

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

In this day and age, one of the most talked about issues is “climate change”. This is an area that has received considerable attention in the media, politics, business, and society in general. People are bombarded with messages about climate change via the various media outlets. Businesses, too, have taken notice of climate change and many have embarked on “green marketing” campaigns. Terms such as “eco-friendly” or “green” products are modern-day classifications of products that are not (or less) detrimental to the environment as a whole. This thesis aims to ascertain not only the factors that influence consumers’ purchase intentions in the context of eco-friendly Fast Moving Consumer Goods (FMCGs) but also to find what types of customers are more likely to purchase such products. Understanding of these two issues is crucial to marketers and academics alike to enable practical and academic contributions to the field of green marketing. This thesis examines these issues in detail. The chapters that follow this introductory one will provide an insight into the rationale behind the study, the methodology used to address the research objectives and questions, the findings, and the implications and limitations of the study.

This chapter presents the study’s main research topic, which is to identify the green consumer segment and investigate the factors that affect consumers’ purchase intentions of eco-friendly Fast Moving Consumer Goods. The chapter first provides a discussion of the background to the study and then introduces the research problem. The chapter then goes on to provide a brief description of the Australian market for eco-friendly FMCGs, and goes on to discuss the research objectives and provide an overview of the thesis.

1.2 BACKGROUND OF THE STUDY AND RESEARCH OBJECTIVES

Over the years, marketing, as with most other fields of study, has evolved and progressed through many stages. Kotler and Keller (2009, p. 18) state that modern marketing management philosophies include discussions of the product, production, selling, marketing, and societal marketing concepts. Societal marketing concept is an extension of marketing concept; it does not limit its focus to understanding the satisfaction of consumer needs and wants while making a profit but it also takes into account overall betterment of society resulting from satisfaction of consumer needs. Chamorro, Rubio, and Miranda (2009) stated that the field of marketing has not been immune from impacts caused by a social concern

about the deteriorating environment, which has created a new area of research known as green marketing.

Ever since the publication of the Brundtland Report in 1987, there has been significant interest by companies, researchers and marketing practitioners concerning the impact of business activity on the environment (Peattie & Crane, 2005). The importance of the Brundtland Report lies in the fact that, in a global context, it focused on sustainable development; proposed long-term environmental strategies; and took into account limitations, such as the state of technology that may hinder the achievement of desired goals and objectives. Subsequent to the Report, companies engaged in several activities, such as campaigns and product launches involving eco-friendly products. However, Vandermerwe and Oliff (1990) pointed out that the anticipated “green tide” of new environmentally friendly products never came to fruition, and that the initial growth of green products that emerged in the 1990s gradually subsided. Many of the companies marketing green products actually left the marketplace (Peattie & Crane, 2005). Vandermerwe and Oliff (1990) also stated that companies were cautious about launching environmentally-based advertising campaigns fearing that they may be perceived as being involved in “greenwashing”. In the marketing literature (e.g., Ramus & Montiel, 2005) greenwashing is referred to as a deliberate ploy by organisations to portray themselves as having an environmentally responsible public image but their practices are actually environmentally unsound.

As an area of academic study, Green Marketing is receiving considerable interest amongst modern day scholars. In their work, Peattie and Crane (2005) cite the works of Prothero (1990) and Vandermerwe and Oliff (1990), stating that, although there had been some focus on this subject in the 1970s, it was only in the 1980s that the concept of green marketing really emerged and academics began to discuss the shift towards green consumerism.

Ottman (1993) shows that there was a significant growth in green spending by large corporations between 1989 and 1990. In the US the introduction of new green products rose to 11.4 % of all new household products, a figure that grew to 13.4 % the following year. However, despite this increase, in the early 90s, the mid 90s did not see the continued growth of green consumerism (Peattie & Crane, 2005). The *Second Green Consumer Report* (Mintel, 1995) showed only a small increase in the number of green consumers since 1990. The reason for the small growth was attributed to a widening gap between environmental concern and actual purchases; this was shown in studies by scholars such as Wong, Turner, and

Stoneman (1996), Peattie (1999), Crane (2000), and Barr and Gill (2007). This meant that, although people were showing concern for the environment, the concern was not being translated into tangible purchase behaviour.

Rahbar and Wahid (2010) noted that most research focusing on consumer behaviour in this field have been carried out in the US and Europe, and few have researched the Asian consumer. Consumers from industrialized and developed nations and consumers from lesser developed nations come from different socio-economic contexts and different cultural backgrounds. Thus, expecting homogeneity in terms of consumer behaviour would be a mistake since studies by researchers, such as Hofstede (1983), show that Eastern and Western nations of the world differ in their consumption behaviour along the lines of various cultural dimensions. In their work, Rahbar and Wahid (2010) cite Keegan and Green (2000) who state that, without adequate market information, companies will fail to gain competitive advantage and be unable to implement successful marketing strategies due to their lack of understanding of consumers' needs and wants regions of interest.

This research examines the specific needs of green consumers to understand the factors that influence their purchase intentions in the context of eco-friendly FMCGs. The purpose of the research is to provide useful insights for marketers and managers, and contribute to the growing body of knowledge on green marketing. Most importantly, it seeks to use an integrated model that will better explain the factors that affect green purchase intention and clarify issues for which previous studies have found inconsistent and contradictory results. The purpose of employing an integrated model is to incorporate a greater number of variables (taken from previous literature) to better explain the effect these factors have (or don't have) on consumers' green product purchase intentions. These factors and the evolution of the model are discussed in detail in subsequent chapters.

In sum, the study seeks to answer the following research questions:

1. What are the characteristics of the segment(s) of consumers that intend to purchase green products?
2. Can a holistic picture of the characteristics of the green consumer be developed?
3. How do various factors affect consumers' green product purchase intentions? and, finally,

4. What are the relationships and the strength of the relationships that exist between each of the different factors and consumers' green product purchase intentions?

The answers to such research questions should reveal a clearer picture for marketers so that they can respond more effectively to the needs and wants of the green consumer.

1.3 RESEARCH CONTEXT

In recent years environmental issues have attracted much attention around the world.

Australia is no exception to this. In 2007-08, 82 % of Australian adults reported that they were concerned about at least one environmental problem. However, only around a quarter (26%) reported that the condition of the natural environment was bad while almost two-fifths (39%) were indifferent and thought it was neither good nor bad. Despite this, over half of the adult population (53%) reported that, in their opinion, the natural environmental was declining (ABS, 2010).

The Australian Bureau of Statistics (ABS) (2010) showed that, in the Australian context, women (83%) were more slightly likely to report being concerned about environmental problems than men (80%). Younger adults (18-24) and older adults (65 years and over) were least likely to be concerned about environmental problems (74% and 77% respectively). A state-based comparison showed that rates of concern about environmental issues were highest in the Australian Capital Territory (90%) and lowest in Tasmania (77%).

Being a developed economy, consumption patterns in Australia are likely to be different to consumption patterns in the lesser developed economies of the world. One dimension of general wellbeing of any population is their command over resources to obtain goods and services to satisfy their needs and wants. Increases in the volume of goods and services consumed are then, generally, regarded as a measure of progress. However, reduced consumption of certain goods and services can also indicate progress towards social and environmental goals, such as improved health and cleaner air. Because past research has used consumption patterns of a population as measures for concern for the environment, such research will be discussed in this thesis. Furthermore, for the purposes of this research it is also necessary to provide an overview of the trends in household consumption in Australia. This is because household consumption, as opposed to individual consumption, is the standard measure used by marketers of FMCGs.

In Australia, real household final consumption expenditure per capita increased at an average annual rate of 2.0 % between 1985-86 and 2005-06. In 2005-06, almost half (46%) of all household final consumption expenditure was accounted for by rent and other dwelling services, food, catering, and transport. From the perspective of FMCGs, food and personal care items are of relevance to this research. In terms of food, there was a total increase of 7.8 % with a low average annual increase of 0.4 % during the period in per capita real household final consumption expenditure on food and non-alcoholic beverages. In terms of personal care items, there was a total increase of 72.3 % over the period, at an annual average increase of 2.8 % (ABS, 2007). Although the increase in food consumption was low, the significantly higher increase in consumption of personal care items indicates there was a rapidly growing demand for FMCGs within households.

Given this overall increase in domestic household expenditures, and the relationship between consumption and environmental consequences, it is important to investigate consumers' intentions to purchase products that are eco-friendly. Since conducting the study across consumers over the whole of Australia was beyond the scope of this thesis research, the study was limited to researching the consumption behaviour of Sydney-based consumers. The following section provides a rationale for the selection of Sydney as the ideal location for conducting the research for this thesis.

1.3.1 Research site

The present study was conducted in Sydney. This site was chosen for a number of reasons. According to the ABS, Sydney is the most populous city in Australia. In 2011, just over one-fifth of Australia's population lived within the greater Sydney area (ABS, 2011). Located on the Australian east coast, Sydney is widely known as the commercial hub of Australia and home to people from different backgrounds and walks of life, enabling information to be gathered from a range of consumer segments. The ABS (2011) reported that the most common ancestries in greater Sydney (greater capital city Statistical areas) were English 20.4 %, Australian 20.4 %, Irish 6.6 %, Chinese 6.5 %, and Scottish 5.0 %. This diversity of the population was further highlighted by noting the languages spoken in greater Sydney: 62.2 % of people only spoke English at home; Arabic was spoken in 4.1 % of households; Mandarin in 3.0 %, Cantonese in 3.0 %; Vietnamese in 1.9 %; and Greek in 1.8 %. Other key demographic variables, such as number of families (1,152,548) and average children per family (1.9), makes Sydney an ideal setting for conducting the study, because the large

number of families residing in Sydney means that the demand for FMCGs would be broadly indicative and representative of household spending throughout Australia.

1.4 NEED FOR AND SIGNIFICANCE OF THE RESEARCH

The present research stems from the need to investigate the characteristics of the green consumer and the factors that influence their purchase decisions in the context of eco-friendly FMCGs. Since FMCGs are purchased by all households, albeit in varying quantities, the study of this set of products becomes very important as it relates to the buying behaviour of all households and individuals in society.

The present research extends the existing body of work. It applies theories that are associated with consumer purchase intention in the context of eco-friendly products. Investigation of the antecedents to consumers' green product purchase intentions has significant importance to marketers, manufacturers, decision-makers, academics, and other stakeholders in the area of green product marketing.

The research that has been conducted to date in this particular area has presented conflicting results, which have been particularly prominent in the case of the green customer segment. The rapidly changing nature of this segment has made it difficult for marketers to develop appropriate strategies for the segment. In addition, the theories that have been used to investigate the antecedents to green product purchase intention have also undergone various changes and developments. The core premise of the theoretical framework used to investigate the factors has been the Theory of Planned Behaviour (TPB). Multiple modifications to this framework have allowed researchers to incorporate relevant factors over time to test their influence on consumers' green product purchase intentions.

This thesis provides a comprehensive coverage of the issues that define the customer segments which intend to purchase eco-friendly FMCGs and the factors that potentially influence consumers' green product purchase intentions. The thesis differs from most other work done in this field by incorporating both qualitative and quantitative data to address the research objectives. In addition, the present research contributes to the body of knowledge on the subject by providing an in-depth investigation of the potential factors that influence consumers' purchase intentions in the context of eco-friendly FMCGs. Such an approach is different to past research on the topic, which has tended to propose various conceptual frameworks based partly upon the findings of previous research.

1.5 OVERVIEW OF THE THESIS

The thesis is comprised of seven chapters. Chapter 1, the introduction, includes a brief discussion of the research objectives of the thesis, the rationale behind the research, a discussion of the research context, and an outline of the overall structure of the thesis.

Chapter 2 presents a review of the literature on green marketing, and green product purchase intention. The chapter begins by providing an overview of the field of green marketing and its evolution over time. The chapter then reviews the literature on consumer behaviour in the context of eco-friendly products. In addition, past research (e.g., D'Souza, Taghian, and Khosla, 2007; Rahbar & Wahid, 2010, 2011a, 2011b; Thøgersen, 2000) on the specific factors taken into account in this study are critically reviewed for the purpose of identifying gaps in the existing literature.

Chapter 3 discusses the research methodology employed in the study. The study was conducted in three stages: literature review, qualitative analysis of interview data, and quantitative analysis of survey data. The literature review and the qualitative study formed the basis of the exploratory phase of the research. The research gaps and questions were identified after reviewing the literature. On the basis of the findings of the literature review, the researcher developed 16 semi-structured questions to use in the qualitative focused interviews. The purpose of the qualitative phase was to identify the factors that were important to the consumers and, more specifically, the factors that had not been addressed past research. Thematic content analysis of the interview data was conducted to identify the categories of reasons for intending to buy (or not buy) eco-friendly FMCGs. On the basis of these themes (categories), relevant constructs were developed for hypothesis testing. These were used to develop the survey questionnaire that formed the basis of the confirmatory stage of the research. Thus, the quantitative component (questionnaire) consisted of scale items in the form of close-ended questions. Exploratory Factor Analysis (EFA) was conducted to refine the scales used in the study. A survey of consumers, using the refined questionnaire, was then conducted. Confirmatory Factor Analysis (CFA) and Path Analysis were used to test the hypotheses that were developed for this study. Finally, one-way MANOVA tests were conducted to develop the profile of the green consumer.

Chapter 4 presents the findings of the qualitative focused interviews. Open-ended questions were designed to elicit in-depth responses from the participants. These interviews were digitally recorded, transcribed, and analysed using MAXQDA (version 10). Similar themes

were grouped and later used for developing the hypotheses to be tested. The respondents were initially asked about their general shopping behaviour before they were probed for more detail on their attitudes and purchase intentions in the case of eco-friendly FMCGs.

Chapter 5 discusses how the model and the relevant hypotheses were developed for the study. It reports the findings of the pre-test and the pilot survey that were conducted to refine the scales for the study's survey instrument. EFA was conducted for this purpose. The factors that did not meet the reliability criteria were discarded and not used further in the research. The chapter concludes by presenting the modified model to be tested by the survey.

Chapter 6 presents the findings of the main survey. CFA was conducted to verify the scale developed after modifying the survey instrument on the basis of the findings of the pilot study. Structural Equation Modelling (SEM) was used to conduct path analysis to test the ten hypotheses that were developed to respond to the research question concerning the identification of the factors that affect consumers' green product purchase intentions in the context of FMCGs. The chapter then presents the results of the one-way MANOVA tests that were conducted to develop a profile of the green consumer on the basis of their demographic and behavioural characteristics.

Chapter Seven, the final chapter of the thesis, presents the main research conclusions and critically reviews and discusses the findings presented in Chapters 4, 5, and 6. The findings of the study are compared and contrasted with the findings of past studies. The practical and academic implications of the research are also discussed. The limitations of the research are identified, and directions for future research presented. The overall research framework employed in the study is presented in Table 1.1.

1.6 SUMMARY

Chapter 1 introduced the research topic and discussed the rationale behind undertaking the study. First, a discussion on the background of the study was provided along with the major research objectives of the study. The discussion focused on the evolution of green marketing and its growing importance in academic literature, with particular attention being paid to green product purchase intention.

Following discussion of the rationale for the research, the research context was discussed. An overview of environmental concern and awareness in the Australian context was presented followed by information relating to household expenditure patterns across Australia. The

characteristics of household consumption in Sydney were discussed to rationalise why Sydney was chosen for the study conducted for this thesis. The multicultural diversity, the economy and other pertinent factors makes Sydney an ideal setting for a study of this nature; it allows the researcher to tap into a plethora of people from different backgrounds, which enables gathering information from a number of perspectives.

Third, the need for the research and its significance was discussed. The section highlighted the gaps that the research intended to address. The main goal of this research is to identify underlying factors that may affect customers' purchase intentions in the context of FMCGs and to present a holistic profile of the customer segments that are willing to buy such products. This research extends the knowledge related to purchase intention in the context of green products and, more specifically, in the context of FMCGs. It brings to light certain factors that have not received attention in past research, and has profound implications for marketing practitioners and researchers. The research also adds considerable insight into the research topic by employing both qualitative and quantitative techniques to develop a conceptual framework that is more statistically and theoretically robust than previous studies have provided. The findings of this research should be of interest to manufacturers and marketers of eco-friendly FMCGs as well as academics in the field.

Finally, an overview of the structure of the thesis was provided. This highlighted the major topics and areas of discussion of the different chapters.

The next chapter, Chapter 2, discusses the literature relevant to this study. This includes a review of literature on green marketing and the factors influencing consumers' green product purchase intentions. The chapter then highlights the gaps in the existing literature and develops the research questions.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

This chapter discusses the literature concerning green marketing and identifies the inconsistencies and gaps in the research to provide a rationale for the research conducted in this thesis. The chapter begins by providing a background of the study then examines the specific literature pertaining to the individual factors considered in this study. Finally, the chapter presents a preliminary conceptual framework, which sets the direction for the subsequent phases of the research.

2.2 BACKGROUND OF THE STUDY

The core of marketing theory and practice revolves around satisfying consumer needs and wants. However, an important prerequisite for this edict is to have a clear understanding of why consumers behave the way they do (Dann & Dann, 2004). Thus, consumer behaviour and understanding the consumer psyche has always been the cornerstone of marketing strategy. Typically, a consumer goes through five stages a decision-making process (Kotler, Keller, & Burton, 2009, p. 176). The process is initiated with problem recognition. Once the consumer identifies the problem, he/she seeks information about products or services that may solve this problem. The alternative solutions are then evaluated. After the consumer evaluates the various alternatives, he/she makes a purchase decision, and this is typically followed by post purchase behaviour. In theory this five-stage process seems fairly simple. However, a consumer's degree of involvement in this process will vary depending on how important they rank each purchase decision.

Peter and Olson (1996) and Zuur and Fuchs (2010) state that the key to successful modern-day companies lies in their ability to design their entire organisations to serve customers and to be close to them. They highlight the importance of connecting with consumers and enhancing the value of products to the consumers. The development of consumer behaviour research has come about due to this increased emphasis on consumers. Another issue that authors highlight is that consumer behaviour is dynamic. This means that individual consumers, consumer groups, and society at large are constantly changing and evolving over time. Thus, the needs and wants of consumers in the past might not be the same today. Companies need to be abreast of the changes in consumer needs and wants if they wish to succeed in this day and age.

An area of research that has captured the attention of marketing researchers is consumers' purchase intention and purchase behaviour. When the consumer decision-making process is analysed, it is evident that consumer purchase intention follows the evaluation of alternatives stage. Once the alternatives are evaluated, consumers intend to purchase a particular product. A widely-used model in social psychology for the study of intention and behaviour is the Theory of Planned Behaviour (TPB) (Ajzen, 1988, 1991). The TPB is an extension of the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). Similar to the TRA, the core premise of the TPB is the individual's intention to perform a given behaviour. Ajzen (1991) argues that intentions are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behaviour. He states that as a general rule, the stronger the intention to engage in a behaviour, the more likely should be its performance. The theory provides a useful framework for a deeper analysis of factors determining purchase decisions, and has been relatively widely used to explain environmental behaviour (Bamberg & Schmidt, 1998; Fishbein, 1995; Fishbein & Ajzen, 2005, 2010; Heath & Gifford, 2002; Kaiser & Gutscher, 2003; Kaiser, Hubner, & Bogner, 2005; Kalafatis & Pollard, 1999; Oreg & Katz-Gerro, 2006; Ozcaglar-Toulouse, Shiu, & Shaw, 2006; Sparks & Shepherd, 1992). One of the main advantages of TPB for analysing environmental intention or action is its ability to consider a large set of complex determinants within a relatively simple framework. The predictive power of the TPB model has often been improved by extensions made to the main variables (attitude, subjective norms, and perceived behavioural control). For the purpose of this study, modifications have been made to the existing TPB whilst keeping the core premise of the theory. The influencing roles of the various marketing factors and subjective norms have formed the basis of analysis.

Based on the basic premise of the TPB model, further studies were conducted to investigate the influence of other factors on purchase intention. Chang and Wildt (1994) studied the impact of price and product information on purchase intention. The results of their study indicated that the effect of price on perceived quality is not universal and is influenced by various external variables (Jacob & Olson, 1977; Monroe & Krishnan, 1985). Purchase intention was found to be influenced by perceived value, which mediates the influence of perceived quality and perceived price. As far back as 1979, Morrison stated that purchase intentions were an important concept in marketing. At that time the study showed that

purchase intentions tended to be more stable and translated into actual purchases for high involvement products such as automobiles.

More recent studies, however, have shown that there is a “gap” between what consumers intend to purchase and what they end up purchasing. For example, Kotler et al. (2009, p. 181) identified that the attitudes of others and unanticipated situational factors were the two factors that may alter a consumer’s actual purchase behaviour from their intended purchase behaviour. This phenomenon is referred to as the attitude-behaviour gap (Boulstridge & Carrigan, 2000). Such a gap may partly explain why, even when consumers say they will purchase green products, it does not translate into behaviour in terms of the percentage of green products sold.

Returning to the basics of marketing, theory states that the core premise of marketing has always been to understand the needs and wants of consumers and to satisfy those needs and wants better than one’s competitors. However, companies have come to accept that, in trying to satisfy inherent consumer needs, it is also important to minimise, if not completely eliminate, the detrimental effects that businesses have on the environment. This is highlighted by Kotler (2003), where he argues, environmental marketing is one which connects the company to the environment and socially conscious and demanding markets. Environmental marketing as he points out, also integrates the functions of the company to serve those markets in an environmentally and socially responsible manner.

In research conducted on the “Characteristics of Research on Green Marketing”, Chamorro et al. (2009) found that past studies on green marketing could be classified into five distinct categories:

1. Green consumer: This includes studies that investigated environmentally friendly consumer behaviours, concerns, intentions, or attitudes. Some of the studies in this category identify the demographic, psychological, and behavioural profiles of consumers.
2. Recycling behaviours: Includes work that focused on waste and recycling behaviours and activities of consumers.
3. Green communication: These studies focused on analysing and studying the environmental aspect of communication policies of different firms.

4. Macromarketing: Studies focusing on research that addressed green marketing from a macro perspective, and analysing the implications and relationships between marketing and environmental impacts were included in this category.
5. Concepts and strategies: Included studies that define green marketing and focus on the consequences of incorporating environmental aspects of the firm's marketing strategy.

They found that research on the topic reached its peak in the 1990s with an average of 13 articles being published per year. However, after 2000 there has been a significant decline in the number of articles published. Chamorro et al. attribute this decline to an increase in the importance of general research on corporate social responsibility that incorporates an ecological dimension. They also found that most articles published (72.96%) were empirical and involved quantitative analysis and most concerned the “green consumer” and “green communication”.

The green marketing process, proposed by Peattie (1992), integrates the four P's of marketing practice with an additional set of external green P's, which include consideration of the various stakeholders: paying customers, providers, politicians and pressure groups. In conjunction with the elements of the marketing mix, these external green P's determine the success of a green marketing program. The core principle of this green marketing process is that the elements of the marketing mix (four P's) have to be calibrated, keeping in mind the external Green P's, for the success of the green marketing process. The importance of undertaking this process is that it highlights the need for addressing the traditional elements of the marketing mix, whether they be in regular marketing practices or green marketing practices.

Prior to investigating the issues relating to consumer behaviour and purchase intention, when it comes to green products it is essential to define the concept of “green product”. A lot of conjecture exists in the literature which shows that there is a lack of consensus when it comes to defining what actually makes a product “green”.

2.2.1 Green products

The basic foundation of the marketing mix lies in the product (Peattie, 1995). Carson and Moulden (1991) noted that a 1991 opinion poll showed that 85 % of the citizens of the industrialized world believed that the number one public issue was the environment. This created a realization on the part of the general public that their consumption patterns and

activities lead to environmental problems (Kangun, et.al, 1991). Because of their concern for the environment, some customers began to specifically aim to purchase green products (Martin, 1995).

Peattie (1995) suggested that there are several elements that can influence the perception of the greenness of a product:

What goes into it

Focus on the quantity, sustainability, efficiency and safety of the raw materials and energy that go into a product. Also includes the social acceptability of the conditions under which human resources contribute to production.

The purpose of the product

Focusing on the core use of the product and whether or not the intended use is of any detriment to the environment.

The consequences of product use and misuse

Misuse of a product can often distort and hamper the perceptions of the eco-friendly nature of the product. Some companies take the responsibility of ensuring that their products are used correctly.

The risks involved in product use

Beck (1992) sees a key development of industrialization as the replacement of harmful elements with risks poised to society.

Product durability

How long the product lasts not only has economic implications for customers, but also environmental consequences.

Product disposal

Product stewardship approaches can require customers to take a very proactive and responsible approach to the safe disposal of their product.

Where it is made

The country of origin plays an important role since certain countries have better reputations when it comes to the technical quality of a product. This may also be used for the product's environmental quality.

Although considering these factors help to developing an understanding of what a green product is, the definition is still unclear. The concept boundaries remain poorly defined, and the discipline continues to lack a commonly accepted definition (Rivera-Camino, 2007; Hartman & Ibanez, 2006). Ottman (1998), a well-known author in the field of green marketing, provided the following definition for green products:

Green products are typically durable, non-toxic, made of recycled materials, or minimally packaged. Of course, there are no completely green products, for they all use up energy and resources and create by-products and emissions during their manufacture, transport to warehouses and stores, usage, and eventual disposal. So green is relative, describing products with less impact on the environment than their alternatives. (p. 89)

Durif, Boivin & Julien (2010) conducted extensive analysis in their attempt to arrive at a definition of a green product. They identified 35 definitions of "green product" from the literature and found that the definitions of green product varied according to the domain of the study; green products can be defined from three different perspectives: (1) academic, (2) industrial, and (3) consumers.

The literature suggests that the type of product studied is not always the same, and the definitions themselves focus on different elements, such as: environmental impacts (e.g. Albino, Balice & Dangelico, 2009); preliminary production aspects (e.g. Eichner & Pethig, 2006) or life cycle's elements (e.g. Pickett-Baker & Ozaki, 2008). In addition, there is no consensus on the terminology used for the concept: some authors refer to "green innovations" (e.g. Chen, Lai & Wen, 2006), while others refer to "eco-efficiency product" (e.g. Parthasarathy, Hart, Jamro & Miner, 2005; Magerholm, 2003), "environmentally-efficient-product" (e.g. Pickett-Baker & Ozaki, 2008), "environmental innovation" (e.g. Triebswetter & Wackerbauer, 2008; Wagner, 2000) or "green product" (e.g. Chen, 2008; Hartman & Ibanez, 2006). The various definitions are listed in Table 2.1 which has been adapted from Durif et al. (2010).

Table 2.1: Green product definitions in academic literature

Year	Author(s)	Definition
2009	Liu & Wu	Products whose functions or ideas deal with the process of material retrieval, production, sales, utilization and waste treatment available for recycling, reduced pollution and energy saving.
2009	Albino, Balice & Dangelico	Product designed to minimize its environmental impacts during its whole life-cycle. In particular, non-renewable resource use is minimized, toxic materials are avoided and renewable resource use takes place in accordance with their rate of replenishment.
2009	Wagner	Environmental innovations: measures of relevant actors (firms, private households), which: (i) develop new ideas, behaviour, products and processes, apply or introduce them, and; (ii) contribute to a reduction of environmental burdens.
2008	Triebswetter & Wackerbauer	Environmental innovations: techno-economic, organisational, social and institutional changes leading to an improved quality of the environment.
2008	Pickett-Baker & Ozaki	Defining environmentally sustainable products is complex. In a strict sense, there is no such thing as a truly sustainable or green product, as all products we buy, own, use and discard in our everyday lives will have negative environmental impacts at some stage in their life cycles.
2008	Eerola & Huhtala	Its production has a reduced environmental impact but organic food products are often thought of as having different consumptive characteristics than conventional ones.
2007	D'Souza, Taghian & Khosla	One that has to represent a significant achievement in reducing environmental impact; they may also have to incorporate strategies of recycling, recycled content, reduced packaging or using less toxic materials.
2006	Chen, Lai & Wen	Green product development addresses environmental issues through product design and innovation.
2006	Hartmann & Ibanez	Green product attributes may be environmentally sound production processes, responsible product uses, or product elimination, which consumers compare with those possessed by competing conventional products.
2006	Chen, Lai & Wen	Green innovation: hardware or software innovation that is related to green products or processes, including the innovation in technologies that are involved in energy-saving, pollution-prevention, waste recycling, green product designs, or corporate environment.
2005	Parthasarathy, Hart, Jamro & Miner	Eco-efficiency: estimates (or metrics) which provide early recognition and systematic detection of economic and environmental opportunities and risks in existing and future business activities.
2005	Wee & Quazi	Being green is defined by 2 basic goals: reducing waste and maximizing resource efficiency.
2005	Ferraro, Uchida & Conrad	Conrad Impure public good consisting of a private good (e.g., rainforest honey) bundled with a jointly produced public good

Year	Author(s)	Definition
		(e.g., biodiversity protection).
2005	Kleindorfer, Singhal & Van Wassenhove	Sustainable Operation Management: set of skills and concepts that allow a company to structure and manage its business process to obtain competitive returns on its capital assets without sacrificing the legitimate needs of internal and external stakeholders.
2005	Gurau & Ranchhod	Ecological product: product that was manufactured using toxic-free ingredients and environmentally-friendly procedures, and who is certified as such by a recognized organisation, such as SKAL in the Netherlands; BIOKONTROL in Hungary; INAC, OKO-GARANTI or QCLI in Germany.
2004	Huang, Gumley, Strabala, & Li	IMAPP broadcasting products can provide immediate information to government, educational, commercial, and research sector users in areas such as severe weather monitoring, forest fire detection, fisheries management, weather forecasting, aviation safety, and ice forecasts.
2003	Eichner & Pethig	Green designing: when producers explicitly incorporate environmental and recycling issues into their product design and manufacturing decisions.
2003	Osada	One that contributes to environmental protection or preservation.
2003	Pujari, Pattie, & Wright	“Design for-environment”, defined as “a practice by which environmental considerations are integrated into product and process engineering design procedures.
2003	Tanner & Kast	Green food: one that fosters changes in the food chain, such as changes in production, trade practices, or consumption, are crucial steps in the quest for sustainable development.
2003	Magerholm	Eco-efficiency: product or service value per environmental influence (Eco-efficiency indicator = economic performance indicator/environmental performance indicator).
2002	Janssen & Jager	Janssen and Jager Products with an alternative design such that less physical resources are required during its life cycle.
2001	Dosi & Moretto	With environmental attributes.
2001	Mebratu	Environmental procurement: systematically building environmental considerations into your day-to-day procurement decision-making and operations.
2000	Stafford, Polonsky, & Hartman	Green alliances seek common ground among ecological, social and commercial interests, encouraging enviropreneurship.
1997	Roarty	Greening business: moving away from damaging the environment and moving towards products that are sustainable.
1997	Marron	Environmentally superior.
1996	Chan	Environmentally friendly.
1995	Schuhwerk & Lefkoff-Hagius	Less harmful to the environment.
1994	Davis	Environmentally friendly or ecologically safe: Not harmful to or is beneficial to the environment.
1993	Berman	Environmentally sound product.

Year	Author(s)	Definition
1991	Weber	Products claiming to be environmentally friendly and biodegradable.
1990	Schorsch	Those that: 1) are grown organically, 2) are made of degradable materials, 3) contain little or no phosphates, or 4) are not tested on animals.
1977	Harmon	Environmental product costs: costs involved in minimizing a product's adverse impact on the environment resulting from extraction of its raw material, production, consumption and disposal.
1975	Herberger	Ecology appeal: among the product's characteristics its viability with the environment is recognizable, understandable and marketable.

The listing shows that definitions of “green product” have evolved over time from just “being eco-friendly” or not harmful to the environment (1975 to a better part of the 1990s) to focuses on other dimensions that include manufacturing processes, issues of sustainability, recyclability and waste treatment. However, although there is yet to be a universal consensus on the definition of green products, from an academic standpoint, there is the general agreement that green products are those that do lesser harm to the environment relative to other products.

Durif et al. (2010) investigated how consumers defined green products. They found that the dimensions consumers used were: biodegradable, non-toxic, for nature, with minor impact for the environment, good for health, socially responsible, and safe for the planet. Thus, the understanding that consumers have of the concept of green product is fairly rudimentary and focuses predominantly on the post-usage attributes of the product. However, it should be noted that these definitions concerned only the product that was being studied by the authors, which was a green household cleaning product.

2.2.2 Consumer behaviour in the context of green products

Studies undertaken by Chan and Lau (2000), Thøgersen (1999, 2000), Kim and Choi (2005), Barr and Gilg (2007) have focused on pre-purchase consumer behaviour where various factors were taken into consideration to test whether these have an effect on consumer intention and purchase behaviour. Such research can be classified into three major categories: firstly, a focus on psychological and situational variables and how they affect purchase decisions; secondly, a focus on the impact of green marketing tools and activities; and, finally, research that takes into account demographic variables. A discussion of this research will now be undertaken.

Barr and Gilg (2007) expanded upon the framework of environmental behaviour developed by Barr et al. (2001). The basic premise of the framework (shown in Figure 2.1) is that values and behaviour are linked but mediated by a number of situational and psychological factors that have an impact on intentions and actual behaviour. This framework was expanded upon to incorporate more variables, such as, motivators, barriers, enabler and disablers, to give a clearer understanding about the specifics involved in explaining how social and environmental values formed intention, which in turn results in a particular behaviour. On the basis of the behavioural data, the study revealed that: a large number of people were willing to recycle their waste; there was a tendency to make small-scaled behavioural changes; and these changes would predominantly be within the home and not necessarily in the context of consumption behaviour. This framework provides a basis for understanding environmental behaviour from a social, psychological, and situational perspective, and gives a platform to understand the antecedents of environmental behaviour. As with much research, the Barr and Gilg study had major limitations: it was conducted in a region (Devon, England) where cultural differences and differences in social class were not prevalent and thus not discussed in the findings of the research. The sample, therefore, was culturally homogenous and, as such, the findings cannot be generalised to other social contexts. Consequently, research in different cultural contexts would provide findings that shed light on whether consumers from different cultures have similar or different responses in terms of environmental purchasing.

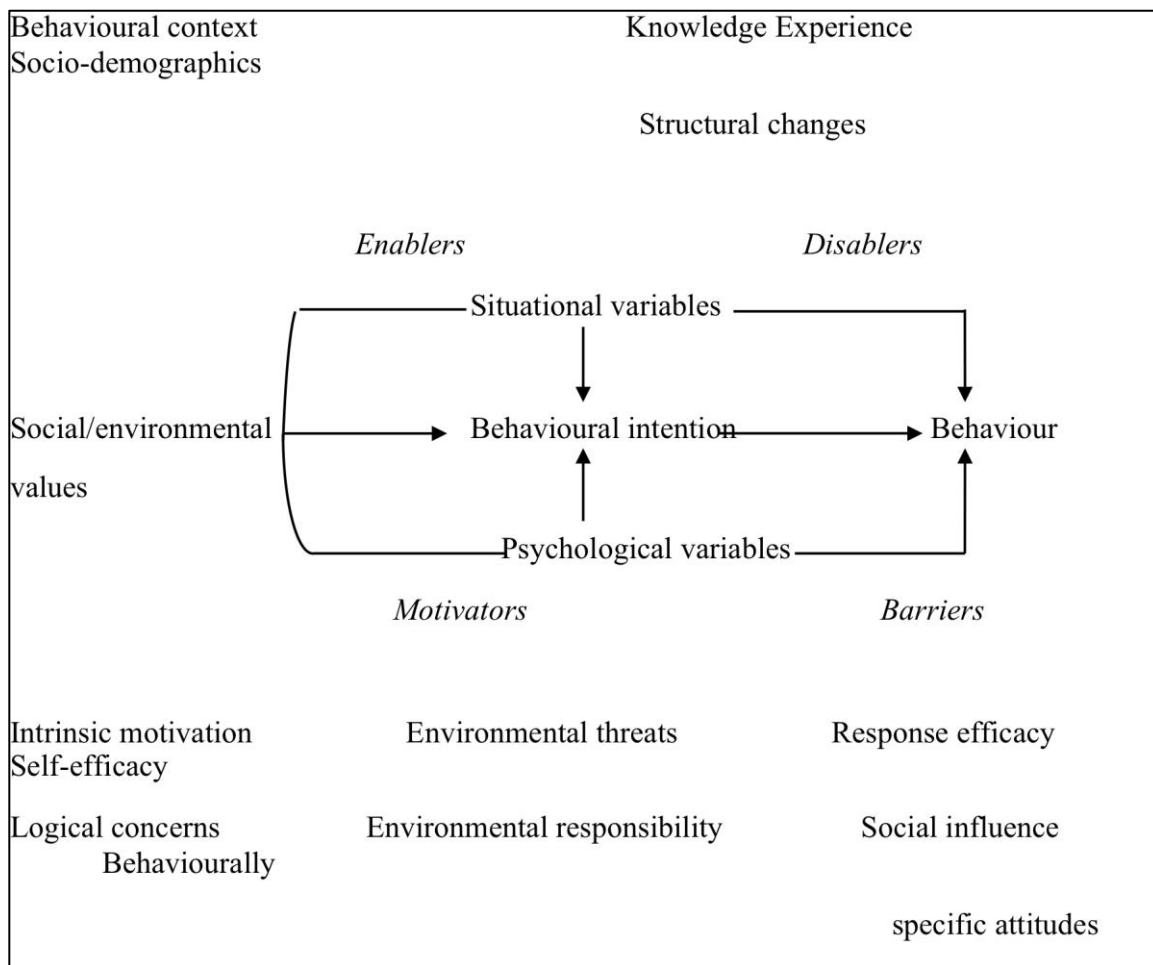


Figure 2.1: Detailed conceptual framework for analysing and understanding attitudes (Source: Barr & Gilg, 2007).

Thøgersen (1999) examined the relationship between moral norms (personal and social) and the choice of environmentally friendly packaging. As with most of his studies, the study was based in Denmark. The findings of the study revealed that consumers sometimes do not choose environmentally friendly packaging due to lack of attention to the matter in a shopping situation. He states that attention-generating cues need to be increased in a shopping situation. Increased environmentally friendly packaging and improving labelling schemes would function as attention-generating cues. Since this was a correlational study, there is no guarantee that the correlations found reflected causal relationships between the variables; the results showed that there was a relationship between the two factors but it does not necessarily mean that the choice of environmentally friendly packaging is dependent on the moral norms of the individuals participating in the study. Another possible limitation of the study is that all variables were measured using the same instrument. When this is the case, there is a risk that the answers to the questions might be synchronized with previous answers and respondents want to appear consistent (Sudman, Bradburn, & Schwarz, 1996).

Danish consumers' attitudes to the functional and environmental characteristics of food packaging were studied by Bech-Larsen (1996). He found that many consumers take a personal interest in the environmental consequences of packaging, which may result in a preference for sustainable packaging, although this preference seldom influences consumers' purchase decisions.

Much scholarly attention has been focused on pre-purchase behaviour pertaining to green purchases in Europe. In another study, Thøgersen (2000) investigated the impact that paying attention to eco-labels has on purchase decisions. The research contributes to a systematic understanding of how eco-labels work. He developed a psychological model (Figure 2.2) to explain when and why consumers pay attention to eco-labels in the buying situation.

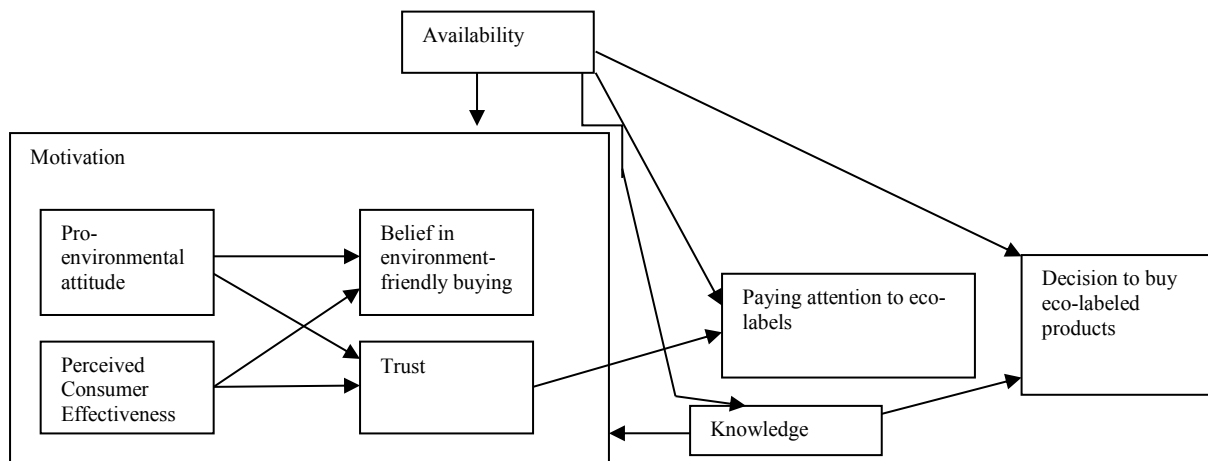


Figure 2.2: Predicting paying attention to eco-labels and the purchase of labelled products (Source: Thøgersen, 2000).

The model explains how various motivational factors (pre-environmental attitude, perceived consumer effectiveness, trust, belief in environment-friendly buying) were affected by one another, and how they, in turn, affected people's propensity to paying attention to eco-labels (while being moderated by availability and knowledge) and, finally, if this led to a decision to buy eco-labelled products. Thøgersen addresses limitations of previous research, noting that such research has generally been descriptive and not addressed the question of "why" consumers know, notice, and use labels. His model examined the relationship between motivation and the decision to buy eco-labelled products, showing that the relationship is mediated by whether consumers were actually paying attention to these labels. All the factors were, in turn, being moderated by availability and knowledge. Thus, intervening factors in the decision-making process are extremely complex. His findings, in this research, state that environmental labelling schemes were potentially useful tools but, if the labels are not

noticed, then consumers may not be persuaded to buy environmentally friendly products. However, Thøgersen concluded that paying attention to the labels should not be considered as the goal by marketers but as a means to a goal, which is to motivate consumers to buy environmentally friendly products.

Research in Asia (Malaysia) by Rahbar and Wahid (2010) addressed the ethno-cultural differences in Malaysia and investigated understanding of eco-labels by different ethnic groups. Consumers were questioned on their awareness, recognition, familiarity, beliefs, trust, and doubts about eco-labels. Results showed that Malays were much more aware of eco-labels than other ethnic groups (i.e. Chinese, Indians, and other). However, there was no noticeable difference amongst the different groups in terms of recognition, familiarity, beliefs, trust, and doubts about eco-labels.

In 2011, Rahbar and Wahid published a paper describing a study that investigated green marketing tools' effect on consumers' purchase behaviour. Their study investigated three green marketing tools: eco-brand, eco-label, and environmental advertising. They point out that Asian consumers are very diverse in terms of ethnic and cultural backgrounds. The study results show that eco-brand, and trust in the eco-label and eco-brand are positively related to actual purchase behaviour. Environmental advertising, however did not appear to have the same relationship with purchase behaviour.

