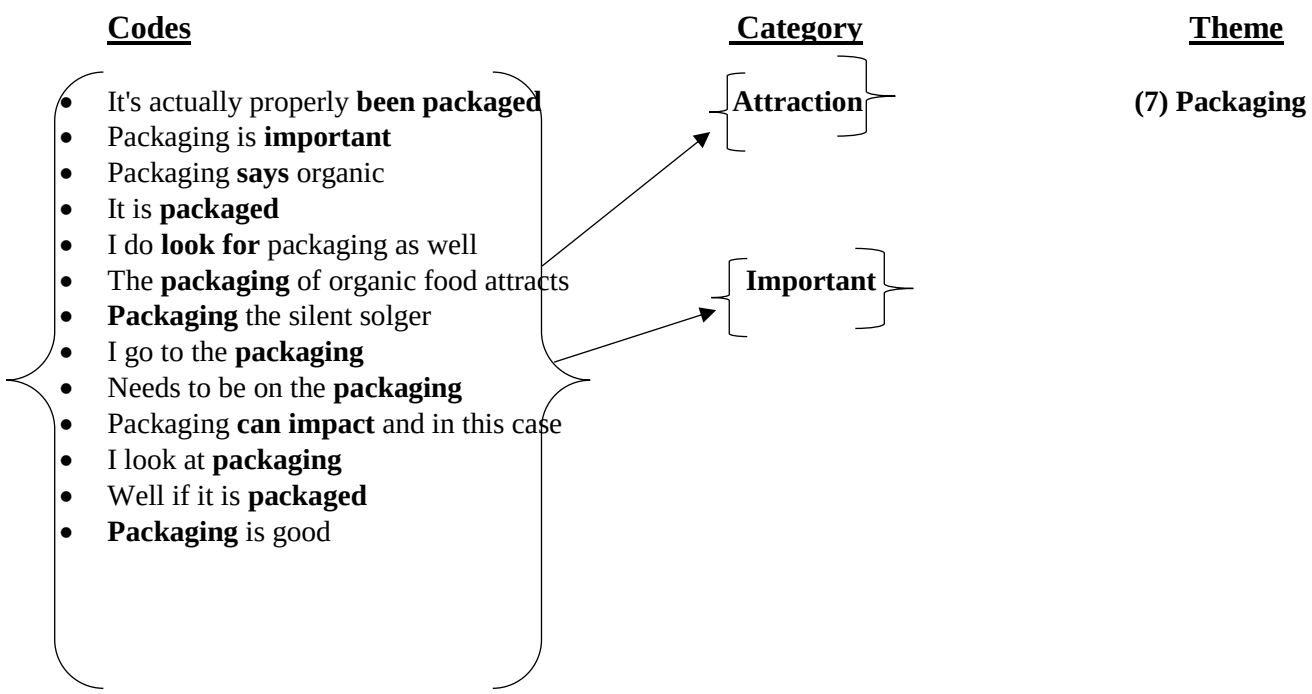

Codes
Category
Theme
It **costs** more
It's too **expensive**
Be quite **costly**
Cost factor
Quite cost effective
I know it is more **costs**
Organic food is very **expensive**
It is more **expensive**
It is mostly **expensive**
Not everyone has **ability** to buy
Where we can **afford**
Usually more **expensive**
I comes down to **cost**
If they **can** buy
Can't **afford**
Cost more
The **cost** is an issue
Get in lower **price**
It's really **expensive**
Might be a bit **more expensive**
Just the **expense**
Not **cheap** in the market
They charge **more**
If those are **cheaper** and affordable
My **budget**
If it is **not expensive**
Ability to pay
Cost
Expensive
Cheap
(2) Price

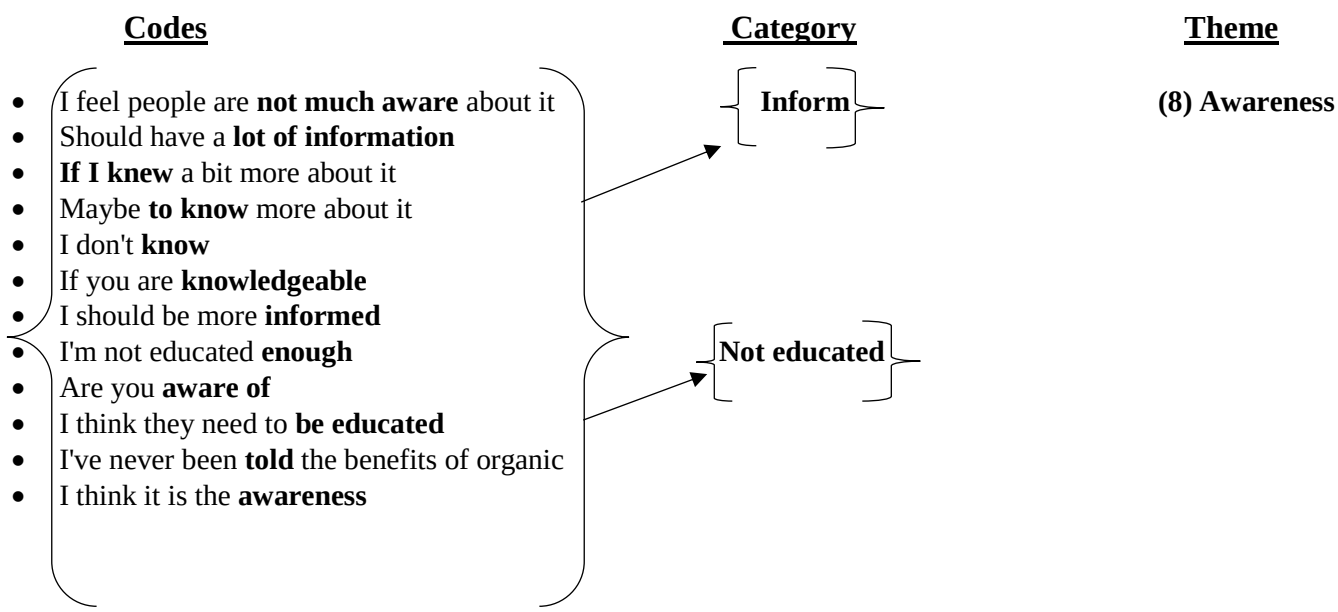

Codes
Category
Theme
Rare **verities**
Not available
Depend on **availability**
It is **limited**
Not easy **to find** organic food
It is not wide as **popular**
Not easily available
Organic can be quite **limiting** to the consumer
You have to **search** for it
Organic became **available**
A very **limited** line
They need to be **visible**
Limited aisles
They need to be widely **available**
I can easily **find** it
Increase food production
If you can **find** them
Don't have **access** to it
Probably **not enough** of it
We do as much as it is **available**
The **quantity** of organic food
Less items in the organic
There's **not that much**
Less **food**
I see it in **supermarket**
You have to **look for it**
Limited
To find
Accessible
Not visible/ Popular
(3) Availability