A cross-cultural study comparing American and Chinese consumers set out to explain the green purchasing behaviour of these two groups (Chan & Lau, 2001). The study employed the TPB to green purchasing behaviour in the American and Chinese cultural settings. The authors believed that the differences between the two cultures revolved around the individualism and collectivism dimensions of culture. Being traditionalistic and collectivist in nature, the Chinese people's behavioural disposition to purchasing green products is hypothesised to be greatly influenced by subjective norm rather than attitude. The opposite being hypothesised for the American people due to their individualistic nature. The study did conclude that subjective norms rather than attitude exert a stronger influence on Chinese consumers in terms of green purchasing intention. Conversely, it was found that attitudes rather than subjective norms exert a stronger influence on American consumers' green purchasing intention. Implications for marketers are that, when operating in a collectivist society, they need to look at the behaviour and norms of society as a whole and design programs that highlight the betterment of society. However, in an individualistic society, the

focus should be on highlighting individual gains and benefits to alter and influence the attitudes of consumers.

Kim and Choi (2005) also investigated the antecedents of green purchase behaviour and studied how collectivism, environmental concern, and perceived consumer effectiveness (PCE) impacted green purchase behaviour. Their study showed that an orientation towards collectivism did affect green purchase behaviour after being mediated by PCE but has no bearing on environmental concern. Environmental concern did individually affect green purchase behaviour. This means that collectivism has no bearing on environmental concern, but does affect green purchase behaviour after it shapes consumers' PCE. On the other hand, environmental concern was found to directly influence consumers' green purchase behaviour. The results of this study can be questioned to a large extent due to a major methodological limitation: the sample comprised only students, which is by no means representative of the population at large. However, the findings do set a platform for further research.

Many studies have attempted to create a profile of the green consumer (e.g. Finisterra do Paco & Raposo, 2008; Kinneer, Taylor, & Ahmed, 1974; Laroche, Bergeron, & Barbaro-Forleo, 2001; Lee, 2009; Straughan & Roberts, 1999). The first of these studies dates back to the late 1960s (Laroche, et al., 2001). Berkowitz and Lutterman (1968), and Anderson and Cunningham (1972) were pioneers in this field. Demographic variables have been used to paint a picture of the ecologically concerned consumer. D'Souza, Taghian, Lamb, & Peretiatkos (2006), in an empirical investigation, developed a model (shown in Figure 2.3) to investigate the effect of a number of factors (corporate perception, label, product perception, regulatory protection, packaging, ingredients and past experience) on green purchase intention (depending on price) while being mediated by the perception of green products. Although this study was quite extensive in terms of the various external stimuli, it did not take into account demographic or cultural variables (which the authors note as a limitation) of the market. The results of this study show that the model collectively explains 87 % of the variance of the construct of perception about green products. The overall findings of the study indicate that the different factors influence the overall perception at different levels. The contributions of corporate perception and regulatory protection to the construct of perception about green products were found to be negative. The contribution of past experience to the same was found to be positive. Again, this is an example of contradictory results that have surfaced over the years. Product perception, packaging and ingredients were found to have no significant contribution to the overall perception of green products. The

results of this study also indicate that the influence of perception about green products on purchase intention, even if the product is more expensive, is negative. People are more likely to purchase green products if they are lower in quality but not higher in terms of price.

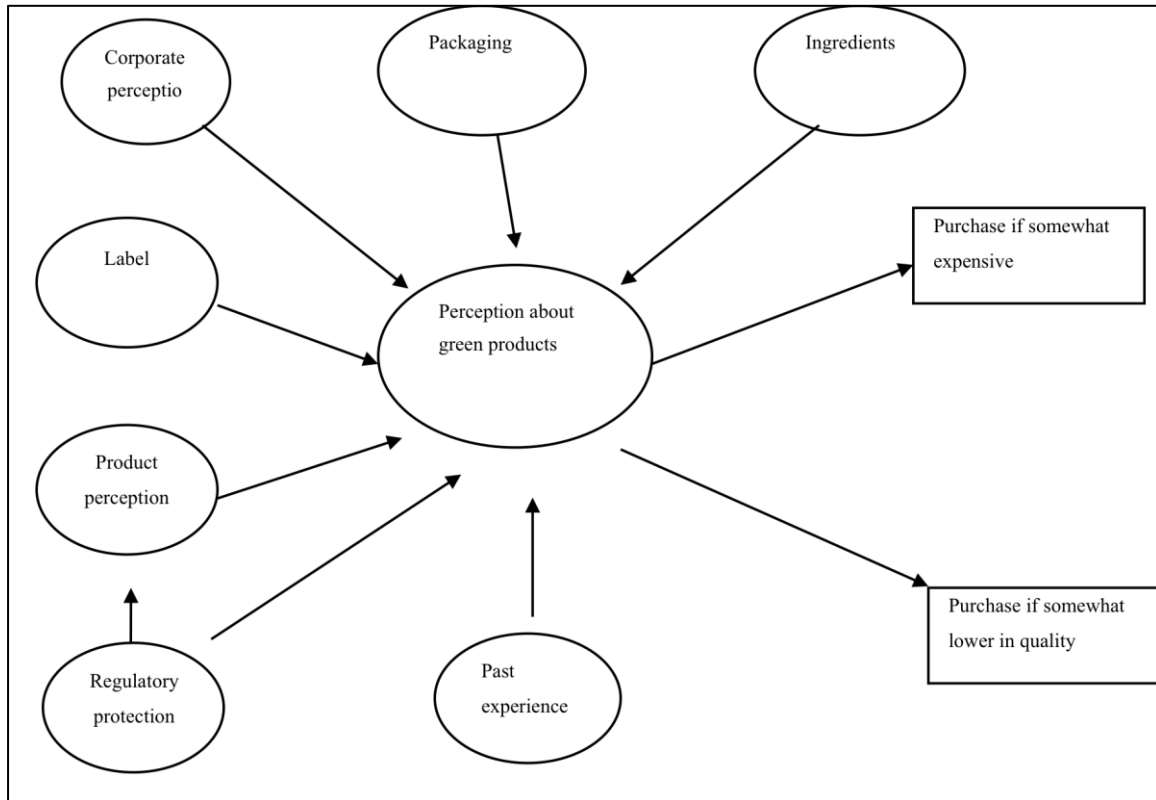


Figure 2.3: Conceptual model of customers' perception formation of environmentally safe products (Source: D'Souza et al., 2006).

Various inconsistent results regarding the demographic profile of green consumers have appeared in the green marketing literature over the years. The early studies of Berkowitz and Lutterman (1968), and Anderson and Cunningham (1972) portray the profile of the socially conscious consumer as: female; pre-middle aged; with a relatively high level of education; and above average socio economic status. Research over the years has shown that females were more ecologically conscious than men (Banerjee & McKeage, 1994) but, in one study, it was men who were willing to pay more for the control of air pollution (Reizenstein, Hills, & Philpot, 1974). Such contradictions in findings from research on the topic suggest that there may be differences between the different genders and that the effects of gender on purchase intention should be investigated further.

Henion (1972) initially concurred with the earlier findings of Berkowitz and Lutterman (1968), who stated that consumers with medium or higher incomes are more likely to act in an ecological manner. However, they actually found that environmentally friendly behaviour

was consistent across most income groups. Sandahl and Robertson's (1989) study in the US found that environmentally conscious consumers were less educated and had a lower income than the average American. Thus, the early research on the topic of income level and environmental concern is inconclusive.

Earlier findings suggested green consumers were younger than average (Anderson & Cunningham, 1972; Berkowitz & Lutterman, 1968; Van Lierre & Dunlap, 1981). However, this trend, too, had changed by the late 1980s; more recent studies found that the green consumer is now an individual older (Roberts, 1996; Sandahl & Robertson, 1989; Vining & Ebreo, 1990). Some studies have shown that environmental concern and behaviour were much more prevalent and stronger in consumers above the age of 50 (Gallup & Newport, 1990; Kohut & Shriver, 1989; Lansana, 1992; Vining & Ebreo, 1990). The hypothesis in these studies was that eco-products are more expensive and this is the age group that can most afford them. Thus, the studies indicated that the older segment of the population were more likely to purchase eco-friendly products.

The results of various studies conducted over the years, suggest inconsistent results in terms of consumers' demographic characteristics and their effect on green purchase behaviour (Roberts, 1996). From a marketing standpoint, this is crucial because a marketer needs to have a clear understanding of the characteristics of the segment to which he/she wishes to cater. Not having a clear understanding of the target segment's characteristics may result in incorrect marketing and positioning strategies. Roberts (1996) argues that demographic characteristics exert a significant influence on consumers' green purchase intention. From his study, he concluded that sex, income, education, and age were strong predictors of ecologically conscious consumer behaviour (ECCB). He found education and age to be significant predictors of ECCB (positively correlated). Older consumers were found to perform more ECCBs. Pertaining to education, he found that the higher the level of education, the more likely the consumer will perform ECCBs. However, income was negatively correlated with ECCB. This particular result cast doubt on the notion that environmentally conscious consumers predominantly belonged to the higher income segment of society. A plausible reason, offered by Roberts, is that environmental deterioration may have reached a stage where consumers from the lower strata of society are also becoming involved. In addition, other studies, such as those conducted by Webster (1975), Banerjee and McKeage (1994), and Chan (1999) have shown that factors, such as knowledge, values and attitude, are important factors in explaining eco-friendly behaviour.

On the basis of their meta-analysis of past research in the field of green marketing, Chamorro et al. (2009) concluded that, as environmental consciousness continues to grow over time, analysing the green consumer will continue to be attractive and a key area of green marketing research. They also point out that findings from previous studies will not necessarily be valid in the future and new research should aim to find out the ever-changing characteristics of the green consumer. This is an extremely important suggestion, because it encourages constant research to study the characteristics of green consumers and what drives them to purchase green products.

2.3 DERIVATION OF VARIABLES

The primary goal of this research is to further develop a conceptual framework, derived from past research findings and discussed in detail in the following section. This research will aim to extend existing theory, combined with a new methodology, and add a new perspective to the existing body of research. The developed framework takes into account the various green marketing activities, cultural, social, and individual factors, enabling the model to be used in any context to study the green consumer.

The following literature review pertains to factors that have been taken into account by previous studies and used to develop an integrated framework so that an increased number of variables of importance to consumers can be included to provide greater explanatory power to the model to aid in the understanding of the relationship between consumer purchase intention of green products, and the various factors consumers use in their decision-making for green purchasing.

2.3.1 Product perception

Consumers purchase products and services to satisfy their needs and wants. Most marketing literature states that products are solution providers (Kotler, 2003). Green products tend to face an uphill battle in this regard. Not only do they have to provide a core benefit, satisfy the consumers' needs and wants, and function as expected but they also have to provide for the environmental safety aspect (D'Souza, et al., 2006).

Products can be classified at three levels (Adcock, 2000) of benefit. The core or primary level is the benefit that derives the product performing in the way it is expected to perform. This is followed by the desired level, which refers to what the consumer would like to receive from a product. Finally, the unanticipated level; which describes products that delight consumers by providing benefits that exceed his or her expectations. D'Souza et al. (2006) point out that

green consumers would more likely evaluate products and how they affect the environment, by judging the packaging and the ingredients of the product. Dimensions such as recyclable, biodegradable, energy efficient etc. are used to assess the quality of green products. The factors affecting consumers' perception of green products, as studied by D'Souza et al., are shown in Figure 2.3; the results of the study were discussed above – one of the key findings being that people were more likely to intend to purchase green products if they were lower in terms of quality but not if they were more expensive. This study aims to address a limitation pointed out by D'Souza which is that their study did not take demographic variables into account. This study aims to further their work and attempt to create a profile of the green consumer.

2.3.2 Green product perceived value

Perceived value is defined as a consumers' overall evaluation of the net benefit of a product or service based on consumers' appraisal (Bolton & Drew, 1991; Patterson & Spreng, 1997). Past research has extensively explored perceived value due to its positive effect on marketing performance (Sweeney, Soutar, & Johnson, 1999). Due to the growing importance of perceived value nowadays, companies can enhance consumer purchase intentions through product value (Steenkamp & Geyskens, 2006). Products are able to deliver value to customers by offering them benefits and differentiating themselves from competitors' offerings (Aaker, 1996; Zeithaml, 1988). Kim, Zhao, and Yang (2008) reaffirmed this proposition by noting that outstanding product value can differentiate a product from its competitors. Perceived value not only plays a crucial role in establishing long-term customer relationships but also plays a key role in affecting purchase intentions (Zeithaml, 1988; Zhuang, Cumiskey, Xiao, & Alford, 2010). In addition, perceived value plays an important role in influencing customer trust (Kim et al., 2008).

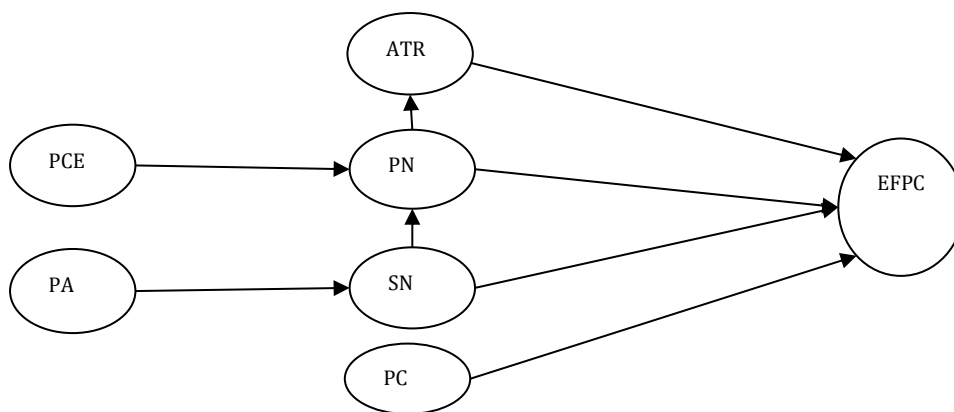
The limitation in past research is that the role of perceived value was not taken into consideration in the context of examining its influence on purchase intentions in the context of eco-friendly products. Its role was only noted later by Chan and Cheng (2012). This study attempts to investigate the role of green product perceived value and how it influences customers' green product purchase intentions in the context of FMCGs.

2.3.3 Packaging

Marketing literature (Griffin, 2003) state that packaging plays important roles or functions. These are: protection, identification, information, packaging to enhance usage, packaging to

enhance disposal, and packaging to enhance channel acceptance. In choosing the right packaging, choices are made the alternative packaging forms that can be presented to the customer (Thogersen, 1999). Waste and the disposal of the waste that emanates from product packaging have become a concern the world over – evident in the number of studies conducted on recycling. Over 11.71 % of all studies on green marketing have been conducted on recycling behaviour (Chamorro, et al., 2009). Environmental concerns over packaging, and the waste generated from it, has also received much public and political attention (Ackerman, 1997; Bech-Larsen, 1996; Thogersen, 1996).

Thogersen (1999) shows in the model, reproduced in Figure 2.4, that environmentally friendly packaging choice is dependent on norms (personal and social), the attention people give to the problem, and their antecedents (problem awareness and perceived consumer effectiveness).



Note: PCE = perceived consumer effectiveness; PA = problem awareness; ATP = attention towards problem; PN = personal norm; SN = social norm; PC = perceived costs; EFPC = environmentally friendly packaging choice

Figure 2.4: Thogersen's norm-activation model for the prediction of environmentally friendly packaging choice (Source: Thogersen, 1999)

In a study conducted on Danish consumers' attitudes towards packaging for food items, Bech-Larsen (1996) found that environmental consequences of packaging enhance the associations consumers make with their personal values, indicating that a group of the consumers are personally involved in the environmental characteristics of food packaging – however, the size of the group could not be estimated.

D'Souza et. al. (2006) found that social factors, such as recyclability, biodegradability and energy savings, are some of the non-utility factors customers take into account when gauging green products and brands. However, they found there was no significant relationship between packaging and the overall perception of green products. This phenomenon needs to

be further investigated since Bech-Larsen's (1996) study showed that there is an association between packaging and consumers' values in the Danish context.

2.3.4 Eco-labelling

Traditionally, for marketing purposes, a label plays the role of identification of products or brands, and information dissemination. With low-involvement products, labels tend to just aid in identification, while, in high-involvement products, consumers seek information about the product's characteristics and other important attributes from the label. The eco-label is a modern-day environmental marketing tool used by companies to inform customers about the environmental characteristics of their products (Rahbar & Wahid, 2010). In addition to informing, eco-labels and labels in general serve the purpose of building a generational relationship with customers through branding. The terms "eco-labelling" and "environmental-labelling" are used synonymously to describe this tool.

Recent research in this particular field undertaken by Borin, Cerf, and Krishnan (2011) investigated how eco-labels influence various facets of consumer behaviour. The results show that clearly-presented information does have a significant impact on a consumer's evaluation of products. The researchers suggested that policy makers should explore the possibility of making manufacturers disclose key product ingredients and how they impact the environment. Most studies have focused on whether people recognise eco-labels and if they trust them (OECD, 1997). A significant number of studies have focused on the traditional stage model of consumer decision-making (Awareness-Interest-Desire-Action). Thøgersen (2000) focused on answering the questions of how eco-labels work. He constructed a model, which investigated how motivation affects people's probability of paying attention to eco-labels and, in turn, affects their decision to buy eco-labelled products (all three variables being affected by availability and knowledge). Thøgersen's study was conducted in five countries in Europe (Germany, Britain, Ireland, Italy, and the Netherlands). It was found that people with pro-environmental attitudes had a greater probability of paying attention to eco-labels.

Rahbar and Wahid (2010) investigated how Malaysians from different cultural and ethnic backgrounds responded to eco-labels. Consumers were studied on their awareness, recognition, belief, trust, doubts and familiarity with the *Malaysian Best* eco-label. The *Malaysian Best* eco-label is a logo that can only be used by produce meeting the "Malaysia's Best" standards. Companies that use this logo are ensured the best price by the government. This was a program undertaken by the Ministry of Agriculture and Agro-based Industry.

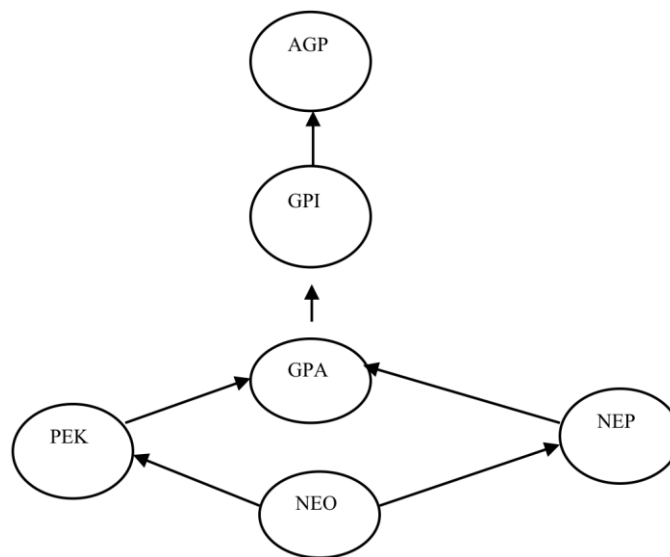
Rahbar and Wahid's findings suggest that different ethnic groups have different perceptions towards the eco-label. Malays tend to have greater awareness levels and have a stronger perception about the eco-label (*Malaysian Best*) than the other ethnic groups in Malaysia. The study suggests that companies in Malaysia using eco-labels should focus on Malays as their target market. In a relational study, a model of customers' perception formation of environmental products was used to investigate the impact of labelling on perception about green products (D'Souza, et al., 2006). The variables of: labels, their accuracy, and whether they were easy to read and comprehend, were taken into account. The study found that product labels did not appear to effectively communicate product information on product safety which consumers could rely upon to make their purchase decisions. Usage of chemical code names and technical jargon would need to be avoided to make label comprehension easier for consumers. Marketers also need to know how much of a "price premium" they can charge for eco-labelled products and still sell them easily. The issue of price is a critical one and will be considered separately later in this chapter.

2.3.5 Environmental knowledge

Environmental knowledge is defined as "a general knowledge of facts, concepts, and relationships concerning the natural environment and its major ecosystems" (Fryxell & Lo, 2003, p. 45). When studying environmental action, knowledge is classified into two categories: abstract and concrete (Schahn & Holzer, 1990). Abstract knowledge pertains to knowledge about issues regarding the environment, such as the problems, causes, and solutions. Concrete knowledge refers to knowing what can be done to address these environmental problems. In Hines, Hungerford & Tomera's (1987) systematic review of 128 previous studies, it was noted that ecological knowledge and behaviour have an average correlation of 0.30. The result suggests that ecological knowledge is positively correlated with environmentally friendly behaviour. Grunert (1993) research findings support this proposition. Individuals with greater knowledge of environmental issues and problems seemed more active in environmental issues, as opposed to people with less knowledge (Stern, 1992). Thus, it appears that a positive relationship between ecological knowledge and behaviour exists. This is further supported by Chan and Lau (2000) who investigated the antecedents of green purchases in the Chinese context. However, the findings of the study revealed that the level of ecological knowledge and actual involvement in green purchases of Chinese people were still rather low. The influence of traditional "man-nature" orientation in

the Chinese society has a significant influence, and people generally express a positive ecological effect and green purchase intention.

Mostafa (2007), in his model, hypothesized a relationship between natural environmental orientation (NEO) and environmental knowledge. His findings did partially contradict Chan and Lau's (2000) findings of a significant relationship between NEO and ecological effect, but not environmental knowledge.



Note: NEO = natural environmental orientation; NEP = new environmental paradigm; PEK = perceived environmental knowledge; GPA = green purchase attitudes; GPI = green purchase intention; AGP = green purchase acceptance

Figure 2.5: Mostafa's model of green purchase behaviour (Source: Mostafa, 2007).

Mostafa's model shows how NEO has a direct influence on environmental knowledge. In the research context (Egypt), positive attitudes towards nature as measured by NEO were found to be representative of high levels of environmental knowledge and concern. As already noted, his results did partially contradict Chan and Lau's (2000) findings of a significant relationship between man-nature orientation (the equivalent of NEO in Mostafa's study) and ecological affect, but not ecological knowledge. This relationship will be further tested in the proposed integrated model (Figure 2.6).

2.3.6 Environmental concern

Environmental concerns form the basis for any form of environmental research (Hines, et al., 1987). It refers to the general concern people have for the environment and is often a predictor of green buying behaviour (Chan, 1996; Donaton & Fitzgerald, 1992; Ottman,

1993). According to Schultz (2000) environmental concern has three correlated factors: egoistic, altruistic and biospheric. Egoistic values are those that oppose the environmental movement. He states that people with high levels of egoism perceive a threat to themselves from environmental degradation. Social-altruistic values makes people concerned about the environment. Biospheric environmental concerns are based on values an individual places on all living things in the planet. A number of studies have examined the various facets of environmental behaviour that result from concern for the environmental.

In analysing a major cultural dimension, such as collectivism, Kim and Choi (2005) have shown that collectivism has a positive relationship to green purchase behaviour, meaning that people who are more collectivistic are more likely to engage in ecological consumption than those who are less collectivistic. However, the relationship between collectivism and environmental concern did not have a positive relationship.

Other research has shown that consumers with higher levels of environmental concern are more likely to purchase products that have positive environmental claims than consumers with lower levels of environmental concern (Mainieri, Barnett, Valdero, Unipan, & Oskamp, 1997). However, the translation of ethical intentions into actual purchases is a complex process because competing and conflicting ethical and traditional concerns are combined, compared, and often traded-off (De Pelsmacker, Driesen, & Rayp, 2005; Freestone & McGoldrick, 2008).

In a study conducted by Zuur and Fuchs (2010) on the gap between intention and actual behaviour within the context of organic food purchase, it was found that 33 % of customers who act out of a “personal” concern were incidental and non-regular consumers. The 77 % of consumers who acted out of concern for the “world” were regular consumers. These findings suggest that if marketers can move consumer’s beliefs from a “personal” to a “world” concern they might increase the total consumption of organic food.

2.3.7 Environmental advertising

Shimp (2003) defines advertising as “nonpersonal communication that is paid for by an identified sponsor, and involves either mass communication via newspapers, magazines, radio, television, and other media (e.g., billboards, bus stop signage) or direct-to-consumer communication via direct mail” (p. 413). Advertising is said to play a number of roles, from providing information to persuading customers, reminding them, and also reinforcing positive beliefs that they may have about certain brands. Rahbar and Wahid (2011) state that, the

primary goal of green advertising is to try to alter consumers' traditional purchase behaviour by making them buy products that do not harm the environment and have a positive impact on the environment at large.

Since advertising not only plays the role of creating awareness but also persuasion, it is imperative that it is taken into account to see how it affects the purchase intention of consumers for green products. In their research on "Strategic Green Marketing", McDaniel and Rylander (1993) developed a ten-point plan of on how to incorporate green marketing into marketing strategy development. As the ninth step, they highlight that companies, through effective advertising and publicity, need to communicate with customers as to what they are doing on the green marketing front. They highlight that this will not only build customer loyalty towards the company but will also encourage customers to cooperate with the environmental efforts being undertaken by the company.

The importance of advertising as a green marketing tool has been noticed by many scholars and is a topic of emerging research. In a study on the green advertising practice of international firms, Leonidou, Palihawadana, & Hultman (2011) analysed the trend of green advertising practices of firms over the past 20 years. Findings revealed that a total of 195 firms were the sponsors of the 473 advertisements. The top ten companies were responsible for around 38.3 percent of these advertisements. Most of the sponsors of green advertisements were firms located in the developed parts of the world, such as Europe, the US and Japan, and manufacturing firms constituted 93.4 % of the sponsors of green advertisements. D'Souza and Taghian (2005) studied the effects of green advertising on attitudes and choice of advertising themes in the state of Victoria, Australia. In the study, customers were categorised according to their degree of involvement. The study analysed the cognitive and affective responses of these two groups to the various green advertising themes. Results of the study showed that customers with lower degrees of involvement appeared to have greater disregard for green advertising across all the perceptual measures towards green advertising. This finding has implications for manufacturers of convenience items such as FMCGs, which are predominantly low involvement products. It will be interesting to further investigate if green advertising does influence the purchase intentions of customers in the case of eco-friendly FMCGs.

The relationship between the various green marketing tools (eco-brand, eco-label, and environmental advertisement) and consumers' purchase behaviour was examined by Rahbar

and Wahid (2011). They hypothesized that a significant positive relationship exists between environmental advertisement and customers' actual purchase behaviour. However, the findings showed no significant relationship between environmental advertisements and actual purchase behaviour. These findings somewhat concur with the findings of D'Souza and Taghian (2005) that green advertising had little role in the purchase behaviour of customers in the case of low involvement products. In another research project conducted in Bangladesh, Islam, Hassan and Hossain (2011) found that there was a positive relationship between environmental attitude and involvement with green advertising. The study reveals that, since Bangladesh is a country ravaged by natural disasters, such as floods and cyclones, on a regular basis, people tend to focus on advertisements with environmental messages. An interesting area to be explored would be to see if the population in Australia who are affected by natural disasters, have similar views towards green advertising.

2.3.8 Price

Price has always been one of the key elements of the marketing mix that determines the demand for a product. In the case of purchasing green products, price has an important role to play. Whether or not consumers are willing to pay a premium price for eco-friendly products has been a topic of great interest for market researchers. In a 1989 study, Coddington (1990) found that 67 % of Americans were willing to pay 5-10 % more for eco-friendly products. By 1991, environmentally conscious consumers were willing to pay 15-20 % more for such products (Suchard & Polonsky, 1991). In 1993, a mail survey conducted by Myburgh-Louw and O'Shaughnessy (1994) found that women consumers in the UK were willing to pay up to 40 % more for detergents, which were identical to the brands they used, but had eco-friendly characteristics. These findings are quite interesting and possibly show that a certain segment of the population does deem eco-friendly characteristics to be an important determinant attribute, making such consumers relatively insensitive towards the higher price these products command. Studying the characteristics of such a segment and determining its size might assist marketers of green products to design and develop products for which they could ask a premium price from this market segment.

In another study conducted by Carrigan et al. (2004) it was found that, although the common perception was that older people have less disposable income, they were willing to pay higher prices in certain situations. Such a finding suggests that if older consumers perceive value in a product (ethical value or value in some other form), they may be willing to pay a premium. Such a finding offers opportunities for marketers of green and ethical products. However, it

was also noted in a recent study by Wheeler, Sharp, and Nencyz-Thiel (2013) that in the context of eco-friendly versions of toilet paper and fabric softener, high price was listed as a factor that made consumers reject the green brands manufacturing these products. This finding suggests that the issue of price is yet presenting contradictory results and warrants further investigation.

2.3.9 Green trust

The issue of green trust, which had not received much attention from researchers since the 1990s, has begun to be investigated again in 2010. Chen (2010) in his paper on the drivers of green brand equity, began taking green trust into consideration. The findings of his work are discussed later in this section. Hart and Saunders (1997) defined trust as a level of confidence that another party would behave as expected. Rousseau, Sitkin, Burt, and Camerer (1998) state that trust is the intention to accept vulnerability based on positive expectations of the behaviours or intentions of another. A number of studies have argued that trust includes three beliefs: integrity, benevolence, and ability (Blau, 1964; Schurr & Ozanne, 1985).

Furthermore, Ganesan (1994) argued that trust is a willingness to depend on another party based on the expectation resulting from the party's ability, reliability, and benevolence. Thus, customer trust can influence their purchasing decisions (Gefen & Straub, 2004). Kalafatis and Pollard (1999), in their study, stated that some companies promote their new products, which make misleading and confusing claims, and exaggerate the environmental value of their products. Thus, customers are not willing to trust their products. This identified why consumers can be sceptical about products that claim to be eco-friendly. Albayrak, Aksoy, and Caber (2013) refer to the work of Mohr, Ellen, and Eroglu (1998) who argue that scepticism is not a kind of mood, and it appears only under certain circumstances. Sceptics entertain doubts about what other people say or do but can be convinced when they are shown proof. Scepticism is a cognitive reaction that varies in accordance with the occasion and content of the communication. In other words, sceptics can be convinced of the environmental benefits of products if they know the facts about those products.

Polonsky, Grau, and Garma (2010), in their study, found that companies who recently claim to be "greener" have done so by the use of a series of activities they call "greenwashing". Greenwashing is advertising or marketing that deceives consumers with respect to the environmental impact of the products they purchase. This notion of greenwashing was found to have a negative impact on the issue of trust that consumers had of products that claim to be eco-friendly. This phenomenon can be seen in the context of Tesco, who in all their public

messages claim that climate change is a reality, and they are committed to fundamental change in how they do business. Tesco has reiterated that they want to be a zero-carbon business by 2050 and reduce the emissions of its stores and distribution centres by 50% by 2020. However, the green marketing undertaken by Tesco hides the fact that Tesco's own carbon footprint is rising. Between 2007 and 2011, Tesco's annual operational emissions rose by 1 million tonnes (Pearse, 2122, p. 26). Such examples of greenwashing contribute to the scepticism that consumers have over the eco-friendly claims made by various companies.

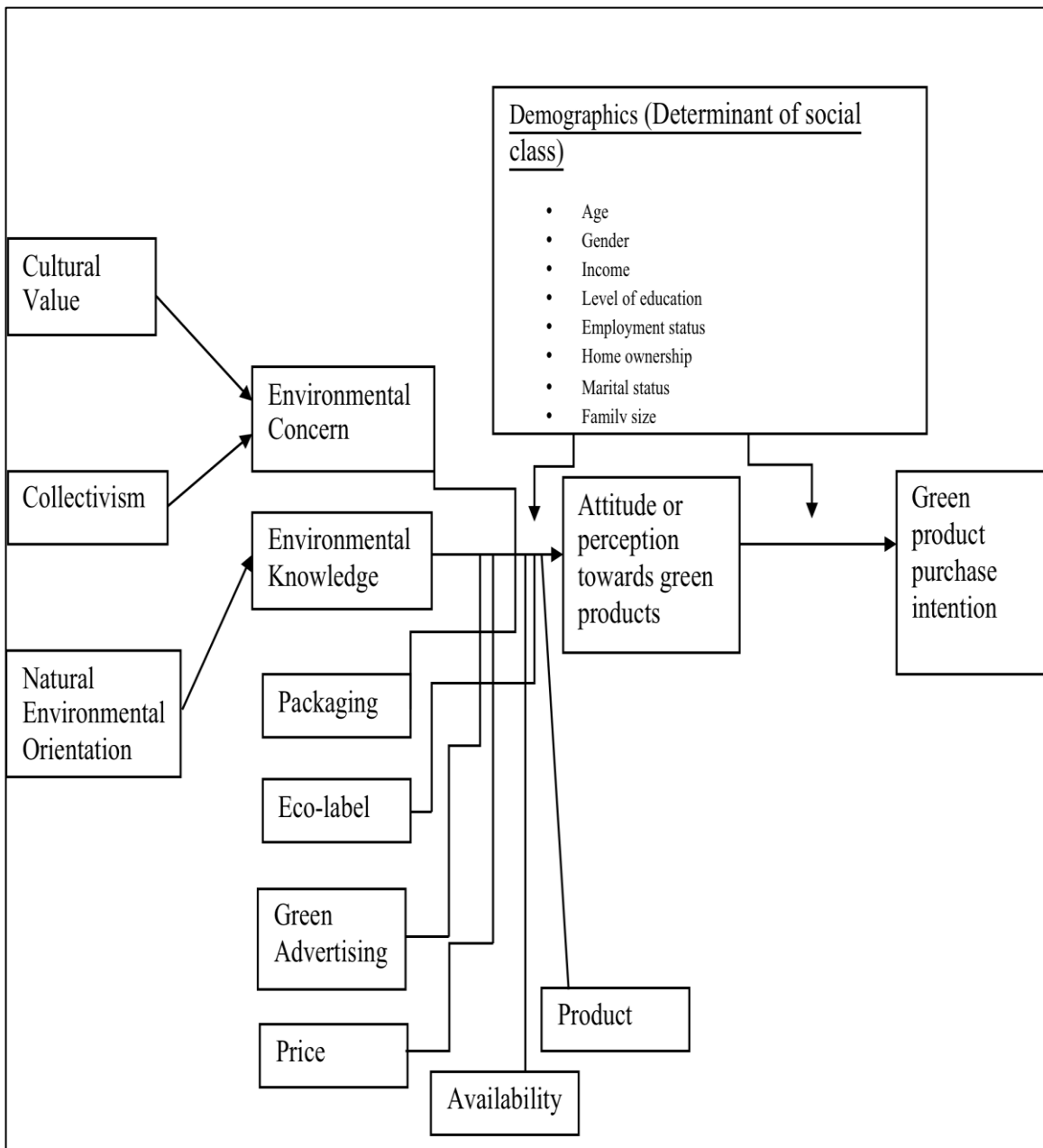
Chen (2010) drew upon the previous works of Blau (1964), Schurr and Ozanne (1985), and Ganesan (1994) in his study and developed a construct referred to as "green trust". He argued that the more the green brand image, the higher the willingness to depend on a product, service, or brand based on the belief or expectation resulting from its credibility, benevolence, and ability about its environmental performance (p. 309). This indicates that higher levels of green brand image result in higher levels of green trust. In Chen and Chang's later work (2012) they investigate the mediating role of green trust on green product purchase intentions. The study investigated how green perceived value and green perceived risk influence green purchase intention while being mediated by green trust. The study showed that green trust was positively associated with green purchase intention, and green perceived value and green perceived risk were both positively associated with green trust. This study was unique in the sense that it addressed an issue that demanded attention, which is how green trust influenced green product purchase intention whilst also mediating other factors. However, the study was limited in addressing which factors that influence green product purchase intention were mediated by green trust. In addition to green perceived value and green perceived risk, there was the probability that claims made by companies using green advertising, eco-labelling, and overall concern and commitment for the environment were subject to a lack of trust of the consumers. Therefore, the role of green trust on mediating the influence of the aforementioned factors on green product purchase intention warrant further investigation.

2.4 INTEGRATED FRAMEWORK

The previous section describes research conducted on the various factors affecting green product purchase intention. The discussion has separately addressed the studies carried out on the different factors. The discussion shows that some studies have found relationships between the different factors and green product purchase intention, while other studies have either shown no relationships or partial relationships. In order to provide a holistic framework

that includes all factors affecting green product purchase intentions, a more comprehensive study is required. Figure 2.6 summarises a framework that is derived from past research. This framework not only incorporates the elements of the marketing mix, but also takes into account the various social and individual factors that potentially influence consumers' purchase intentions in the context of eco-friendly FMCGs. The framework incorporates the works of D'Souza et al. (2006), Rahbar and Wahid (2010) and Mostafa (2007). The framework addresses the key limitation of the work of D'Souza et al., which did not take demographic variables into account. Incorporating the variables that Mostafa, Rahbar and Wahid have studied make this framework more robust. The rationale behind developing this framework is based on an argument presented by Valenzuela (2007) that numerous researchers have suggested that conceptual frameworks developed in a particular cultural and socio-economic context cannot be completely transferred and generalised in another context. Thus, the incorporation of work carried out by different researchers into this framework should make it more robust since it addresses many of the limitations of prior research. This framework provides a starting point for the direction of the research undertaken in this thesis. Incorporating the salient variables uncovered by research in the field as well as important demographic variables will allow the research to build a holistic profile of the green consumer segment for eco-friendly FMCGs in Australia. This then leads to the development of the overall purpose of the study, the research problem, and the specific objectives of the research.

Figure 2.6: An integrated framework for analysing the impact of green marketing tools and other social and individual factors on consumers' green purchase intention derived from past literature



2.5 PURPOSE OF THE STUDY, RESEARCH PROBLEM, AND RESEARCH OBJECTIVES

2.5.1 Purpose of the study

The purpose of the study is to address the inconsistencies of findings of previous research about the green consumer market segment by more accurately profiling the green consumer segment and uncovering their purchase intentions in a more systematic and holistic manner.

2.5.2 Research problem

- What are the factors that affect consumers' green product purchase intentions?
- What are the demographic and behavioural characteristics of such green consumers?

2.5.3 Research objectives

Following are the research objectives of this thesis:

1. To investigate how various factors affect consumers' green product purchase intentions.
2. To investigate the relationships and the strength of the relationships that exists between each of the different factors and the green product purchase intentions of consumers.
3. To study the characteristics of the segments willing to purchase green products.
4. To present a holistic picture of the demographic and lifestyle characteristics of the green consumer.

2.6 SUMMARY

This chapter has presented a review of the body of work on green marketing. Firstly, a background of green marketing as a field of study was discussed. The evolution of the field of green marketing was reviewed and its growing importance in the field of academia was addressed. Research on the various factors influencing consumer behaviour in the context of eco-friendly products was then analysed. These factors included marketing as well as social and individual factors. Literature on the characteristics of the customers who purchase eco-friendly products was also investigated. The analysis of past literature revealed the conjecture and inconsistencies that exist in the body of work on the subject of green marketing. These findings formed the basis for the development of the research questions, and objectives.

The following chapter (Chapter 3) discusses the methodology used to address the research objectives outlined in this chapter. It discusses the details of the qualitative and quantitative

phases of the study and provides justification for the methodology selected for the purpose of this study.

CHAPTER 3: METHODOLOGY

3.1 INTRODUCTION

The previous chapter critically analysed existing literature on the topic of green product purchase intention. It has looked at the body of work carried out in this field and identified key gaps and the areas to be addressed in this study. As stated earlier, most previous research in this arena can be placed into five distinct categories (Chamorro, et al., 2009). These are: a) Green consumer, b) Recycling behaviour, c) Green communication d) Macromarketing, and e) Concepts and strategies.

This chapter discusses the research methodology employed in this study, beginning with an overview will be provided about the research methodology employed, followed by a detailed discussion on the different stages of methodology used in the different phases of the study. The discussion explains the qualitative and quantitative techniques used to answer the research questions. Justification for the use of each method (sampling, questionnaire design, data analysis etc.) is also provided in this chapter. Finally, the chapter concludes by discussing the methodological limitations of the study.

3.2 METHODOLOGICAL PARADIGM OF THE STUDY

The research framework adopted for this study employed a mixed methods approach. This means that both qualitative and quantitative methods were used to address the various research objectives. Initially interviews were undertaken and analysed using qualitative methods. Surveys, analysed using quantitative analysis, were then utilized (Clark-Carter, 2004).

Qualitative research, which falls under the interpretivist paradigm, was used to gain greater insight into the minds of the respondents and to gain a greater understanding of the meaning of the phenomenon (Kvale, 1996). This form of research involves critical analysis of the words and actions of respondents. Analysing what the respondents reported and deciphering the meanings of those responses forms the core premise of this form of research.

Positivistic research focuses on quantitative data and emphasizes measurement and analysis (Everitt, 1975). The premise of quantitative research lies in theoretical grounding and is guided by the hypothesis formed by the researcher. Positivist research aims at providing empirical evidence to support a hypothesis or to refute it by providing causal and theoretical explanations of the phenomena (Kvale, 1996). For the purposes of this study, the themes that

arose from the qualitative phase were investigated in a subsequent quantitative phase of the study. The study was designed around the method developed by Bauer and Gaskell (2000); that is, initially developing a holistic view of the problem, defining the problem, conceptualizing it, collecting data, analysing data, and, finally, writing the results.

3.3 CONTEXT OF THE STUDY

The qualitative focused interviews and the subsequent survey were both conducted in Sydney. Sydney was chosen because it provides an ideal setting for tapping into a diverse population; various social classes, ethnic groups, and people from all spheres of life reside in Sydney. The 2011 census figures show that Sydney is a truly modern, cosmopolitan city. Those with English, Australian, Irish, Chinese, and Scottish backgrounds are the most dominant groups making Sydney's population. In greater Sydney, the most common languages spoken, other than English, are Arabic, Mandarin, Cantonese, Vietnamese and Greek (Australian Bureau of Statistics Census Data, 2011). The employment data shows people working in a plethora of different professions. Access to this diversity enabled the researcher to tap into insights from an heterogeneous population, a necessary factor in this study to enable identification of the segments that are most likely to purchase eco-friendly FMCGs.