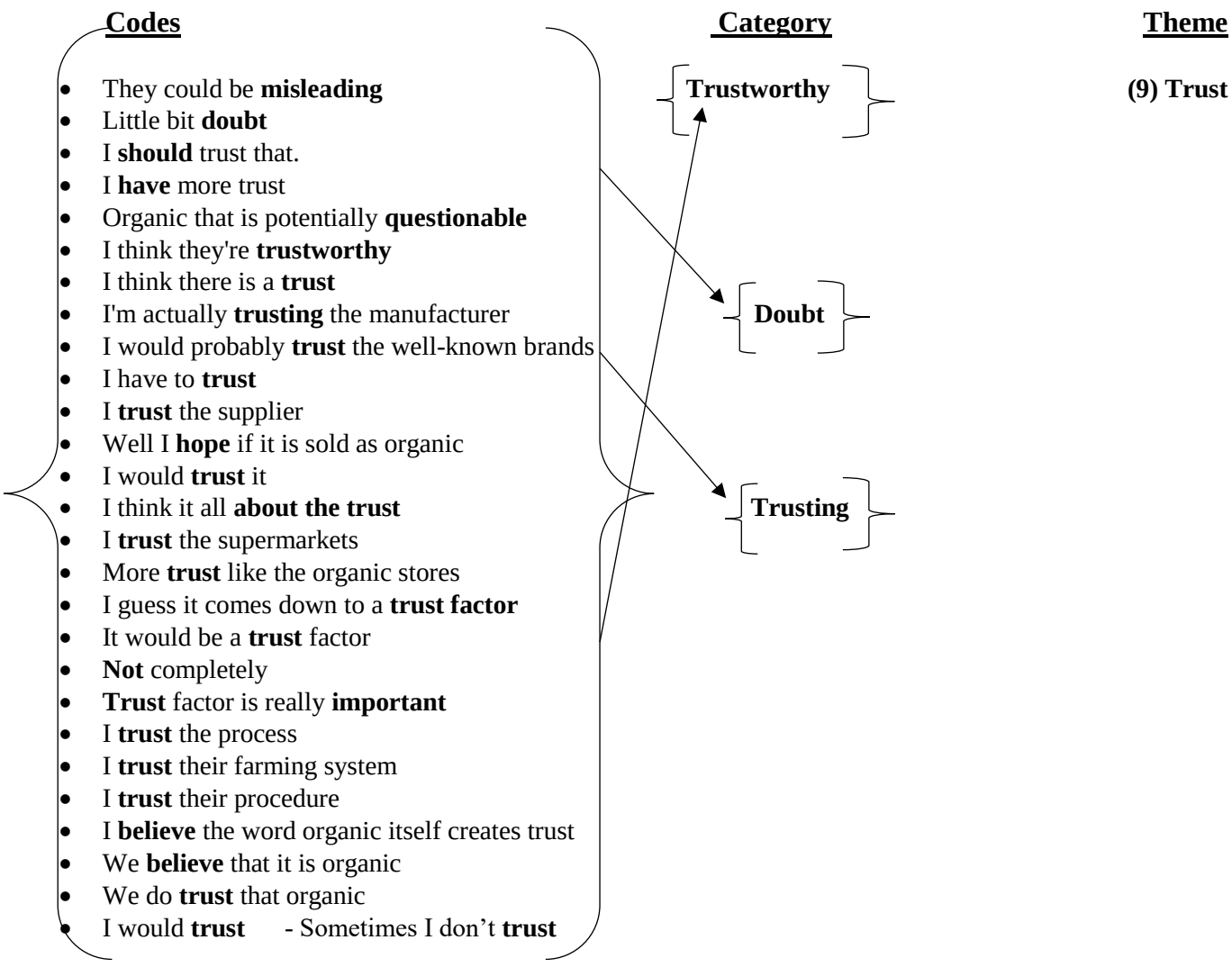

Codes
Category
Theme
It differentiates between organic and inorganic
Easy to identify this is organic
labelling is very important
It informs me
The way of labelling
Only label is important
I do read labels
Well it is easier to identify
To tell the consumer what it is
Well it is traceability
I've read the label
I will read the label
Labelling shows that has been certified
There needs to be strict labelling
Label attracts me to organic
Labelling is important
It need to be well labelled
Only if they have a label
Labelling is definitely important
Label separates
It tells you that this is organic
I read the labels
I definitely do that
I used the labels
Labels show every thing
To defer
Identify
Important/ Attracts
(4) Labelling