3.4 OVERVIEW OF THE RESEARCH METHODOLOGY

A mixed methods design was employed for this study. Cresswell and Clark (2011), who cite their previous work (2007), explain that a mixed-methods design, which involves both qualitative and quantitative approaches within a single project, enable a researcher to have a better understanding of the research problems than if the researcher employed only a single approach. In line with the mixed methods approach, this study was conducted in three stages:

Stage 1: Review of existing literature

Stage 2: Qualitative focused interviews designed to provide data for qualitative analysis

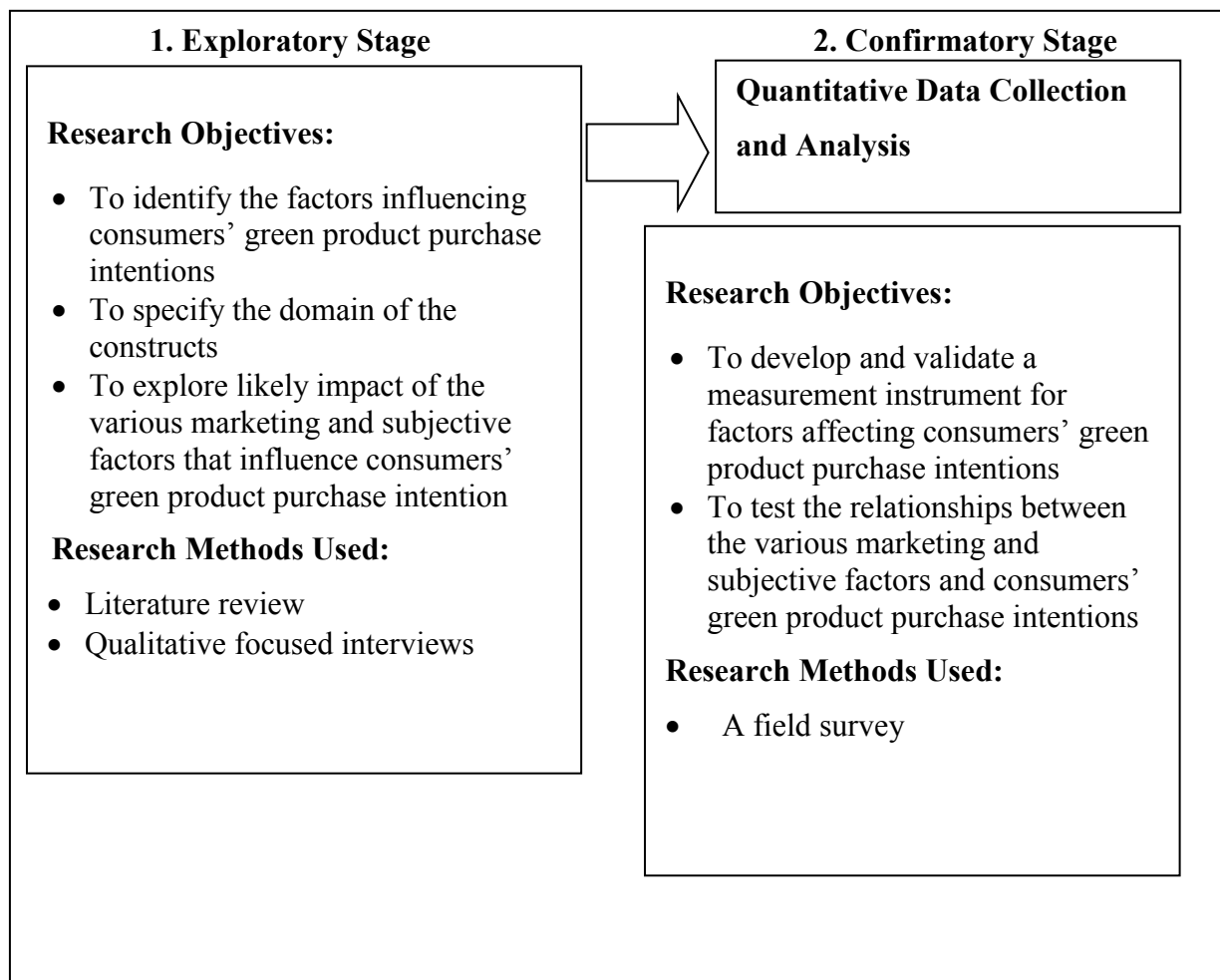
Stage 3: Survey (Pre-test, Pilot Survey, and Final Survey)

The first two stages (literature review and qualitative focused interviews) were part of the exploratory stage. The objective of this stage was to critically analyse the existing literature on the topic of green product purchase intention and to define and specify the themes or constructs. The quantitative stage, which was the confirmatory stage of the study, was designed to develop an instrument to empirically investigate the relationships between the

various factors that potentially influence consumers' green product purchase intentions in the context of FMCGs.

The exploratory stage, which comprises of the literature review and the qualitative interviews, is often the first stage of a sequential mixed-methods research design. Miller and Crabtree (1999) state that this stage allows the researcher to have an initial understanding of the topic being studied. It provides meaning, and a holistic view of the nature of the phenomenon. Sarantakos (2005) emphasize that the exploratory stage is crucial for allowing the researcher to identify the research problem, develop objectives, define the constructs and concepts, develop hypotheses, and aid the researcher to design subsequent stages of their study more effectively. This stage plays a pivotal role in the development of the instrument that specifies the characteristics of the construct, which is of research interest for measurement purposes that follow this stage (Cresswell, 2003). Figure 3.1 illustrates the stages of the research, the objectives to be achieved at each stage, and the corresponding research methods used.

Figure 3.1: Sequential research design of the study



3.5 EXPLORATORY STAGE

The exploratory stage comprises review of existing literature and the qualitative focused interviews. The following discussion pertains to these two phases of the research.

3.5.1 Review of existing literature on green product purchase intention

A literature review helped identify the various factors found to affect consumers' green product purchase intention. Ekiz, Au, and Hsu (2012) noted that a literature review of a topic at the onset of a research endeavour is important because a well-grounded theory commences with an in-depth literature review. Literature on the general topic of the consumer decision-making process was initially reviewed; this was followed by a more focused review of literature on product purchase intention and green product purchase intention. Thus, the approach employed by the researcher was to begin the literature review from a broader topic and then to narrow it down to the specific topic of interest. Upon reviewing the existing body of literature, the researcher observed that it was not adequate in terms of explaining the factors that influence consumers' green product purchase intention in the context of FMCGs. In addition, the literature review revealed several discrepancies and inconsistencies in terms of the profile of the green consumer. These gaps in the literature were highlighted in Chapter 2.

3.5.2 Interviews

Following the literature review, qualitative focused interviews were employed to gather the qualitative data. This was carried to gain further consumer insight into what drives green product purchases. Qualitative investigations are crucial to gain an understanding of the topic at the early stages of the research (Sarantakos, 2005). Kvale (1996) highlighted the importance of interviews and stated 'If you want to know how people understand their world and their life, why not talk to them?'. In order to gain an understanding of the importance of the factors being employed in the framework, consumers were asked open-ended questions to ascertain whether the factors are important or require further modification.

Strauss and Corbin (1990) stated that interpretive research involves research that results in findings and answers that cannot be reached by quantitative techniques or statistical procedures. Qualitative investigations aim to discover and describe what people do in their day-to-day lives, and what their actions and activities mean to them (Benini, 2000). Some of the common methods of data collection for interpretive research are observation techniques, interviews, discourse analysis, ethnographic fieldwork, and textual analysis (Berger, Wolf, &

Ullman, 1989). For the purpose of this study, semi-structured qualitative focused interviews were conducted. Malhotra and Dash (2011) suggest employing such interviews if researchers want to probe the respondent and gain significant consumer insight or a detailed understanding of complicated consumer behaviour. One of the most compelling arguments in favour of using open-ended questionnaires during this phase of the study is to aid the researcher to identify themes and gain information about areas that might not have been foreseen by the researcher (Pfeifer, 2000).

3.5.2.1 Development of interview questions

On the basis of the gaps identified in the literature review and this study's research objectives, a set of semi-structured questions was developed to conduct the qualitative focused interviews which was the instrument used in the qualitative phase of the study. Appendix 1A shows the list of semi-structured questions that were employed at this stage. The initial questions were designed to develop an understanding of the general pattern of consumer behaviour pertaining to FMCGs, and consumers' understanding of the 'green' concept. Subsequent questions probed for factors that consumers take into consideration when purchasing eco-friendly FMCGs. Prior to the interviews, which were conducted in Sydney, a number of pilot interviews were conducted in Armidale.

Seventeen questions were developed for the qualitative focused interviews. These questions were divided into four distinct categories: A) questions related to green products, B) questions related to green purchase intentions, C) negative experiences, and D) concluding questions.

The first section comprised nine questions and addressed issues, such as what the consumer considered as eco-friendly consumer behaviour, and how they were affected by various factors pertaining to green products and their attributes.

The second segment comprised four questions that sought to gain insight into why consumers purchase green products, and what factors would contribute to their continued purchase of such products. One question also sought to gain information from consumers who do not actively buy or intend to buy green products and attempted to gain insight into the underlying reasons for such behaviour.

The third segment had two questions that asked about negative experience (if any) that consumers had with green products. Finally, the fourth segment focused on overall comments

about green products (pros and cons) and any additional information that the respondents felt they wanted to share.

In addition to responding to the semi-structured questions, those who participated in the interviews were asked to complete a self-administered questionnaire about their demographic profiles.

3.5.2.2 Information confidentiality and ethics approval

The University of New England (UNE) Human Research Ethics Committee (HREC) granted approval for the conduct of the project: approved on 18/11/2011 with approval number HE11-208 (see Appendix 1D). The ethics approval was granted on the basis of submission of background and aims of the research to be undertaken, and a preliminary draft of the questions to be asked during the qualitative focused interviews.

3.5.2.3 Pilot study

The pilot study was conducted, in Armidale, located in the north west region of NSW Australia, for the purpose of testing the semi-structured questions designed to collect data through in-depth interviews. The respondents comprised staff members from UNE, a PhD student, and two working members of the Armidale community. The respondents were chosen using the convenience sampling method, which is a non-probability sampling method. E-mails were sent out to UNE staff members and appointments were sought. In addition, personal sources were used to select members from the Armidale community (those who did not work at UNE).

The respondents were given an information sheet and a consent form which they needed to sign to confirm that they did not object to the interviews being digitally recorded (audio). These audio files were later transferred from the digital recording device and saved in the researcher's computer in MP3 format.

Seven people were interviewed for this pilot study. After the seventh interview, the researcher felt, using his own judgment, that he had sufficient input from respondents to fine-tune the questions for use in the qualitative phase of the study.

Two of the interviews were conducted in the researcher's office, two were conducted in the offices of the respondents, and the remaining three were conducted in the respective

residences of the respondents. At the end of the pilot study, it was noted that the average time to complete the interviews was approximately twenty five minutes.

During the pilot study, a number of issues became evident. After the first interview, it was noted that the acronym, FMCG, (which was used in questions 3 and 5) needed to be explained to the respondents, since this is predominantly a marketing jargon. The issue was resolved and the researcher explained this term to the respondents from the second interview onwards. The respondents also talked extensively about the issue of trust in the claims made by the manufacturers. The researcher felt that this was also an issue that needed to be addressed in the subsequent stages of the research as it has also been well cited in previous literature. The researcher also noted that there was some confusion when it came to the first question in Section B (questions related to purchase intention). The wording of the question seemed to be confusing and needed clarification from the researcher.

The issues encountered during the pilot interviews led to changes to the wording: the term “eco-friendly” was added in parenthesis as a synonym for the term “green product”; to address the confusion arising from the question in section B, a screening question was added – “Do you currently buy green products? If Yes, go to Q11. If No, go to Q12” – this made the progression of questions more logical and easier for respondents to understand; in terms of refining section C asking information about negative experiences with green products, the second question, “Is there anything else you would like to share regarding negative experiences with green products?”, was felt to be redundant and was deleted.

Overall, the number of questions was reduced by one, but the changes enhanced clarity, and ensuring a smooth progression of questions so that interviewees would not encounter problems when answering questions in the real in-depth interviewing phase of the study.

3.5.2.4 Main qualitative focused interviews

Twenty-seven people participated in the interview stage of the study. Shoppers at various retail outlets (malls) were interviewed for the purpose. The mall intercept method was used to select the respondents. People were interviewed till a convergence of opinions amongst the respondents began to appear. Strauss and Corbin (1990) have suggested that researchers should continue to undertake qualitative focused interviews till repetition and saturation is reached in terms of the responses being received from the respondents about the particular topic about which they are being questioned. The similar themes that arose from the

respondents' responses in the qualitative phase of the research became the factors to be measured using a quantitative survey method. It was noted that convergence in the responses began to occur at the 20 interviews mark. In order to be on the safe side, the researcher went on to conduct an additional seven interviews to ensure that no new information would be forthcoming. Travers (2000) considered a sample size of 27 as optimum and appropriate given time needed to collect, transcribe, and analyse data. Bauer and Gaskell (2000) argue that greater numbers of interviews do not necessarily translate into a better quality or more detailed understanding of a phenomenon. Sandelovskly (1995) argued that sample size of qualitative studies is primarily a matter of judgment and experience in evaluating the quality of information collected against the uses of that information.

The interviews were conducted employing a conversational style rather than an interrogative one, as recommended by Minichiolo et al. (1999). The main task of the interviewer was to encourage respondents to reveal insights and provide structure to the discussions to increase coherence and meaningfulness. Although a conversational style was employed, the semi-structured questions allowed the researcher to maintain focus on the topic and the appropriate pace and flow of the interview. Each of these interviews was recorded using a digital recorder. These recordings were later stored in MP3 format on a computer hard drive. In addition, the researcher diligently took field notes during each interview, which were referred to later during data analysis.

All the interviews at this stage were conducted in Sydney. The interviews were conducted between the months of April and July of 2012. During this period, the researcher made several trips to Sydney from Armidale. The mall intercept method was employed to collect data from the respondents. The respondents represented different strata of the population of Sydney. People were interviewed in the Sydney CBD, Parramatta and St Marys. Twelve of the respondents were males, and fifteen were females. People of various age, occupations, ethnic backgrounds, and socio-economic status were interviewed. This diversity provided the researcher with different perspectives and provided insight into the mindset of the consumers.

The respondents were comfortable with the questions and there were no issues faced with them not being able to understand the questions. The average duration of each interview was around 22 minutes.

3.5.2.5 Transcription and data analysis

Before attempting to analyse interview data, the researcher transcribed the interviews verbatim. Each interview was listened to several times to gain a greater sense of the whole interview. Once the transcription was completed, the researcher used MAXQDA version 10, a sophisticated text analysis software, to aid in the analysis of the data. The researcher also read the transcripts of the interviews several times to achieve greater familiarity with the content before commencing with the coding task.

The analysis performed at this stage was quite rigorous and was conducted by methods of inductive reasoning (Lincoln & Guba, 1986). Each of the transcribed interviews was imported from MS Word. Separate sections were created for the each question. Once this was done, each response was analysed, using inductive reasoning (Lincoln & Guba, 1986), for the presence of dominant and, at times, not so dominant themes. Responses to certain questions were homogenous across most of the respondents, others were quite unique. Each individual response was classified and coded. Similar themes were clustered together. After this, similar responses were aggregated to give a frequency to responses that could be classified as being the same. This allowed the researcher to have a clear understanding of the different references made and the number of references made to enable a presentation of responses in a tabular format. Details of these findings and the relevant tables are presented in Chapter 4, which discusses the findings of the qualitative focused interviews.

3.5.2.6 Ensuring trustworthiness of the qualitative findings

Maintaining rigour is a fundamental requirement in scientific research. The method of securing rigour can vary from one paradigm to another. A number of qualitative scholars have argued that well-known validity, reliability and generalizability concepts of the positivistic paradigm are not applicable in the context of interpretive research projects (Begley, 1996; Cresswell, 2003; Guba & Lincoln, 1981; Lincoln & Guba, 1985; Tobin & Begley, 2002; all cited in Tobin & Begley 2004). Hence, Lincoln & Guba (1985) suggest “trustworthiness” as a better indicator of rigour for qualitative research, and it is generally demonstrated through credibility, transferability, dependability and conformability criteria (cited in Tobin & Begley, 2004).

Credibility refers to the criteria that assess whether the researcher represents respondents’ view on the research phenomenon accurately (Schwandt, 2001, cited in Tobin & Begley, 2004). This translates to whether the description is credible (Tobin & Begley, 2004).

Credibility can be demonstrated through various options such as member checks, peer debriefing, prolonged engagement, persistent observation and audit trails (Lincon, 1995, cited in Tobin & Begley, 2004). On the other hand, transferability means whether the findings can be generalizable (Tobin & Begley, 2004). It refers to the ability to extend findings from one context to other contexts. The third criteria, “dependability” refers to whether the process used by the researcher is reliable; that is, whether the process followed is logical, traceable and clearly documented (Schwandt 2001, cited in Tobin & Begley, 2004). Dependability is generally established through an audit trail (Tobin & Begley, 2004) which documents all the decisions, steps and procedures undertaken by the researcher throughout the research project so that anyone can examine the trail. Finally, “conformability” refers to whether the findings have been derived from the data and not imagined or fabricated (Tobin & Begley, 2004), which is often shown by providing quotations extracted from the data. A triangulation technique is also widely used by scholars to illustrate the rigour of their qualitative projects.

The present study adopted a number of techniques such as triangulation and audit trail for ensuring the trustworthiness of the findings of the qualitative stage. “Triangulation is a validity procedure where researchers search for convergence among multiple and different sources of information to form themes or categories in a study” (Creswell & Miller, 2000: 126). According to Denzen (1978), cited in Cresswell & Miller, 2000 four types of triangulations are available for researchers to validate their findings: across data sources, theories, methods and among different investigators. The sequential mixed methods research design of the present study enabled the researcher to use “between methods triangulation” (Dootson 1995; Begley 1996b; Creswell 2002; Foss & Ellenfsen 2002); the findings of qualitative methods were validated by the findings of quantitative methods.

The researcher also maintained an audit trail, which documented all the activities and decision taken by the researcher during the research project. MAXQDA software provides an easy option to facilitate maintaining an audit trail within the program, thus all the steps taken and decisions made during the exploratory stage of the research were documented. Finally, all the themes that emerged from the data analysis were supported by the direct quotes from the transcripts of the qualitative focused interviews.

3.6 CONFIRMATORY STAGE

The confirmatory stage sought to empirically confirm the findings of the exploratory stage; in particular, the findings of the qualitative focused interviews. The following section discusses the methodology adopted by the researcher during this phase of the study.

3.6.1 Quantitative survey

After the results of the qualitative interviews were matched with the constructs that were integrated in the framework from literature review, a survey instrument was developed, tested and administered. The sequence of quantitative methodology used was based on the approach used by Valenzuela (2007), which involved administering a pre-test, followed by a pilot survey, and then undertaking the final survey for the project. The pre-test involved checking that the wording and framing of the questions were in order, and identified and eliminated potential problems that the respondents brought to the attention of the researcher. The pilot survey served the purpose of purifying the scales. And, finally, the main survey was administered to test the relationships between the various factors and consumers' green product purchase intentions. The following table shows the sequence of activities that were undertaken during this phase of the research.

Table 3.1: Surveys and their relationship to construct development and testing

Pre-test:	To check the clarity of the questions to be used in the survey
Pilot Survey:	To purify the scales used in the final survey
Final survey:	To undertake confirmatory factor analysis on the factors influencing consumers' green product purchase intentions To test the relationship between the marketing and subjective factors and consumers' green product purchase intentions

3.6.1.1 Questionnaire development

The questionnaire was designed using information gathered from the literature review and from the qualitative focused interviews. Previous scales developed in similar studies were also considered. For the survey, close-end questions were employed to investigate the relationships of the various factors and how they affect consumers' green product purchase intentions. This was similar to the methodology employed by Rahbar and Wahid (2010) and D'Souza et al. (2006). The format of the questions included multiple-choice questions, dichotomous questions, and Likert scale. These are some of the most commonly used formats

of structured questions, as described by Malhotra and Dash (2011). The scales employed in various research on this topic range from crude three-point scales with 'yes', 'no' or 'don't know' as the options (Burns & Bush, 2003; Tobin, 1959) to five-point Likert scales (Pickering & Greatorex, 1980). In the Likert scale, which was the format of the instrument used to measure the different scale items, a higher score indicated higher degree of agreement with the statement. A number of studies have reported that the Likert scale instrument has high reliability (ranging from 0.60 to 0.75) (Mossholder, Bennett, Kemery, & Wesolowski, 1998; Rahim & Buntzman, 1989).

3.6.1.2 Questions on behavioural characteristics

The first part of the questionnaire included questions relating to the general behavioural characteristics of the respondents (see Appendix 2A). A total of seven questions were included in this section. The questions were close-ended with a couple giving respondents the opportunity to justify their responses. Previous research shows limited or inconsistent results in terms of developing a general behavioural profile of consumers. The study aimed to overcome this limitation by collecting the following information from the respondents:

- Frequency of shopping for groceries
- Person(s) who do the shopping for the household
- Classification of respondents as a green consumer
- Eco-friendly activities that the respondents engage in
- Effort taken by customers to purchase eco-friendly FMCGs
- Frequency of purchasing eco-friendly FMCGs
- Portion of grocery shopping that are eco-friendly FMCGs

3.6.2 Operationalization of constructs

The second part of the questionnaire included questions that relate to factors influencing consumers' purchase intentions in the context of FMCGs. This section formed the most crucial component of the survey instrument. Thirty-two items were included in this section. The items were divided into six parts, each focusing on different factors that might influence consumers' green product purchase intentions in the context of FMCGs. The factors that were taken into consideration for this phase of the study were on the basis of findings of previous research and of the qualitative focused interviews:

- Green product perceived value
- Green advertising
- Eco-labels
- Availability of green products
- Green trust
- Green product purchase intention

The investigation of green product perceived value added a new dimension to the study. This factor had not been studied extensively in the past in the context of eco-friendly FMCGs. Most previous studies focused on price and quality as separate factors, and investigated their impact separately. However, the findings of the qualitative phase of the study revealed that customers do not look at these two factors in isolation. Thus, this study aimed to investigate the impact of this composite factor on customers' green product purchase intentions. Eight items (PV1 to PV8) were used to measure this factor. Table 3.2 shows the items and their corresponding source:

Table 3.2: Items relating to green product perceived value

	Item	Source
PV1	Green products offer good value for money	Literature review and Qualitative focused interviews
PV2	Green products' environmental performance meets my expectations	Literature review
PV3	I purchase green products because they have more environmental concern than regular	Literature review
PV4	I purchase green products because they are environmentally friendly	Literature review
PV5	I purchase environmentally friendly products because they have more benefits than other products	Literature review
PV6	The price charged by green products is reasonable	Literature review and Qualitative focused interviews
PV7	Green products offer good quality/benefits	Literature review and Qualitative focused interviews
PV8	I am willing to pay more for an eco-friendly product if it satisfies me and is beneficial to the environment	Literature review and Qualitative focused interviews

The second factor included in this section was green advertising. This factor was a major topic of discussion during the qualitative focused interviews. There was divided opinion about the influence of green advertising. Thus, this warranted further empirical investigation

to ascertain whether green advertising influences consumers' green product purchase intentions. Seven items (GA1 to GA7) were included in this section. Table 3.3 shows the items and their corresponding sources.

Table 3.3: Items relating to green advertising

	Item	Source
GA1	The contents of environmental advertising are of little relevance to daily life	Literature review
GA2	Environmental advertisements are poorly produced and thus are not attractive	Literature review
GA3	Environmental advertisements are always exaggerated	Literature review
GA 4	Arguments presented in the advertisements for eco-friendly products to substantiate the environmental claim are not convincing or vague	Literature review
GA 6	The manufacturer (advertiser) of the advertised product does not bear an eco-friendly image	Literature review
GA 7	I am willing to rely on information conveyed by environmental advertisements when making purchase related decisions	Qualitative focused interviews

The third factor investigated in this section was eco-labels. Previous research and the findings of the qualitative research showed inconsistencies with regard to the influence of eco-labels on consumers' purchase intentions in the context of eco-friendly FMCGs. The impact of eco-labels was shown to be dependent on their reliability, relevance, and the propensity of customers to notice them, read them and understand them. Thus, the limitations of the past studies justified that this construct be investigated further. Table 3.4 shows the six items (EL1 to EL6) and their respective sources.

Table 3.4: Items relating to eco-labels

	Item	Source
EL1	I always read labels	Literature review
EL2	The contents of eco-labels are easy to understand	Qualitative focused interviews
EL3	I can rely on eco-labels and the claims they make	Qualitative focused interviews
EL4	Eco-labels are always exaggerated	Qualitative focused interviews
EL 5	I find eco-labels from regulatory bodies to be more reliable than those of the manufacturers	Qualitative focused interviews
EL 6	I am willing to rely on information conveyed by eco-labels when making purchase related decisions	Qualitative focused interviews

Availability, also referred to as distribution in the Marketing discipline (Kotler, Burton, Deans, Brown, & Armstrong, 2013), plays a crucial role in the purchase intention of the consumers. The qualitative findings have indicated that a small segment of respondents were willing to go to extreme measures to obtain eco-friendly FMCGs. However, the majority of respondents were divided between not making any effort or taking some effort to purchase an eco-friendly FMCG in the event that it was not available in their chosen shop. This divided opinion made a strong case to investigate how availability influences consumers' green product purchase intentions. Items AV1 to Av3 were used to measure this. Table 3.5 shows the items and their corresponding sources.

Table 3.5: Items relating to availability of green products

	Item	Source
AV1	Eco-friendly products are readily available	Qualitative focused interviews
AV2	I will delay my purchase if the eco-friendly product I want is not available	Qualitative focused interviews
AV3	I will take the effort of going to another shop if I can't find the eco-friendly product I am looking for	Qualitative focused interviews

Green trust, the fifth factor in this section was, perhaps, the most contentious and decisive issue that appeared to play an important role in customers' decision to buy eco-friendly FMCGs or not. It was found in the qualitative focused interviews that other factors, such as green product perceived value, green advertising, and eco-labels, had a direct impact on customers' green product purchase intentions and were also mediated by the trust factor of

those variables. Chen & Chang (2012) investigated the role of green trust, but did not discuss how green trust mediated the impact of green advertising and eco-labels on influencing consumers' green product purchase intentions. The qualitative focused interviews further highlighted respondents' scepticism about claims made by marketers of eco-friendly FMCGs via their advertisements, eco-labels, and the claims they made via other avenues. Taking these factors into consideration, the researcher investigated this factor in greater detail. The items developed by Chen and Chang (2012) were used to measure the role of green trust in influencing consumers' green product purchase intentions and how it mediated the role of the factors mentioned earlier. Table 3.6 shows the four items (GT1 to GT4) that were used to measure green trust.

Table 3.6: Items relating to green trust

	Item	Source
GT1	I feel that green products' environmental reputation are generally reliable	Literature Review
GT2	I feel that green products' environmental performance are generally dependable	Literature Review
GT3	I feel that green products' environmental claims are generally trustworthy	Literature Review
GT4	Green products keep promises and commitments for environmental protection	Literature Review

The sixth and final variable included in this section was the dependent variable, green product purchase intention. The four items (PI1 to PI4) used to measure green product purchase intention were developed by using scales developed in other studies and the findings of the qualitative focused interviews. Table 3.7 lists the items used to measure this construct

Table 3.7: Items relating to green product purchase intentions

	Item	Source
PI1	I intend to purchase green product(s) because of its (their) environmental concern	Literature review and Qualitative focused interviews
PI2	I intend to purchase green product(s) in the future because of its (their) environmental performance	Literature review and Qualitative focused interviews
PI3	I would definitely intend to buy eco-friendly products	Literature review
PI4	I intend to recommend green products to family and friends	Qualitative focused interviews

3.6.2.1 Social and individual factors influencing consumers' eco-friendly product purchase intentions

The four items that sought information about the social and individual factors influencing consumers' eco-friendly product purchase intentions in the context of FMCGs comprised subjective norms and cultural factors found to influence consumers' purchase intentions of eco-friendly FMCGs. Three items relating to the cultural factors have been developed on the basis of findings of the qualitative focused interviews. Chapter 4, which discusses the findings of the qualitative focused interviews showed the disparate responses pertaining to social factors. Thus, the influence of these factors needed to be empirically tested using a quantitative survey. The fourth item was developed from the literature review. Table 3.8 lists the items.

Table 3.8: Items relating to personal and social factors influencing purchase of eco-friendly FMCGs

	Item	Source
SN1	People who influence my behaviour encourage me to buy eco-friendly products	Literature review and Qualitative focused interviews
SN2	My decision to purchase eco-friendly products is influenced by my friends	Literature review and Qualitative focused interviews
SN3	My decision to purchase eco-friendly products is influenced by my family members	Literature review and Qualitative focused interviews
SN4	My decision to purchase eco-friendly products is influenced by my colleagues	Literature review and Qualitative focused interviews
CB1	My upbringing and background have taught me the	Qualitative focused

	importance of eco-friendly products	interviews
CB2	In my culture looking after the environment is an important facet of life	Qualitative focused interviews
CB3	My religious views play an important role in influencing me to purchase eco-friendly products	Qualitative focused interviews

3.6.2.2 Questions on demographic characteristics

The final section of the survey questionnaire included questions pertaining to the demographic characteristics of the respondents. Previous research indicated inconsistent findings in terms of the impact of demographic characteristics on consumers' green product purchase intentions. The results were contradictory in terms of determining if females or males were more inclined towards purchasing eco-friendly products. The same scenario prevailed in other key demographic characteristics, such as income, education etc. Thus, it was imperative to obtain key demographic characteristics of consumers. The study used nine questions (D1 to D9) to collect the demographic data:

- Gender: Male or female
- Age: (1) 18-21 (2) 22-25 (3) 26-30 (4) 31-40 (5) 41-50 (6) 51-60 (7) 61 or over
- Highest level of education: (1) Primary school, (2) Secondary/High School, (3) Vocational education and training (TAFE), (4) Undergraduate, (5) Post graduate
- Gross annual income: (1) \$20,000 and under (2) @20,001-\$35,000 (3) \$35,001-\$50,000 (4) \$50,001-\$65,000 (5) \$ 65,001-\$80,000 (6) \$ 80,001 and over
- Ethnicity: (1) Anglo-Australian, (2) Asian, (3) English, (4) Middle Eastern, (5) New Zealander, (6) Others (respondents to specify)
- Occupation: (1) Self-employed, (2) Public servant, (3) Professional, (4) Manager, (5) Executive, (6) Technician/Tradesperson, (7) Student, (8) Academic, (9) Retiree, (10) Housewife. (11) Other (respondents to specify)
- Employment status: (1) Full-time, (2) Part-time, (3) Casual, (4) Self-employed, (5) Unemployed
- Marital status: (1) Single, (2) Married, (3) Divorced, (4) Other (respondents to specify)
- Number of children: (1) 0, (2) 1, (3) 2, (4) 3, (5) 4 or more

3.6.3 Information confidentiality and ethics approval

The UNE HREC granted approval for the project to be conducted by the researcher. The approval was granted on 08/08/2013 with number HE13-195 (see Appendix 2D). The ethics approval was granted on the basis of submission of background and aims of the research to be undertaken, and a preliminary draft of the survey questionnaire.

3.6.4 Pre-test of the questionnaire

The first step of the quantitative phase of the study was to conduct a pre-test of the questionnaire. This was done using a sample of 25 respondents comprising staff and students of UNE and other residents of Armidale. The participants were contacted by phone and email. The surveys were conducted at their workplace and homes.

The participants selected for this phase of the study were asked to evaluate the questionnaire for clarity, bias, ambiguous questions, and relevance to the research topic. In addition, the participants were asked to comment on the instrument with regard to wording and timing, keeping in mind the points stressed by many writers (Benini, 2000; Berger, et al., 1989; Puris, 1995; Selltiz, Wrightsman, & Cook, 1976) regarding these issues. The specific questions asked which related to the respondents' opinions of the questionnaire were:

1. Do you think the questionnaire is too lengthy?
2. Have you experienced any difficulty in providing answers to any questions included in the questionnaire?
3. Is the questionnaire time demanding?
4. Does the questionnaire consist of words that are not easy to understand?
5. Is there any difficulty in reading the questions exactly as worded?
6. Are the design and layout of the questionnaire pleasant?
7. Do any of the questions touch sensitive issues?
8. Is the flow of the questions logical?
9. Do you think any changes are required to the structure of the questionnaire?
10. Do any questions seem repeated?
11. Are the questions provided in the questionnaire understood easily?
12. Is the space provided for the open-ended questions sufficient?
13. Are any questions missing in the questionnaire according to your expectations on the topic?

The majority of respondents had no problems answering any of the questions. They reported that the questionnaire was not too lengthy or difficult to understand. Four respondents reported that it would be better if the index for the Likert scale items be included on every page. They felt that they were forgetting what “1” stood for and what “5” stood for, and needed to go back to the beginning of section B to refresh their memories. This seemed like a logical suggestion and the researcher took this input on board and incorporated this in the final questionnaire. There was also one typographical error in question AV2. The item was listed as “I will delay my purchase *is* the eco-friendly product I want is not available”. The word “*is*” was a typographical error and was replaced with the word “*if*”. Thus, the item was changed to, “I will delay my purchase *if* the eco-friendly product I want is not available”. These were the only two minor changes that needed to be incorporated into the final questionnaire.

3.6.5 Pilot survey

Once the questionnaire was refined on the basis of the findings of the pre-test, a pilot survey was undertaken. The objective of the pilot survey was to purify the scales for the final stage of the research. The pilot survey was conducted in Sydney. The researcher travelled to Sydney several times during 2013. Being one of the most modern cosmopolitan cities in the world and boasting a multicultural population, Sydney presented itself as the ideal setting for this study. The surveys were conducted outside three major shopping centres located in Sydney. There were in the areas of St Marys, Parramatta, and Sydney CBD. The mall intercept method was used and the researcher personally visited these places. Once the respondents expressed their willingness to participate in the survey, the researcher handed out the information sheet, consent form and the survey questionnaire. Once the respondents read the information sheet and signed the consent form, they proceeded to complete the questionnaire. The researcher stayed with the respondents while they filled out the questionnaires to answer any queries that arose during the process.

3.6.5.1 Sample selection

The sample was selected using a mall intercept method. This method was ideal in terms of gaining access to the sample that would be most representative of the population. The criteria taken into account in selecting the respondents (the sampling unit) was that the individual had to be over the age of 18 and needed to be a buyer of FMCGs. Since the criterion was fairly general, selecting the right people was not a cumbersome process. The researcher conducted

the surveys outside their premises of the supermarkets once the customers finished their shopping. All willing volunteer respondents formed the total sample. This method is commonly used in this type of research. The researcher used his UNE student ID card to identify himself to the shoppers and explained the purpose of the study. The whole concept of green marketing was something that people seemed very interested in and were enthusiastic about spending some time in filling out the survey.

Sample size selection has been a topic of much debate over the years. There is no single rule that dictates or determines what method to use in selecting the number of respondents for a particular study. The sample size of 203 was deemed appropriate since there were 40 scale items and exploratory factor analysis requires a minimum 5:1 ratio of respondents to items (Hair, Anderson, Tatham, & Black, 1998).

3.6.6 Data analysis procedures

Sekaran (2003) stated that data analysis is concerned with sensitizing social researchers to the use, interpretation and evaluation of relevant data, rather than with the formal understanding of statistics. To analyse the quantitative data, the researcher first explored the internal structure and measurement qualities of the proposed hypothetical constructs from green product perceived value, green advertising, eco-labels, availability, green trust, subjective norms, and green product purchase intention.

The multiple sources of data had been collected in anticipation that they would converge to support the particular hypotheses. Findings from the quantitative phase were tested against the research hypotheses, and final conclusions were drawn for the study. The following section discusses the various quantitative data analysis approaches used to answer the research questions and test the proposed hypotheses.

3.6.6.1 Data preparation

The first step in preparing the data for further analysis was to check the questionnaires for completeness. The questionnaires were screened to identify ineligible, incomplete and ambiguous responses. This step was followed by a coding process, which involved assigning a specific number to the different levels which appeared in each variable. The coding was carried out following the guidelines of Cohen, Cohen, West & Aiken (2003): each code entered was numeric, the same variable for each respondent occupied the same column in the SPSS data editor and the codes assigned for each variable were mutually exclusive, and this

was done consistently for all the variables. The data records were checked extensively to ensure that they were consistent and no items were missing.

3.6.6.2 Outliers and normality check

Outliers are cases with such extreme values on one variable or a combination of variables that they distort statistics (Barnett & Lewis, 1994). The underlying assumption of regression analysis is that each variable and all linear combinations of the variables are normally distributed. Normality is assessed by either statistical or graphical methods. In this study, histograms and boxplots were visually inspected to identify outliers and then the normality of the distribution of the scores of observed variables were investigated. Two measures of normality are skewness and kurtosis. For normally distributed data, the values of skewness and kurtosis should be close to zero. For graphical methods, normality can be determined by examining the residual plots. If the assumption is met, the residuals should be normally and independently distributed (Hair, Black, Babib, & Anderson, 2014). In this study, the assumption of normality was investigated for both the pilot study and the main survey by observing both residual plots and checking the skewness and kurtosis. The residual plots appeared to be normal, and the skewness and kurtosis values were close to zero. Thus, the assumption of normality was not violated (Affi & Clark, 1998). There were only two extreme outliers which did not represent the population; these were not taken into consideration for further data analysis.

3.6.6.3 Exploratory factor analysis

EFA was then performed on the data collected for the pilot study in order to purify the scales relative to the factors affecting consumers' green product purchase intentions in the context of FMCGs. EFA is known to be an effective and commonly used method for the purification of scales of a survey instrument (Hair, Money, Samouel, & Page, 2007). The analysis used principal component analysis as the extraction method. A Promax oblique rotation was used since it was appropriate under the assumption that the factors may be correlated. To determine which factors were to be retained for the next phase of the study, only eigenvalues greater than 1.0 were accepted (Kaiser, 1958; Walsh, 1990). The scale purification process was similar to the one used by Boshoff (1999) and the methods recommended by experts such as DeVellis (2003) and Hair et al. (2007). The following steps were followed:

- The loading values of the factors were first checked. The items with factor loading values below 0.4 in all the factors were considered not to belong to any factor and were eliminated.
- The items with factor loading values greater than 0.4 for any two or more of the factors were removed due to the issue of discriminant validity.
- Factors that ended up having fewer than two items were discarded since such factors could not be interpreted.
- After deleting the items that did not meet the criteria mentioned above, the Cronbach's alpha value was re-computed for the remaining items. Items which had poor corrected item-to-total correlations ($<.3$) and lower Cronbach's alpha value ($\alpha < .6$) were eliminated. The Cronbach's alpha value of 0.6 was considered as the cut-off point since it has been suggested by Cooksey (2007) that acceptable levels of reliability for researcher-designed scales are considered to be in the 0.6 to 0.8 range.

This process continued until no more items met the criteria which made them eligible for deletion (Tabachnick & Fidell, 2006, cited in Ekiz et al., 2012).

3.7 MAIN SURVEY

Once the scale was purified and tested for reliability and validity, the questionnaire was redesigned. This was carried out by eliminating all the items that did not meet one of the criteria discussed earlier. Scale items with low loading values, factors with fewer than two items, factors with low internal reliability, and scale items with no discriminant validity were eliminated from the survey instrument used at this stage of the study. The sampling method employed for this phase was the same as that employed for the pilot study. The main survey was also conducted in Sydney and in the same locations as the pilot study. The survey was administered to 315 respondents. Similar to the pilot study, all willing volunteer respondents formed the total sample size. The sample size was calculated on the basis of the ratio of ten respondents per item, which is the prescribed minimum sample size needed to conduct SEM (Hair, et al., 1998). The data analysis methodology employed in this stage of the study was dependent on the research objectives. The following sections explain the modes of data analysis that were performed in this phase of the research.

3.7.1 Outliers and normality check

As in the previous phase of the research (the pilot study), an initial check was carried out for missing data and normality of the data. Of the 315 surveys conducted, 310 were useable; five were not completed by the respondents and were deemed unusable by the researcher.

In this phase of the study, histograms and boxplots were visually inspected to identify outliers and then the normality of the distribution of the scores of observed variables were investigated. As with the previous phase of the study, the residual plots appeared to be normal, and the skewness and kurtosis values were close to zero. Thus, the assumption of normality was not violated.

3.7.2 Confirmatory factor analysis (CFA)

A CFA was performed to validate all the constructs under investigation. The analysis was aimed at determining if the number of factors and the loading patterns of the measured variables conformed to the outcomes of the pilot study. The approach to conducting CFA involved conducting SEM with the AMOS software package. Although SEM is used to test and model causal relationships between variables, it can also be used to explore CFA measurement models (Garson, 2006). The variables belonging to one common factor were allowed to free load to that factor, but were restricted to zero loadings on the other remaining factors (Byrne, 2009). The factor structure derived from the pilot survey is confirmed via this process.

The most widely used model fit indices are presented in table 3.9.

Table 3.9: Indices used to test the adequacy of the model fit

Index	Minimum acceptable level
Absolute Fit Indices	
Chi-square/ <i>df</i> ratio (Marsh, Balla, & McDonald, 1988)	< 3
Goodness-of-Fit Index (GFI) (Jöreskog & Sörbom (1984)	> 0.9
Adjusted Goodness-of-Fit Index (AGFI) (Jöreskog & Sörbom, 1984)	> 0.9
Standardized Root Mean Square Residual (SRMR) (Bentler, 1995)	< 0.1 < .05
Root Mean-Square Error of Approximation (RMSEA) (Steiger & Lind, 1980)	< .08
Hoelter <i>N</i> (Hoetler, 1983)	> 200
Incremental/comparative Fit Indices	
Comparative Fit Index (CFI) (Bentler, 1990)	> 0.95
Incremental Fit Index (IFI) (Bollen, 1989)	
Tucker-Lewis Index (TLI) (Tucker & Lewis, 1973)	
The Relative Fit Index (RFI) (Bollen, 1986)	
Predictive Fit Indices	
Akaike's Information Criterion (AIC) (Akaike, 1987)	The hypothesized model should report the smallest value
Consistent AIC (CAIC) (Bozdogan, 1987)	
Bayesian Information Criterion (BIC) (Schwarz, 1978)	
Expected Cross-Validation Index (ECVI) (Browne & Cudeck, 1992)	

Although there are many indices that are used to measure the overall model fit, researchers and scholars do not report all the indices in their work. They choose a selection of indices that they deem important and representative of the types of indices: absolute fit indices, incremental/comparative fit indices and predictive fit indices. This study has used the following indices to ascertain the overall model fit of CFA:

CFA:

Absolute Fit Indices

- Chi-square/*df* ratio
- Root Mean-Square Error of Approximation (RMSEA)
- Hoelter *N*

Incremental/comparative Fit Indices

- Comparative Fit Index (CFI)
- Incremental Fit Index (IFI)
- Tucker-Lewis Index (TLI)

Predictive Fit Indices

- Expected Cross-Validation Index (ECVI)

These are some of the most commonly reported goodness of fit statistics in academic SEM research. The reported values (if they meet the respective criteria) show a model that is representative of the data (Byrne, 2009).

3.7.3 Hypothesis testing and path analysis

Ten hypotheses were developed based on the qualitative findings of the study. These hypotheses were tested using path analysis. The AMOS software package was used for the purpose. The path model was developed based on the conceptual model. The hypotheses that were tested are explained in Chapter 5.

3.7.4 Model assessment

The path model was assessed using the approach used to assess the CFA model. The following indices were used to evaluate the overall model fit:

- Chi-square/*df* ratio
- Root Mean-Square Error of Approximation (RMSEA)
- Hoelter *N*
- Comparative Fit Index (CFI)
- Incremental Fit Index (IFI)
- Tucker-Lewis Index (TLI)
- Expected Cross-Validation Index (ECVI)

As suggested by Byrne (2009, p 77) the goodness of the parameter estimates were assessed by evaluating the feasibility of the estimates, appropriateness of the standard errors and the statistical significance of the parameter estimates.