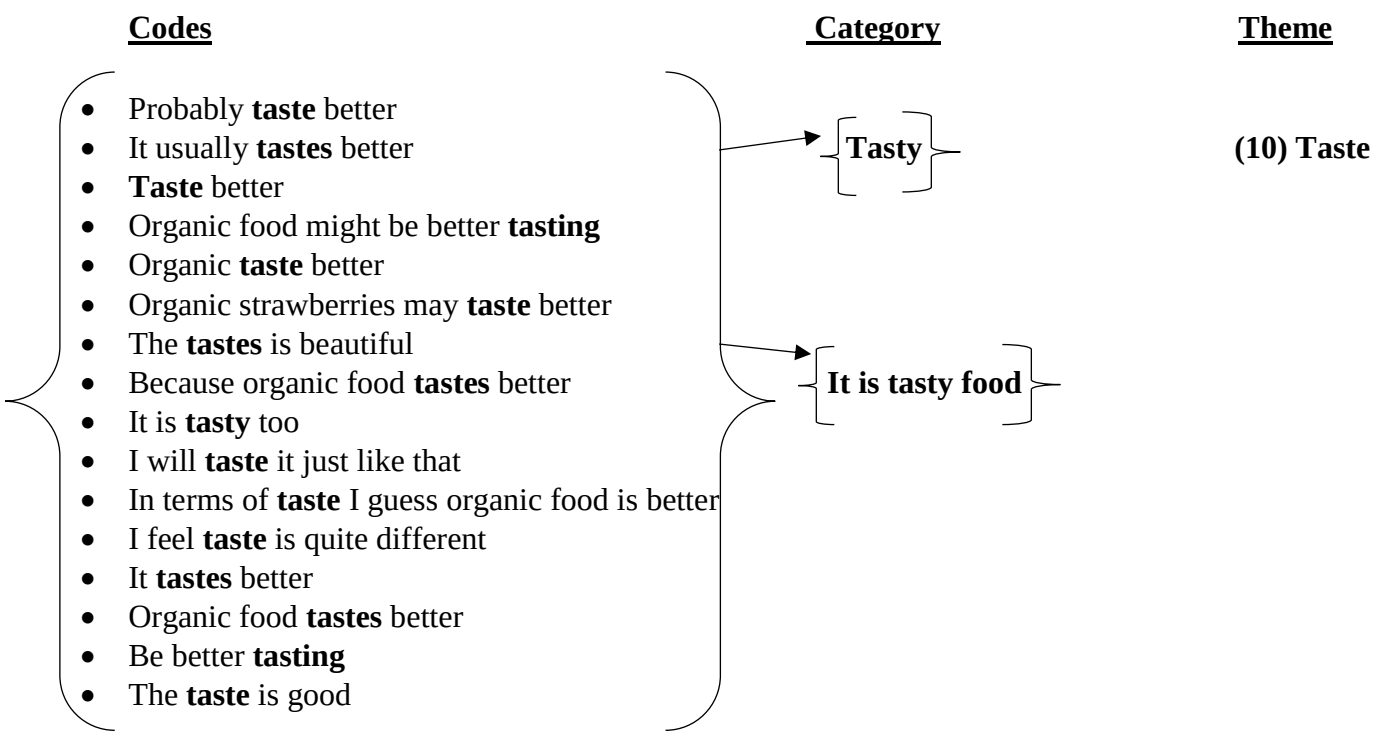

Codes
Category
Theme
It is **good for** the environment
You can actually **benefit** the environment
Does bring my mind more to **environment**
Probably for the **environment** as well
Maybe **environmental factors**
If people can be reducing the **amount of chemicals**
It is **environmental** friendly
Wouldn't be having a chemical impact **on their environment**
I want to have environmentally **sustainable food**
Environmental benefits
I think it is healthy **for the environment** as well
It is better for the **environment**
It has less **impact on the land**
Have more **sustainable future**
Non organic food can **destroy** the environment
To be more **sustainable**
Organic food is better to **environment**
Not saturating the soil with **chemicals**
Benefit
Less impact
Sustainable
(5) Environmental concerns