3.7.5 Multivariate Analysis of Variance (MANOVA)

In order to address the research objective of developing a profile of the green consumer, one-way MANOVA was performed to determine if there were statistical differences in green product purchase intentions among genders, levels of education, ages, incomes, occupations, ethnic backgrounds, marital status, and eco-friendly behaviours. MANOVA is the multivariate extension of univariate techniques for assessing the differences between group means. As statistical inference procedures, both the univariate techniques (t test and ANOVA) and MANOVA are used to assess the statistical significance between groups (Hair, et al., 1998). Use of MANOVA had an advantage over a series of univariate ANOVAs in this study: it provided a more powerful test of significance for a large sample, reduced error rates relative to those occurring in a series of univariate ANOVAs (Diekhoff, 1992; Kwan, 1999; Stevens, 1996). Further, to determine which specific groups within a factor differed significantly, post hoc comparisons across groups were made. The findings of the MANOVA tests have been presented in Chapter 6.

3.8 METHODOLOGICAL LIMITATIONS

From a methodological perspective, the primary limitation in this study lay in the sample. The researcher made every effort to ensure that the sample was representative of the population. Non-probability sampling was not used since the UNE Ethics Committee does not permit the use of this sampling method. However, since the mall intercept method was used and the respondents were contacted when they were either entering or leaving the shopping centre, it was not possible to ensure that every individual who would be representative of the population was interviewed. Particularly those who were not fluent in English tended not to be too willing to participate in the study. Every effort was made to try and involve as many people from different backgrounds as possible to participate in the study, but it was found that people with higher levels of education tended to be more willing to participate in the surveys.

Future research may take this into account and conduct the study using a different approach to further enhance the representative quality of the sample.

3.9 SUMMARY

This chapter began by discussing the various research paradigms, namely the interpretive and positivist research paradigms, since the study, which utilised a mixed methods approach, involves both these paradigms. The interpretive paradigm focuses on the qualitative focused

interviews, and aims to understand the insight of consumers. The positivist paradigm is reliant on quantitative data which measures the various relationships, trends and other characteristics of the sample, and can be used to draw conclusions and generalisations.

A triangulation approach was used to help verify the validity of the data. At the onset, an extensive review of literature was conducted. This was followed by qualitative focused interviews. In order to validate the findings of the themes that arose from the interviews, a subsequent positivist approach in the form of a quantitative survey was undertaken.

The findings of the first stage of the research, the literature review, were discussed in Chapter 2. Qualitative focused interviews were conducted using information from the literature review. A pilot study in Armidale was carried out to ensure the quality of the questions being asked in the interviews was satisfactory. After making necessary changes to the questions, based on pilot study results, interviews were conducted in Sydney with consumers. Twenty-seven qualitative focused interviews were conducted in various locations in Sydney. The mall intercept method was used to gain access to the respondents. The respondents were approached and invited to participate in the interviews. Those willing were given an information sheet and asked to sign a consent form. The interviews were recorded to ensure accuracy of recall. Once all the interviews were conducted, the researcher transcribed the interviews and used the MAXQDA software package for content and thematic analysis.

The various themes that arose from the qualitative focused interviews formed the basis of the quantitative phase of the study. A questionnaire was developed on the basis of the findings of the qualitative phase of the study and past literature. Initially, the questionnaire was pre-tested using 25 respondents from within the Armidale community. This was carried out to enhance the quality of the questions; checking the questionnaire for clarity and ease of understanding. Once the necessary changes were made, the final questionnaire was developed. A pilot study was then conducted to purify the scales that measured the various factors affecting green product purchase intentions of the consumers. This pilot study was conducted in Sydney and a total of 203 surveys were completed. Exploratory factor analysis was used to purify the scales before conducting the final survey. Once the scales were purified, the final survey was conducted in Sydney. In the final survey, 310 customers were surveyed. SEM was performed on the data that had been collected. The number of respondents met the minimum number required to perform SEM. SEM was performed to confirm the factors influencing green product purchase intentions that were obtained from the

qualitative focused interviews and the pilot survey, and to determine if there is a relationship between these factors and consumers' green product purchase intentions.

The chapter finally discusses the methodological limitations of the study, being the fact that the sample may not be completely representative of the entire population. This was primarily because the researcher could only interview and survey people who were willing to participate. Quite often they only replied in the affirmative when they were informed what the topic of the research was. Thus, those who did not participate were not keen on the concept of eco-friendly products. Obtaining such views would have further added value to the study.

The following chapter (Chapter 4) discusses the findings of the qualitative phase of the research. The chapter describes the characteristics of the respondents, and then goes on to address the different questions asked during the interviews. The chapter then presents and discusses the themes that arose from the interviews. Quotations are used to support the various themes emerged from the interviews. The chapter provides a basis for further confirmation of the factors that potentially influence consumers' green product purchase intentions.

CHAPTER 4: QUALITATIVE RESEARCH FINDINGS

4.1 INTRODUCTION

The justification for the methodology used to conduct the qualitative focused interviews for this research has been discussed in Chapter 3. The importance of qualitative focused interviews in gaining consumer insights has also been highlighted in previous sections of the thesis. This chapter provides a summary of the key findings obtained from the qualitative focused interviews. The chapter begins by providing a synopsis of the characteristics of the respondents who participated in the interviews, then highlights the findings from an analysis of the responses from the interviewees in distinct sections. The first section shows the results from the research objective that seeks to understand what variables affect the purchase of FMCGs. The section that follows discusses consumers' perceptions of green products, particularly dealing with the research objectives related to what people think about green products, what they believe the pros and cons of green products are, and if people are willing to recommend green products to their family and friends are discussed. The third section presents findings related to eco-friendly behaviour identified by the consumers. Issues such as consumer actions that can be deemed as eco-friendly, their propensity to buy eco-friendly products, what companies should do to retain these customers and how they can attract newer customers are covered. The fourth section forms the critical component of the qualitative focused interviews and addresses key areas that have an impact on consumers' decision-making processes when it comes to purchasing green products. This includes the elements of the marketing mix and how they specifically relate to eco-friendly products. The fifth section discusses the impact of additional factors, such as culture, background and religion, on consumers' decisions to buy or not buy eco-friendly products. Finally, other potential issues and themes that have emerged from the qualitative focused interviews are discussed.

4.2 CHARACTERISTICS OF RESPONDENTS

A total of 27 interviews were conducted to uncover the factors that affect consumers' green product purchase intentions in the context of FMCGs. As mentioned earlier, these interviews were conducted in Sydney. Respondents were interviewed at either their work place or at their homes. The key criteria used in selecting respondents was to first ensure they were buyers of groceries and other regular items, either independently or together with their partners and/or other family members.

Of the 27 respondents interviewed, 13 were male and 14 were females indicating an even spread of both genders. The age of the respondents ranged from 24 to 71. Table 4.1 shows the demographic characteristics of the respondents.

Table 4.1: Demographic characteristic of respondents

	Characteristic	No. of respondents	%of sample
Gender	Male	12	44.44
	Female	15	55.56
Age	18 – 30	6	22.22
	31 - 40	8	29.63
	41 - 50	7	25.92
	51 - 60	4	14.81
	61 - 70	1	3.70
	> 70	1	3.70
Income per Annum	< 50,000	8	29.63
	50,000 – 100,000	14	51.85
	100,000 – 150,000	2	7.40
	> 150,000	0	0.00
	Did not respond	3	11.11
Educational Qualification	High School	7	25.92
	Undergraduate	9	33.33
	Postgraduate	7	25.92
	Other (TAFE, Diploma, etc.)	4	14.81
Marital Status	Single	6	22.22
	Married	19	70.37
	Divorced	2	7.40
	Widowed	0	0.00
	Other	0	0.00
Number of Children	0	7	25.92
	1	9	33.33
	2	8	29.63
	3	3	11.11
	> 3	0	0.00

The age group between 30 and 50 was the most predominant age group with over half of the respondents (55.6%) belonging to this age group. Just over half (51.9%) of the respondents had an annual income between A\$50,000 and A\$100,000 per annum. There was a more even spread in terms of educational qualification of the respondents having a high school, undergraduate, or postgraduate degree. Only four respondents, representing 14.8% of the total sample size, either had qualifications from TAFE or a diploma course. A majority of the

respondents (70.4%) were married. Approximately one-fifth (22.2%) of the respondents were single, and two were divorced. In terms of family size and the number of children, over 40.7% of the respondents had between 2 and 3 children, and around one-third (33.3%) had only one child. An interesting finding was that none of the respondents had more than three children in their family. Such a finding may reflect the long-term trend of having smaller families. Year Book Australia (2009-2010), reported that the average number of persons per household decreased from 4.5 in 1911 to 2.6 in 2006.

In addition to demographic characteristics of the respondents, pertinent information about their shopping behaviour was also recorded. Table 4.2 shows a summary of the shopping traits of the respondents.

Table 4.2: Shopping traits of the respondents

	Characteristic	No. of respondents	% of total respondents
Shopping done by	Self	13	48.15
	Partner	0	0
	Jointly (self and partner)	15	55.55
	Children	0	
	Other	2	7.40
Shopping done from	Coles	23	85.19
	Woolworths	17	62.97
	Franklins	1	3.70
	Aldi	9	33.33
	IGA	5	18.52
	Corner Store	1	3.70
	Other	2	7.40
Shopping Frequency	Daily	6	22.22
	Weekly	18	66.66
	Fortnightly	3	11.11
	Monthly	0	0
	Other	0	0

The data pertaining to shopping behaviour of the respondents show that respondents either shop themselves (48.2%) or shop in conjunction with their respective partners (55.6%) with the split being almost half and half. Coles (85.2%) and Woolworths (63.0%) are the preferred retail outlets from where the majority of the respondents tend to carry out their shopping activities. It was noted at the interviews that respondents who were primarily driven by price tended to shop more at Aldi (33.3%). For this particular data, the total number of responses exceeds the number of respondents because the majority of the respondents chose to shop

from more than one outlet. When it came to the frequency at which the respondents did their groceries, weekly shopping was the most preferred option (66.7%).

4.3 RESULTS OF QUALITATIVE FOCUSED INTERVIEWS

The following sections discuss the results of the interviews conducted. The results have been organised according to the following sequence:

- a. Factors affecting consumers' purchase of FMCGs
- b. Consumers' perceptions of green products
- c. Consumers' eco-friendly behaviour
- d. Issues related to the marketing mix of green products
- e. Role of culture and background
- f. Other potential issues and factors

In order to understand the factors affecting consumers' green product purchase intentions, it was imperative at the outset to have an understanding of what generally affects consumers' purchase decision of FMCGs. Subsequently, it was necessary to decipher what kind of (if any) eco-friendly behaviour that the respondents engaged in in their daily lives. Their understanding and association with the terms "green product" or "eco-friendly product" also needed to be ascertained before further probing.

4.3.1 Features consumers look for when purchasing fast moving consumer goods

At the outset, the researcher tried to gain insight into the consumers' psyche by asking them what factors played a role in their purchase decision in the context of FMCGs. Table 4.3 shows the findings from responses and the number of times each of these factors were referred to by the consumers.

Table 4.3: Factors affecting consumers' purchase decisions

Number	Theme	No. of respondents	% of total respondents
1	Price	22	81.48
2	Quality	15	55.55
3	Convenience	2	7.40
4	Brand name	9	33.33
5	Freshness	1	3.70
6	Corporate image	1	3.70
7	Natural ingredients	1	3.70
8	Environmental concern	4	14.81
9	Australian made	3	11.11
10	Health concern	2	7.40

The number of references to the various factors show that the majority of consumers' purchase decision is dominated by the two well-documented most important factors, that is, price and quality (Suri, Kohli, & Monroe, 2007; Teas & Agrawal, 2000). This result is not surprising, and these are the two most important considerations in most purchase decisions particularly when considering "low involvement" products and services.

Price: The fact that a majority of the respondents (81.5%) considered price to be the dominant factor determining their purchase decision came as no surprise. Respondent #25 summarises this psyche quite well by stating that when he and his family go for shopping to the supermarket, price is the first and most important factor that they take into consideration. Some of the respondents, such as Respondent #24, who indicated a high degree of price sensitivity, stated that she always looks for bargains and discounts when shopping for groceries. It has been well documented in the literature that price is the most important factor taken into consideration in most shopping situations by customers. However, some respondents used the term *value* rather than just price to identify the most important factor influencing their purchase decision. When probed about this, the respondents noted that value was a balance between the price of the product and what they received for that price. The consumers who nominated value as the dominant factor influencing their purchase decisions did not consider price in absolute terms, rather they considered price in conjunction with other factors, such as the quantity and the quality of the product. Following are quotes from the respondents that highlight the importance of price and value in their purchase decision-making process.

- *'Number one thing for us is price' (Respondent # 13)*
- *'Price is important. That is why I shop at Aldi's. I know it's cheaper so I don't have to think about it. If it's on sale at Coles, I don't worry about that because I know that generally across the board Aldi's has a good price so I don't hop from store to store because that is a waste of my time' (Respondent # 18)*
- *'I always buy for price. Very price conscious' (Respondent # 9)*
- *'Price first. Most important, focus on price' (Respondent # 3)*
'Quality and price balanced' (Respondent # 23)

Quality: This was the second most popular determinant attribute, with over half (55.5%) of the respondents stating that quality was a decisive factor in their purchase decision-making process. Again, this response was one that the researcher expected since it has been widely

reported and it is common knowledge that product quality is an important factor taken into consideration by most shoppers (Chang, 2013; Suri, et al., 2007; Teas & Agrawal, 2000). The importance of the two traditionally dominant determinant attributes was highlighted by the response from one of the consumers (Respondent # 16) who stated that the first thing she looked at was quality, followed by price. This sentiment was also shared by Respondent #14, who stated quality was the most important factor that he took into consideration when shopping for FMCGs. When the notion of quality was investigated further, respondents defined quality along many different dimensions. For those who referred to food items, quality meant taste, digestibility, freshness etc. In terms of other consumer items, some respondents referred to durability as an important dimension used to define quality. One of the respondents (Respondent #11), looked for certification from and validation from respective authorities as a sign of perceived quality. The respondents were divided in their definition of quality but converged on their responses in deeming that quality, no matter how it was measured, was an important attribute that they take into consideration when shopping for FMCGs. The following quotes from the respondents clearly attest to the importance of product quality in purchase decisions.

- *'Quality, food quality, product quality' (Respondent # 12)*
- *'It actually depends. Like if it is a food item, then obviously taste and quality is a big issue' (Respondent # 8)*
- *'If it's a food, of course taste. If it's a durable product, durability' (Respondent # 17)*

Brand: One-third (33.3%) of respondents reported that, when it came to purchasing FMCGs, brand name was an important factor that they took into consideration. Since brand name does play a role in perceived quality and also results in familiarity after repeated use, some respondents stated that they usually stick to tried and tested brands. In terms of food items, such as cereals, the importance of brands was found to be quite strong. One of the respondents (Respondent #27) reported that she avoids certain brands of cereals because she doesn't like their taste and only prefers certain brands. Since well-known brands are usually more expensive, the price sensitive customers sometimes only purchase such brands when they are offered at discount prices; this was supported by Respondent #24, who stated that she goes for the better brands when there are discounts offered on those brands. An interesting finding from the responses to this question was that some consumers found that some of their preferred brands of FMCGs were now no longer available since they were

replaced by store brands. Respondent #9 reported that she no longer found some of the brands that she used to purchase in the past as they were replaced by the store's own labels.

Following are some of the quotes from the interviews which highlight the importance of brands in the consumers' purchase decision-making process.

- *'We do look for certain brands, just because we have got an affinity to those brands that has evolved over a period of time' (Respondent # 5)*
- *'I go for trusted brands that I have used before. They don't necessarily have to be high-fi designer brands or anything but something that I have used. I will go for brands that I can identify with' (Respondent # 22)*
- *'Let's say for nutrition and cereals, sometimes I go for brands. There are certain brands where you just don't like the taste. I do go for brands for cereals and bread. Brand and price are the two most important factors. Price is the most important though and then brands' (Respondent # 27)*

Environmental Concern: Environmental concern was reported as being a factor taken into consideration by around 15% of the respondents. These respondents were of the view that they had a responsibility to choose products that had minimal detrimental impact on the environment. However, a couple of the respondents (Respondents #23 and #13) in this group also shared the view that, whilst acknowledging that they preferred and made an effort to buy eco-friendly products, they would do so only if these products were not significantly more expensive than regular products. Respondent #4 was perhaps the unique individual who held very strong views about green products. He claimed to believe in the "green revolution" and would always buy eco-friendly products under any circumstances. The following quote from one of the respondents clearly indicates a mode of thinking where the respondent shows an affinity towards green products, but also take price into consideration when making those purchase decisions.

'For preference I would choose green, but only if there is a balance with the cost and the price. I wouldn't be paying five times as much for a green product because I can't afford that. In a perfect world, of course we would all buy green but obviously... organic vegetables for example, I can't always afford them because they are always so excruciatingly expensive that you just have no option but to push them aside. So for me it's like with all the push about the greening and the sustainability, I'm obviously looking for that and I head to those. But a

major factor for me is price as well as quality. Because I just can't afford an indefinite price increase' (Respondent # 23)

Australian Made: The other factor reported as being a key criteria in their decision-making was 'Australian Made'. Approximately 11% of respondents preferred Australian made products when shopping for FMCGs. When asked about the reasons why they preferred Australian made products, it was evident that they perceived Australian made products to be of higher quality than imported products and/or they wanted to support local industries. However, one interesting response was from Respondent #3 who was not willing to pay more for a product just because it was made in Australia, but those who had a strong association for Australian made products would more often than not tend to buy Australian made rather than imports, as illustrated by the following quotes.

- *'I buy Australian made. However, sometimes the imports are such that you can't beat them with the price. Milk for instance, I will always buy Australian. It's because I think of the farmers and the issues they are having' (Respondent # 9)*
- *'So for foods it would be safety, whether or not the product was made and grown in Australia because I have a tendency to buy Australian made stuff' (Respondent # 12)*

Other Factors: The results of the qualitative focused interviews also showed that few respondents considered health concerns, freshness, natural ingredients, and corporate image as factors to take into account when purchasing FMCGs. Those who focused on health concerns were respondents who belonged to the age group 61 and above. Thus, it was not surprising that eating healthy would be an important part of their lifestyle. A couple of respondents also considered natural ingredients and freshness of the products that they purchased. One respondent who reported corporate image as an important factor affecting her purchase decision was very knowledgeable about the roles played by the large corporations and viewed Corporate Social Responsibility (CSR) as being very important. She stated that she does avoid products from certain companies who she doesn't view to be socially responsible businesses and deems their actions have detrimental effects on society at large. Surprisingly, this respondent was not one of the high earners and did not even have a university degree. However, she was not only aware of, but also passionate about social issues, and her purchase decisions were significantly influenced by the reputations of the companies manufacturing various products. Following is a quote from her interview.

- *'I will not support a company that has a history of corporate social irresponsibility. I avoid Nestle. I avoid Mitsubishi, not only because of the products that they sell, but because of the other arrangements that they have in the world. The other things that they do to the other citizens in the world. That is really important to me. Mr Mitsubishi started off as one of the most corporately responsible individuals. His charter was to look after his people, look after his workers, and never get involved in anything that is going to cause wars. He died, other people took over, and they are heavily involved in the nuclear industry, and they are one of the biggest loggers in the world. I will never buy a Mitsubishi pen or a car because of it. So I think the money speaks volumes. If I don't support them and the word gets around that they are not going to be supported because of their corporate practices, then that will make them rethink how they operate as businesses' (Respondent # 20)*

4.3.2 Consumer perception of green products

Once it was ascertained which factors played key roles in consumers' FMCGs purchase decisions, the researcher went on to probe the cornerstone of this research topic, consumers' perceptions of eco-friendly products. Consumers were simply asked what they understood or what they related to when they heard the terms green product or eco-friendly product. The different responses and their corresponding frequencies are presented in Table 4.4.

Table 4.4: Consumer perception of green products

Number	Theme	No. of respondents	% of total respondents
1	Better technology	1	3.70
2	Energy saving	1	3.70
3	Renewable/Sustainable	2	7.40
4	Natural	2	7.40
5	Cost saving/Cheap	1	3.70
6	Expensive	2	7.40
7	Ecofriendly/Recyclable	15	55.55
8	Not decided/Don't know	5	18.52
9	Sceptical	3	11.11

Eco-friendly/Recyclable: The responses from the customers revealed that most (55.6%) associated the term, green product with ecofriendly and recyclable products. For these respondents, green products meant something that has less impact on the environment that we live in in terms of its manufacturing process and, ultimately, its disposal. Thus, buying ecofriendly products is buying something that is produced with least harm to the environment, and, after consuming, any unused portion could be disposed of with minimal

impact on the environment. The key finding is that most respondents who related green products with recyclable products focused on the disposability of products. For example:

- *'Recyclable, stuff that isn't made out of fossil fuels, crude oils, and things like that. Things that generally are free of insecticides. Renewable type stuff, recyclable plastics and things like that' (Respondent # 13)*
- *'Biodegradable, recycled, made from recycled materials, easily recyclable, not using anything that is high in carbon emissions, not made from fossil fuels and things like that' (Respondent # 5)*
- *'The colour green and how biodegradable it is and how organic it is. It doesn't necessarily mean fresh to me, it doesn't necessarily mean something which is more healthy. It's just something at disposal whether it is easily disposed of and whether it impacts the environment' (Respondent # 19)*
- *'Biodegradable, recycled, made from recycled materials, easily recyclable, not using anything that is high in carbon emissions, not made from fossil fuels and things like that' (Respondent # 5)*
- *'Something which is produced in a way which is better for the environment, or will be recyclable, or which will be better for the environment overall' (Respondent # 8)*

Undecided: Although a majority (55.6%) of respondents viewed green products as being ecofriendly and recyclable, a significant portion did not have a clear idea of what green products were (18.5%). It was quite interesting to find that the next most popular response to this question was by five customers who were undecided, had never given the term, green product, much thought and had no clear understanding of it. Responses from the other customers also reflected limited understanding of this term and no clear association with other factors.

Sceptical: Another interesting finding to this question is that 11.1% respondents who related green products to recyclable and ecofriendly products were sceptical about the usage of the term by the manufacturers. They believed that just because companies classified their products as green products and claimed that they were better for the environment, this was not always the case. The claims being made by manufacturers were something of an issue with these customers who sought further accreditation of these claims from respective government bodies. The issue of trust has also appeared in the literature (Chen & Chang, 2012). The following responses reflect the scepticism.

- *'I don't really trust what is on the labels. I make my own decision on what's on the label. I don't trust the claims from manufacturers, let's put it that way' (Respondent #12)*
- *'Sometimes packaging can be very deceptive. I always read what it says, but I get very confused when it says made in Australia but purchased from overseas. I find that very confusing. Personally I try to go for environmentally friendly but I think you got to know a lot of the background. The average shopper doesn't know the background of the company. So yes I will tend to go for an environmentally friendly label but that doesn't necessarily mean I believe whatever they say. There is an issue of trust, yes. Having it on the label doesn't mean it is environmentally friendly. However, I shop for the labels that say that. To be able to label something, I'd like to believe that by law they have to meet a certain standard. That's why I would buy it for that. I don't know if it always truthful' (Respondent # 9)*
- *'Just because a product says it's green, doesn't mean it's green. I will look for accreditations' (Respondent # 20)*

The key finding from consumers who exhibited scepticism was that they sought some form of formal accreditation of the ecofriendly claims being made by the companies. Since the average consumer has little or no knowledge about such complex terms, they feel that consumers were being misled into making purchases of products that were claiming to be green, but may not be so.

Sustainability and natural: These were factors that 14.8% (combined) of the respondents associated green product with. In addition, some customers also viewed green products to be representative of energy saving products, and products manufactured using innovative and superior technology. An interesting comment was made by one of the customers who stated that green products reflected an advancement of a new generation, and the employment of new technology (Respondent # 4).

Expensive: A final key finding from this question came from 7.4% of the customers who perceived green products to be good for the environment, but perceived them to be more expensive than regular products.

- *'It will be a bit more expensive than the regular product' (Respondent # 8)*
- *'Something which is good for the people, which is good for the society, and when you talk about a product which is green we definitely pay more for it' (Respondent # 17)*

4.3.3 The pros and cons of eco-friendly fast moving consumer goods

When asked to comment on what they felt were the pros and the cons of eco-friendly FMCGs, respondents were unanimous in their views that the eco-friendly attribute is the major positive benefits as long as the claims were true. However, 59.3% of the respondents noted that a major negative was that the price of such products was much higher than regular products. Five respondents stated that green products were not readily available and they could not buy them even if they wanted to and, as can be seen from a previous discussion, people are not willing to travel the extra distance for the sake of an eco-friendly product. The other negatives mentioned were: lack of accreditation, less attractiveness than regular products; and inferior quality. Some respondents were just unsure of their characteristics.

4.3.4 Willingness to recommend green products

Since previous research shows that word-of-mouth plays an integral part in convincing people to use eco-friendly FMCGs, the researcher felt that it was necessary to find whether those who used such products would refer them to their friends and family. The results obtained indicated that a majority would, and a couple would only do so if he or she had adequate experience of using the product himself or herself. A couple of respondents would not actively engaged in word-of-mouth communication about such products and would only mention them if they came up during conversation. Table 4.5 shows the distribution of the responses to this question.

Table 4.5: Willingness to recommend green products

Number	Theme	No. of respondents	% of total respondents
1	Yes	23	85.20
2	Not actively, but just as a side note	2	7.40
3	Not until used it himself/herself	2	7.40

4.3.5 Negative experiences with green products

Ten of the respondents (37.0%) reported negative experiences with green products. The most surprising revelation was that eight had had negative experiences with some form of eco-friendly household cleaning products or laundry detergent. The other two reported negative experiences with toilet paper and printing paper made from recycled paper. They felt that the paper did not feel as smooth as regular paper, and was a bit rough in terms of texture. But the majority who had negative experiences either said the cleaning products were not effective in terms of cleaning or they needed more of the cleaning product to do the job. Thus, there was not only an issue of effectiveness but also of efficiency. If they had to use more volume, then

it meant they had to buy more of the product. One respondent (#12) said that if he had to use more of the cleaning product, it meant he had to buy more (plastic) bottles of it, which totally negated the eco-friendly attribute it was trying to promote in the first place. Following are some of the responses to this question:

- *'There are cleaning products that don't perform as well as the chemical ones unfortunately' (Respondent # 9)*
- *'Dishwashing liquid, I didn't buy it personally but my wife bought it. This liquid that was labelled environmentally friendly in some way or green in some way. It just was weak. It failed to wash dishes properly. You had to put twice or three times more as another liquid. To me that was a pointless exercise. What was the point of buying something that is using tiny quantities to wash a few dishes and you end up using more, you end up buying more plastic bottles, so the damage from the packaging would surely outweigh any benefit from the liquid inside it' (Respondent # 12)*
- *'I bought green cleaning items about ten or fifteen years ago, and what a crock! Didn't work. Give me the chemicals' (Respondent # 18)*
- *'Yes. Like this spray on surface cleaner. I bought it because it didn't have chlorine and a bunch of stuff that was bad for dolphins and stuff. I like dolphins, they are cool. Brought it home, tried it out, it cleaned ok but stacked up against the major sort of brands, it only did about half the job they did and took about three times as much elbow grease. So it's still in the back of the cupboard somewhere' (Respondent # 13)*
- *'The washing liquid. That was before the summit that Kevin Rudd took us to Copenhagen. There was a big push for green and ecofriendly products, and climate change. By trying out those products I find they did not deliver what they promised' (Respondent # 25)*

4.3.6 Consumers' eco-friendly behaviour

In order to find how the respondents' associated with ecofriendly behaviour, the researcher asked what in their view is considered as being eco-friendly behaviour. The results showed conversion on certain forms of behaviour and variation of the existing behaviour patterns when it came to what they did that could be classified as an ecofriendly behaviour. The results of the interview revealed that out of 27 respondents, 51.9% engaged in recycling, noting that as the most common form of ecofriendly behaviour they undertook. Upon further probing, it was evident that this behaviour was exhibited because councils provided

households with two forms of bins: one for regular waste, and the other for disposing of recyclable materials, such as cardboards, tins and plastics. One of the respondents ensured that the children in the house were already being groomed on recycling and being taught to separate the recyclables from the non-recyclables in bins marked within the house (Respondent # 25).

Recycling behaviour was perhaps best summarised by a respondent who stated that she always tried to put the correct category of waste in the appropriate bin, and this was to make it easier for the trash collector (Respondent # 16). Similar sort of behaviour was noted by a majority of respondents who claimed to be conscious and actively involved in recycling.

Table 4.6 shows the different themes that arose from the responses to this specific question. The number of responses exceeds the total sample size since respondents gave a number of responses to the same question and the themes that emerged from these responses were counted individually.

Table 4.6: What consumers view as eco-friendly behaviour

Number	Theme	No. of respondents	% total respondents
1	Limit consumption	1	3.70
2	Buying organic	3	11.11
3	Buying energy efficient	2	7.40
4	Buying ecofriendly products	10	37.03
5	Buying Australian made	2	7.40
6	Focus on price	4	14.81
7	Buying local	1	3.70
8	Avoiding plastic bags	8	29.63
9	Focus on ecofriendly packaging	7	25.93
10	Focus on sustainable practices	2	3.70
11	Engage in recycling	14	51.85

From the data gathered, 11 micro themes were identified in relation to consumer perception of what they classify as eco-friendly behaviour. Engaging in recycling activities was the most common response (51.9%). Over half of the respondents engaged in recycling activities and viewed this as a dominant eco-friendly activity. This was closely followed by the response of customers stating that they purchase eco-friendly products (37.0%). Almost an equal number

of respondents stated that they avoid plastic bags and also focus on eco-friendly packaging when buying FMCGs.

The most common eco-friendly activity reported by respondents was largely attributable to the fact that councils require consumers to separate recyclable waste into especially allocated bins. Some households also had separate bins inside the house and encouraged family members to diligently follow this practice at home, as evident from the following quotes:

- *'I usually try to put the right trash in the right bin. Like I put the cardboard and paper in the recycling bin and I put the kitchen waste in another bin. So I try to separate the bins so that it will be helpful for the waste collector' (Respondent # 16)*
- *'We are big on recycling. So we look for anything than can be recycled' (Respondent # 21)*
- *'I try to be conscious of putting things in the right bins to recycle. I guess generally not to leave too many footprints' (Respondent # 7)*
- *'We use our recycling bin and we told that to our kids that there are two bins in the house. One is for recycling, the yellow one. So the kids know that is for recycling. Most of the times they will be crushing and putting things in the recycling bin which is the way to go' (Respondent # 25)*

Buying eco-friendly products was also a popular practice amongst respondents. 37.0% of the respondents reported being actively engaged in purchasing ecofriendly products. This phenomenon was particularly prevalent among customers who were not price sensitive and were willing to pay a premium price for an ecofriendly product.

- *'I try to buy toilet paper that is made of recycled paper. I'm not driven by price. I'm driven more by the environmental acceptability of the products that I'm buying. I'm a bit extreme in that case I suppose' (Respondent # 12)*
- *'I would say that my main aim is to buy goods that are environmentally friendly, but I also like to dispose of goods in proper ways like in recycling or composting' (Respondent # 1)*
- *'I suppose using green cleaning products. I pick the "Earth" brand' (Respondent # 3)*

Avoiding plastic bags was also common eco-friendly behaviour. 29.6% customers reported avoiding the use of plastic bags at supermarkets. These customers chose to bring their own

bags, which they used repeatedly. In general these respondents were averse to the use of plastic bags and often did their best to avoid the use of plastic bags whenever they could.

- *'Sometimes I avoid plastic bags. And if I've got a lot of plastic bags, I go to the supermarket and dump in the recycling box for plastic bags' (Respondent # 24)*
- *'I bring my green bag along all the time. But sometimes after work I do forget. But if I forget, I use the bags from them and at the end of the week I put them all in recycling bin just at the shop outside the supermarket. I always use the recycled bags because you can use them again and don't waste a lot of money on that' (Respondent # 27)*
- *'I guess some of it would be the use of plastic bags. We actually use plastic bags but we generally use them for rubbish so they don't just end up in the garbage' (Respondent # 13)*

A significant number of respondents (25.9%) also reported that paying attention to packaging was a key criterion in their purchase-decision process. By focusing on minimal packaging and packaging made up of recyclable materials, consumers deemed that this was eco-friendly behaviour on their part. It was evident from the interviews that some of the consumers felt that a lot of the packaging was in excess and not necessary. A quarter (25.9%) of the respondents reported that they focus on eco-friendly packaging when making their purchase decisions. The overall consensus of customers who focused on purchasing goods with minimal packaging or packaging made of recyclable products was that there were too many unnecessary levels of packaging which served no practical purpose and was detrimental to the environment.

- *'Focus on packaging. Way too much of it unfortunately' (Respondent # 21)*
- *'We try and make our own fruit juices. That gets rid of getting containers, plastic containers and things like that' (Respondent # 25)*
- *'I object to over packaging on things particularly directed at children. So for a very long time, I denied my daughter the pleasures of lollypops that are covered in plastics and cases because that really irritates me. I try and use the green bags to cut down on plastics again' (Respondent # 11)*

Other respondents were divided in terms of their engagement with eco-friendliness: buying local (3.7%), buying products which focused on sustainable practices (3.7%), buying organic (11.1%), limiting energy consumption (7.4%), and limiting consumption in general (3.7%).

4.3.7 Consumers currently purchasing green products

The objective of the question asking respondents about current purchase of green products was to verify how many customers of those interviewed actually bought eco-friendly FMCGs. It was found that most (74.1%) had purchased some form of eco-friendly FMCG. Five customers had not, and two were not sure if they had. Table 4.7 shows the number of respondents who fall into each category.

Table 4.7: Consumers currently buying green products

Number	Theme	No. of respondents	% of total respondents
1	Yes	20	74.07
2	No	5	18.51
3	Not sure	2	7.40

Yes: Around two-third (74.1%) of respondents had bought eco-friendly FMCGs. Of the 20, three stated that they did buy such products but did not do so due to their eco-friendly attribute but because of other attributes such as quality, or realised that the products were eco-friendly after using them. However, the remaining 17 respondents did consciously buy eco-friendly FMCGs. Their responses were quite straightforward and most just said “yes” when asked if they had purchased eco-friendly FMCGs. Following are some of their responses:

- *‘Yeah, definitely. I said toilet paper, some of the muesli and cereals that we buy, paper. I buy recycled paper, office products, things like that’ (Respondent # 5)*
- *‘Some, yes’ (Respondent # 7)*
- *‘I’ve just bought this environmentally friendly paint’ (Respondent # 9)*
- *‘Yes. I consume green products when I can. I make an effort to purchase them’ (Respondent # 12)*
- *‘Yes, we buy the energy saving bulbs, toilet paper which is made of recycled material’ (Respondent # 16)*

No: 18.5% of the respondents reported that they do not or had not purchased eco-friendly FMCGs. Of these respondents, one respondent (#17) said his focus was predominantly on price and he rarely focused on anything else. Respondent #10 stated that she would like to

buy eco-friendly FMCGs, but was not sure which ones were indeed the eco-friendly ones. She stated that she had trouble identifying them and would want to see much clearer labelling on the products. The remaining three customers plainly stated that they did not purchase green products.

Not sure: 7.40% of the customers reported that they were not sure if they had purchased eco-friendly FMCGs. Their answers revealed that there was a lack of concern on their part and not a great deal of active involvement in green issues.

4.3.8 How to retain current customers

The customers who reported buying eco-friendly FMCGs were then asked about what attributes in the product or what factors would encourage them to continue purchasing such products. The responses were categorised into five common factors that customers sought. These were: claims to be substantiated; better product quality; more promotion; greater availability; and a reduction in price. Following is a detailed discussion on each of these factors.

Table 4.8: Added features that might influence consumers to continue purchasing green products

Number	Theme	No. of respondents	% of total respondents
1	Claims to be substantiated	3	15.00
2	Enhance product quality	7	35.00
3	Increase promotions/advertisement	4	20.00
4	Increase availability	8	40.00
5	Reduce price	16	80.00

Claims to be substantiated: It was quite surprising, given the answer to earlier questions where the issue of trust was brought to the researcher’s attention, that only 15.0% of the respondents reported substantiated claims to be an important factor for influencing continued purchase of green products. These responses were along the lines of customers wanting to see the claims made by the manufacturers to be substantiated and validated in some way.

Customers wanted to be absolutely sure that if a company was claiming that its product was eco-friendly, then in reality had to be so. Respondent #19 wanted some sort of accreditation body to be set in place which would put a sign or symbol on the product to identify and validate it as being eco-friendly. The essence to the response to this question was to have

some sort of mechanism in place to ensure that customers can trust that the claims made by manufacturers that their products are eco-friendly are indeed true. This clearly indicated that the issue of trust was a key issue for 15% of the respondents and influenced their purchase of eco-friendly FMCGs.

Enhance product quality: The issue of quality has appeared in responses to earlier questions. It is evident from the responses that customers are not willing to compromise on the quality of a product. As a response to an earlier question, Respondent #5 reported that he purchased toilet paper made from recycled materials but was not satisfied with the quality of the product and found it to be inferior to regular toilet paper. There were seven respondents who stated that enhancing the quality of eco-friendly FMCGs would encourage people to continue buying such products. The respondents have referred to dimensions of quality such as durability and taste (for food items) to be important product attributes. Thus, it is imperative that green products need to perform on par if not better than regular products for customers to continue to demand them. Following are some of the responses from the customers:

- *'Like I said before, the quality should be better than the normal products' (Respondent # 26)*
- *'The longevity of bulbs and such products. Probably if they are more efficient' (Respondent # 16)*
- *'Just as long as I like what the product is. The quality and the taste' (Respondent # 18)*

Greater promotion/advertisement: 20.0% of the respondents reported the need to greater promotional activities and advertisements on the part of the companies. Customers believe there needs to be more awareness generated amongst individuals to choose green products.

Increase Availability: 40.0% of the respondents felt that increasing the availability of eco-friendly FMCGs would further enhance their intentions to continue purchasing such products. This highlighted the perception that customers had about the lack of availability of eco-friendly FMCGs. Making such products more readily available would potentially assist in allowing customers to continue purchasing eco-friendly FMCGs.

- *'I don't think they are much available and should be more available' (Respondent # 16)*
- *'Need to be much more readily available' (Respondent # 25)*
- *'Greater availability' (Respondent # 4)*

Reduce Price: A majority of respondents (80.0%) felt that reduction in prices of eco-friendly FMCGs was necessary to facilitate continuing purchases of such products. The prevalent perception amongst respondents was that eco-friendly FMCGs were more expensive than regular FMCGs, and that this made them hesitate to purchase and continue to purchase eco-friendly FMCGs. It was a common notion amongst the respondents that the prices of eco-friendly FMCGs would need to be competitive and not significantly more expensive than regular FMCGs. Following are quotes concerning this issue.

- *'Yes, I expect prices will go down as time goes on. Because it will take time to convince people' (Respondent # 4)*
- *'Better price. I think slightly more competitive prices' (Respondent # 5)*
- *'Prices need to go down' (Respondent # 26)*
- *'Much more available, much more cheaper. With volume, the price would come down' (Respondent # 25)*

4.3.9 How to attract new customers

Customers who did not engage in buying eco-friendly FMCGs were asked the question about how to attract new customers. The objective of the question was to gain a better understanding of the factors that would encourage these types of customers to actively seek green products. The responses were classified into six categories (see Table 4.9). Following is a discussion of the factors that were identified by the researcher following the qualitative focused interview.

Table 4.9: Factors that will encourage non-buyers of green products to actively seek and buy green products

Number	Theme	No. of respondents	% of total respondents
1	Word of mouth communication/referrals	3	60.00
2	Better quality products	1	20.00
3	Accreditation and Easier identification	1	20.00
4	Reduction of price	2	40.00
5	More effective marketing	4	80.00
6	Claims being substantiated	3	60.00

Word-of-mouth communication/referrals: Three respondents noted that they preferred word-of-mouth communication from the customers. It seemed to be the preferred mode of communication due to its unbiased nature. These three individuals stated that they would only pay attention to an eco-friendly FMCG if it was referred to them by someone who used the product. When probed on this issue, they admitted they paid no attention to advertising and relied on what their friends and family told them. So for them to go out and actively seek a green product, it would have to be referred by someone who had experience in using the product. Following are quotes from these interviews:

- *'It would have to be an ad or a recommendation. But I'm not good at watching ads because when an ad comes in I put my head in a book. So I really would not have any idea half the time on what an ad was unless my husband says "hey look at this", or somebody is demonstrating things in supermarkets or outside markets showing stuff like that or it comes recommended' (Respondent # 21)*
- *'Recommendation from other people. That would be the only way. I wouldn't just pick something off the shelf and just try it. Someone would have to say "give this a go"' (Respondent # 2)*

Better product quality: It was quite surprising that only one reference was made to this factor as one that would induce more green product purchase when it had been mentioned seven times in previous responses by the customers who buy green products. The customer who did mention this factor was not active in terms of focusing on green products, and his predominant criteria for choosing products was product quality.

Accreditation and easier identification: There was only one respondent who stated that this factor was important. The respondent stated that she wanted some sort of accreditation to make her feel secure that she was indeed buying an eco-friendly product as opposed to something that claims to be green but in reality had little or no impact on the betterment of the environment. The sign/symbol/logo of the accreditation body would also aid in easier identification because she finds it difficult to identify which product is green and which is not.

Reduction of price: The two respondents who mentioned this factor were quite aware of the benefits of using eco-friendly products, but often refrained from doing so because of the higher prices of such products. Both customers were extremely price sensitive and their

purchase decision was predominantly based on the variable price more than any other factor. They both expressed willingness to buy eco-friendly FMCGs as long as the prices were on par with regular products. Respondent #17 summarised this mindset in his statement when he said, *'Well the manufacturing of marketing of green products should keep the price right'*.

More effective marketing: The four respondents who felt that more effective marketing would perhaps encourage them to purchase green products were of the belief that companies need to create more awareness and most, importantly, need to convince them of the tangible environmental benefits of their products rather than simply stating that it was green when in fact it really had no significant bearing on the environment. Following is what some of them had to say:

- *'First of all, the whole marketing side of it. If they can say that there is a particular value that this product has and it is quite a significant value, then yes I would definitely. It has to have significant value. They can't just get away with saying "we are eco-friendly". But what difference does it really make. So it has to be well conveyed' (Respondent # 22)*
- *'It would just be awareness. If I'm thinking about my shelf at Woolworths and I'm looking at the range of shampoos or laundry detergents, I can't think of anything that leaps out to me and says it's green. So given that I'm not overly exposed to television advertising it would have to come into my awareness at display. Once I became aware of the possibility, I might consider it' (Respondent # 11)*

Claims being substantiated: 60.0% of the respondents reported that they wanted to be made to believe that the eco-friendly claims being made by the manufacturers were in fact being substantiated and were not simply lip-service. These customers believed that, if claims were being made by manufacturers, there should be significant positive tangible environmental benefits to using their products. The key issue that came to the surface was one of trust (which has also been mentioned earlier). The respondents believed there should be more value (from an environmental perspective) to using their products. Demonstrations would also assist in convincing customers of the actual environmental benefits of these products. Respondent #13 stated that *'A demonstration that they are more effective and demonstrated proof that they are actually environmentally effective. We are just bombarded that "if you do this it will be good for the environment"'. I reckon at least half of this stuff is just baloney.*

And the other half, there might be something there. But is it negligible or is it actual?’ This clearly highlights the mindset of customers and the need to make them believe that the products being marketed as green and indeed green.

4.3.10 Issues related to the marketing mix of green products

This section is the crucial component of this study and investigates the effect of the marketing mix on the consumers’ purchase decisions when it comes to eco-friendly FMCGs. The discussion first addresses issues pertaining to product (ingredients, packaging), then price, availability and promotion.

4.3.11 Importance of natural ingredients in certain types of FMCGs

One of the modern day preferences of customers is for the use of natural ingredients (Lockie, Lyons, Lawrence, & Mummery, 2002). And this is particularly important in the case of various FMCGs, such as food items, toiletries, skin care products. Not only is there a health concern, but also an environmental consideration that encourages customers to prefer natural ingredients over synthetic and other artificial ingredients. Due to its importance, which has been noted in the literature and discussed in Chapter 2, this factor needed to be studied in greater detail. Table 4.10 shows the distribution of respondents on the basis of whether or not they felt that natural ingredients played a role in the purchase decision in the context of FMCGs.

Table 4.10: Importance of natural ingredients in certain types of FMCGs

Number	Theme	No. of respondents	% of total respondents
1	Important	21	77.78
2	Indifferent	10	37.04
3	Sceptical of claims	5	18.52
4	Focus on brand	1	3.70

Important: When consumers were asked about the importance of natural ingredients and whether or not it played a role in their purchase decision when it came to buying FMCGs, it was found that 77.8 % said it was an important factor. Almost all of these references were made in relation to the importance of natural ingredients in food items, and any other item such as skin care products and products which come in contact with the human body. Some respondents mentioned that they focus on organic food since it does not contain any harmful chemicals. It also came to the researcher’s attention that some customers avoided products

such as lollies and soft drinks due to their artificial contents. Although there was an overwhelming majority who considered natural ingredients to be an important determining attribute, some respondents from the same group acknowledged that some chemicals (such as preservatives and those used in cleaning) are needed in certain types of products. For example, Respondent #13 believes that fewer chemicals are better, but there is a role for chemicals at some levels, such as maintaining cleanliness. However, the issue of trust did seem to appear as a concern for some who wanted to buy products made of natural ingredients, but were sceptical about what was written on the labels. For example, Respondent #9 believed that natural ingredients were better, but she was quite sceptical about believing what was written on the packaging and what was said via promotional campaigns undertaken by different brands. Following is what some of respondents had to say in relation to why they place great emphasis on natural ingredients:

- *'In food yes they are very important. Like I said, we make our own juices. We buy very little of that. We only buy it for kids. Natural is very important to me because of the fact that we know from all the articles that come out in the media or through work that natural untampered products are the best for the body. They place less strain on your system as well as you are also helping the environment by consuming things as they are produced' (Respondent # 25)*
- *'Things without preservatives and certain chemicals which can cause harmful effects to environment or human body, that is important' (Respondent # 26)*
- *'Yeah for food items sometimes we prefer to buy organic products like organic chicken and vegetables' (Respondent # 16)*
- *'Yes as natural as possible. I don't like genetically modified stuff. If I can see that is written on the label, I will steer right away from it' (Respondent # 23)*
- *'It goes back to the fact that we personally tend to buy more fresh foods as opposed to pre-packaged and pre-prepared. Whether it be pasta sauces or ...frozen food we tend to buy only frozen like vegetables. Rarely would we buy anything that is pre-prepared. So I guess that natural element comes into our initial way of shopping and thinking' (Respondent # 7)*

Indifferent and Sceptical: Ten respondents suggested that they were indifferent to the nature of the ingredients of the FMCGs they purchased. These people were not concerned whether the ingredients were natural or artificial. They claimed to be indifferent either because they

did not pay much attention to the labels or, those who did pay attention to labels, were sceptical of the claims made by the companies. The issue of trust was evident here again. Five respondents noted the issue of mistrust regarding what was written on the labels and what was being communicated to customers via the promotional campaigns undertaken by the different companies. Following is what these customers had to say:

- *'Well at some stage you will die of something. So you will not know if that chemical is bad unless something bad has happened. Anybody can claim anything. So what they claim may not be true. How do you verify that? (Respondent # 27)*
- *'I find a lot of the labelling is quite confusing. It is hard to know what's what. And you may try and look for certain natural products and it's really hard to know whether they are or not (Respondent # 7)*
- *'It is basic, whenever I am buying I have to look at the content. To know what is inside it. But sometimes you, they deceive, there is some deceptions you know. You think the content is, but is lacking. Thus consumers get a lot of confusion when they are buying. It doesn't mean that what you see in the content, all is in there (Respondent # 4)*

For a few, the nature of the ingredients was not an issue to be bothered about at all. This psyche was typified by Respondent #12 who blatantly claimed that natural ingredients was a complete non-issue for him and he felt that things like preservatives were necessary for food items since they hindered bacterial growth in those items and prolonged their life. Following are quotes of from respondent who were indifferent about natural ingredients:

- *'No, I don't really care. It is too time consuming, and they can write whatever they want to on the labels. We can't really verify it with them (Respondent # 27)*
- *'To be honest I don't really pay that much attention to the ingredients' (Respondent # 8)*
- *'With facial products, I tend to just stick to the one that worked for me. With food I check. We buy organic whenever we can. But not so much with toiletries and shampoos' (Respondent # 11)*
- *'Not as much (concerned). It's very tough to live your life by being that much conscious about each product that you get from the retail stores' (Respondent # 6)*
- *'Not so much (concerned). Because I suppose I am allergic to a few things. So I stay to the products I know. I haven't really investigated if they are really less chemical.*

Soap wise I do, soap wise I go for my natural things. But shampoos and hair, I don't worry about it too much (Respondent # 2)

Focus on brand: There was only one reference to brand. This was from Respondent # 8, who also reported about being indifferent about the composition of the ingredients in different types of FMCGs. In addition, he also stated that he tries to stick to the tried and tested brands of toiletries, skin care, and hair care products that he uses and is not bothered about the presence of natural or chemical ingredients in them.

4.3.12 Consumer perception of eco-friendly packaging

When asked about eco-friendly packaging, interesting information came to light. For a majority (44.4%) of respondents, this was an important product feature, some thought there was too much packaging, which the product could do without, some tried to buy products with eco-friendly packaging when possible, while some were undecided or did not consider this to be an important product attribute (see Table 4.11). Following is a detailed discussion on the findings of this question.

Table 4.11: Factors pertaining to eco-friendly packaging

Number	Theme	No. of respondents	% of total respondents
1	Important	12	44.44
2	Not important	4	14.81
3	Undecided	3	11.11
4	Focus on price	3	11.11
5	Try to buy when possible	7	25.93
6	Disappointed with over-packaging	8	29.63

Important: When asked about their perception of eco-friendly packaging, 44.4% of the respondents acknowledged that this was an important product attribute. These consumers had strong opinions about eco-friendly packaging. Their responses were consistent in terms of their dislike for over-packaging and the need for eco-friendly and lesser packaging in products. Some of the respondents, such as Respondents #21 and #25, view eco-friendly packaging as one of the most important product attributes that affects their purchase decision along with price and quality. A majority of respondents were also disappointed with over-packaging of products and did not see the need for it. They viewed over-packaging as a

means of making the products more attractive on the store shelves, and were of the opinion that this over-packaging aspect did not serve any functional benefit. In their opinion, over packaging was not only detrimental to the environment but also disposing of this packaging was cumbersome for the consumers. The responses clearly reflect negative perceptions regarding over-packaging and packaging that uses non-recyclable material, as shown in the following quotes:

- *'I'm always very disappointed about buying products such as electronic consumer goods which have been over packed with the styrofoam. I am very happy buying goods, which have been packed with recycled cardboard and things, which you can crush. Unfortunately it is unavoidable that the product you want is packaged with white Styrofoam. But I think consciously if I could I would buy products which are genuinely least packaged, because overall the product generates so much rubbish like plastic and Styrofoam that by the time you are finished with one product you've got more than the volume of the product is waste itself' (Respondent # 25)*
- *'Yes. In that if I think something is over packaged, I will not buy it' (Respondent # 11)*
- *'I don't like packaging. I hate packaging. I wish there was much less of it. I try to minimize packaging when I buy' (Respondent # 12)*
- *'Get rid of it all, recycle it' (Respondent # 21)*
- *'I don't think it is used as much as it could be. Because I think it is a prime way of being eco-friendly. I don't think it is used as much as it should be. And I would pay more if I could see that it is an eco-friendly packaging because some things you are not going to be able to improve in a sustainability context other than your packaging' (Respondent # 23)*

Try To Buy When Possible: 25.9% of the respondents stated that they bought products with eco-friendly packaging when possible. This group of consumers were not quite as staunch in their beliefs and perceptions about eco-friendly packaging but chose products with eco-friendly packaging when the opportunity presented itself and would not pose an inconvenience or financial burden on their purchase decision. Some of the consumers admit to acknowledging the importance of eco-friendly packaging but are not able to dwell too much into the issue and make purchase decisions on the basis of this due to various constraints. Respondent #13 typified this group of respondent when he stated that he knows eco-friendly packaging is a good thing, but it does not play a major role in his purchase

decision. Respondent #10 has a similar view and admits to seeking out products with eco-friendly packaging only when she is not in a rush or pressed for time. Following are some of the responses from customers who try to buy products with eco-friendly packaging when possible:

- *'I don't look for it, but if it comes around after I buy, then I feel good since I have bought something' (Respondent # 26)*
- *'We did buy some of them for eco-friendly packaging, but not always' (Respondent # 16)*
- *'I don't know that biodegradable has come into my framework at the moment. But certainly purchasing things like refills rather than the whole plastic bottle again, that sort of thing' (Respondent # 11)*

Not Important and Focus on Price: 14.8% respondents did not view eco-friendly packaging as an important product attribute that determines or influences their purchase decisions. Another 11.1% of the respondents highlighted the importance of the role of price in the purchase decision. Price has traditionally been the determinant attribute in most purchase decisions, but only three respondents focused on it. This shows that the modern day customer pays also attends to other attributes of the product offering.

Undecided: The interviews revealed that 11.1% of the respondents claimed to be undecided about the importance of the role of eco-friendly packaging in their purchase decision. These customers had not given enough thought to this factor and, thus, it was still not a major part of their decision-making criteria.

Following is what some of the respondents who held this mindset had to say:

- *'I'm just looking for the nutritional information, quality, and the price' (Respondent # 19)*
- *'Again it depends on how much I end up paying. If it means that just for packaging I will have to pay significantly more then probably it is a bit of a concern for me' (Respondent # 8)*

Disappointed with over-packaging: 29.6% of the respondents reported that they were disappointed with over-packaging. These respondents felt that there were too many layers of

packaging that were not necessarily required for the protection of the product. The respondents were of the opinion that it would be better from a disposal perspective if there was minimum packaging, necessary for the protection or containment of the product. The additional layers of packaging presented a problem for customers when it came to disposal of the packaging and was perceived by the respondents to be detrimental to the environment. The following responses highlight this mindset:

- *'I'm just looking for the nutritional information, quality, and the price' (Respondent # 19)*
- *'Again it depends on how much I end up paying. If it means that just for packaging I will have to pay significantly more then probably it is a bit of a concern for me' (Respondent # 8)*

4.3.13 Effect of price on consumers' decisions to buy green products

Price has always been one of the most important factors that determine demand for a product or a product class. As discussed above, price also plays an important role to play in consumers' purchase decisions for FMCGs; it determined the brand and the type of products that people bought. The impact of price was even found to be more prevalent in the context of green products since consumers perceive green products to be more expensive than regular products. To further investigate the impact of price on purchase intention, respondents in this study were asked about how price impacts their purchase intention in the context of eco-friendly FMCGs. Their responses have been classified into three categories: those who will definitely pay more, those who might pay more, and those who are not willing to pay more for green products. Following is a detailed discussion of the responses from the customers during the course of the qualitative focused interviews.

Table 4.12: Effect of price on consumers' decisions to buy green products

Number	Theme	No. of respondents	% of total respondents
1	Will definitely pay more	7	25.93
2	Might pay more	15	55.55
3	Will not pay more	5	18.52

Will definitely pay more: The consumers who shared this mindset were not at all price sensitive and expressed significant concern towards the wellbeing of the natural environment.

Their responses suggested that they have an obligation towards the natural environment and buying green products was a means by which they could positively contribute towards that. However, one common response was that, although some of them were willing to pay as much as double the price of a regular product, the green product would have to be of good quality and would have to be as effective as the regular product. Around a quarter of the respondents were willing to pay more for eco-friendly FMCGs. They reported that they would not mind paying ten to fifteen per cent more for an eco-friendly product. However, product quality was a non-negotiable attribute for these customers. Following is what respondents had to say:

- *'Yes, I would pay more because I know it's an eco-friendly product and it would be more valuable. Valuable for the environment' (Respondent # 16)*
- *'Presuming that it is not triple the price, I would be prepared to give something a go, and then it would depend on the performance. For the same price, I'd go green' (Respondent # 11)*
- *'If knew it was genuinely eco-friendly, and I knew the brand, yes I would pay more. I am willing to pay double. Australian products I buy more. If it's going into my body or if it is going down the drain a lot of the cleaning products I don't find them that effective. I tend to do a lot of the cleaning products on my own. I have tried the environmentally friendly ones but they are not very effective. They need to perform' (Respondent # 9)*
- *'Yes, I would. It depends on the quality and of course it depends on the rating of the product. If it does meet the Australian standard, it does have the safety measure, yeah I do consider a few things before buying even if it is a little bit more expensive. I would probably go with the expensive one if the quality is good' (Respondent # 6)*
- *'It's just like electricity, these bulbs, eco-friendly bulbs. Because of the newness in nature, they are still expensive. But as time goes on it will come down. I don't care about the price. All I know is "Can it give me the effect of why I am buying them? Price is not important. That's why I changed my bulbs to eco-friendly. At times they last longer than those ones, halogen bulbs. These ones (eco-friendly) you buy and in two to three years it is still there' (Respondent # 4)*

Might pay more: A majority of customers (55.5%) from the sample reported that they might pay more for an eco-friendly FMCG. However, it would depend on certain other factors. The

most common response was that the customers would have to be convinced that the product is genuinely eco-friendly and was not just a ploy by companies to command a premium price when the environmental benefits were either minimal or inconsequential. The manner in which the product was marketed was also a key factor. When asked how much more they were willing to pay, the most common response was ten to fifteen per cent more than a regular product. If the green products were astronomically more expensive than regular products, then most respondents said they would not consider buying it. Following are some of the responses from the customers who felt this way:

- *'Again, as I mentioned in the beginning it really depends. For example, if I am paying one dollar for a regular product and the ecofriendly product is ten cents more, which is probably ten per cent more, then I would probably consider it. But if it significantly higher and I can buy something for one dollar and the ecofriendly version costs one dollar fifty cents then probably I will choose the one that costs one dollar' (Respondent # 8)*
- *'Possibly [pay more]. And I think that it ties in with the way they are marketed. If they started as a way of always following that path, they are organic, they are healthy, then yes I would pay. But I'm not just going to pay, for example Pantene, if they switch to an eco-friendly marketing strategy and they decide to put their price up for that then no. It just has to be from the beginning' (Respondent # 22)*
- *'Well I mean obviously if it's just crazily expensive, I can't buy it anyway. That's the first thing. But also I guess I am always thinking about whether the impact of the product actually justifies the price they are charging for it. So there is a lot of guilt cast upon consumers in terms of "if you don't have this green product, ten baby fur seals could die". Well that is just crazy. You know plastic bags do not kill baby fur seals, Inuit's do because they want to eat. So it's that constant toss up where I'm going "if I buy this, is it actually going to have a real effect?". If it's in the same price range as the normal product, is it actually going to make a difference? Or are you just trying to guilt trip me?' (Respondent # 13)*
- *'It would be a decision I would make that the time. It would be a judgment call. I would think just ballpark, ten percent I would be happy to pay if it was clear to me it was green. Above that, it would probably be a judgment call and that would be matched against price and quality. If I can see the quality is there, I might pay a bit extra to get it' (Respondent # 23)*

- *'I think I need to consider other issues to answer this question. If it's really a product which I think will create a lot of damage to the environment and I feel guilty about it possibly I will be willing to pay more for an environment friendly product. But if it's not that sort of product then I will go for the cheaper product' (Respondent # 17)*
- *'Obviously it [price] is going to have an effect. The higher the price, the less likely I am to buy it. That is just simple economics, but it's not the only factor. It's a hard question to answer without quantifying things' (Respondent # 12)*

Will not pay more: 18.5% of the respondents stated that they were not willing to pay more for an eco-friendly FMCG. These customers were very much price driven in their purchase decisions and the eco-friendly attribute was not something they felt worthy of paying a premium price for. These customers were direct in saying that unless the product was of superior quality, more durable, or has some distinct tangible benefit over other products, they would not pay more for it. Following are some of the responses:

- *'Simply we couldn't afford it' (Respondent # 25)*
- *'No, I don't think so. I would not pay more.' (Respondent # 1)*
- *'Probably not, unless it came recommended and it last longer and you get more for your dollar. Perhaps I would look at it that way' (Respondent # 21)*

4.3.14 Effect of availability on consumers' decision to buy green products

The importance of availability is crucial to the success of any product. Availability, which is also referred to as place in the marketing mix, plays a pivotal role in facilitating convenience for customers to acquire the product. One of the objectives for carrying out the qualitative focused interviews was to find out how important availability was to customers when it came to purchasing eco-friendly FMCGs. The key issue was to ascertain whether customers were willing to travel the extra mile for an eco-friendly FMCG in the event that it was not available within close proximity. There were three general responses from customers with regards to this issue: they will travel the extra distance for an eco-friendly FMCG; some may do so; and the majority said they would not take the trouble of doing so. Following is a detailed discussion on the findings of this question.

Table 4.13: Effect of availability on consumers' decision to buy green products

Number	Theme	No. of respondents	% of total respondents
1	Will/does travel	3	11.11
2	Might travel	8	29.63
3	Will not travel	16	59.26

Will/does travel: 11.1% of the respondents indicated that they did or would take the trouble of travelling to a distant location for an eco-friendly product. These customers were of the view that it was a small price to pay to make a positive contribution towards the environment. Notably, these three respondents were consistent in their answers to other questions that, as long as the claims from the manufacturers are genuine, they do prefer eco-friendly FMCGs to regular ones. In response to this question, Respondent #4, who firmly believes in the “green revolution”, said that he would travel to Canberra from Sydney for an eco-friendly product that satisfied his need, and distance was not a problem for him at all. Following is what the other respondents had to say:

- *‘Yes. I do [travel]. For one particular product I have to go down twenty kilometres to get it. It’s Planet Arc. It’s an air freshener. It’s great, and I can only get it down at Penrith. So I go down there. I will buy four or five at a time, but I will go down and do that. And it’s a great product’ (Respondent # 9)*
- *‘Yes, I would [travel]’ (Respondent # 20)*

Might travel: Around a third of the respondents (29.6%) revealed that they might consider travelling the extra mile or distance to purchase a green product. However, in most cases they noted that this effort would depend upon the product, the time the respondents had available, and the actual distance they had to travel. The majority of respondents said that, if the product was truly green and of good quality and if they had the resources available, they would contemplate making the extra effort to buy it. An interesting response from one of the customers highlighted the need for marketers to make eco-friendly products more available. Respondent #7 stated: “Why don’t we have them available? Why should it be so difficult to take more care of our planet?” This truly summarized the mindset of people who are willing to do good for the environment. It highlighted the fact that people were willing to play their

part by purchasing eco-friendly products but were unable to do so due to lack of availability. Following are what some of the other respondents said when asked if they were willing to travel the extra distance for an eco-friendly FMCG if it was not available close by.

- *'I guess it depends on the product. If it also gives some form of value to me, if it's personal value rather than just environmental value, yes I would. If it's made from recycled paper or whatever, it wouldn't suffice. It has to have some value to me'* (Respondent # 22)
- *'Again it is an issue of what product I am buying. If it's really being threatening to the environment and cause a lot of damage, and if I really feel I should not do it then possibly I will travel the extra mile to buy an environment friendly product'* (Respondent # 17)
- *'Yes I would, I think. Not in all cases obviously. There are limitations of time and energy and stuff. But if I had the time and energy to go and source it out, and the desire, I certainly would. I tend to think if I could, I probably would seek it out. If that meant for example, crossing the road and walking ten minutes to go to a different shop, I would do that'* (Respondent # 12)

Will not travel: The majority of respondents (59.3%) stated that they would not take the trouble of travelling the extra distance for an eco-friendly FMCG. The customers were firm in their negative response and stated that, in most cases, that they would not take the trouble to travel the extra distance for a green product. They believed it was not worth it, and too time consuming and expensive when the cost of travel was incorporated into the equation. Respondent #23 summarised the mindset of these respondents: "Huge, huge. In this fast paced life, I don't have time to go all around the universe to get something. So it's literally got to be locally. If I can't get it at Coles or Woolies, if it's in that vicinity, I'd do it, no drama. But once I had to go next suburb across and it's an everyday thing, not a chance. I don't have the time." Most of the customers just stated "no" when asked if they would travel the extra distance for an eco-friendly FMCG, as demonstrated in the following quotes:

- *'No I wouldn't travel'* (Respondent # 25)
- *'I will buy something else for convenience'* (Respondent # 27)
- *'No, it should be available'* (Respondent # 26)
- *'I don't think so'* (Respondent # 1)

- *'No. I don't even want to go out of my house to go and do grocery shopping. I'd prefer to order over the internet if I could but it's more expensive. I go to the most convenient location to buy groceries and I wouldn't go out of my way for that (Respondent # 5)*

4.3.15 Consumer perception of green advertising

Since advertising is one of the most effective ways for companies to communicate their offering to customers, and since its importance has been highlighted in the literature (Ackerberg, 2001; Deighton, Henderson, & Neslin 1994; Gotlieb & Sarel, 1992), it was considered necessary, from the researcher's perspective to investigate how consumers perceived green advertising. Green advertising comprises advertisements that represent green products and inform customers of their benefits over regular products from an environmental perspective. Their objective is to influence consumers' purchase behaviour by encouraging them to buy products that do not harm the environment and to direct their attention to the positive consequences of their purchase behaviour, for themselves as well as the environment (Rahbar & Wahid, 2011). Following is a discussion on the findings that have come to surface from the qualitative focused interviews when the customers' were asked about this particular issue.

Table 4.14: Consumer perception of green advertising

Number	Theme	No. of respondents	% of total respondents
1	Trust ads	4	14.81
2	Undecided	2	7.40
3	Seldom notices green ads	6	22.22
4	Sceptical but sometimes influenced	6	22.22
5	Not influenced	7	25.93
6	Influenced	8	29.63
7	Do not trust at all	12	44.44

Do not trust at all: 44.4% of the respondents vehemently stated they did not trust green advertisements at all. As noted earlier, there have been several responses pertaining to the lack of trust customers have when it comes to eco-friendly claims being made by companies. The responses obtained from the interviewees in this section were no different. The

customers who did not trust green advertisements firmly believed that the claims being made were false, fabricated and not substantiated. They also believed that such claims were nothing more than a modern-day marketing ploy on the part of the companies. Following are some of the quotes from the qualitative focused interviews which clearly depict the mistrust held by customers:

- *'No I don't trust those ads. I think they are made from a marketing point of view only to sell more items' (Respondent # 25)*
- *'I don't believe them. I don't trust them at all, but what proof do they have? Everybody will claim that it is environmentally friendly, but how do you verify that statement? Unless there is a proof that they provide' (Respondent # 27)*
- *'I'm deeply suspicious of them actually. I don't want to be manipulated. If somebody tell me you've got to buy this because it is good for the environment, I want to say tell me collectively, "how me buying that is actually going to be good for the environment?". And often it is quite difficult to prove (Respondent # 13)*
- *'I think unfortunately I tend to be a bit of a cynic when I see them because I think this is where it is almost like "I'm a green product, so I can charge twice as much as anything else". So I tend to get a little bit cynical. So do I believe all the claims in the advertising? No. I try to make a best judgment call of my own and sometimes that is making a wrong judgment call because everyone that says green is not always green. And you kind of think "if you're spending so much money on green advertising, are you in fact green because you're spending so much money". So a bit cynical (Respondent # 23)*
- *'I think a good percentage of them would be false. Maybe not false, but misleading (Respondent # 12)*

Influenced: 29.6% of the respondents reported that they were influenced by advertisements of eco-friendly products. The interesting finding from the response to this question was that customers who already depicted high levels of awareness and empathy towards environmental issues were the ones influenced by such advertisements. These responses were highly optimistic of the benefits of eco-friendly products and had genuine trust in the claims made by the manufacturers and marketers of those products. Following are some of the responses from the respondents who reported that they would be influenced by advertisements of eco-friendly FMCGs.

- *'Well I trust because I am eager. I am eager to know much about environmental friendly.'* (Respondent # 4)
- *'Yup. Take a look at all the lightings in my house (referring to energy saving bulbs)* (Respondent # 6)
- *'I am persuaded by them. Maybe because I am not a critical thinker. It all depends on the advertising. Some advertising is cleverer. Sometimes I will buy the product, but if I'm not happy I will not buy it again. But yes, I'm swayed towards natural products (* Respondent # 9)
- *'I am persuaded by them. As an environment student (she has a BSc in Environmental Studies), I do look at them in a different way but it's not that they always attract my attention* (Respondent # 16)

Not influenced: 25.9% of the respondents reported that they were not influenced by advertisements of eco-friendly products. These respondents were sceptical and had little or no trust in the claims made by such advertisements. These responses reinforced the finding that there was not only a lack of green advertising, but also scepticism in general about green products. Following are some of the responses from the respondents when asked if they were influenced by green advertisements.

- *'Not really, no in terms of groceries. But there are other products like Prius's and cars and big ticket products which I say I would be. But when it comes to groceries, not really'* (Respondent # 19)
- *'I'm not persuaded by them'* (Respondent # 18)
- *'No (not influenced), unless the pricing is good'* (Respondent # 27)

Sceptical but sometimes influenced: 22.2% of the respondents who echoed this sentiment were inherently sceptical of the claims made by green advertisements but were occasionally influenced by them. These respondents paid attention to the advertisements but tended to use their own judgment to gauge the credibility of the advertisements and then make their decision. Following are some of the responses of those who had this mindset.

- *'Most advertising is going to be swayed about what they want you to know. So with most advertising there is a level of credibility and a level of scepticism. Depending on*

what they say makes sense or is illogical. If it's not sensible or illogical, I discount it' (Respondent # 2)

- *I guess I'm guessing a bit sceptical. Not because I want to, but there have been some incidents where tests have shown later on that they are not as eco-friendly or as healthy or as natural as what we were initially led to believe' (Respondent # 7)*
- *'Not always. But I would expect if they are coming from a big company they would have to get it right' (Respondent # 21)*

Seldom notice green advertisements: 22.2% of the respondents revealed that they rarely notice green advertisements. This was attributed to lack of interest or the simple exercise of switching channels when such advertisements were on the television. Such advertisements and the entire notion of eco-friendly products were considered to be modern-day hype by some of the respondents and not worth paying attention to. The following responses show the sentiments shared by the respondents who seldom notice green advertisements.

- *'No, because it's all hype. If I see something and it seems interesting, I try it and if I like it I'll buy it again' (Respondent # 18)*
- *'I'm not very exposed to advertising. I don't read magazines and papers very much. I generally watch the ABC. If it is going to come on my radar it's probably going to have to be displayed at the store. I'll probably go "oh that's a new thing" and have a look at it then. And probably my scepticism will grow as there is more of it as they start using it more as a marketing tool. Then I will start thinking, "are the claims really true?" (Respondent # 11)*
- *'I seldom see because there isn't much. There should be more (Respondent # 26)*

Trust green advertisements: 14.8% of the respondents reported to trusting the messages being conveyed via advertisements of eco-friendly products. These respondents depicted a positive view of these advertisements and deemed them to be reliable and credible sources of information. Following are their responses:

- *'I do in a sense, but in a way everyone is trying to get some sort of accreditation like the heart tick approval' (Respondent # 19)*
- *'We do (trust the advertisements)' (Respondent # 5)*

Undecided: 7.4% of the respondents were undecided when asked about their perception of eco-friendly advertising. These respondents were generally undecided about how they viewed the entire issue of green products and the concept of green marketing.

4.3.16 Role of culture and background on consumers' decision to purchase green products

The effect of culture and background is an important issue that needs further research since existing literature had shown mixed results (Mostafa, 2007; Rahbar & Wahid, 2010). This was even more relevant in the context of the study since Australia, and Sydney in general, is home to people from various ethnic, social and cultural backgrounds (Australian Bureau of Statistics census, 2011). When respondents were probed on this issue, 13 said that their culture had no impact on their decision to buy green or not to buy green products and this behaviour could be attributed to other factors. Ten respondents suggested that culture and background had a role to play in customers' decision to buy green or not to buy green products. Four respondents suggested that culture had no role at all in their purchase decisions. Following is a detailed discussion on the findings of this question:

Table 4.15: Role of culture and background in consumers' decisions to buy green products

Number	Theme	No. of respondents	% of total respondents
1	No effect of culture or background	4	14.81
2	Other factors play a role	13	55.55
3	Influenced by culture and background	10	29.62

No effect of culture or background: 14.8% respondents from the qualitative focused interviews stated that purchase decisions pertaining to green products were in no way related to or affected by their respective cultures or ethnic backgrounds. These customers predominantly buy what they want to buy and view it as a simple decision-making process rather than being a complex one with a number of variables involved. Following is what they had to say when asked whether culture, background or religion had any role in their decisions to buy green products.

- *'No, it [cultural background] doesn't have any effect. If I want to buy it, I'll buy it. If I don't, I don't' (Respondent # 21)*
- *'No, doesn't [cultural background] do anything (Respondent # 15)*

- *'I don't think so. I think that we have been brought up in a changing lifestyle, where years ago we didn't have any choice. And now that we have choice, I don't know if it's such good choice' (Respondent # 1)*
- *'No' (Respondent # 24)*

Other factors play a role: More than half of the respondents (55.5%) attributed factors other than culture, background and religion in their green products purchase decisions. When probed on this issue, the respondents revealed that they were more inclined to buy green products because of factors such as advertising, promotion, modern-day awareness, healthy consciousness and personal choice. The main factor that deterred respondents was not so much as apathy towards green issues but the price factor. Since green products are perceived as being more expensive, some people tend to refrain from buying them. Following is what the consumers had to say when asked about this issue:

- *'It has nothing to do with my culture, religion, or whatsoever. It's just personal choice' (Respondent # 27)*
- *'To be honest the culture and background that I am from, the concept of ecofriendly is not as important as price or quality. So to some extent it does. Having said that, the persuasive advertising and marketing has definitely changed my perception and my preferences towards ecofriendly products' (Respondent # 8)*
- *'Probably not so much when I was younger. Now that I'm older I do think that more green products and environmental products are the way to go for my future and my children's future. But probably as I said, age now has contributed' (Respondent # 10)*
- *'I've mostly grown up here in Australia, a westernized country...so no not really. I would say my employment has, because the amount you are exposed to working in marketing environment. Since I'm exposed to that and I know what goes on behind the scenes I get a bit immune to that sort of thing' (Respondent # 19)*
- *'I don't know whether it was an issue in the old days. My mom probably would've bought purely for price. Having a large family, it probably would've been for price. But that was a long time ago. We didn't have half the stock we have nowadays. I buy purely because now we are very aware of landfill and of the environmental issues we have. But there are also the imports. It affects our farming, it affects our export and imports. So I tend to look at that. Going back to my mother, no it would just have been*

price' (Respondent # 9)

- *'It is not religiously based. The culture that we grew up in the 70s and 80s was very focused on inculcating the disposable lifestyle. It was all about convenience and disposability. If you wanted to look at our background and culture, we were raised to be "Environmental vandals" essentially, because everything was individually packed for freshness and for your protection and protection of your health. It was actually illegal for a long time to have tank attached to your house because there was a scare that people would drink contaminated rain water. We have come the other side of that now. The pendulum has swung the other way. Now you can't build a building without rainwater tank If you look at it, historically our culture has raised individual environmental vandals' (Respondent # 3)*

Influenced by culture and background: 29.6% of the respondents indicated that they were influenced by culture and background in their purchase decision of green products. The findings represent the views of customers who come from different cultural and ethnic backgrounds. Some were influenced by their upbringing, which encouraged eco-friendly behaviour and minimal consumption, while others tend to adhere to religious teachings, which highlight the need for preserving the environment. A key finding from the answers to the question pertaining to the influence of religion on their decision to purchase or not purchase eco-friendly products is that religious beliefs force the individual to reflect on their treatment of the environment and this prompts them to purchase eco-friendly products. Another interesting finding in relation to the role of family and upbringing is that some of the respondents attributed their perception about nature and eco-friendly products to their parents. They believe that their parents made them think about such issues and to address them in their daily lives. Following are what some of the respondents had to say about this issue:

- *'Yes my culture would dictate that we buy upon cost, and basically upon monetary cost only. The rationale behind it is our background has been in a third world country where looking after the environment comes sort of at a lower priority than looking after yourself. For most part of my life I have not been concerned about the environment or what my actions can do. But coming to a first world country has significantly changed*

that attitude. Now I'm aware of the impact on what I can have on the environment and what little steps I can take to minimize that' (Respondent # 25)

- *'The simple answer is yes. My parents brought me up to look after things and leave things in a better state than you found them, or as good a state as you found them. So they are not into waste, and they are not into excess. But by the same token, they never had a lot of money' (Respondent # 13)*
- *'Well my background as a Chemist does. And limited study of things like ecology. Yes, religious beliefs maybe. I believe that God created the world and we are supposed to look after it. And if we do things that are damaging to the environment, we are not looking after it. Excess consumption is simply bad as well. So that influences me. I also have a personal preference for doing things and enjoying the natural environment. So I don't want to see it defiled by the choices I make, and I make that as general as possible. Everything I do, I try and have a minimal impact on the environment. So when buying products, I ask myself, where is that packaging going to go? By consuming stuff, what is going to be the impact on the environment and other people and so on? I think that has actually developed over time. I wasn't always like that. My awareness has increased as I've grown older' (Respondent # 12)*
- *'Yes, I come from a very conservative family. Very isolated culturally. I was brought up in an urban, white, middle-class area in the sixties. But they (parents) made me think. That was probably the best gift they could give me. They made me think about the decisions I was making, to do research, to ask the questions, to not just accept what I'm told by the media, the politicians, and things like that. I do come from a background, a class, and a culture that don't want to hear and see. However, my parents are very intelligent and very thoughtful, and they did want us to think before we made these decisions. I count myself very lucky there' (Respondent # 20)*
- *'Yes. I can clearly tell you that in my culture, we are still adapted to nature. Natural products. They are good in famine. They are good in all those production of animals. They all stay the same. They don't use chemicals. They don't use hormones in the production. And anything you eat even the fruits, the ones you pluck from the plants is all natural. We believe culturally that they live long when they eat those products than the synthesized or manufactured products which contains some preservatives' (Respondent # 4)*

4.4 SUMMARY

After studying the responses to each of the questions, the researcher gained a good insight into consumers' perceptions and purchase intentions of green products (in the case of FMCGs). Most of the issues have been analysed and discussed at length in this chapter. The first issue investigated was factors generally affecting consumers' purchase decisions in the case of FMCGs. It did not come as a surprise that price and quality were the two dominant factors that were taken into consideration by the respondents. The next most important factor was brand name. This finding concurs with most past research findings (Suri, et al., 2007; Teas & Agrawal, 2000).

The novel factors that were identified during this phase of the research were that the customers did not necessarily view price and quality in isolation. Instead, they placed greater emphasis on the concept of green product perceived value. This meant that customers wanted a balance between price and quality of the eco-friendly products. However, since the perception was that eco-friendly products were more expensive, customers expected products to not only deliver a core benefit, but also deliver eco-friendly promises made by the marketing spiel.

A second important finding was that customers were sceptical of the claims made by manufacturers and marketers of eco-friendly FMCGs. This scepticism was directed to the advertisements, labelling, and claims made for these products. Thus, the researcher noted that it was necessary to investigate the role of green trust and how it influenced consumers' green product purchase intentions in the context of FMCGs.

In addition to the factors mentioned above, there was also contention over the role of family, friends, religious beliefs and such factors. The researcher took the findings of this phase into account for further empirical investigation through the development of a conceptual framework and relevant hypotheses.

In light of the findings of this chapter, the following chapter (Chapter 5) will provide insight on the development of the proposed model, the hypotheses to be tested, and the survey instrument to be used for the purpose. The chapter will provide the link between the findings of the qualitative phase and how that has led to the quantitative phase of the study.

CHAPTER 5: MODEL DEVELOPMENT AND RESEARCH HYPOTHESES

5.1 INTRODUCTION

The previous chapter discussed, in detail, the findings from the qualitative focused interviews. A primary focus of the discussion was the themes that emerged as a result of the interviews. These themes highlight the factors that potentially influence consumers' purchase intentions of eco-friendly products in the context of FMCGs. The qualitative stage of this study preceded the quantitative phase since it was important to ascertain the likely factors that influence consumers' purchase intentions of eco-friendly FMCGs; these themes were used to develop a model that was tested in the quantitative phase of the study. This chapter discusses the development of the model and the relationship between the various factors and consumers' purchase intentions of eco-friendly FMCGs. The model developed has been constructed with the aim to:

- Ascertain the relationships between the various factors that came to surface from the qualitative focused interviews and consumers' green product purchase intentions in the case of FMCGs;
- Investigate the mediating role of green trust in influencing consumers' green product purchase intentions.

This chapter discusses the manner in which these dimensions have been operationalized and the process used to purify the scales used to measure consumers' green product purchase intentions. An overview of the model that forms the basis of the quantitative phase and the hypotheses that emerge from the model is also included in the chapter.

5.2 RESEARCH HYPOTHESES

Based on the findings of the qualitative phase of this study and past research, ten hypotheses were developed for this study. A number of hypotheses were formulated to respond to inconsistencies in past research on relationships that may explain consumer's green product purchase behaviour. Other hypotheses deal with new constructs to investigate if these have an impact on consumers' green product purchase intentions.

5.2.1 Development of Hypotheses 1 and 2:

The qualitative focused interviews showed varying responses when it came to understanding the relationship between price and quality of eco-friendly products in determining their influence on consumers' purchase intentions. In terms of their behaviour towards general FMCGs, 36.7% of all references to determinants of purchase intention related to price as the major fact. The next most important determinant, at 25% of all references, was quality. The following quotes are examples of responses:

'Number one this for us is price' (Respondent #13)

'I look for quality, then price' (Respondent #16)

Nevertheless, in the context of eco-friendly FMCGs, 25.9% of respondents stated that they would definitely pay more for such products, and 55.6% noted that they might pay more for such products. In relation to the quality of eco-friendly FMCGs, 18.5% of respondents indicated that they wanted marketers of such products to enhance product quality since that was deemed as an important feature. The following responses were testament to this notion:

'Like I said before, the quality should be better than the normal products' (Respondent #26)

'Quality and price balanced' (Respondent #23)

Thus, instead of looking at price and quality in isolation, as has occurred in past studies, this research project attempted to investigate how perceived value, which is the combined effect of perceived quality and price, influences green product purchase intentions. People appear to be willing to pay more as long as the quality of eco-friendly products is on par or better than regular FMCGs.

These findings and the findings of past studies, which have focused mostly on price and quality as separate factors, have prompted the researcher to develop the following hypothesis:

H1: Green product perceived value is positively associated with green product purchase intention

The role of trust is something that has not received a great deal of attention in the green marketing literature, especially in the context of its role on influencing consumers' green product purchase intentions. Chen and Chang (2012) have investigated the mediating role of green trust and how it impacts green product purchase intentions. The findings of the

qualitative focused interviews have also highlighted that trust has a role to play in influencing consumers' green product purchase intentions. Some respondents reported that they want claims being made by the marketers of green products to be substantiated. Although this figure was small (7.9% of references) when compared to other factors, the issue of trust did surface from time-to-time during the interviews. Respondents who referred to the issue of trust wanted to be absolutely sure that if a company was claiming that its products were eco-friendly, the claim is valid. For example:

'I want some sort of accreditation body to be set in place to validate products as being eco-friendly' (Respondent #19)

The mediating issue of trust is not limited to perceived value and extends to other marketing factors. Hypothesis 2 aims to investigate this relationship.

H2: Green product perceived value is positively associated with green trust

5.2.2 Development of Hypotheses 3 and 4:

The ways in which advertising influences consumers' purchase intentions have been well documented in the literature (as discussed in Chapter 2). The findings of the qualitative focused interviews provided mixed results concerning the role of advertising in influencing consumers' green product purchase intentions. Some respondents indicated that they were not influenced at all by such green advertising (15.6 % of references), other respondents indicated that they were influenced by such advertisements (17.78% of references). To investigate the relationship between advertising and its affect, the following hypothesis was developed:

H3: Green advertising is positively associated with green product purchase intention

The fourth hypothesis was developed on the basis of the qualitative focused interviews and the findings of Chen and Chang (2012). The qualitative focused interviews revealed that respondents were sceptical of advertising claims made about green products. Of the number of references made when asked about the performance of green advertising, 8.9% of the references made pointed to the fact that the respondents were influenced by green advertisements while 13.3% indicate distrust of such advertisements. This indicated a split in opinions and indicated that this phenomenon needs further empirical investigation to verify if there is a relationship between advertisements of eco-friendly products and trust in those advertisements. The following response exemplifies respondents' distrust:

'I'm deeply suspicious of them. I don't want to be manipulated.' (Respondent #13)

For the reasons mentioned above, and looking upon expanding on the work of Chan and Cheng (2012), the following hypothesis was developed.