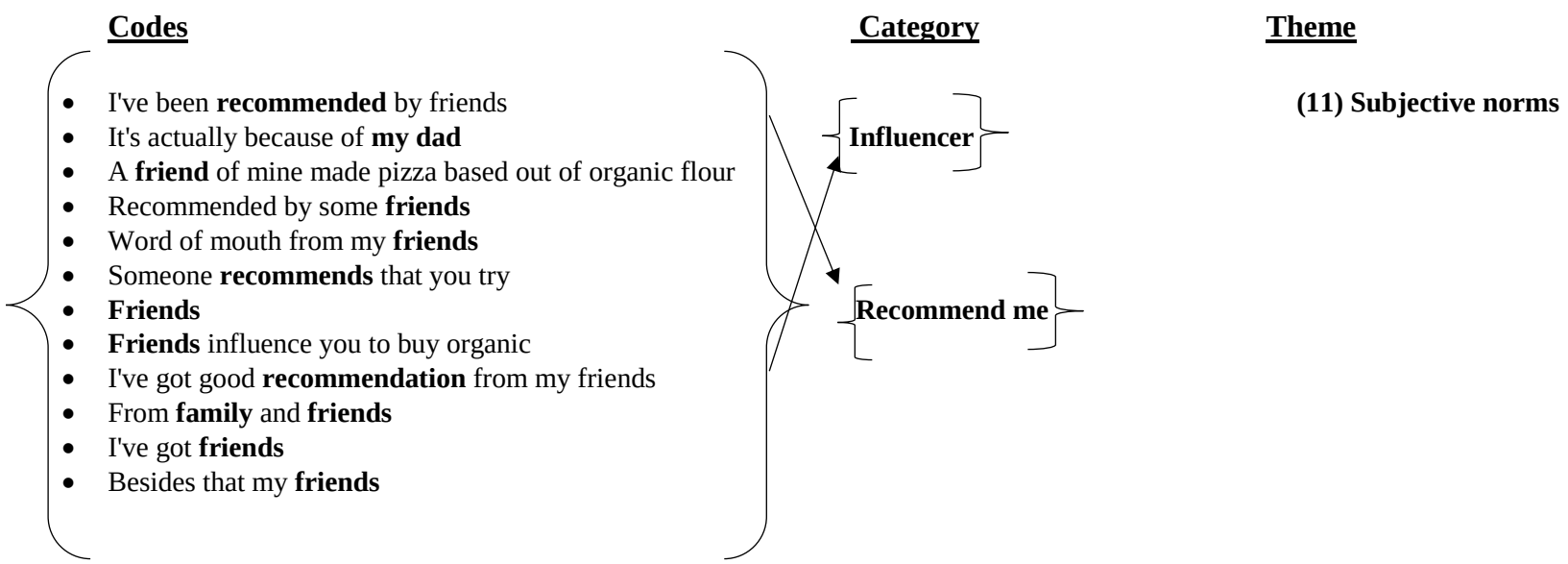

Codes
Category
Theme
If the product is **certified**
There is a board that **certifies**
If I see a certificate
If they **certified**
If it is **certified**
If it's **certified** organic
When I see **certified** organic
Organic **should have** a certification
If it is **certified**
If there is some kind of **certification**
As far as being organic **certified**
Well I look for a **certified** organic
If it has a certification then I buy
Who is a **certified** organic farming
I would **consider** food that is organically certified
I think it is the **certification**
Process of being **certified**
Look for items that have a **certification**
To make sure that these people **are certified**
Certified
If certified
Should be
(6) Certification

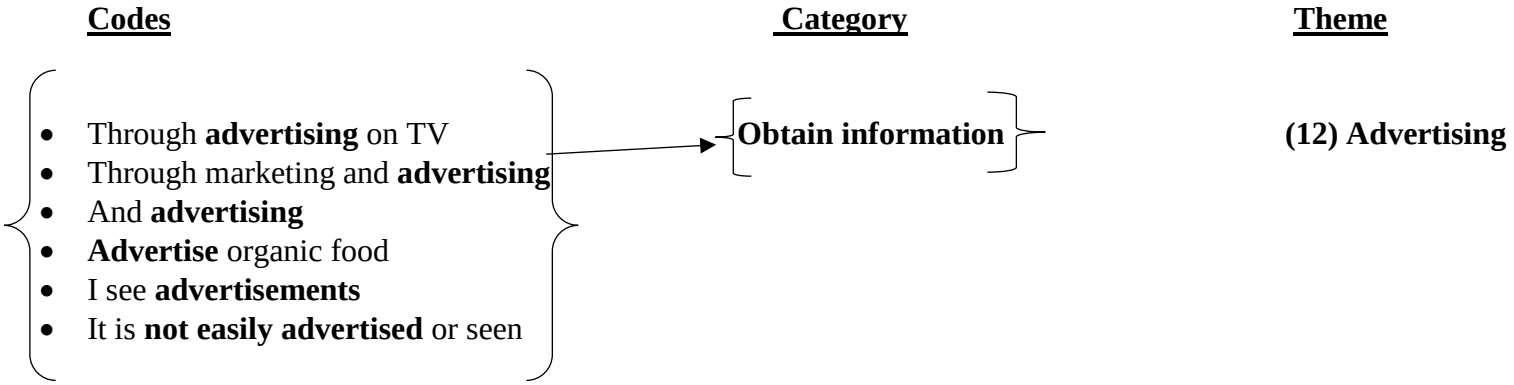

Codes
Category
Theme
It's actually properly been packaged
Packaging is important
Packaging says organic
It is packaged
I do look for packaging as well
The packaging of organic food attracts
Packaging the silent solger
I go to the packaging
Needs to be on the packaging
Packaging can impact and in this case
I look at packaging
Well if it is packaged
Packaging is good
Attraction
Important
(7) Packaging