H4: Green advertising is positively associated with green trust

5.2.3 Development of Hypotheses 5 and 6:

Eco-labelling and its influence on consumer purchase intention have been investigated to a certain degree by various researchers (Rahbar & Wahid, 2010, 2011; Thøgersen, 2000) with mixed results. The qualitative phase of this research included, in particular, questions about the role of packaging and labelling. Responses suggested that some people who had a high degree of involvement in purchase decisions engage in reading labels and paying close attention to details such as ingredients, eco-friendly accreditation and other pertinent information. However, a certain segment (10 respondents) were relatively indifferent about the labels on products and did not care about the nature of ingredients or the eco-friendly attributes of the FMCGs they purchased. The following quotes represent the mindset of some of the respondents:

'No, I don't really care. It is too time consuming and they can write whatever they want on the labels. We can't really verify them.' (Respondent # 27)

'I find a lot of labelling is quite confusing. It is hard to know what's what.' (Respondent #7)

These responses also indicate a potential relationship between eco-labelling and trust in the content of those labels. The findings of the qualitative focused interviews and past research have contributed to the development of the following hypotheses.

H5: Eco-labelling is positively associated with green product purchase intention

H6: Eco-labelling is positively associated with green trust

5.2.4 Development of Hypothesis 7:

The qualitative focused interviews highlighted the fact that eco-friendly FMCGs were not as readily available as regular FMCGs. Since availability is closely related to the issue of convenience, it was pertinent to ask respondents if they were willing to take the trouble of going to another shop or putting off the purchase if the eco-friendly product they were seeking was not immediately available. Only three respondents said they would travel to

another shop, eight said they might travel, and an overwhelming majority (16 out of 27) said they would not take the trouble of travelling to another shop for an eco-friendly product. Since a significant portion (29.63%) said they might travel, the researcher decided to further probe the impact of availability on consumers' green product purchase intentions. The following responses strengthened the case for further empirical investigation.

'Yes, I would travel.' (Respondent #20)

'I will buy something else for convenience.' (Respondent #27)

These findings resulted in the development of the following hypothesis.

H7: Availability is positively associated with green product purchase intention

5.2.5 Development of Hypothesis 8:

This hypothesis has been drawn from the work of Chan and Cheng (2012) and focuses on the impact of green trust on consumers' green product purchase intentions. The previous hypotheses (**H2**, **H4**, **H6**) have been developed to investigate the mediating role of green trust. This hypothesis is aimed at investigating of the relationship, as suggested by Chan and Cheng (2012), between green trust and consumers' purchase intentions. The lack of substantial research on this issue has prompted the researcher to further investigate the findings of Chan and Cheng, and determine whether it holds true in the Australian context. Thus, the following hypothesis was developed.

H8: Green trust is positively associated with green product purchase intention

5.2.6 Development of Hypothesis 9:

This hypothesis was developed on the basis of the findings of the qualitative focused interviews and findings from past research. It is aimed at investigating the influence of subjective norms and individual beliefs of green product purchase intentions. Separate studies (e.g. Mostafa, 2007) have examined the influence of religion and other social factors, and presented an array of findings which cannot necessarily be generalised in all contexts. The diversity of the Australian population made this factor an important one since it can aid in not only pinpointing the factors that influence consumers' green product purchase intentions but also aid in developing a profile of the customer. Findings from the qualitative focused interviews indicated that the effects of culture and background are varied: four respondents stated that culture and background had no effect; ten suggested that culture and background

did influence their purchase decisions; and thirteen suggested that other social and personal factors play a role. The following quotes illustrate this difference of opinion amongst the respondents.

'No, it (cultural background) doesn't have any effect. If I want to buy it, I'll buy it. If I don't, I don't'. (Respondent #21)

'The simpler answer is yes. My parents brought me up to look after things and leave in a better state than you found them, or as good as a state as you found them.' (Respondent #13)

Further empirical investigation of the relationship between culture and social background, and purchase decisions is warranted. Thus, the following hypothesis was developed:

H9: Subjective norms and individual values and beliefs are positively associated with green product purchase intention

5.3 CONCEPTUAL MODEL OF THE STUDY

The conceptual model, which is illustrated in Figure 5.1, was developed on the basis of the findings of the qualitative focused interviews and findings reported in the literature. The conceptual map shows the potential relationships (the hypotheses to be tested) among factors that might influence consumers' green product purchase intentions within the context of FMCGs.

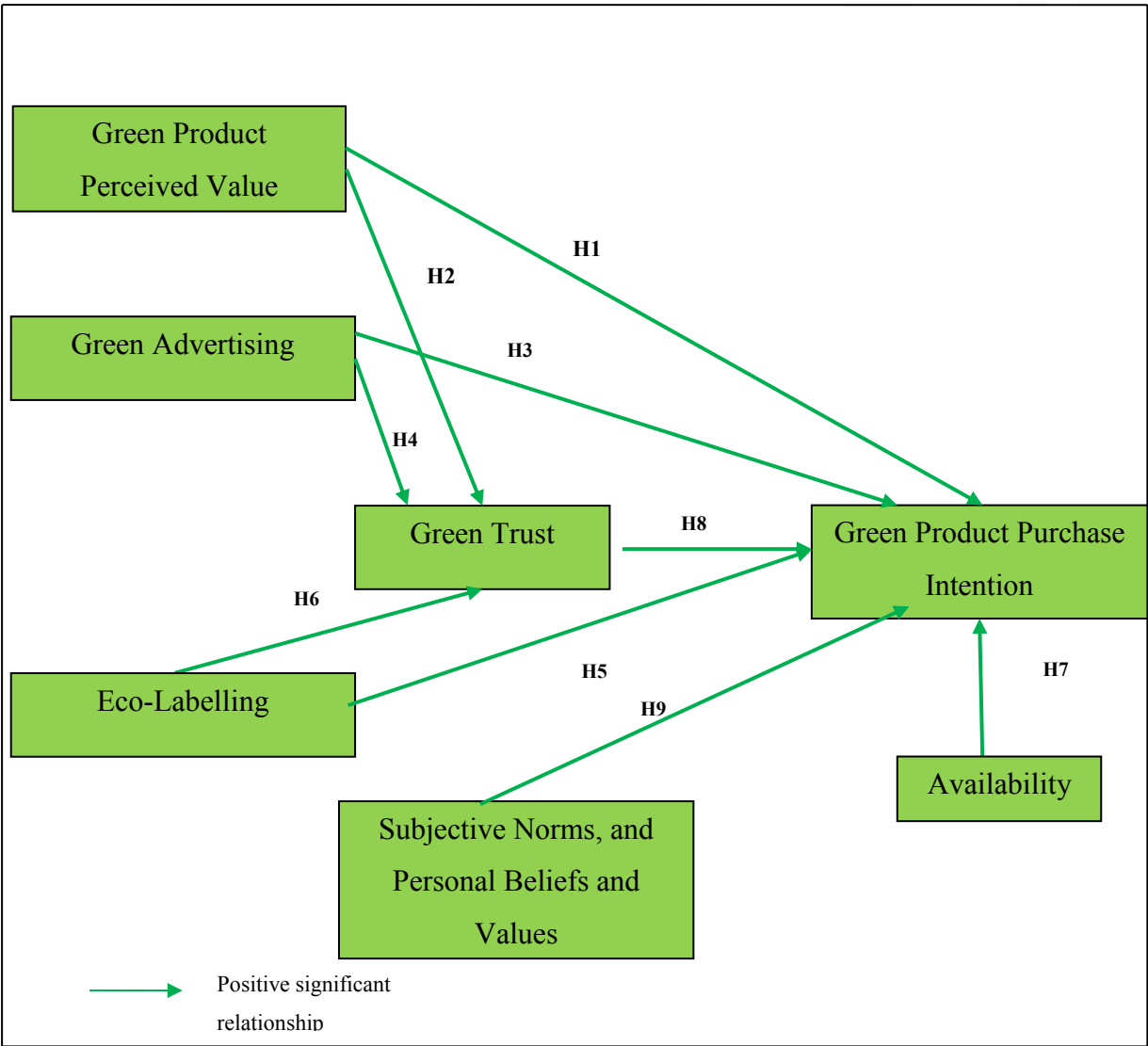


Figure 5.1 Conceptual model of the study

5.4 PRE-TEST

In order to develop the survey instrument to be used to test the hypothesis for this study, summarised in the conceptual model (Figure 5.1), the researcher undertook a number of steps to ensure that the survey instrument to be used was reliable and valid. The first step of this scale purification process was the pre-test stage.

A questionnaire was distributed to 25 members of the Armidale community. The primary objective of pre-testing the questionnaire was ensure the questions were easily understood by respondents and gain an estimate of how long it took to complete the questionnaire. Upon

completion of the questionnaire, respondents were asked about difficulties they faced in completing the questionnaire. They reported two issues:

1. Problems remembering what the numbers stood for in the Likert Scale. To address this problem the words “strongly agree”, “agree” etc. were repeated on all pages containing the Likert scale items. This made it easier for them to recall what number stood for what response.
2. Cluttered look of pages because the Likert scale items were grouped together. Thus, the items were divided into two parts: a section on marketing factors that potentially influence purchase decision, and personal and social factors. This enhanced the readability of the questions and eliminated the cluttered look.

5.5 PILOT SURVEY

A pilot survey was conducted using 203 subjects. The pilot survey, as explained in Chapter 3, was conducted in different parts of Sydney using the mall intercept method. The sampling unit consisted of individuals over the age of 18. The following sections discuss the characteristics of the participating sample in the pilot survey and the main findings of this stage of the research.

5.5.1 Descriptive statistics of the sample

The frequencies and valid percentage of the various demographic and behavioural characteristics of the respondents have been presented in the tables and figures that follow. The overall number of respondents interviewed during the survey pilot study was completed by 210 respondents but seven of the questionnaires could not be used because that they had not been properly completed. Thus, 203 questionnaires were collected and used for preliminary analysis in the pilot study.

5.5.2 Demographic profile of respondents

The demographic profile of the respondents who participated in the survey is shown in Table 5.1.

Table 5.1: Demographic characteristics of survey respondents

Item	Characteristic	Frequency	%
Gender	Male	90	44.3
	Female	113	55.7
Age	18-21	48	23.6
	22-25	33	16.3
	26-30	30	14.8
	31-40	51	25.1
	41-50	28	13.8
	51-60	12	5.9
	61 or over	1	0.5
Education	Primary School	0	0
	Secondary School	43	21.2
	Vocational Education and Training	47	23.2
	Undergraduate	67	33
	Post Graduate	46	22.7
Income	\$20,000 and below	49	24.1
	\$20,001-\$35,000	23	11.3
	\$35,001-\$50,000	47	23.2
	\$50,001-\$65,000	36	17.7
	\$65,001-\$80,000	21	10.3
	\$80,000 and over	27	13.3
Ethnic Background	Anglo Australian	101	49.8
	Asian	61	30
	Middle Eastern	24	11.8
	New Zealander	1	0.5
	Other	16	7.9
Occupation	Self-employed	4	2
	Public servant	9	4.4
	Professional	17	8.4
	Manager	27	13.3
	Executive/Admin	63	31
	Technician/Tradesman	7	3.4
	Student	27	13.3
	Academic	3	1.5
Other	46	22.7	
Employment Status	Full-time	109	53.7
	Part-time	28	13.8
	Casual	38	18.7
	Self-employed	5	2.5
	Unemployed	23	11.3
Marital Status	Single	103	50.7
	Married	80	39.4
	Divorced	5	2.5
	Other	15	7.4
Number of Children	0	130	64
	1	33	16.3
	2	21	10.3
	3	16	7.9
	4 or more	3	1.5

The table shows that over half of the respondents (55.7%) were females. This reflected the researcher's experience that women were more willing to participate in the survey. The age distribution of the respondents was fairly normal with the exception of those over the age of 61 (only one respondent). Most of the respondents were under the age of 40. In terms of the level of education of the respondents, undergraduates (33%) represented the largest proportion, while other education categories were fairly equally distributed: secondary school degree (21.2%), vocational education and training (23.2%), and post graduate degree holders (22.7%). In terms of income distribution, 58.6% had income levels of \$50,000 or below and the remainder (41.4%) earned more than \$50,000. Thus there appears to be a representative number of respondents from major income groups. In terms of ethnic backgrounds, Anglo Australians comprised approximately half (49.8%); Asians 30 %, Middle Easterners, 11.8 %; and the remainder, (New Zealanders, Africans, Europeans etc.), 8.4% %.

Table 5.1 also shows that most survey respondents (31%) were involved in working in an executive or administrative position; an equal number of were either students or working in managerial positions (13.3% each); and the remainder worked in various other professions (tradesman, academic, public servant, self-employed etc.). Most respondents (53.7%) were full-time employees; this was followed by respondents who were either casuals (18.7%) or part-time employees (13.8%). The remaining 13.8% of the respondents were either self-employed (2.5%) or unemployed (11.3%). In addition, over half of the respondents (50.7%) who participated in the survey were single; 39.4 % were married; and the remaining 9.9 % were either divorced or were in some other form of relationship (separated, widowed etc.). A large number of the respondents (64%) had no children, 16.3 % had one child, 10.3 % had two, 7.9 % had three, and 1.5 % had four or more children.

5.5.3 General pattern of behaviour of the respondents

Information about the general pattern of behaviour of respondents was collected because it was considered to be an important factor to take into account when defining the profile of the segment that intends to purchase eco-friendly FMCGs. Table 5.2 shows the frequencies and percentages of the factors: frequency of grocery shopping; who does the shopping in the household; description of consumers' eco-friendly behaviour profile; eco-friendly activities that consumers engage in; effort made to purchase eco-friendly FMCGs; probability of actual purchases of eco-friendly FMCGs; and portion of purchases that were classified as eco-friendly FMCGs.

Table 5.2: Behavioural characteristics of respondents

Item	Characteristic	Frequency	%
Frequency of grocery shopping	Daily	16	7.9
	Weekly	137	67.5
	Fortnightly	27	13.3
	Monthly	6	3.0
	Other	17	8.4
Person responsible for doing grocery shopping in the household	Self	72	35.5
	Partner/spouse	14	6.9
	Jointly (self and partner/spouse)	74	36.5
	Parents	42	20.7
	Other	1	0.5
Best description of self	Major green purchaser and recycler	35	17.2
	Will buy green but not make lifestyle changes	49	24.1
	Care about the environment but will only spend little more to buy green	98	48.3
	Thinks caring for the environment is somebody else's problem	6	3.0
	Does not care about environmental issues	15	7.4
Activities engaged in	Use biodegradable soaps and detergents	47	23.2
	Avoid buying aerosol products	39	19.2
	Read labels to see if the products are environmentally safe	68	33.5
	Buy products packaged in recycled materials	88	43.3
	Buy products that can be refilled	116	57.1
	Avoid buying products from companies who are not environmentally responsible	40	19.7
	Recycle bottles, cans or glass	179	88.2
	Recycle newspapers	159	78.3
	Compost garden waste	88	43.3
	Takes own bag to the supermarket	83	40.9
	Cut down on car use	43	21.2
	Contribute money to environmentally friendly causes	25	12.3
	Volunteer for an environmental group	10	4.9
	Write to politician	6	3.0
Other	6	3.0	
Always makes a conscious effort to purchase eco-friendly FMCGs	Yes	51	25.1
	No	71	35.0
	Does, but no always	79	38.9
Always purchases eco-friendly FMCGs	Yes	19	9.4
	No	89	43.8
	Does, but not always	94	46.3
Portion of shopping classified as eco-friendly	0-20%	59	29.1
	21-40%	55	27.1
	41-60%	43	21.2
	61-80%	33	16.3
	81-100%	13	6.4

The descriptive statistics presented in Table 5.2 show some information that are of relevance to marketers of ecofriendly FMCGs. The general shopping behaviour of the respondents show that most of respondents (67.5%) shop for groceries on a weekly basis. The shopping in the household is predominantly carried out by the respondent (35.5%) or jointly with spouse/partner (36.5%). The table also shows that 48.3 % identify themselves as being environmentally conscious but not willing to pay too much for eco-friendly products. In terms of engagement in environmental activities, a majority of respondents were engaged in the recycling of bottles, cans and glass (88.2%), recycling newspapers (78.3%), and buying products that can be refilled (57.1%). A quarter (25.1%) of respondents reported to always making a conscious effort to buy eco-friendly FMCGs. However, as subsequently found when asked about actual purchases, only a small number (9.4%) reported to always buying eco-friendly FMCGs. When the respondents were asked to classify what portion of their grocery shopping comprised eco-friendly FMCGs, there was a relatively even spread across the and only a small number (6.4%) nominated over 81% of their grocery shopping as being eco-friendly.

5.5.4 Initial data screening results

Prior to entering data, the questionnaires were checked for missing data. Of the 210 questionnaires, 203 were usable and seven not because they were incomplete. Missing value analysis showed no missing data from the questionnaires that were used for analysis. Normality of the data was also investigated by studying residual plots and checking for skewness and kurtosis; residual plots appeared to be normal, and the skewness and kurtosis values were close to zero. Thus, the assumption of normality was not violated (Affi & Clark, 1998).

5.5.5 Main findings of the pilot survey

The primary objective of the pilot survey was to purify the questionnaire scale items. The questionnaire comprised 40 items related to the various factors that potentially influence consumers' green product purchase intentions in the context of FMCGs. To purify the scales, exploratory factor analysis was conducted a number of times; principal components and Promax rotations were used. This allowed for the correlation of factors to be examined (Wideman, 1993). In each of the steps in the exploratory factor analysis, the scale was purified by eliminating scale items with $\alpha < .6$ before conducting the next series of exploratory factor analysis.

Table 5.3 shows the process followed for purifying the scale that measures the factors that influence consumers' green product purchase intentions. The initial solution shows that there were eight (8) factors to begin with. The final solution had seven factors (7). In addition, eight scale items were deleted in the process of scale purification.

Table 5.3: Process followed for purifying the scale measuring factors influencing consumers' green product purchase intentions

No	Variables or Factors Deleted	Reason	Number of Factors
1		Initial solution	8
2	F4	Factor 4 had low Cronbach alpha	7
3	Av1	Loading value below 0.4	7
		Final solution	7

The final solution of the exploratory factor analysis comprised twenty-five (25) scale items that were categorized into seven (7) factors. All the factors had eigenvalues higher than one. The internal consistency values for the factors ranged from 0.67 to 0.89, which indicated a high level of reliability. Cumulatively, the items explain 63.97 % of the total variance. This is considered to be a good value in an exploratory study (Garson, 2006). Bartlett's Test of Sphericity showed a large chi-square value, which is highly significant χ^2 (DF=325, n=203) = 2194.467, $p < .05$ and KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) was 0.760. The value of 0.60 or above is required for KMO to be considered adequate (Kaiser & Rice, 1974). Thus both Bartlett's Test of Sphericity and KMO figures signalled the appropriateness of applying Principle Components Analysis to the data set. The final solution shown in Table 5.4, comprises 25 scale items across 7 factors, which, collectively explain 63.97 % of the total variance; above the minimum threshold of 60 % considered appropriate in the social sciences (Hair, Babin, and Anderson, 2010, p. 109).

Table 5.4: Final solution of exploratory factor analysis

Scale Items	Factors						
	1	2	3	4	5	6	7
I feel that green products' environmental claims are generally trustworthy	.902						
I feel that green products' environmental performance are generally reliable	.895						
I feel green products' environmental reputation are generally reliable	.889						
Green products keep promises and commitments for environmental protection	.603						
Green products offer good value for money		.800					
I find that the price charged by green products is reasonable		.765					
I find that green products offer good quality/benefits		.628					
Green products' environmental performance meets your expectations		.473					
In my culture looking after the environment is an important facet of life			.754				
My religious views play an important role in influencing me to purchase eco-friendly products			.676				
My political views play an important role in influencing me to buy eco-friendly products			.672				
My upbringing has taught me the importance of eco-friendly products			.573				
My decision to purchase eco-friendly products is influenced by my friends				.826			
My decision to purchase eco-friendly products is influenced by my colleagues				.821			
My decision to purchase eco-friendly products is influenced by my family members				.740			
People who influence my behaviour encourage me to buy eco-friendly products				.550			
I find arguments presented in green ads to be unconvincing					.806		
Environmental advertisements are always exaggerated					.747		
The advertiser of the product does not bear an eco-friendly image					.674		
The contents of environmental advertising are of little relevance to my daily life					.450		
I purchase green products because they are environmentally friendly						.905	
I purchase green products because they have more environmental concern than regular products						.828	
I purchase eco-friendly products because they have more benefits than other products						.438	
I will take the effort of going to another shop							.911

Scale Items	Factors						
	1	2	3	4	5	6	7
if the eco-friendly product is not available							
I will delay my purchase if the eco-friendly product I want is not available							.893
Variance	23.88	10.26	7.69	6.84	5.93	4.80	4.58
Total variance	23.88	34.14	41.83	48.67	54.60	59.40	63.97
Cronbach's alpha	0.83	0.822	0.763	0.665	0.673	0.763	0.891

5.5.6 Factor labelling

The final solution of the exploratory factor analysis categorised the items into seven factors; scale items were grouped together and each group was identified as a factor. Following is a discussion of each of these factors.

Factor 1: Green Trust: This factor relates to the trust that the consumers have for the claims made by about green products. Table 5.5 shows the four scale items that form this group.

Table 5.5: Factor labels

Factor Label	Item No:	Item Label	Items	Cronbach's alpha
F1 Green Trust	1	GT1	I feel green products' environmental reputation are generally reliable	0.83
	2	GT2	I feel that green products' environmental performance are generally reliable	
	3	GT3	I feel that green products' environmental claims are generally trustworthy	
	4	GT4	Green products keep promises and commitments for environmental protection	
F2 Green Product Perceived Value	5	PV1	Green products offer good value for money	0.822
	6	PV2	Green products' environmental performance meets your expectations	
	7	PV6	I find that the price charged by green products is reasonable	
	8	PV7	I find that green products offer good quality/benefits	
F3 Personal Beliefs and Values	9	SN5	My upbringing has taught me the importance of eco-friendly products	0.763
	10	SN6	In my culture looking after the environment is an important facet of life	
	11	SN7	My religious views play an important role in influencing me to purchase eco-friendly products	
	12	SN8	My political views play an important role in influencing me to buy eco-friendly products	
F4 Subjective Norms	13	SN1	People who influence my behaviour encourage me to buy eco-friendly products	0.665
	14	SN2	My decision to purchase eco-friendly products is influenced by my friends	
	15	SN3	My decision to purchase eco-friendly products is influenced by my family members	
	16	SN4	My decision to purchase eco-friendly products is	

			influenced by my colleagues	
F5 Green Advertising	17	AD1	The contents of environmental advertising are of little relevance to my daily life	0.673
	18	AD3	Environmental advertisements are always exaggerated	
	19	AD4	I find arguments presented in green ads to be unconvincing	
	20	AD5	The advertiser of the product does not bear an eco-friendly image	
F6 Environment al Concern and Commitment of Green Products	21	PV3	I purchase green products because they have more environmental concern than regular products	0.763
	22	PV4	I purchase green products because they are environmentally friendly	
	23	PV5	I purchase eco-friendly products because they have more benefits than other products	
F7 Availability	24	AV2	I will delay my purchase if the eco-friendly product I want is not available	0.891
	25	AV3	I will take the effort of going to another shop if the eco-friendly product is not available	

Factor 2: Green Product Perceived Value: This factor relates to the perceived value that customers green products offer. It not only focuses on price but also on the relationship between price and the benefits derived from these products. Table 5.5 shows the four scale items that have been used to measure this factor.

Factor 3: Personal Beliefs: This factor relates to individuals' religious and political beliefs, and how they influence consumers' green product purchase intentions. It also takes into account the individual's cultural background and upbringing and how that influences their purchase intentions. Table 5.5 shows the four scale items used to measure this factor.

Factor 4: Subjective norms: This factor relates to the influence of family, friends, colleagues, and others on consumers' purchase decisions. The findings from the qualitative stage of this study show the likelihood of influence of word-of-mouth from friends and family on consumers' green product purchase intentions. Table 5.5 shows the four scale items used to measure this factor.

Factor 5: Green Advertising: This factor relates to the advertising of green products and whether it influences consumers' green product purchase intentions. The findings of the qualitative survey showed mixed results, with an almost equal split between those influenced by such advertisements and those not. Table 5.5 shows the four scale items used to measure this factor.

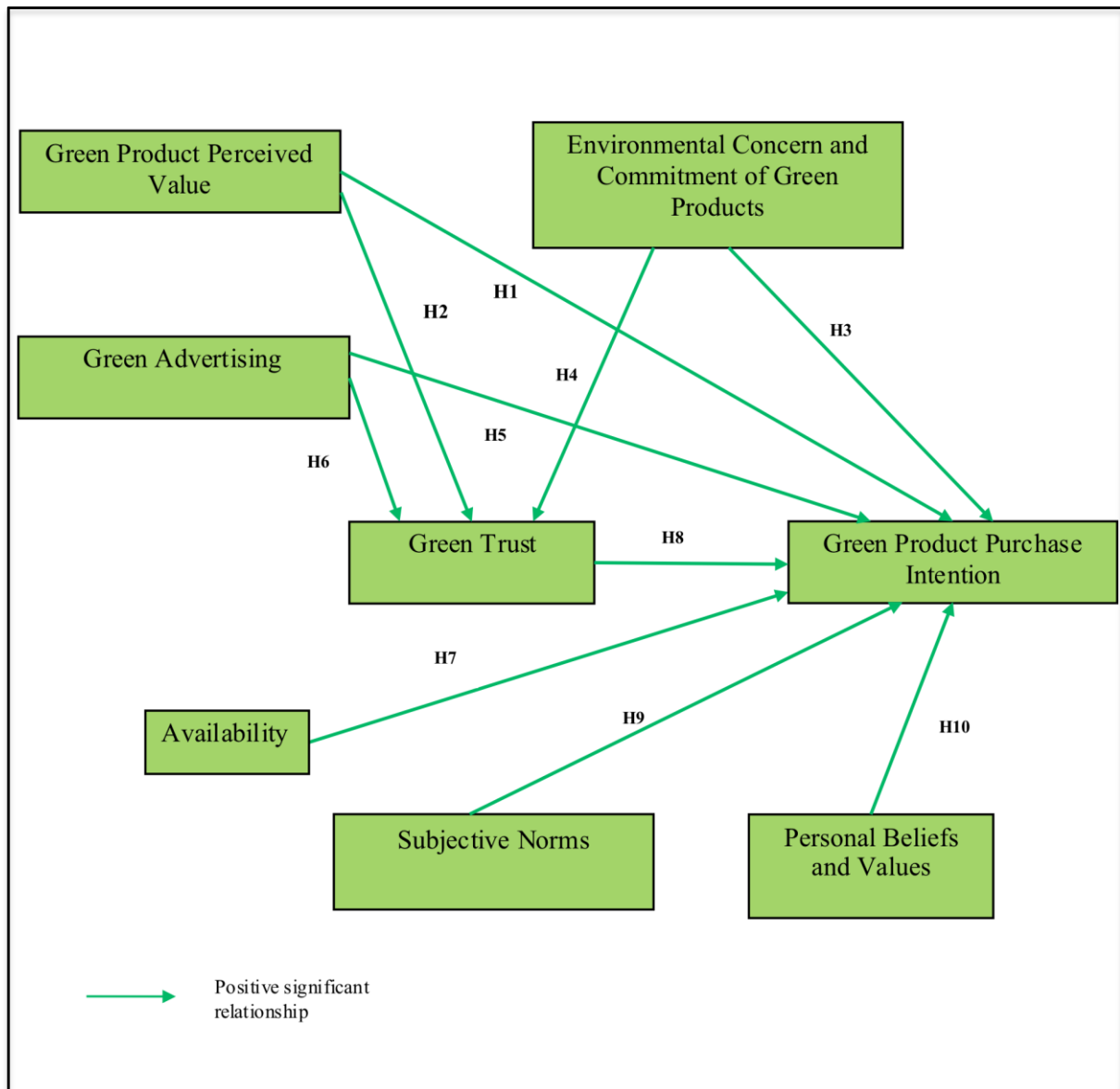
Factor 6: Environmental commitment of green products: This factor relates to the commitment and concern towards the environment shown by purchasers of eco-friendly FMCGs. The factor examines whether people's purchase intentions are influenced by a commitment to these types of products. The three items used to measure this are shown in Table 5.5.

Factor 7: Availability: This factor relates to the impact that availability has on consumers' purchase intentions of eco-friendly FMCGs. The two scale items used to measure this factor are shown in Table 5.5.

5.6 REVISED MODEL OF THE STUDY

A revised model developed on the basis of the findings of the pilot study was developed to test a revised set of hypotheses, as listed below. The model differs from the initial one (Figure 5.1) in a number of ways. After performing the EFA, the grouping of the items suggested that the environmental commitment and concern of green products, and personal beliefs and values of consumers were two separate factors that needed to be taken into account in the model. In addition, the eco-labelling factor was removed from the model due to a poor reliability score. Taking these changes into account, the model was revised and is illustrated in Figure 5.2.

Figure 5.2: Revised conceptual model of the study



5.7 HYPOTHESES TO BE TESTED

Based on the findings of the exploratory factor analysis, the factors were grouped according to scale items that were similar and were given appropriate labels. The changes from the initial proposed model were the separation of personal beliefs and values from the subjective norms construct, and the creation of a construct called green products' environmental concern and commitment. This construct measures the influence of the claims of environmental concern made by eco-friendly FMCGs on consumer purchase intentions. In addition, the construct of eco-labelling was deleted from the model because the Cronbach Alpha value fell below the acceptable limit.

Following are the hypotheses to be tested in the next phase of the study:

H1: Green product perceived value is positively associated with green product purchase intention

H2: Green product perceived value is positively associated with green trust

H3: Green products' environmental concern and commitment is positively associated with green product purchase intention

H4: Green products' environmental concern and commitment is positively associated with green trust

H5: Green advertising is positively associated with green product purchase intention

H6: Green advertising is positively associated with green trust

H7: Availability is positively associated with green product purchase intention

H8: Green trust is positively associated with green product purchase intention

H9: Subjective norms is positively associated with green product purchase intention

H10: Personal beliefs and values is positively associated with green product purchase intention

5.8 SUMMARY

This chapter discussed the rationale behind the development of the various hypotheses and the conceptual framework of the model. The overall aim of the research was to identify the relevant factors that influenced consumers' green product purchase intentions in the context of the Australian market. The findings of the qualitative focused interviews enabled the researcher to identify the various factors that may potentially influence consumers' green product purchase intentions. From the analysis of past literature and the findings of the interviews, 40 items were developed to measure the various constructs. Once the survey instrument had been developed, a pre-test was carried out to ensure that the instrument was easily understood by potential respondents and free from errors. A pilot survey was then conducted in Sydney and comprised a sample of over 200 respondents. Exploratory factor analysis was conducted on the resulting data to test the purity of the scale. The final solution resulted in a questionnaire with 29 scale items in addition to questions on the demographic

profile and behavioural aspects of consumers. The scale items were divided into seven factors, which were labelled and discussed in this chapter. The revised model shows the relationships to be tested in the next phase of the study, as discussed in Chapter 6.

Chapter 6 initially discusses the findings of the confirmatory factor analysis and goes on to discuss the relationship between the various variables under investigation. The chapter also discusses the results of the tests of the hypotheses.

CHAPTER 6: QUANTITATIVE RESEARCH FINDINGS

6.1 INTRODUCTION

The previous chapter discussed the model that was developed and the corresponding hypotheses. In this chapter, the findings of the main quantitative survey are presented. The survey aimed to confirm the findings of the qualitative focused interviews and answer the research questions developed at the outset. The objective of this chapter is to report the results of this final phase of the study, which relates to the factors that influence consumers' green product purchase intentions in the context of fast moving consumer goods, and developing a profile of the green consumers.

This chapter is divided into two major sections: the first section presents the demographic and behavioural characteristics of respondents that participated in the survey; the second section reports the findings of the CFA, the path analysis, and the series of MANOVA tests that were performed. The second section of the chapter begins with the CFA, which confirms the findings of the earlier phase of the study (EFA). A path analysis was then conducted using SEM, and the various relationships between the factors that influence consumers' green product purchase intentions were tested. This section of the chapter had a restatement of the ten hypotheses developed earlier (Chapter 5) and provides results of tests of the hypotheses. The findings of MANOVA tests are then reported, addressing the research objective for developing a profile of the green consumer. All assumptions of the relevant statistical tests are presented in the second section of the chapter.

6.2 MAIN SURVEY

The main survey was conducted in Sydney. The researcher collected 310 completed survey questionnaires. This chapter discusses the parts of this phase of the research. It begins with a discussion of the characteristics of the respondents who participated in the survey (demographics and behavioural characteristics). The chapter then presents and discusses the major findings of the survey. This includes the results of the CFA, structural equation modelling used to test the study's hypotheses, and the results of the MANOVA tests conducted to develop a profile of the green consumer.

6.2.1 Demographic characteristics of respondents

Various demographic variables were taken into account for describing the characteristics of respondents, detailed in Table 6.1.

Table 6.1: Demographic characteristics of respondents

Item	Characteristic	Frequency	Percentage
Gender	Male	143	46.1
	Female	167	53.9
Age	18-21	82	26.5
	22-25	55	17.7
	26-30	39	12.6
	31-40	67	21.6
	41-50	47	15.2
	51-60	18	5.8
	61 or over	2	0.6
Education	Primary School	0	0
	Secondary School	81	26.1
	Vocational Education and Training	65	21.0
	Undergraduate	94	30.3
	Post Graduate	70	22.6
Income	\$20,000 and below	92	29.7
	\$20,001-\$35,000	39	12.6
	\$35,001-\$50,000	59	19.0
	\$50,001-\$65,000	52	16.8
	\$65,001-\$80,000	26	8.4
	\$80,000 and over	42	13.5
Ethnic Background	Anglo Australian	148	47.7
	Asian	105	33.9
	Middle Eastern	31	10.0
	New Zealander	1	0.3
	Other	25	8.1
Occupation	Self-employed	6	1.9
	Public servant	11	3.5
	Professional	28	9.0
	Manager	34	11.0
	Executive/Admin	93	30.0
	Technician/Tradesman	8	2.6
	Student	54	17.4
	Academic	14	4.5
Other	62	20.0	
Employment Status	Full-time	151	48.7
	Part-time	50	16.1
	Casual	60	19.4
	Self-employed	8	2.6
	Unemployed	41	13.2
Marital Status	Single	165	53.2
	Married	117	37.7
	Divorced	6	1.9
	Other	22	7.1
Number of Children	0	203	65.5
	1	42	13.5
	2	36	11.6
	3	24	7.7
	4 or more	5	1.6

As for the pilot survey, the sample was selected using the mall intercept method. Table 5.1 shows that the demographic characteristics of this second sample are similar to those for the pilot phase of the study:

- The number of men and women who participated in the survey were fairly equal
- A significant portion of the sample were below the age of 50
- The income of the majority of the sample was \$65,000 or below
- The majority of respondents were of Anglo-Australian ethnic background, followed by Asians
- There was representation across all major occupational groups and employment status

These demographic characteristics are similar to those reported in the 2011 census data of (ABS, which showed that: 50.6 % of the population comprise females, similar to the gender distribution of the sample; the median age of the Australian population was 37, with 14.0 % of the population above the age of 65, similar to the age ranges of respondents, most of whom were under the age of 50 but with a relatively even spread across the different age ranges; and the ancestry of the population, indicative of the ethnic background of the population, was predominantly English (25.9%) and Australian (25.4%), similar to the sample, which comprised 47.7 % Anglo-Australians. The range of occupations and income levels of the sample were also similar to that of the population. Overall, the sample was well representative of the Australian population along the major demographic characteristics.

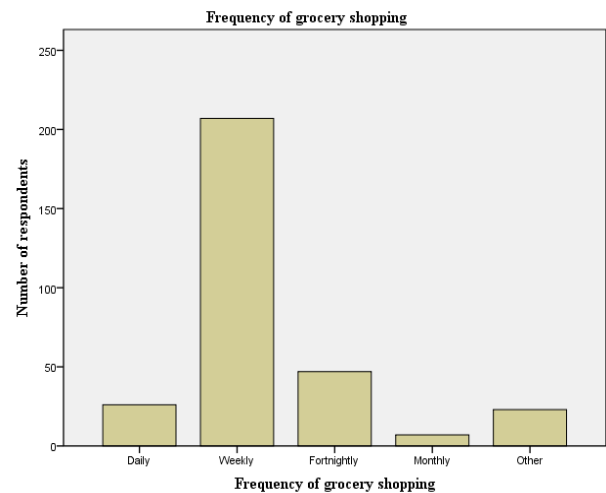
6.2.2 Behavioural characteristics of respondents

The study required data about the behavioural characteristics of respondents, in addition to demographic profile, to enable the development of a holistic profile of the green consumer. The following section describes the behavioural characteristics of the 310 respondents who participated in the main survey. The corresponding bar charts shows the frequency with which respondents displayed the particular behaviours or interest.

Frequency of shopping

As a preliminary question, respondents were asked how frequently they shop for groceries. Most shoppers (66.8%) said they shop on a weekly basis, or four visits to the grocery store each month.

Figure 6.1: Frequency of grocery shopping

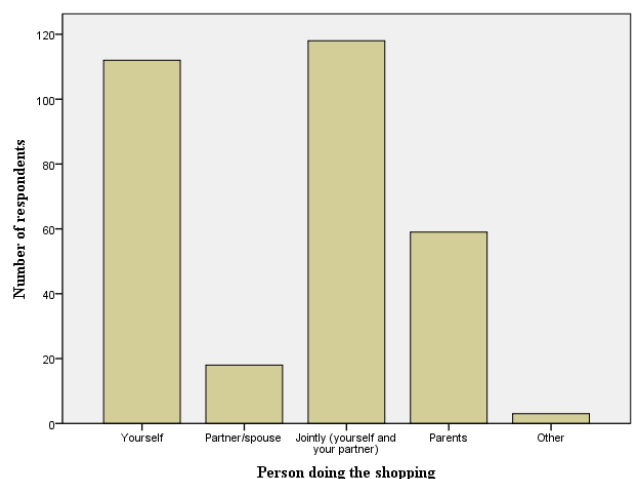


Person in the household doing the shopping

In terms of who, in the household, was doing the shopping, it was found that 38.1 % of respondents do the shopping with their partners.

Figure 6.2: Person doing the shopping

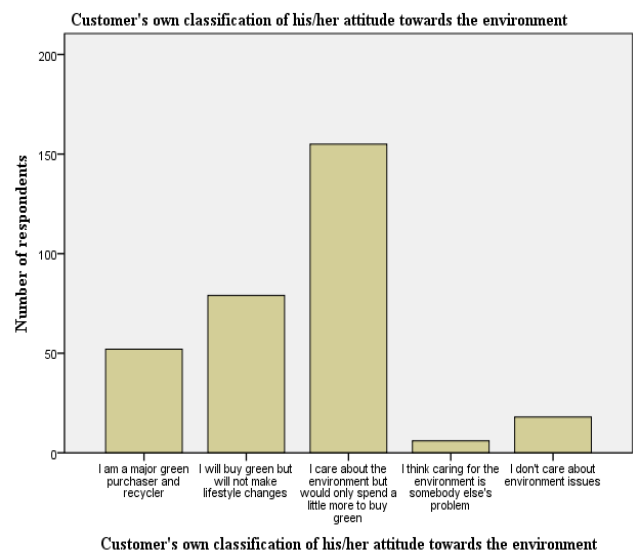
This figure was influenced by the fact that a large number of respondents were married or in a de-facto relationship (43.5%). Just over a third (36.1%) of respondents shop for groceries shopping along. Respondents who were still students and dependents generally had their parents doing the shopping (19.0%).



Attitude towards the environment

Previous studies found that customer's attitudes have an important influence on the buying behaviour of customers. The survey showed that only a small percentage of respondents were apathetic about the environment (7.7%). Most respondents care about the environment, but a half (50.0%) would not spend too much more to buy eco-friendly FMCGs. This statistic is in line with past research which shows that people in Australia are willing to pay around 10 % more for an eco-friendly product. The findings of the qualitative phase of the study (see Chapter 4) also highlighted this aspect of consumer behaviour.

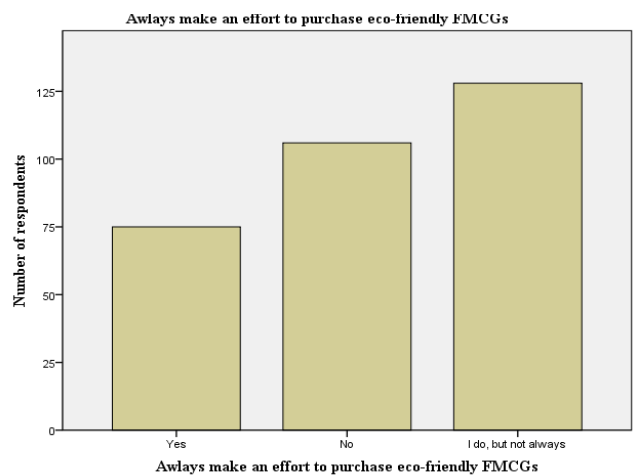
Figure 6.3: Respondents' attitude towards the environment



Effort made to purchase eco-friendly FMCGs

The survey showed that roughly a quarter of respondents (24.2%) always make an effort to purchase eco-friendly FMCGs. Around a third (34.2%) reported not making the effort of doing so. A large portion (41.6%) reported that, due to certain limitations, they are not always able to make the effort to purchase eco-friendly FMCGs even if they wanted to. When asked to explain the limitation, most respondents said that lack of time in their busy lives was a major impediment. A further compounding factor was fact that eco-friendly FMCGs were not as readily available as regular products.

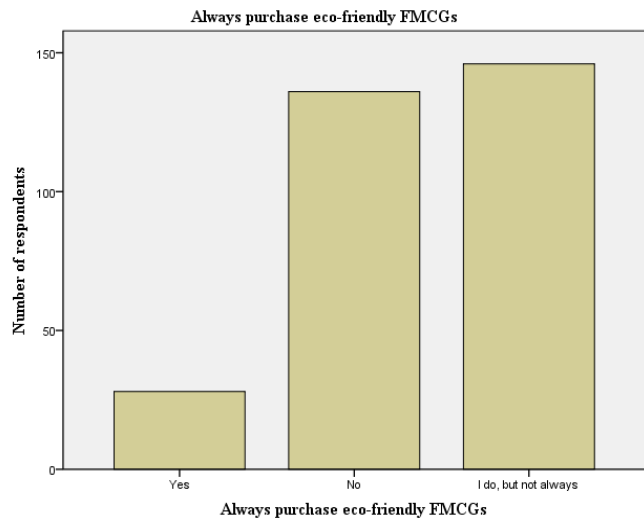
Figure 6.4: Number of respondents who make an effort to purchase eco-friendly FMCGs



Purchase of eco-friendly FMCGs

A small number (9.3%) of respondents turned always purchased eco-friendly FMCGs. A large portion (43.9%) reported not buying eco-friendly FMCGs. Almost half (46.8%) reported that they do buy eco-friendly products, but not always. The reasons for not always buying were the same as those given when asked if they make the effort to purchase such products; lack of time and limited availability of eco-friendly FMCGs were the major limitations reported by respondents.