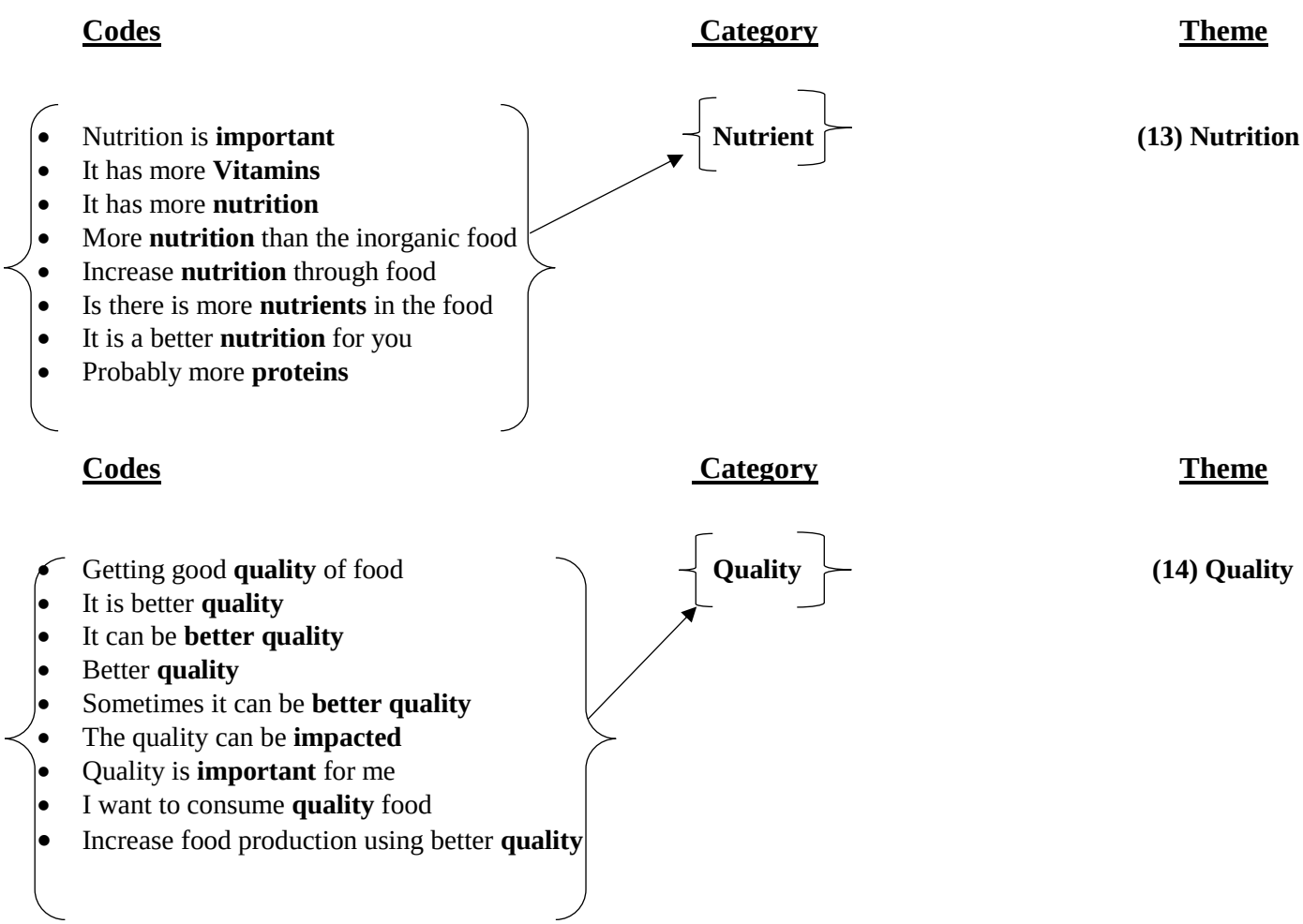

Codes
Category
Theme
I feel people are **not much aware** about it
Should have a **lot of information**
If I knew a bit more about it
Maybe **to know** more about it
I don't **know**
If you are **knowledgeable**
I should be more **informed**
I'm not educated **enough**
Are you **aware of**
I think they need to **be educated**
I've never been **told** the benefits of organic
I think it is the **awareness**
Inform
Not educated
(8) Awareness