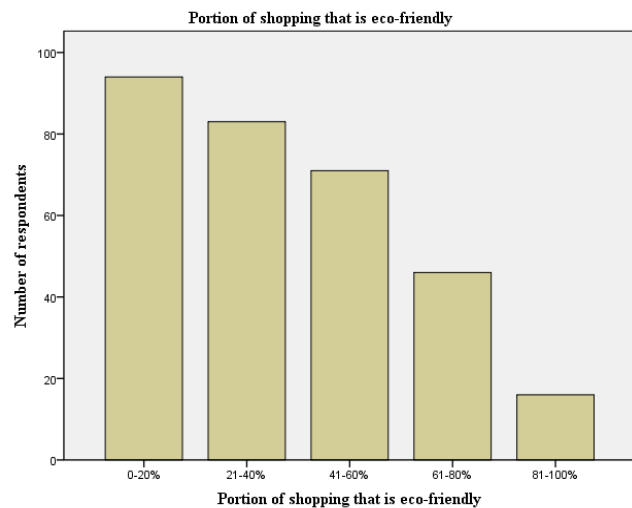
Figure6.5: Number of respondents who always purchase eco-friendly FMCGs



Portion of shopping classified as eco-friendly

To obtain an insight into the volume and portion of groceries that were eco-friendly, respondents were asked to give an estimate. Around a-third of the respondents (30.3%) reported that between 0-20 % of their shopping comprised eco-friendly products. A cumulative 64.5 % of the respondents reported that 21-80 % of their shopping comprised eco-friendly products. This spread is evident in Figure 6.6. Only 5.2 % of respondents reported that 81-100% of their shopping comprised eco-friendly products. The distribution shows a gradual decline in the number of respondents whose purchases comprise a greater portion of eco-

Figure 6.6: Portion of shopping that is eco-friendly



6.3 MAIN FINDINGS

The purpose of this phase of the research was to address the major research objective; that is, to investigate the factors that influence consumers' purchase intentions of eco-friendly products in the context of FMCGs, and developing a profile of the eco-friendly customer. To address these objectives ten hypotheses (see Chapter 5) were tested, and MANOVAs conducted to develop the profile of the eco-friendly customer.

The results of the EFA (discussed in Chapter 5) indicated that the 29-item scale was ready for further validity tests using CFA (Ekiz, Au, & Hsu, 2012). A sample size of 310 respondents was considered appropriate for a 29-item scale. A first order CFA was conducted to test the validity of the factorial structure established in the final EFA solution. Following this, a path analysis was performed using SEM to test the hypotheses.

6.3.1 Initial data screening results

Prior to entering data, the questionnaires were checked for missing data. Of the 316 questionnaires, 310 were usable. Seven of the questionnaires had not been completed and was found to be unusable by the researcher. Missing value analysis showed no missing data from the remaining 310. Checks of residual plots, and skewness and kurtosis (close to zero) of the data confirmed that the assumption of normality held. checks were made to ensure that the assumption of normality . The residual plots appeared to be normal, and the skewness and kurtosis values were close to zero. Thus, the assumption of normality was not violated (Affi & Clark, 1998).

6.3.2 Results of confirmatory factor analysis (CFA)

AMOS (version 20) was used to conduct first order CFA. This was performed to test the validity of the factors' solution (8 factors) of EFA. The proposed model was assessed in the following ways: (i) evaluating overall model fit and (ii) evaluating adequacy of the parameter estimates (Byrne, 2009, p. 67).

(i) Evaluation of the model fit

Table 6.2 shows the major model fit evaluation indices produced by the first order CFA model and the recommended minimum threshold values (criteria) for each of the indices.

Table 6.2: Model fit indices of the first order CFA model

Name of the Indices	Reported value	Criteria
Chi-square/DF ratio (CMIN/DF)	1.784	CMIN/DF <3
CFI	.932	CFI>.90
IFI	.933	IFA>.90
TLI	.921	TLI>.90
RMSEA	.050 Lower confidence interval=.044 Upper confidence interval=.057	RMSEA < .08 with a narrow lower and upper confidence interval
ECVI	2.573 (Default model) 2.816 (Saturated model) 14.479 (Independence model)	Default model should report the smallest value
HOELTER	206 at .01 level	HOELTER figures at .01 level > 200

The reported CMIN/DF value of 1.784 indicates a good overall model fit since it is less than 2, which is the statistical benchmark of the CMIN/DF (Hair, et al, 1998, p.658). The other fit indices also show that the model is well fitted to the data. The CFI, IFI and TLI are greater than the threshold of good model fit of 0.90 (Hu & Bentler, 1999). Hu and Bentler (1999) suggest that CFI, IFI, and TLI values greater than 0.95 show very good model fit, but values above 0.90 are acceptable and show good model fit. The RMSEA was .050, which is less than .08 cut-off threshold associated with a narrow lower and upper confidence interval (.044 and .057) (MacCullum, Browne, & Sugawara, 1996). In addition, the default model reported the smallest value for ECVI, which indicates that the model can be cross-validated using similar samples from the same population (Browne & Cudeck, 1992). Finally, the HOETLER figure of 206 at .01 level indicated a good sample adequacy for the model; according to Hoelter's benchmark (1983), 200 would indicate good sample adequacy for the model. Thus, the statistics provide adequate evidence to support for a good model fit of the first order CFA.

(ii) Adequacy of the parameter estimates:

Goodness of the parameter estimates was reviewed using the three criteria proposed by Byrne (2009, p. 67): (i) the feasibility of the parameter estimates (ii) the appropriateness of the standards errors, and (iii) the statistical significance of the parameter estimates. Verifying the

feasibility of the parameter estimates involved examining whether the parameter estimates exhibited the correct sign and size according to the underlying theory. The results revealed no problem with those estimates. Following this, the inspection of the standard errors indicated that they were acceptable and no excessively large or small values were found. Finally, the examination of statistical significance of the estimates revealed that all the estimates were statistically significant with the critical values greater than ± 1.96 ($p < .05$). Table 6.3 shows the estimates of standardised regression weights (factor loadings) of each of the items.

Table 6.3: Standardised regression weights of items

Dimension	Standardised regression weights (Factor Loadings)	Dimension	Standardised regression weights (Factor Loadings)
Green Trust		Personal Beliefs and Values	
GT1	.779*	SN5	.695*
GT2	.823*	SN6	.621*
GT3	.721*	SN7	.612*
GT4	.628*	SN8	.601*
Green Product Perceived Value		Green Advertising	
PV1	.584*	AD1	.336*
PV2	.710*	AD3	.712*
PV6	.447*	AD4	.878*
PV7	.697*	AD5	.448
Subjective Norms		Environmental Commitment of Green	
SN1	.386*	PV3	.884*
SN2	.825*	PV4	.788*
SN3	.783*	PV5	.550*
SN4	.837*	Availability	
		AV2	.871*
		AV3	.896*
		Green Product Purchase Intention	
		PI1	.896*
		PI2	.899*
		PI3	.846*
		PI4	.789*

*Significant at $p < .05$

The confirmatory model showing the various relationships is presented in Appendix 6.1.

A path analysis was conducted to test the ten hypotheses discussed in Chapter 5.

6.3.3 Empirical investigation of the factors influencing consumers' green product purchase intentions

The relationships of factors potentially influencing consumers' green product purchase intentions was investigated on the basis of the ten hypotheses discussed in Chapter 5. The hypotheses aim to investigate the factors that might influence consumers' green product purchase intentions. The independent variables taken into account comprise: marketing factors; green trust, which is a mediating variable; and individual and social factors. The

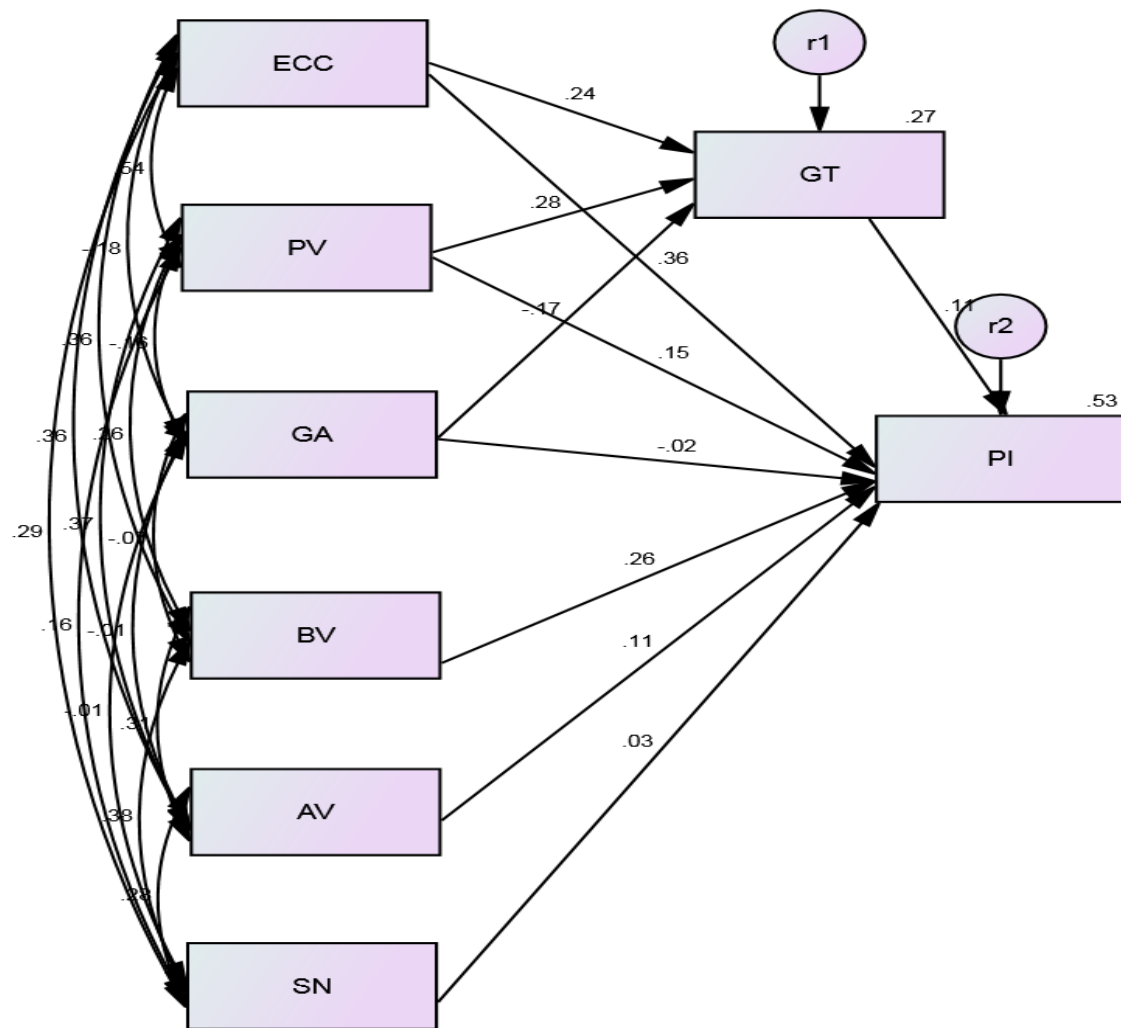
sample used for this phase of the study comprised of 310 respondents from various locations in Sydney. The results of the hypotheses tests have been discussed in the following sections.

6.3.3.1 Results of path analysis

The path model was tested using AMOS (version 20). The model assessment was performed by inspecting and evaluating the model fit indices as, suggested by Byrne (2009, p. 67).

Assessment of model fit

The overall goodness-of-fit of the model was measured by the following indices: χ^2 (3, N=310) = 6.798, $p = .079 < .05$, CMIN/DF = 2.266, and CFI=.994. These values were as expected and met the minimum cut-off points, indicating very good model fit. Other model fit indices also confirmed that the model fitted well to the data: GFI = .995 >.95, IFI=.994 >.95, NFI=.989 >.95, RMSEA = .064 <.08 and HOELTOR values were 356 and 516 at the .05 and .01 levels respectively and well above the 200 threshold level. The final path model is shown in Figure 6.7.



Legend: ECC= Environmental Concern and Commitment of the Companies; PV = Perceived Value of Green Product; GA= Green Advertising; BV= Beliefs and Values of Individuals; AV= Availability of Green Products; SN= Subjective Norms; GT= Green Trust; PI= Green Product Purchase Intention

Figure6.7: Path analysis

1. *Relationship between green product perceived value and green product purchase intention*

Perceived value was a factor that surfaced in the qualitative focused interviews. Respondents do not look at price and quality in isolation, but balance the two elements. A review of past research showed that this factor was not studied in detail, though it was noted by Chen and Chang (2012). The findings of the qualitative focused interviews suggested that a positive relationship may exist between green product perceived value and green product purchase intention. This led to the development of *H1*:

H1: Green product perceived value is positively associated with green product purchase intention

The results of the path analysis using SEM showed that there was a significant relationship between green product perceived value and green product purchase intention ($p=.002$). This was in line with the findings of Chen and Chang (2012) and provided empirical support for the findings of the qualitative focused interviews. Thus, this hypothesis is supported.

2. ***Relationship between green product perceived value and green trust***

The issue of trust is something that arose frequently in the qualitative focused interviews; respondents voiced scepticism about marketing claims for eco-friendly products. This is another factor whose mediating role in green product purchase intentions was not studied in great depth in past research. The researcher drew upon the work of Chen and Chang (2012) to examine this relationship that did not feature heavily in past literature. However, the qualitative focused interviews undertaken earlier in the study (Chapter 4) provided strong evidence to suggest the development of the second hypothesis of the study:

H2: Green product perceived value is positively associated with green trust

The results of the path analysis show there is a significant positive relationship between green product perceived value and green trust ($p<.001$). Thus, *H2* is supported and the positive relationship between green product perceived value and green trust was established.

3. ***Relationship between green products' environmental concern and commitment, and green product purchase intention***

The construct of green products' environmental concern and commitment was developed on the basis of the grouping of the items in the EFA, which led to development of the third hypothesis.

H3: Green products' environmental concern and commitment is positively associated with green product purchase intention

The results of the path analysis shows that there is a significant relationship between environmental concern and commitment of the green products and consumers' green product purchase intentions ($p<.001$). *H3* is, thus, supported.

4. ***Relationship between green products' environmental concern and commitment and green trust***

As with some other marketing factors, the trustworthiness of claims of environmental concern and commitment made of green products by their manufacturers and marketers were a concern. This was in line with the issue of green trust which surfaced during the qualitative focused interviews. To investigate the existence of a relationship between this factor and green trust, the following hypothesis was developed:

H4: Green products' environmental concern and commitment is positively associated with green trust

The path analysis revealed that there is a significant relationship between these two variables ($p < .001$). Thus, this hypothesis is supported.

5. *Relationship between green advertising and green product purchase intention*

This relationship was hypothesized on the basis of the findings of the qualitative focused interviews. There were mixed responses in terms of the role of green advertising influencing consumers' green product purchase intentions. This suggested that empirical investigation needed to be conducted to further explore this relationship. *H5* was developed to test this relationship:

H5: Green advertising is positively associated with green product purchase intention

The path analysis clearly indicates there is no significant relationship between the two variables ($p = .561$). Thus, this hypothesis is not supported in the study.

6. *Relationship between green advertising and green trust*

This relationship warranted further investigation since it was evident from the qualitative focused interviews that people wanted the claims made by green advertisements to be substantiated. Some respondents were sceptical about the claims being made in these advertisements. The following hypothesis was developed to test this relationship:

H6: Green advertising is positively associated with green trust

The path analysis clearly indicated that there is a significant relationship between green advertising and green trust ($p < .001$). Although there is a negative coefficient, this is due to the negative wording of the questions and has no bearing on the direction of the relationship. Thus, this hypothesis is supported in the study.

7. *Relationship between availability and green product purchase intention*

The issue of availability of green products was identified as important by respondents during the qualitative focused interviews. However, the responses were mixed. While most said that they would not take the time and effort to travel to a different location for the sake of purchasing an eco-friendly FMCG, some said they would. Thus, to test the influence of availability on green product purchase intention, the following hypothesis was developed:

H7: Availability is positively associated with green product purchase intention

The path analysis indicates that there is a significant relationship between availability of eco-friendly FMCGs and green product purchase intention ($p=.013$); thus supporting Hypothesis 7.

8. *Relationship between green trust and green product purchase intention*

The mediating role in influencing consumers' green product purchase intentions was one of the novel relationships that were tested in this study. Chen and Chang (2102) had examined this to a certain degree and this factor did not feature heavily in the literature reviewed. This study expanded Chen and Chang's research by investigating if other factors, such as green advertising, and environmental commitment and claims of green products had a relationship with green trust. The following hypothesis was developed to test this relationship:

H8: Green trust is positively associated with green product purchase intention

The path analysis showed that there is a significant relationship between green trust and consumers' green product purchase intentions ($p=.017$). Thus, this hypothesis is supported.

9. *Relationship between subjective norms and green product purchase intention*

There were mixed results about the role of subjective norms from the qualitative focused interviews. Thus, this relationship between subjective norms and consumers' green product purchase intention would benefit from empirical testing. For this purpose, the following hypothesis was developed:

H9: Subjective norms is positively associated with green product purchase intention

The results of the path analysis show that there is no significant relationship between subjective norms and consumers' green product purchase intention ($p=0.547$). Thus, this hypothesis is not supported in this research.

10. Relationship between personal beliefs and values with green product purchase intention

The individual factors of personal beliefs and values was an issue that surfaced in the qualitative focused interviews. As with findings for the previous relationship (*H9*), this relationship was tested since there were mixed responses gained from the qualitative focused interviews. The following hypothesis was developed to test this relationship:

H10: Personal beliefs and values is positively associated with green product purchase intention

The path analysis showed there was a significant relationship between personal value and beliefs, and consumers' green product purchase intention ($p<.001$). Thus, this hypothesis is supported in this research.

Table 6.4 summarises the hypotheses test results.

Table 6.4: Summary of path analysis results

	Hypotheses	Decision
1	<i>Green product perceived value is positively associated with green product purchase intention (.154, $p<.05$)</i>	Support H1
2	<i>Green product perceived value is positively associated with green trust (.284, $p<.01$)</i>	Support H2
3	<i>Green products' environmental concern and commitment is positively associated with green product purchase intention (.359, $p<.01$)</i>	Support H3
4	<i>Green products' environmental concern and commitment is positively associated with green trust (.241, $p<.01$)</i>	Support H4
5	<i>Green advertising is positively associated with green product purchase intention (-.024, $p>.05$)</i>	Does not Support H5 at .05 level
6	<i>Green advertising is positively associated with green trust (-.174, $p<.01$)</i>	Support H6
7	<i>Availability is positively associated with green product</i>	Support H7

	<i>purchase intention</i> (.111, $p < .05$)	
8	<i>Green trust is positively associated with green product purchase intention</i> (.109, $p < .05$)	Support H8
9	<i>Subjective norms is positively associated with green product purchase intention</i> (.026, $p > .05$)	Does not Support H9 at .05 level
10	<i>Personal beliefs and values is positively associated with green product purchase intention</i> (.257, $p < .01$)	Support H10

6.3.4 Results of MANOVA tests

The MANOVA tests were the last series of data analysis performed in the study. The purpose of these tests were to ascertain whether other factors, such as behavioural and demographic factors, had an influence on consumers' green product purchase intentions. These findings also aimed to answer the research question which sought to develop a profile of the green consumer using the demographic and behavioural factors. The following sections report the findings of these tests.

(i) Demographic Factors

One-way MANOVA was performed to test if significant differences exist between the green product purchase intentions of people with various demographics characteristics. To realise this objective, demographic data was gathered from respondents, included in Part D of the questionnaire. The demographic factors that were taken into account for the study were:

- Gender
- Age
- Education Level
- Gross Annual Income
- Ethnic Background
- Occupation
- Employment Status
- Marital Status
- Number of Children

For all the factors, the inspection of Box's M test was not significant, (i.e. $p > .001$). Thus, the assumption of homogeneity of the variance-covariance matrices was judged not to have been

violated. Levene's tests, carried out for the dependent variable, was also not significant, and so assumptions of homogeneity variances for univariate comparisons was also judged not to be violated.

Following are the results of the one-way MANOVA tests conducted to investigate if differences exist in green product purchase intentions among the different demographic groups.

- In terms of gender it was found that women tended to show slightly higher levels of green product purchase intention than men
- In terms of the different age groups, it was found that the differences in green product purchase intentions of the different age groups was significant ($p < .05$). Those in the 41-50 age bracket were most likely to purchase green products. This was followed by the 31-40, 51-60, 26-30, 22-25, and 18-21 age brackets respectively. Overall, the pattern (apart from the 51-60 age bracket) shows that green product purchase intentions is higher amongst older age groups. Since only two respondents out of the 310 surveyed were over 60, that age group was not taken into account in the findings.
- The comparison of people from various education levels showed that those with post graduate education were most likely to purchase green products. Those with vocational training or undergraduate degrees showed similar green product purchase intentions. The respondents with secondary (or high school) education level were least likely to purchase green products.
- A one-way MANOVA test was conducted to determine whether a relationship exists between gross annual income and green product purchase intention. With the use of the Wilk's criterion, green product purchase intention was found to be not significantly related to gross annual income ($p > .05$). Thus, there was no further need to investigate the differences in green product purchase intentions of people with different levels of gross annual income.
- Of the different ethnic backgrounds represented in the sample, it was found that individuals of Anglo-Australian descent were most likely to purchase eco-friendly FMCGs.
- The use of Wilk's criterion showed that there is no significant relationship between green product purchase intention and occupation ($p > .05$).

- As with the variable, occupation, the use of Wilk's criterion showed that there is no significant relationship between employment status and green product purchase intention ($p > .05$).
- When investigating the various differences in green product purchase intentions of people with different relationship status, it was found that respondents who were married or in a de-facto relationship were more likely to purchase green products. Those respondents that were single were least likely to do so.
- The use of Wilk's criterion showed that there is no significant relationship ($p > .05$) between a respondent's number of children and green product purchase intention.

(ii) Behavioural factors

Similar to the procedure used to investigate the relationship between demographic variables and green product purchase intention, one way MANOVA was performed to test if relationships exist between the green product purchase intentions of people and various behavioural characteristics. To realise this objective, data on behavioural characteristics was gathered from respondents, included in Part A of the questionnaire:

- Frequency of grocery shopping
- Who does the shopping in the household
- Individual's commitment to the environment
- Eco-friendly activities that consumers engage in

For all the behavioural factors, the inspection of Box's M test was not significant, (i.e. $p > .001$). Thus, the assumption of homogeneity of the variance-covariance matrices was judged not to have been violated. Levene's tests, carried out for the dependent variable, was also not significant, and so assumptions of homogeneity variances for univariate comparisons was also judged not to have been violated.

Following are the results of the one-way MANOVA tests conducted to investigate if differences exist in green product purchase intentions of the different behavioural characteristics:

- The use of the Wilk's criterion showed that green product purchase intention was not significantly ($p > .05$) related to the frequency of grocery shopping of the consumers.

- Similarly, the use of the Wilk's criterion showed that green product purchase intention was not significantly ($p > .05$) related to who does the shopping in the household.
- In terms of commitment to the environment, it was found that individuals who classified themselves as major green purchasers and recyclers were most likely to purchase green products. This was followed by those who said they will buy green but will not make lifestyle changes. Third were respondents who said that they care about the environment but would only spend a little more to buy green. Those who said they think that caring for the environment is somebody else's problem were the next group likely to purchase green products. Those who were least likely to purchase green products were the respondents who classified themselves as not caring about environmental issues.
- With the use of Wilk's criterion, the dependent variable (green product purchase intention) was found to be significantly related to environmental activities engaged in with $p < .05$ in most of the cases. The Wilk's criterion was not met (p was reported to be greater than .05) in groups that looked to compare purchase intentions between those who recycle bottles, cans or glass with those who do not; those who cut down on car use with those who do not, those who write to politicians regarding environmental issues and those who do not, and those who engage in other miscellaneous environmental friendly activities and those who do not. In terms of the various eco-friendly activities that people engage in, results show that respondents who engaged in the following activities were more likely to purchase green products than those who do not.
 - Those who use biodegradable soaps
 - Those who avoid buying aerosol products
 - Those who read labels to see if products are environmentally safe
 - Those who buy products made or packaged in recycled materials
 - Those who buy products that can be refilled
 - Those who avoid buying products from companies who are not environmentally responsible
 - Those who recycle newspapers
 - Those who compost garden waste
 - Those who take their own bag to shopping

- Those who contribute money to environmentally friendly causes
- Those who volunteer for an environmental group

The results of these comparisons indicated that people who engaged in various forms of environmentally friendly activities showed higher levels of green product purchase intention than those who did not.

6.4 SUMMARY

This chapter presented the findings of the main survey of the study. The main survey was conducted as part of the quantitative phase of the research and addressed two research objectives: a) what are the factors that influence consumers' green product purchase intentions, and b) what is the profile of the green consumer. Firstly, the chapter discussed the demographic and behavioural characteristics of respondents who participated in the survey to present the reader with an overview of the sample participating in the survey. The results of a CFA were then presented. The CFA was conducted to test the validity of the factorial structure established in the final EFA solution. The CFA tested the validity of the eight factors used in the model. The results showed that the overall model fit was good; this was also supported by the parameter estimates.

The ten hypotheses developed at the second stage of the research were then empirically tested. The hypotheses guided testing of relations between the factors: green product perceived value, green advertising, environmental concern and commitment of the brands, availability, subjective norms, and personal beliefs and values, and the variable green product purchase intention. The mediating role of green trust was also investigated. The results showed that, out of the ten hypotheses, eight were supported.

Finally, a series of MANOVA tests were conducted to ascertain the profile of the green consumer. Various demographic and behavioural factors were taken into account and the differences in the various groups of people in terms of their green product purchase intention were highlighted in the results. This provided information that can be used for effective segmentation and targeting of the green consumer segment.

The next chapter (Chapter 7) provides an in-depth discussion of the findings of the qualitative and quantitative phases of the study. The chapter also discusses the managerial and theoretical implications of the findings, and proposes future research directions to further enhance the body of knowledge in this particular field of study.

CHAPTER 7: DISCUSSION AND CONCLUSION

7.1 INTRODUCTION

This chapter summarizes the findings of the research in light of the research questions and objectives, and provides a discussion of the managerial and theoretical implications of the study. The chapter also discusses the study's limitations and, finally, provides a conclusion and suggestions for further research that can be undertaken in this field of study. The following sections have been dedicated to address these topics.

7.2 DISCUSSION OF THE FINDINGS

After conducting an extensive literature review on past research in the field of green product marketing, a study was designed to address a number of the apparent gaps that arose from the analysis of the literature and research on the topic of green marketing. These gaps were then articulated in the form of the following research objectives:

5. To investigate how various factors affect consumers' green product purchase intentions.
6. To investigate the relationships and the strength of the relationships that exists between each of the different factors and the green product purchase intentions of consumers.
7. To study the characteristics of the segments willing to purchase green products.
8. To present a holistic picture of the demographic and lifestyle characteristics of the green consumer.

The exploratory stage of the research, which involved the use of qualitative focused interviews, sought to address the first research objective: to investigate how various factors affect consumers' green product purchase intentions. The confirmatory stage, which followed the exploratory stage, involved the use of a survey to collect data for analysis using quantitative methods. This phase of the research aimed to address the remaining objectives of the research. The methodology used for each of the different phases of the study is discussed in detail in Chapter 3. The results of the investigations (qualitative focused interviews, and quantitative surveys) are discussed in Chapters 4, 5 and 6.

The following sections discuss the results of the findings of each of the stages of the research in the context of the research objectives.

7.2.1 Research objective 1: To investigate how various factors affect consumers' green product purchase intentions

The objective of the 27 qualitative focused interviews was to uncover underlying factors that influence customers' green product purchase intentions in the context of FMCGs. Before probing the respondents about eco-friendly FMCGs, the respondents were asked about their perceptions and what factors they took into account when buying regular FMCGs. Analysis of responses showed that price and quality were the major attributes influencing respondents purchase intentions. This was followed by the brand name of the product. Much past research has also highlighted the importance of these attributes (as discussed in Chapter 2).

Once it was established that in the case of regular FMCGs, customers were still influenced by the factors that have already been well documented in past literature, the next question was to gain information about respondents' perceptions of green products. Here it was found that many of the respondents (46.9%) associated green products with concepts of eco-friendliness or recyclability of products. The respondents strongly related these products to be classified as green products.

Respondents were then asked what they thought were the positive and negative aspects or attributes of green products. They were unanimous in stating that the major positive of such products is that they are environment friendly and have little or no adverse impact on the natural environment. The major concern customers had was with regard to the reliability of claims made by manufacturers of green products. Thus, the issue of trust in the claims made by marketers of green products was highlighted. Another negative (noted by 59 % of the respondents) was that they believed green products were more expensive than regular products. Lack of availability was another drawback of green products as reported by the respondents. The most significant drawback, though, was the perceived lack of trust that the respondents had in the claims made by manufacturers. Respondents stated that there was no way of telling if these claims were indeed true and wanted companies to show tangible evidence of their claims being substantiated. The level of scepticism was quite strong and warranted further investigation to verify whether this sentiment was widespread among consumers. This was done in the confirmatory stage of the research where the role of green trust on influencing consumers' green product purchase intentions was empirically investigated.

It was also interesting to find that the majority of respondents would actively recommend green products to their friends and family if they had used the product and were satisfied with the performance of the product. In terms of negative experiences, it was noted by a few respondents that certain eco-friendly cleaning products did not perform as well as regular ones; customers had to use greater quantities of the eco-friendly product to get the same result as if they had used regular products. They believed this negated the eco-friendly attribute since more of the product was being used. Thus, there was a concern over the eco-friendly products' ability to deliver their core benefits.

When asked about what respondents viewed as eco-friendly behaviour, engaging in recycling activities was the most common response. This was closely followed by their preference to purchase eco-friendly products. The response to this question clearly indicates that consumers view these two activities as being eco-friendly behaviour on their part. These findings have implications for marketers who can develop their strategies so that they communicate to the segment using appropriate ways.

An interesting finding not related to the purchase intentions from eco-friendly products was that if they had purchased green products (FMCGs) for day-to-day use. 74.0% of respondents reported that they do purchase eco-friendly FMCGs. When this matter was further investigated, it was found that out that only 15.0% of those who bought eco-friendly FMCGs had consciously bought such products due to their eco-friendly attributes. The remainder had realised with hindsight that the products they had bought were eco-friendly after using them.

The major component of the study, which was to find out what factors influence customers' purchase intentions of eco-friendly FMCGs was addressed by asking respondents questions along the lines of the elements of the marketing mix. The majority of respondents revealed that they preferred natural ingredients over artificial ones, and eco-friendly packaging was also an important factor. When probed about the importance of price, the majority of respondents said they might pay more for eco-friendly FMCGs. Further investigation revealed that customers did not merely look at price in isolation, but evaluated it along the lines of product value. Thus, the focus was on how well product quality (core attribute and eco-friendly attribute) matched the price. This provided an important insight since research in the past had not extensively investigated the influence of perceived product value on customers' purchase intention of eco-friendly FMCGs. Past research predominantly investigated product quality and price as separate elements of the marketing mix, and then

investigated their impact on purchase intentions. This finding added an extra dimension to the study by incorporating a construct that took into account the combined effect of price and quality in the form of green product perceived value. Respondents further reported that one major impediment in the purchase of eco-friendly FMCGs was the lack of availability of such products. More than half of the respondents stated that they would not travel the extra distance to purchase eco-friendly FMCGs. Only three respondents reported that they would, and around a third said they might do so. Thus, opinions were divided on this particular issue.

One of the most profound findings of the qualitative focused interviews was in regard to the advertising of green products. It was found that a majority (44%) of the respondents did not trust green advertising. They felt that the claims made were exaggerated or fabricated. These respondents felt that companies had an obligation to substantiate these claims and prove that the claims were indeed true. Some even felt that green marketing was a ploy that led customers into paying a premium price for a product by making them feel guilty that if they do not purchase eco-friendly products, they will be adversely affecting the environment. The importance of this issue suggested that empirical evidence needs to be gathered to investigate the mediating role trust plays on the impact of green advertising on customers' purchase intentions of eco-friendly FMCGs. The same sort of finding was evident in the case of product labelling. Both these issues were included in this study for further investigation.

Up to this point the discussion has been about the results from the qualitative focused interviews that related to the elements of the marketing mix, and now the impact of social and individual factors affecting customers' purchase intentions will be discussed. It noted from the responses that religious views and environmental concern seemed to have a direct bearing on consumers' green product purchase intentions. Those that held strong religious beliefs felt that they had a responsibility to the world and an obligation to look after it. One way was to purchase eco-friendly products, engage in environmentally friendly behaviour, and leave less of a carbon footprint on the planet. Another key finding in terms of what determines customers' purchase intentions of eco-friendly FMCGs was the role of social norms and the influence of family and friends. It was found that word-of-mouth communication from friends and family were strong influencing factors on those who intended to purchase eco-friendly products.

Qualitative analysis of data obtained from the qualitative focused interviews paved the way for an investigation of the influence of novel constructs of consumers' green product

purchase intentions in the context of FMCGs: green product perceived value, and green trust. The roles of these factors has recently received attention from Chen and Chang (2012). However, the authors only studied the mediating role of green trust in the context of green product perceived value and perceived risk. Its role in mediating the influence of other marketing factors had not been investigated. The qualitative focused interviews indicated that the mediating role of green trust is not limited to the two factors studied by Chang and Cheng (2012) but possibly affects other marketing factors, such as eco-labelling and green advertising.

The confirmatory phase of the study was designed to empirically investigate the existence of the relationships that surfaced from data analysis of the qualitative focused interviews. The following research objectives are related to the confirmatory phase of the study.

7.2.2 Research objective 2: To investigate the relationships and the strength of the relationships that exists between each of the different factors and the green product purchase intentions of consumers.

Once the factors of importance to the consumers were identified, the researcher developed the constructs for which the relationships were to be tested in the confirmatory phase of the study. The methodology used for this phase (pre-test, pilot, and main survey) are discussed in detail in Chapter 3. Once the factors were identified and the relevant constructs developed, a questionnaire was created and pre-tested. A pilot study was then conducted and EFA carried out on the results of the study. Details of this phase of the study is discussed in detail in Chapter 5. Questionnaire items were grouped, and the factors to be further investigated were given relevant labels;

- Green Trust
- Green Product Perceived Value
- Green Advertising
- Environmental Concern and Commitment of Green Products
- Availability
- Subjective Norms
- Personal Beliefs and Values

In order to test the relationships between the factors mentioned above and green product purchase intentions, nine relevant hypotheses were developed. These relationships were pictorially represented in Figure 5.2 in Chapter 5.

The CFA conducted in the next phase was to test the validity of the factors solution of EFA. Model fit and adequacy parameter estimates were investigated and the finding was that there was an overall good model fit. The researcher then conducted a path analysis to investigate the hypothesized relationships. The results reported in Chapter 6 are discussed below.

Green product perceived value and green product purchase intention were found to be positively associated. This supported the first hypothesis, which stated that “green product perceived value is positively associated with green product purchase intention”. The notion of green product perceived value came to the attention of the researcher during the qualitative focused interviews. The respondents indicated that when purchasing eco-friendly FMCGs, they were already of the understanding that they would be paying more, but they also expected more. The additional benefits that they sought were not limited to the generic functional attributes of the product, they also expected the product would have tangible benefits for the environment; that is, unlike a regular product, the green or eco-friendly product was expected to outperform its regular counterpart in terms of being beneficial or less detrimental to the natural environment.

The next relationship investigated was that between green product perceived value and green trust. To test this relationship, the following hypothesis was developed: “green product perceived value is positively associated with green trust”. The results of the path analysis confirmed this relationship. This reinforced the findings of Chen and Chang (2012), and signifies that the higher levels of perceived value of the green product enhances the levels of trust that people have in that product. The responses gathered during the qualitative focused interviews also revealed that people who found eco-friendly FMCGs that delivered the benefits they promised and offered them value for their money were the products that they could rely upon.

The construct of environmental concern and commitment was developed on the basis of the grouping of relevant items in the EFA. This construct focused on the perception that customers had of environmental claims and the eco-friendly image of the brands of FMCGs. The third hypothesis, “green products’ environmental concern and commitment is positively associated with green product purchase intention” was developed to investigate if this was an influencing factor for consumers when it came to purchasing eco-friendly FMCGs. The path analysis showed that there was a significant positive relationship between the two. Consumers who perceived companies to genuinely be concerned about the environment

tended to be the preferred brands when it came to eco-friendly FMCGs. This was also reflected in some of the responses in the qualitative focused interviews.

The hypothesis, “green products’ environmental concern and commitment is positively associated with green trust” was developed to test if there was a relationship between the two factors and whether green trust also played a mediating role in the influence of green products’ environmental concern and commitment on consumers’ green product purchase intentions. The path analysis revealed that there was a significant relationship between the two. This reaffirmed the notion that many respondents believed that the claims made by many companies were not necessarily true. They believed that the claims would be exaggerated and that customers were taken on a “guilt trip” to pay a premium for eco-friendly FMCGs. However, if the claims were substantiated and the products were indeed good for the environment, then customers were likely to include those brands and products in their consideration-set when purchasing FMCGs. In order to substantiate the claims made by the companies about the environmental-friendly attributes of their products, companies could undertake strategies such as brand trial and demonstrations. This would allow customers to experience first-hand the environmental benefits of the products and enable the companies to validate their claims.

The relationship between green advertising and green product purchase intention was also investigated in this study. Advertising has traditionally played a role in informing customers about goods and services, and influencing them to purchase an advertised brand. When it came to eco-friendly FMCGs, it was found, in the analysis of data from the qualitative focused interviews that respondents were divided in terms of being influenced by eco-friendly FMCGs advertising. For the purpose of testing this relationship the following hypothesis was developed: “green advertising is positively associated with green product purchase intention”. The results of the path analysis showed that there was no significant relationship between green advertising and green product purchase intention. This finding indicates that people were not influenced to purchase eco-friendly FMCGs by the advertisements for such products. In conjunction with the findings of the qualitative focused interviews, the research concluded that this was because people did not watch these advertisements and, more importantly, did not have faith in the claims made in these advertisements.

To further investigate the mediating role of green trust, the relationship between green trust and green advertisement was investigated. This relationship has not been tested in past studies and the researcher built on the model developed by Chan and Chen (2012) to test it. The hypothesis “green advertising is positively associated with green trust” was developed. The findings of the path analysis revealed that there is a significant relationship between green advertising and green trust. Since it has also been established that green trust has a significant relationship with green product purchase intention, it was also revealed that green advertisements do influence green product purchase intentions indirectly but only indirectly because they are mediated by green trust. Thus, only if the advertisements are trustworthy and claims credible, would they influence consumers’ green product purchase intentions.

When the respondents were probed on the issue of availability, a majority stated that they would not take the trouble to travel any significant distance if the eco-friendly FMCG they were looking for was not available at the location where they did their shopping. Only around seven per cent of the respondents in the qualitative focused interviews stated that they would indeed take the trouble of going to another shop and traveling a significant distance for an eco-friendly FMCG if they had to. Although the split was tilted heavily in favour of those who deemed availability to be important, the researcher developed the following hypothesis: “availability is positively associated with green product purchase intention”. The result of the path analysis were not surprising. There was a significant relationship between availability and consumers’ green product purchase intentions. This result indicates that if the availability of eco-friendly products is improved then the manufacturers and marketers of green products may be able to tap into a larger portion of the green segment of the market.

The issue of green trust was of particular interest to all respondents whose scepticism over eco-friendly claims of FMCGS was very high. This issue demanded further investigation. The hypothesis “green trust is positively associated with green product purchase intention” was supported in the path analysis. The practical and theoretical implications of this relationship are important and are discussed later in the chapter.

Subjective norms have been well documented to be a key component of the Theory of Planned Behaviour a theory most effective in predicting purchase intentions. This study investigated the role of subjective norms and how they influence consumers green product purchase intentions. The findings from the qualitative focused interviews initially suggested that a portion of respondents were not influenced by others when making purchase decisions

related to eco-friendly FMCGs, while others relied on word-of-mouth communication and recommendations from their friends and families (Hassan, 2012). The variation in responses and the role of subjective norms as documented in past literature presented a case for empirical investigation of the relationship. The hypothesis, “a subjective norm is positively associated with green product purchase intention” was developed to test this relationship. The qualitative focused interviews initially suggested that a portion of the respondents were not influenced by others when making purchase decisions related to eco-friendly FMCGs, while certain people relied on word of mouth communication and recommendations from their friends and families (Hassan, 2012). However, the results of the path analysis did not support this hypothesis or find this relationship significant.

The last relationship that was tested was the relationship between personal beliefs and values with green product purchase intention. The hypothesis, “personal beliefs and values is positively associated with green product purchase intention” was developed to test this relationship. The path analysis supported this hypothesis and confirmed that people were more likely to make their own decisions rather than be influenced by others when purchasing eco-friendly products.

The results of the relationships tested in this research can inform the marketing strategy and development of eco-friendly FMCGs. The issue of green trust, which has only recently been receiving attention, is a factor that needs to be taken into consideration by marketers and academics. Details of the practical and theoretical implications are discussed later in this chapter.

7.2.3 Research objective 3: To study the characteristics of the segments willing to purchase green products

One of the key objectives of the study was to define the green customer. Past research has studied this issue (as shown in Chapter 2), but has come up with conflicting results. Chamorro et al. (2009) in their study of green marketing research suggested that the definition and characteristics of the green consumer will continue to evolve and change over time.

Chapter 6 discussed the results of the one-way MANOVA analysis conducted to develop a profile of the green consumer. The following section elaborates upon the findings of the MANOVA results.

Demographic factors

Gender

One of the most widely studied demographic variables with reference to green customers is gender. The results of past studies have shown mixed results in this context. The most recent studies suggested women were more inclined towards purchasing eco-friendly products than their male counterparts. Similarly, in this study, conducted in Sydney, it was found that women were slightly more likely to purchase eco-friendly FMCGs than men.

Age

Age is another demographic variable that had received attention in the past. As with the analysis of other demographic variables and their roles in defining the green customer, the results of past studies were conflicting. There was no consensus on what age group defined the green customer or if younger people were more likely to purchase eco-friendly products than older segment of the population. The results of the one-way MANOVA tests in this study show that, of the different age groups, people in the 41-50 year age group were most likely to purchase eco-friendly products.

Education

The one-way MANOVA tests conducted clearly show that those with post-graduate education were most likely to purchase eco-friendly FMCGs. The next most likely group is those with vocational training or undergraduate degrees. The respondents with secondary (or high school) education were least likely to purchase eco-friendly FMCGs. Like other demographic factors mentioned earlier, there is conjecture in the literature over this issue. This study confirmed that people with higher levels of education were more likely to purchase eco-friendly FMCGs.

Income

When the potential association of income levels with consumers' green product purchase intentions was investigated, it was found that there was no significant relationship between the two. In the context of this study, an individual's gross annual income was not significantly related to their green product purchase intention in the case of FMCGs. This finding contradicted results of a number of previous studies.