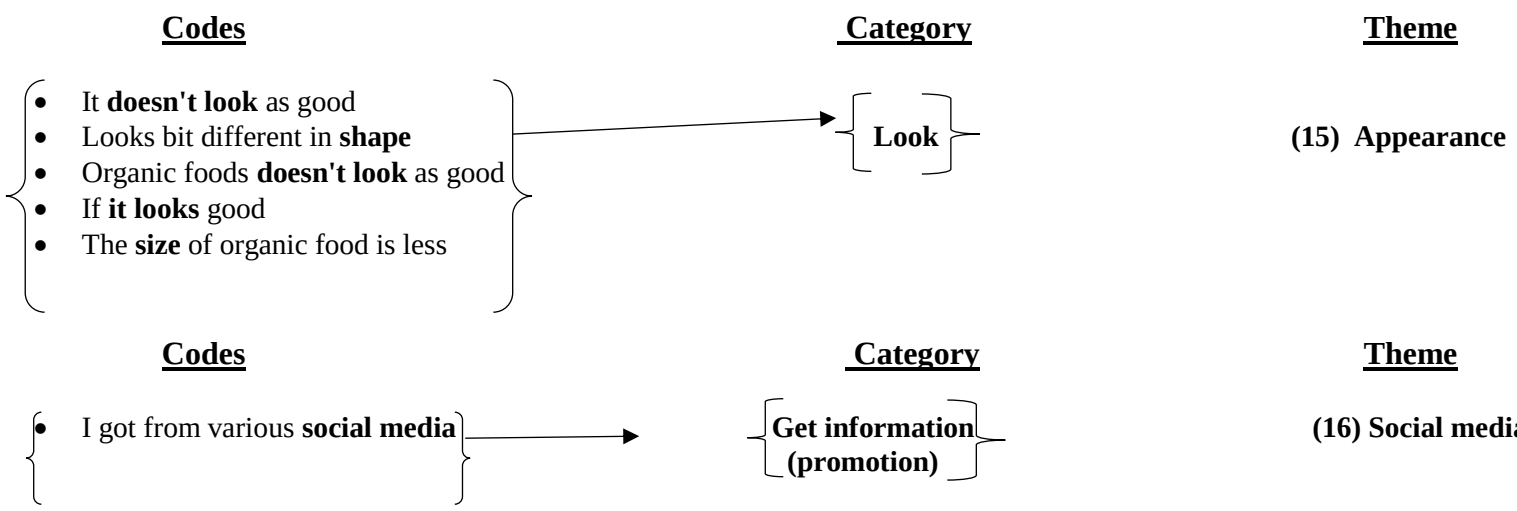

Codes
Category
Theme
They could be misleading
Little bit doubt
I should trust that.
I have more trust
Organic that is potentially questionable
I think they're trustworthy
I think there is a trust
I'm actually trusting the manufacturer
I would probably trust the well-known brands
I have to trust
I trust the supplier
Well I hope if it is sold as organic
I would trust it
I think it all about the trust
I trust the supermarkets
More trust like the organic stores
I guess it comes down to a trust factor
It would be a trust factor
Not completely
Trust factor is really important
I trust the process
I trust their farming system
I trust their procedure
I believe the word organic itself creates trust
We believe that it is organic
We do trust that organic
I would trust - Sometimes I don't trust
Trustworthy
Doubt
Trusting
(9) Trust


Codes
Category
Theme
Probably **taste** better
It usually **tastes** better
Taste better
Organic food might be better **tasting**
Organic **taste** better
Organic strawberries may **taste** better
The **tastes** is beautiful
Because organic food **tastes** better
It is **tasty** too
I will **taste** it just like that
In terms of **taste** I guess organic food is better
I feel **taste** is quite different
It **tastes** better
Organic food **tastes** better
Be better **tasting**
The **taste** is good
Tasty
It is tasty food
(10) Taste


Codes
Category
Theme
I've been **recommended** by friends
It's actually because of **my dad**
A **friend** of mine made pizza based out of organic flour
Recommended by some **friends**
Word of mouth from my **friends**
Someone **recommends** that you try
Friends
Friends influence you to buy organic
I've got good **recommendation** from my friends
From **family** and **friends**
I've got **friends**
Besides that my **friends**
Influencer
Recommend me
(11) Subjective norms


Codes
Category
Theme
Through **advertising** on TV
Through marketing and **advertising**
And **advertising**
Advertise organic food
I see **advertisements**
It is **not easily advertised** or seen
Obtain information
(12) Advertising


Codes
Category
Theme
Nutrition is important
It has more Vitamins
It has more nutrition
More nutrition than the inorganic food
Increase nutrition through food
Is there is more nutrients in the food
It is a better nutrition for you
Probably more proteins
Nutrient
(13) Nutrition
Codes
Category
Theme
Getting good quality of food
It is better quality
It can be better quality
Better quality
Sometimes it can be better quality
The quality can be impacted
Quality is important for me
I want to consume quality food
Increase food production using better quality
Quality
(14) Quality


Codes
Category
Theme
It doesn't look as good
Looks bit different in shape
Organic foods doesn't look as good
If it looks good
The size of organic food is less
Look
(15) Appearance
Codes
Category
Theme
I got from various social media
Get information (promotion)
(16) Social media