Ethnic Background

Past studies have shown differences in consumers' green product purchase intentions on the basis of their ethnic backgrounds. Rahbar and Wahid (2010) showed that different ethnic groups in Malaysia have different patterns of consumer behaviour when it comes to eco-friendly products. Sydney, being a melting pot of different cultures and ethnicities, was ideal to test whether there were differences in the behaviour patterns of the different groups. The ethnic backgrounds represented in the survey were Anglo-Australians, Asians, Middle Easterners, New Zealanders, and others. Of all the different groups studied, it was found that those of Anglo-Australian descent were most likely to purchase eco-friendly FMCGs.

Occupation and Employment Status

Like income, the one-way MANOVA tests showed that neither occupation, nor employment status had any significant relationship with consumers' green product purchase intentions. Thus, in the context of this study, their contribution to the development of the profile of the green consumer was negated.

Marital Status

The one-way MANOVA tests showed that people who were either married or in a de-facto relationship were more likely to purchase eco-friendly FMCGs. People who reported being single were least likely to purchase eco-friendly FMCGs. This finding was quite unique and provided evidence to a facet of the green consumer segment that had not come to surface in past research.

Number of Children

The number of children in a household was found not to have a significant relationship with consumers' green product purchase intentions. Like income, occupation, and employment status, this factor was not significant in terms of the profile of the green consumer.

Behavioural factors

Past research has suggested that demographic variables could not be used as the sole basis for developing a profile of the green consumer. Thus, this research studied the influence of behavioural factors such as frequency of shopping, who does the shopping, and various other eco-friendly activities in order to develop a holistic profile of the green customer.

Like the demographic factors, one-way MANOVA tests were conducted to investigate the relationships between the various behavioural factors and consumers' green product purchase intentions in the context of FMCGs.

General Shopping Behaviour

The one-way MANOVA tests conducted show that frequency of shopping is not significantly related to consumers' green product purchase intentions. Thus, this study shows that whether customer(s) shopped daily, weekly, fortnightly, or monthly was inconsequential when it comes to their intention to purchase eco-friendly FMCGs.

The analysis also shows that who does the shopping in the household had no bearing on consumers' intention to buy eco-friendly FMCGs. This result was quite surprising and may have an impact when marketers are deciding who to target with their messages about eco-friendly products. It may be the case that the purchaser does not make the decision of what will be purchased but is only the buyers of the goods. Further research would need to be undertaken to investigate this phenomenon more thoroughly.

Eco-friendly Behaviour

The factors used to describe consumers' eco-friendly behaviour were developed from past literature. These factors focused on how customers described or classified themselves as green customers, and the various eco-friendly activities (if any) they engaged in. Information gathered on the consumers' pattern of behaviour and their own descriptions of being green customers was used to investigate whether these factors had an influence on the green product purchase intention in the context of FMCGs.

The one-way MANOVA tests showed that customers who classified themselves as major green purchasers were most likely to purchase eco-friendly FMCGs while respondents who reported that they do not care about environmental issues were the least likely to purchase eco-friendly FMCGs.

A list of activities was included in the questionnaire to obtain information about the types of eco-friendly behaviour engaged in by respondents. Those who indicated that they engaged in any of the listed behaviours (e.g. use biodegradable soaps, avoid buying aerosol products, buy product that can be refilled etc.) were more likely to purchase eco-friendly FMCGs than those who did not. The results of the one-way MANOVA tests pertaining to these activities and whether or not they influence consumers' green product purchase intentions is presented

in Chapter 6. The results clearly indicated that those who engaged in eco-friendly activities were more likely to purchase eco-friendly FMCGs than those who do not.

The findings of the relationships between these behavioural factors and consumers' green product purchase intentions allow for the development of a more detailed picture of the green consumer to be presented. The holistic profile of the consumer who is more likely to purchase eco-friendly FMCGs has been presented in the following section.

7.2.4 Research objective 4: To present a holistic picture of the demographic and lifestyle characteristics of the green consumer

The previous two sections addressed the research objective of enhancing an understanding of the characteristics of customers most likely to purchase eco-friendly FMCGs.

The typical profile of the green consumer in Australia based on these findings is a 41-50 year old female who is married (or in a de-facto relationship), has achieved post-graduate education level education, is of Anglo-Australian descent, who purchases green products at a major level, and engages in various environmental friendly activities. Table 7.1 summarises the traits of customers more likely to purchase eco-friendly FMCGs.

Table 7.1: Profile of customers most likely to purchase eco-friendly FMCGs

Characteristic	Segment of Population
Gender	Female
Age	41-50
Education	Post Graduate
Ethnic Background	Anglo-Australian
Marital Status	Married/De-Facto
Level of Green Consumption	Major green purchaser and recycler
Eco-friendly Activities	Engages in eco-friendly activities such as <ul style="list-style-type: none">• Using biodegradable soaps• Avoid buying aerosol products• Read labels to see if products are environmentally safe• Buy products made or packaged in recycled materials• Buy products that can be refilled• Avoid buying products from companies who are not environmentally responsible• Recycle newspapers• Compost garden waste• Take their own bag to shopping• Contribute money to environmentally friendly shopping• Volunteer for environmental groups

These findings, along with the identification of the factors that influence customers' purchase intentions in the context of eco-friendly FMCGs have important practical and theoretical implications. The implications of the findings of this study are discussed in the following sections.

7.3 THEORETICAL IMPLICATIONS OF THE STUDY

This study has a number of academic contributions. First, it extends the Theory of Planned Behaviour and uses that as a platform to investigate how factors that are relevant to the consumer today can influence their green product purchase intention. The study takes into account a number of factors, which include green product perceived value, green advertising, environmental claims and commitment of the brands, availability, subjective norms, personal values and beliefs, and green trust. The study demonstrates how these factors influence consumers' green product purchase intentions and developed a framework to investigate the strength of these relationships.

Second, the study extends research on consumer purchase intentions and perceived value into the field of green marketing. It demonstrates how higher green product perceived value enhances the consumers' green product purchase intentions. Third, the research addresses the crucial issue of green trust, the mediating role of which has only recently been studied in green marketing literature. Chan and Cheng (2012) studied how green trust had mediated the influence of perceived value and perceived risk, but this study expanded upon their work by exploring the meanings behind the terms through qualitative focused interviews. The mediating role of green trust was investigated in terms of how it influences green advertising and the claims of environmental commitment and concern of the eco-friendly brands. The findings suggest that greater levels of green trust contribute towards enhancing consumers' green product purchase intentions in the context of FMCGs. Thus, this research provides evidence that the mediating role of green trust also encompassed factors that had not been addressed before in green marketing literature.

Fourthly, from a theoretical perspective the study showed that through enhancing green product perceived value, the reach and reliability of green advertisements, substantiating the claims of environmental concern and commitment of the brands manufacturing and marketing eco-friendly FMCGs, and making these products more readily available would all have a significant positive impact on customers' green product purchase intentions.

Fifth, the study took into account the suggestion of Chamorro et al. (2009) that the characteristics of the customers of eco-friendly products were dynamic and subject to change over time. Thus, this research investigated the characteristics of the eco-friendly consumer from a demographic and behavioural perspective. This allowed for the development of a holistic picture of the green consumer.

Overall, the main contribution of the study in the field of green marketing lay in its ability to extend existing work and study new, relevant factors that influence the modern-day consumer to purchase eco-friendly FMCGs. The research identified the main antecedents of green product purchase intention and investigated the partial but profound mediating role of green trust on some of the antecedents of green product purchase intention.

7.4 PRACTICAL IMPLICATIONS OF THE STUDY

The practical implications of the findings of this research are two-fold. Firstly, there are implications in terms of marketing strategy development based on the factors that influence consumers' green product purchase intentions in the context of FMCGs. These strategies would need to take into account the important findings of this study, which focus on the roles of perceived value, availability, green trust, personal values and beliefs, and the indirect role of green advertisements. Companies need to take into consideration these factors when developing their marketing mix. Product development and design should take into account the benefits sought by customers (should be able to provide eco-friendly benefits in addition to the core benefit) and ensure that the pricing strategy is well calibrated with the benefits being offered by the product. The product distribution aspect should also be looked at closely to make sure that such products are readily available because customers are not willing to take the extra time and effort to purchase eco-friendly products that are not readily available. Greater visibility in stores should also be taken into consideration. In developing advertisements for such products, companies should ensure that the messages being conveyed are reliable and show the tangible benefits of using eco-friendly products. Gaining customer trust in claims they make is of paramount importance since green trust has been found to play an important mediating role in influencing customers' green product purchase intentions. Secondly, the findings regarding the profile of the green customer have market segmentation implications. The characteristics of the segment have been presented in Table 7.1 and this information is crucial from a marketing standpoint. It allows for companies to focus on the segment that is more likely to purchase eco-friendly FMCGs to allow for purchase intention to translate into actual purchase behaviour.

In the context of the factors influencing consumers' green product purchase intentions, this study verified that enhancing green product perceived value, green advertising and the claims of environmental concern and commitment not only enhance green trust but also raises green product purchase intentions. Making these green products more available would also enhance the customers' green product purchase intentions. If manufacturers and marketers want to enhance the green product purchase intentions of their customers, then it is imperative that they combine the concepts of green product perceived value, green advertising, claims of environmental concern and commitment, and green trust into their long-term strategy. The results of the qualitative focused interviews brought these issues to the fore, and they were later confirmed via empirical investigation. The evidence clearly suggests the importance of

addressing these factors if companies want to enhance consumers' purchase intentions. From a practical perspective, in terms of green product perceived value, companies need to develop products that will not only offer the core benefit but also deliver eco-friendly benefits. In addition, the companies need to strike a balance between the benefits offered by the products and the price they charge. Customers are willing to pay around 10 % more for an eco-friendly product, but seek those added benefits.

The advertisements of eco-friendly FMCGs need to reach their target audience. Firstly, companies need to be able to expose customers to their advertisements. Secondly, they need to be able to provide the necessary information in a manner that will build customer confidence in their product.

In terms of availability, there is a strong perception that eco-friendly FMCGs are not as readily available as regular products. The onus is on the companies to ensure that their eco-friendly products are readily available. Since a vast majority of Australians shop at large retail outlets such as Coles, Woolworths, Aldi, and IGA, it is imperative that these products are able to acquire visible shelf space in these outlets. Supermarkets could train their employees to communicate to customers the availability of eco-friendly products.

The most important issue that producers of eco-friendly products need to address is that of green trust. Both the qualitative focused interviews and the quantitative surveys reaffirmed the importance of enhancing consumers' trust in green products. The results clearly showed the significant mediation effect that green trust has on consumers' green product purchase intentions. Lack of trust on information concerning the eco-friendliness of green products appeared to be a major impediment to being able to influence consumers to purchase such products. Companies need to substantiate claims they make about the eco-friendly attributes of their products. Simply stating the benefits will not suffice. The qualitative phase of the research showed responses where people demanded proof of the eco-friendly benefits of the FMCGs being marketed under the green banner. Companies need to make concerted efforts to provide customers with the evidence that their products are indeed eco-friendly. Enhancing green trust may go a long way towards elevating the level of consumers' green product purchase intentions. As green marketing overcomes these issues pertaining to trust, consumers may gain confidence to trust the claims associated with green products and green products could penetrate the market more quickly (TerraChoice, 2009).

Companies also need to be aware of the beliefs and values of their customers, and use that information in their communication strategies to convince this segment of the need for eco-friendly FMCGs. To this end, companies should make sure they have detailed lifestyle segmentation data about this segment of their target market.

The findings of the one-way MANOVA tests, which have been used to develop the profile of those customers most likely to purchase eco-friendly FMCGs, provides insights into that segment of the customer which would be suitable to target. The profile of the customer in Australia who is more likely to purchase eco-friendly FMCGs is a married woman with postgraduate education, within the 41-50 age bracket, and who engages in various eco-friendly activities. Thus, instead of a “shot gun” or mass marketing approach, in the short-term, producers of green products need to take a more focused approach on the segment that is more likely to purchase their eco-friendly products. In the long-term green product producers might take measures to enhance the awareness of eco-friendly products amongst the wider audience and potentially expand their market base for these products.

7.5 LIMITATIONS AND DIRECTION FOR FUTURE RESEARCH

As with all research, this study has its limitations. The samples for both the qualitative and quantitative phases of the survey were selected using the mall intercept method. Although there was a fair distribution in terms of demographic characteristics, it was found that people with higher levels of education were more interested in participating in the surveys. In addition, responses were gathered only from those respondents who agreed to answer the questionnaire when intercepted in a shopping mall. Therefore, the data collection method employed in this study had the potential for single source bias. This method was adopted because the University Ethics Committee does not allow simple random sampling of human populations and this causes limitations in the research design.

The study verified the hypotheses that were developed by the means of a questionnaire survey. This means that only cross-sectional data was provided, which cannot be used to observe the dynamic change of consumer behaviour patterns on the basis of the changes in the factors influencing their purchase intentions. The findings of this study could be enhanced in future by research that employed longitudinal studies to shed light on the changing patterns of behaviour as well as the evolution of green market segment over time.

The issue of generalisability is a limitation of most consumer behaviour studies, and this study is no exception. The study has been conducted in Sydney, Australia, and was aimed to

gain information about buyers of FMCGs. Findings may vary with the application of the study to other contexts or countries. Past research has indicated that studies conducted on consumer behaviour pertaining to green products produced varying results in different contexts and countries. This is a possible reason why some of the theorised relationships between green product purchase intentions and its antecedents were not found. For example, in the context of this study, eco-labelling was not taken into consideration in the later phases of the research after the EFA results revealed that the eco-labelling variable did not meet the reliability criteria. The complexities of the models tested also contributed to this phenomenon. Thus, it cannot be said with complete certainty that the findings of this study can be generalised and applied to other contexts and countries, especially those that are very different from the Australian context.

This research is also limited in the application of TPB to the purchase intention stage. Owing to the complexities of the variables involved, some of which were not tested before (e.g. the mediating role of green trust on green advertising's influence on green product purchase intentions) the study limited its scope to green product purchase intention. Future research could expand upon this research and address the intention-behaviour gap whilst taking into account the variables included in this research.

A final limitation is that this study concentrated solely on FMCGs. Eco-friendly products are available in other forms. Future studies could use this study as a platform to investigate consumers' purchase intentions in the context of other types of products as well as services. Finally, this study anticipates that the research results will be helpful to managers, researchers, practitioners and policy makers, and contribute to future research as reference.

7.6 CONCLUSION

This chapter discussed the findings of the different phases of the research. The discussion addressed the research objectives and questions set forth at the onset of the research.

The first objective was to investigate how various factors influence consumers' green product purchase intentions; this was addressed in a qualitative study (see Chapter 4) qualitative focused interviews allowed the researcher to probe respondents for data that would surface latent factors that influence or hinder their green product purchase intentions. The major factors that came to surface during these interviews included green product perceived value, green trust, availability, advertising of green products, eco-labelling, social factors, and

personal values and beliefs. From these findings, themes were developed which were used to develop relevant constructs to be used in a framework for empirical investigation.

The second research objective, which was to investigate the relationships and the strength of the relationships that exist between each of the different factors and the green product purchase intentions of consumers, was carried out by developing and testing the relevant hypothesis (Chapters 5 and 6). This phase of the study was the confirmatory stage where the findings of the exploratory phase (qualitative focused interviews) were either supported or rejected on the basis of the results of path analysis that was conducted. This stage of the study confirmed that green product perceived value, availability, green trust, and personal values and beliefs had a direct influence on consumers' green product purchase intentions. Green trust was also found to have a mediating role on the influence of green product perceived value, and advertising on green product purchase intentions.

The third and fourth objectives of the research, which aimed to study the characteristics of those customers more likely to purchase eco-friendly FMCGs, were also addressed in Chapter 6. A series of one-way MANOVA tests were conducted to explore the relationships between the various demographic and behavioural characteristics of the respondents and their willingness to purchase eco-friendly FMCGs. On the basis of these findings, a holistic profile of the green consumer was developed. The findings suggested that in the Australian context the person most likely to purchase eco-friendly FMCGs is a woman who is married, within the age of 41-50, has attained post graduate level of education, is a major green purchaser, and engages in various environmentally friendly activities.

The study expanded upon the framework developed by Chan and Cheng (2012), which had its foundations based on the Theory of Planned Behaviour (TPB). A sizeable number of studies have employed TBP to explain environmental behaviour (e.g. Davies, et al., 2002; Bamberg, 2003). Most previous studies, however, have employed undergraduate samples (Langdridge, Sheeran, & Connolly, 2007). This study employed a more representative sample comprising a range of customers shopping in malls (as discussed in Chapter 3).

As noted above, understanding green consumer behaviour is an increasingly important research topic. This is especially relevant for developed countries, like Australia, with high levels of consumer product consumption and where the environmentally sensitive market segment is growing rapidly. To better understand the complex roles of the antecedents influencing consumers' purchase intentions and buying behaviour, further research must be

carried out. This study highlighted the mediating role of green trust. Future researchers and marketers must take this important issue into account and incorporate it into future research and long-term marketing strategies. The researcher hopes that this will set the platform for further investigations in this dynamic field of green marketing where things are rapidly evolving.

REFERENCES

- Aaker, D. A. (1996). *Building strong brands*. New York: Free Press.
- Ackerberg, D. A. (2001). Empirically distinguishing informative and prestige effects of advertising. *RAND Journal of Economics*, 32(2), 316-333.
- Ackerman, F. (1997). *Why do we recycle? Markets, values, and public policy*. Washington DC: Island Press.
- Adcock, D. (2000). *Marketing strategies for competitive advantage*. Chichester: Wiley.
- Affi, A. A., & Clark, V. (1998). *Computer-aided multivariate analysis* (3rd ed.). London: Chapman & Hall.
- Akaike, H. (1987). Factor analysis and AIC. *Psychometrika*, 52(3), 317-332.
- Albayrak, T., Aksoy, S., & Caber, M. (2013). The effect of environmental concern and scepticism on green purchase behaviour. *Marketing Intelligence and Planning*, 31(1), 27-39.
- Albino, V., Balice, A., & Dangelico, R. (2009). Environmental strategies and green product development: An overview on sustainability-driven companies. *Business Strategy and the Environment*, 18, 83-96.
- Anderson, W. T. J., & Cunningham, W. H. (1972). The socially conscious consumer. *Journal of Marketing*, 36(July), 23-31.
- Ajzen, I. (1988). *Attitudes, personality and behaviour*. Milton Keynes: Open University Press
- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behavior and Human Decision Processes*, 50, 179-211.

- Australian Bureau of Statistics (ABS). (2007). *Australian Social Trends*. Retrieved October 15, 2012, from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts>
- Australian Bureau of Statistics (ABS). (2010). *ABS Australian Social Trends 4102.0*. Retrieved October 10, 2012 from <http://www.abs.gov.au/AUSSTATS>
- Australian Bureau of Statistics (ABS). (2011). *Census Quick Stats*. Retrieved October 18, 2012, from http://www.censusdata.abs.gov.au/census_services/getproduct/census
- Bamberg, S. (2003). How does environmental concern influence specific environmentally related behaviours? A new answer to an old question. *Journal of Environmental Psychology, 23*(1), 21-32.
- Bamberg, S., & Schmidt, P. (1998). Changing travel-mode choice as rational choice. *Rationality and Society, 10*(2), 223-252.
- Banerjee, B., & McKeage, K. (1994). How green is my value: Exploring the relationship between environmentalism and materialism. *Advances in Consumer Research, 21*, 147-152.
- Barnett, V., & Lewis, T. (1994). *Outliers in statistical data*. New York: John Wiley & Sons.
- Barr, S., Gilg, A. W., & Ford, N. J. (2001). A conceptual framework for understanding and analysing attitudes towards household-waste management. *Environment and Planning, 33*, 2025-2048.
- Barr, S., & Gilg, A. W. (2007). A conceptual framework for understanding and analyzing attitudes towards environmental behavior. *Geographiska Annaler, 89*(4), 361-379.
- Bauer, M., & Gaskell, G. (2000). *Qualitative research with text, image and sound*. London: Sage Publications Inc.
- Bech-Larsen, T. (1996). Danish consumers' attitudes to the functional and environmental characteristics of food packaging. *Journal of Consumer Policy, 19*, 339-363.

- Begley, C. M. (1996). Using triangulation in nursing research. *Journal of Advanced Nursing*, 24(1), 122-128.
- Benini, A. (2000). *Construction of knowledge*. Rome: Gnome.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238-246.
- Bentler, P. M. (1995). *EQS structural equations and program manual*. Encino, California: Multivariate Software Inc.
- Berger, H., Wolf, H., & Ullman, E. (Eds.). (1989). *Handbuch der sozialistischen forschung: methodologie, methoden, technicken*. Berlin: Akademie Verlag.
- Berkowitz, L., & Lutterman, K. G. (1968). *The traditional socially responsible personality*. *Public Opinion Quarterly*, 32, 169-185.
- Berman, E. (1993). The market for green products and public policy. *Environments*, 22(1), 75-84.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: Wiley Inc.
- Bollen, K. A. (1986). Sample size and Bentler and Bonett's nonnormed fit index. *Psychometrika*, 51(3), 375-377.
- Bollen, K. A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods and Research*, 17(3), 303-316.
- Bolton, R. N., & Drew, J. H. (1991). *A multistage model of consumers' assessment of service quality and value*. *Journal of Consumer Research*, 17(4), 375-384.
- Borin, N., Cerf, D. C., & Krishnan, R. (2011). *Consumer effects of environmental impact in product labelling*. *Journal of Consumer Marketing*, 28(1), 76-86. doi: 10.1108/07363761111101976

- Boshoff, C. (1999). An instrument to measure satisfaction with transaction-specific service recovery. *Journal of Service Marketing, 1*(3), 63-90.
- Boulstridge, E., & Carrigan, M. (2000). Do consumers really care about corporate responsibility? Highlighting the attitude-behaviour gap. *Journal of Communication Management, 4*(4), 355-368. doi: 10.1108/eb023532
- Bozdogan, H. (1987). Model selection and Akaike's information criterion (AIC): The general theory and its analytical extensions. *Psychometrika, 52*(3), 345-370.
- Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods and Research, 21*(2), 230-258.
- Bruntland, G H. (1987). *Our Common Future*. (World Commission on Environment and Development). Oxford: Oxford University Press.
- Burns, A. C., & Bush, R. F. (2003). *Marketing Research* (5th ed.). Upper Saddle River: Pearson International Education.
- Byrne, B. (2009). *Structural equation modelling with Amos: Basic concepts, applications, and programming* (2nd ed.). New York: Routledge, Taylor and Francis Group.
- Carrigan, M., Szmigin, I., & Wright, J. (2004). Shopping for a better world? An interpretive study of the potential for ethical consumption within the older market. *Journal of Consumer Marketing, 21*(6), 401-417.
- Carson, P., & Moulden, J. (1991). *Green is gold :business talking to business about the environmental revolution* (1st ed). New York: Harper Business.
- Chamorro, A., Rubio, S., & Miranda, F. J. (2009). Characteristics of research on green marketing. *Business Strategy and the Environment, 18*(4), 223-239. doi: 10.1002/bse.571

- Chan, R. Y. K. (1999). Environmental attitudes and behavior of consumers in China: Survey findings and implications. *Journal of International Consumer Marketing*, 11(4), 25-51.
- Chan, T. S. (1996). Concerns for environmental issues and consumer purchase preferences: A two-country study. *Journal of International Consumer Marketing*, 9(1), 43-55.
- Chan, R. Y. K., & Lau, L. B. Y. (2000). Antecedents of green purchases: A survey in China. *Journal of Consumer Marketing*, 17(4), 338-357.
- Chan, R. Y. K., & Lau, L. B. Y. (2001). Explaining green purchasing behavior: A cross cultural study on American and Chinese consumers. *Journal of International Consumer Marketing*, 14(2), 9-40.
- Chang, C.-J. (2013). Price or quality? The influence of fluency on the dual role of price. *Marketing Letters*, 24(4), 369-380. doi: 10.1007/s11002-013-9223-8.
- Chang, T.-Z., & Wildt, A. R. (1994). Price, product information, and purchase intention: An empirical study. *Journal of the Academy of Marketing Science*, 22(1), 16-27.
- Chen, Y.-S. (2008). The driver of green innovation and green image - green core competence. *Journal of Business Ethics*, 81(3), 531-543.
- Chen, Y.-S. (2010). The drivers of green brand equity: Green brand image, green satisfaction, and green trust. *Journal of Business Ethics*, 93, 307-319.
- Chen, Y., & Chang, C. (2012). Enhance green purchase intentions - The roles of green perceived value, green perceived risk, and green trust. *Management Decision*, 50(3), 505-520.
- Chen, Y., Lai, S.-B., & Wen, C.-T. (2006). The influence of green innovation performance on corporate advantage in Taiwan. *Journal of Business Ethics*, 67, 331-339.

- Clark-Carter, D. (2004). *Quantitative psychological research*. New York: Psychology Press.
- Coddington, W. (1990). It's no fad: Environmentalism is now a fact of corporate life. *Marketing News*, 15(October), 7.
- Cohen, J., Cohen, P., West, S., & Aiken, L. (2003). *Applied multiple regression/correlation analysis for the behavioural sciences* (3rd ed.). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Cooksey, R. W. (2007). *Illustrating statistical procedures: For business, behavioural and social science research* (1st ed.). Australia: Tilde University Press.
- Crane, A. (2000). Facing the backlash: Green marketing and strategic re-orientation in the 1990s. *Journal of Strategic Marketing*, 8(3), 277-296.
- Cresswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124-130.
- Cresswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, California: Sage Publications, Inc.
- Cresswell, J. W., & Clark, V. L. P. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, California: Sage Publications, Inc.
- Cresswell, J. W., & Clark, V. L. P. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, California: Sage Publications, Inc.
- D'Souza, C., & Taghian, M. (2005). Green advertising effects on attitude and choice of advertising themes. *Asia Pacific Journal of Marketing and Logistics*, 17(3), 51-66.
- D'Souza, C., Taghian, M., & Khosla, R. (2007). Examination of environmental beliefs and its impact on the influence of price, quality and demographic characteristics with respect

- to green purchase intention. *Journal of Targeting, Measurement and Analysis for Marketing*, 15(2), 69-78. doi: 10.1057/palgrave.jt.5750039
- D'Souza, C., Taghian, M., Lamb, P., & Peretiatkos, R. (2006). Green products and corporate strategy: *An empirical Investigation. Society and Business Review*, 1(2), 144-157. doi: 10.1108/17465680610669825
- Dann, S., & Dann, S. (2004). *Introduction to Marketing*. Milton, QLD: John Wiley and Sons.
- Davies, J., Foxall, G. R., & Pallister, J. (2002). Beyond the intention-behaviour mythology: An integrated model of recycling. *Market Theory*, 2(1), 29-113.
- Davis, J. J. (1994). Consumer response to corporate environmental advertising. *Journal of Consumer Marketing*, 11(2), 25-37.
- Deighton, J., Henderson, C. M., & Neslin, S. A. (1994). The effects of advertising on brand switching and repeat purchasing. *Journal of Marketing Research*, 31(1), 28-43.
- De Pelsmacker, P., Driesen, L., & Rayp, g. (2005). Do consumers care about ethics? Willingness to pay for fair-trade coffee. *The Journal of Consumer Affairs*, 39(2), 363-385.
- DeVellis, R. F. (2003). *Scale development: Theory and applications* (2nd ed.). Thousand Oaks, California: Sage Publications Inc.
- Diekhoff, G. (1992). *Statistics for the social and behavioral sciences: Univariate, bivariate, multivariate*. Dubuque, IA.
- Donaton, S., & Fitzgerald, K. (1992). Polls show ecological concern is strong. *Advertising Age*, 63(June 15), 3.
- Dootson, S. (1995). An in-depth study of triangulation. *Journal of Advanced Nursing*, 22(1), 183-187.

- Dosi, C., & Moretto, M. (2001). Is eco-labelling a reliable environmental policy measure? *Environmental and Resource Economics*, 18, 113-127.
- Durif, F., Boivin, C., & Julien, C. (2010). In search of a green product definition. *Innovative Marketing*, 6(1), 25-33.
- Eerola, E., & Huhtala, A. (2008). Voting for environmental policy under income and preference heterogeneity. *American Journal of Agricultural Economics*, 90(1), 256-266.
- Eichner, T., & Pethig, R. (2006). Corrective taxation for curbing pollution and promoting green product design and recycling. *Environmental and Resource Economics*, 25(4), 477-500.
- Ekiz, E., Au, N., & Hsu, C. (2012). Development of a tourist complaint constraint (TCC) scale. *Scandinavian Journal of Hospitality and Tourism*, 12(4), 373-399.
- Everitt, B. S. (1975). Multivariate analysis: The need for data, and other problems. *British Journal of Psychiatry*, 126, 237-240.
- Ferraro, P., Uchida, T., & Conrad, J. (2005). Price premiums for eco-friendly commodities: Are 'green' markets the best way to protect endangered ecosystems? *Environmental and Resource Economics*, 32, 419-438.
- Finisterra do Paco, A. M., & Raposo, M. L. B. (2008). Determining the characteristics to profile the "green" consumer: An exploratory approach. *International Review on Public and Nonprofit Marketing*, 5, 129-140.
- Fishbein, M. (Ed.). (1995). *Developing effective behaviour change interventions: Some lessons learned from behavioural research*. National Institute on Drug Abuse.
- Fishbein, M., & Ajzen, I. (2005). Theory-based behaviour change interventions: Comments on Hobbis and Sutton. *Journal of Health Psychology*, 10(1), 27-31.

- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behaviour: The reasoned action approach*. New York: Psychology Press (Taylor & Francis).
- Foss, C., & Ellefsen, B. (2002). The value of combining qualitative and quantitative approaches in nursing by means of method triangulation. *Journal of Advanced Nursing*, 40(2), 242-248.
- Freestone, O., & McGoldrick, P. (2008). Motivations of the ethical consumer. *Journal of Business Ethics*, 79, 445-467.
- Fryxell, G., & Lo, C. (2003). The influence of environmental knowledge and values on managerial behaviors on behalf of the environment: An empirical examination of managers in China. *Journal of Business Ethics*, 46, 45-59.
- Gallup, G., & Newport, F. (1990). Americans strongly in tune with the purpose of Earth Day 1990. *Journal of Consumer Research*, 8(1), 114-117.
- Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. *Journal of Marketing*, 58(2), 1-19.
- Gotlieb, J. B., & Sarel, D. (1992). The influence of type of advertisement, price, and source credibility on perceived quality. *Journal of the Academy of Marketing Science*, 20(3), 253-260.
- Garson, D. (2006). *Structural equation modelling* Retrieved September 6th, 2013, from <http://www2.chass.ncsu.edu/garson/pa765/structur.htm>
- Gefen, D., & Straub, D. W. (2004). Consumer trust in B2C e-commerce and the importance of social presence: Experiments in e-products and e-services. *Omega*, 32(6), 407-424.
- Griffin, A. (2003). *Marketing's role in new product development and product decisions*. In J. W. Calhoun (Ed.), *Marketing Best Practices* (pp. 236-277).

- Grunert, S. (1993). Everybody seems concerned about the environment, but is this concern reflected in (Danish) consumers' food choice? *European Advances in Consumer Research*, 1, 428-433.
- Guba, E. G., & Lincoln, Y. S. (1981). *Effective evaluation: Improving the usefulness of evaluation results through the responsive and naturalistic approaches*. San Francisco: Josey-Bass.
- Gurau, C., & Ranchhod, A. (2005). International green marketing: A comparative study of British and Romanian firms. *International Marketing Review*, 22(5), 547-561.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis*. Upper Saddle River, NJ: Prentice-Hall Inc.
- Hair, J. F., Black, W. C., Babib, B. J., & Anderson, R. E. (2014). *Multivariate data analysis* (7th ed.). Essex, England: Pearson Education Limited.
- Hair, J. F., Money, A. H., Samouel, P., & Page, M. (2007). *Research methods for business*. West Sussex: John Wiley & Sons.
- Harmon, R. (1977). Incorporating environmental product costs into a shortage economy. *Business & Society*, 17(2), 19-26.
- Hart, P., & Saunders, C. (1997). Power and trust: Critical factors in the adoption and use of electronic data interchange. *Organizational Science*, 8(1), 23-42.
- Hartmann, P., & Ibanez, V. A. (2006). Green value added. *Marketing Intelligence and Planning*, 24(7), 673-680.
- Hassan, R. (2012). *An investigation of customers' perceptions of green products and their willingness to recommend green products in the context of fast moving consumer*

- goods*. Paper presented at the Partnerships and the Research Journey, Univeristy of New England, Armidale, NSW, Australia.
- Heath, Y., & Gifford, R. (2002). Extending the theory of planned behaviour: Predicting the use of public transportation. *Journal of Applied Social Psychology, 32*(10), 2154-2189.
- Henion, K. E. (1972). The effect of ecologically relevant information on detergent sales. *Journal of Marketing Research, 9*(2), 10-14.
- Herberger, R. (1975). The ecological product buying motive: A challenge for consumer education. *The Journal of Consumer Affairs, 9*(2), 187-195.
- Hines, J. M., Hungerford, H. R., & Tomera, A. N. (1987). Analysis and synthesis of research on responsible environmental behaviour: A meta-analysis. *Journal of Environmental Education, 18*(2), 1-8.
- Hoetler, J. W. (1983). The analysis of covariance structures goodness-of-fit indices. *Sociological Methods & Research, 11*(3), 325-344.
- Hofstede, G. (1983). National cultures in four dimensions: A research-based theory of cultural differences among nations. *International Studies of Management and Organization, 13*(1-2), 46-74.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modelling: A Multidisciplinary Journal, 6*(1), 1-55.
- Huang, H.-L., Gumley, L., Strabala, K., & Li, J. (2004). Intenrational Modis and Aris Processing Package (IMAPP). *Bulletin of the American Metereological Society, 85*(2), 159-161.

- Islam, M. S., Hassan, R., & Hossain, M. M. (2011). An assessment of the impact of green messages on the audience of Dhaka city. *East West Journal of Social Studies*, 2, 21-38.
- Jacob, J., & Olson, J. C. (1977). Consumer response to price: An attitudinal, information processing perspective. *Paper presented at the In Moving ahead with Attitude Research Conference*.
- Janssen, M., & Jager, W. (2002). Stimulating diffusion of green products. *Journal of Evolutionary Economics*, 12, 283-306.
- Joreskog, K. G., & Sorbom, D. (1984). *LISREL 6: A guide to the program and applications*. Chicago: SPSS Inc.
- Kaiser, F., & Gutscher, H. (2003). The proposition of a general version of the theory of planned behaviour: Predicting ecological behaviour. *Journal of Applied Social Psychology*, 33(3), 586-603.
- Kaiser, F., Hubner, G., & Bogner, F. (2005). Contrasting the theory of planned behaviour with the value-belief-norm model in explaining conservation behaviour. *Journal of Applied Social Psychology*, 35(10), 2150-2170.
- Kaiser, H. F. (1958). The varimax criterion for analytic rotation in factor analysis. *Psychometrika*, 23(3), 187-200.
- Kaiser, H. F., & Rice, J. (1974). Little, Mark IV. *Educational and Psychological Measurement*, 34(1), 111-117.
- Kalafatis, S. P., & Pollard, M. (1999). Green marketing and Ajzen's theory of planned behaviour: A cross-market examination. *Journal of Consumer Marketing*, 16(4/5), 441-460.

- Kangun, N., Carlson, L., & Grove, S. J. (1991). Environmental advertising claims: A preliminary investigation. *Journal of Public Policy and Marketing*, 10(2), 47-58.
- Keegan, W. J., & Green, M. S. (2000). *Global Marketing*. Upper Saddle River, NJ: Prentice-Hall Inc.
- Kim, Y., & Choi, S. M. (2005). Antecedents of green purchase behaviour: An examination of collectivism, environmental concern, and PCE. *Advances in Consumer Research*, 32.
- Kim, C., Zhao, W., & Yang, K. H. (2008). An empirical investigation on the integrated framework of e-CRM in online shopping: Evaluating the relationships among perceived value, satisfaction, and trust based on customers' perspectives. *Journal of Electronic Commerce in Organizations*, 6(3), 1-19.
- Kim, Y., & Choi, S. M. (2005). Antecedents of green purchase behavior: An examination of collectivism, environmental concern, and PCE. *Advances in Consumer Research*, 32, 592-599.
- Kinnear, T. C., Taylor, J. R., & Ahmed, S. A. (1974). Ecologically concerned consumers: Who are they? *Journal of Marketing*, 38, 20-24
- Kleindorfer, P., Singhal, K., & Wassehove, L. V. (2005). Sustainable operations management. *Production and Operations Management*, 14(4), 482-492.
- Kohut, A., & Shriver, J. (1989). Environment regaining a foothold on the national agenda. *Gallup Report*, 285, 2-12.
- Kotler, P. (2003). *Marketing management* (11 ed.). Prentice Hall, New Jersey.
- Kotler, P., Burton, S., Deans, K., Brown, L., & Armstrong, G. (2013). *Marketing* (9th ed.). Frenchs Forest, NSW, Australia: Pearson Australia.

- Kotler, P., & Keller, K. L. (2009). *Marketing management* (13th ed.). New Jersey: Pearson Education Inc.
- Kotler, P., Keller, K. L., & Burton, S. (2009). *Marketing management* (1st ed.). Frenchs Forest, NSW: Pearson Australia.
- Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. Thousand Oaks, California: Sage.
- Kwan, K. P. (1999). How fair are students ratings in assessing the teaching performance of university teachers? *Assessment and Evaluation in Higher Education*, 24(2), 181-195.
- Langdrige, D., Sheeran, P., & Connolly, K. J. (2007). Analyzing additional variables in the theory of reasoned action. *Journal of Applied Social Psychology*, 37(8), 1884-1913.
- Lansana, F. M. (1992). Distinguishing potential recyclers from non-recyclers: A basis for developing recycling strategies. *The Journal of Environmental Education*, 23, 16-23.
- Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, 18(6), 503-520.
- Lee, K. (2009). Gender differences in Hong Kong adolescent consumers' green purchasing behavior. *Journal of Consumer Marketing*, 26(2), 87-96.
- Leonidou, L. C., Leonidou, C. N., Palihawadana, D., & Hultman, M. (2011). Evaluating the green advertising practices of international firms: A trend analysis. *International Marketing Review*, 28(1), 6-33. doi: 10.1108/02651331111107080
- Lincoln, J. R., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills: Sage.
- Liu, M.-S., & Wu, S.-D. (2009). A case study of the fire extinguisher industry. *Journal of American Academy of Business*, 14(2), 104-111.

- Lockie, S., Lyons, K., Lawrence, G., & Mummery, K. (2002). Eating 'Green': Motivations behind organic food consumption in Australia. *Sociologia Ruralis*, 42(1), 23-40. doi: 10.1111/1467-9523.00200
- MacCullum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modelling. *Psychological Methods*, 1(2), 130.
- Magerholm, A. (2003). Eco-efficiency reporting exemplified by case studies. *Clean Technologies and Environmental Policy*, 510(3-4), 232-239.
- Mainieri, T., Barnett, E., Valdero, T., Unipan, J., & Oskamp, S. (1997). Green buying: The influence of environmental concern on consumer behavior. *The Journal of Social Psychology*, 137(2), 189-204. doi: 10.1080/00224549709595430
- Malhotra, N. K., & Dash, S. (2011). *Marketing research: An applied orientation* (6th ed.). New Delhi: Pearson Education.
- Marron, D. (1997). Buying green: Green procurement as an instrument of environmental policy. *Public Finance Review*, 25(3), 285-305.
- Marsh, H. W., Balla, J. R., & McDonald, R. P. (1988). Goodness-of-fit indexes in confirmatory factor analysis: The effect of sample size. *Psychological Bulletin*, 103(3), 27-54.
- Martin, B. (1995). The impact of green product lines on the environment: Does what they know affect how they feel? *Simintiras Antonis C.*, 13(4), 16-23.
- McDaniel, S. W., & Rylander, D. H. (1993). Strategic green marketing. *The Journal of Consumer Marketing*, 10(3), 4-10.
- Mebratu, D. (2001). Environmental competitiveness: Green purchasing. *Paper presented at the International Trade Forum*.

- Miller, W. L., & Crabtree, B. F. (Eds.). (1999). *Clinical research: A multimethod typology and qualitative roadmap* (Vol. 2). Thousand oaks, California: Sage Publications, Inc.
- Minichiello, V., Madison, J., Hays, T., Courtney, M., & St-John, W. (1999). *Handbook of Research Methods for Nursing and Health Science*. French Forest, NSW: Pearson Education Australia.
- Mintel. (1995). In Mintel (Ed.), *The Second Green Consumer Report*. London.
- Mohr, L. A., Ellen, P. S., & Eroglu, D. (1998). The development and testing of a measure of scepticism toward environmental claims in marketers' communications. *The Journal of Consumer Affairs*, 32(1), 30-55.
- Monroe, K. B., & Krishnan, R. (1985). *The effect of price on subjective product evaluations*. Lexington, MA: Lexington Books.
- Morrison, D. G. (1979). Purchase intentions and purchase behavior. *The Journal of Marketing*, 43(2), 65-74.
- Mossholder, K. W., Bennett, N., Kemery, E. R., & Wesolowski, M. A. (1998). Relationships between bases of power and work reactions: *The mediational role of procedural justice*. *Journal of Management*, 24(4), 533-552.
- Mostafa, M. M. (2007). A hierarchical analysis of the green consciousness of the Egyptian consumer. *Psychology and Marketing*, 24(5), 445-473. doi: 10.1002/mar.20168
- Myburgh-Louw, J., & O'Shaughnessy, N. J. (1994). Consumer perception of misleading and deceptive claims on the packaging of 'green' fast moving consumer goods. *Paper presented at the AMA Summer Educators' Conference Proceedings*, Chicago, IL.
- OECD. (1997). *Sustainable consumption and production*. Paris: OECD

- Oreg, S., & Katz-Gerro, T. (2006). Predicting proenvironmental behaviour cross-nationally: Values, the theory of planned behaviour, and value-belief-norm theory. *Environment and Behavior*, 38(4), 462-483.
- Osada, H. (2003). New product planning for environment. *Quality Congress*, 57, 257-262.
- Ottman, J. A. (Ed.). (1993). *Green marketing: Challenges & opportunities*. Chicago, IL.
- Ozcaglar-Toulouse, N., Shiu, E., & Shaw, D. (2006). In search of fair trade: Ethical consumer decision making in France. *International Journal of Consumer Studies*, 30(5), 502-514.
- Parthasarathy, G., Hart, R., Jamro, E., & Miner, L. (2005). Value of sustainability: Perspectives of a chemical manufacturing site. *Clean Technologies and Environmental Policy*, 7, 219-229.
- Patterson, P., & Spreng, R. (1997). Modeling the relationship between perceived value, satisfaction and repurchase intention in a business-to-business, service context: An empirical examination. *International Journal of Service Industry Management*, 8(5), 414-434.
- Pearse, G. (2012). *Greenwash*. Collingwood, Vic: Black Inc.
- Peattie, K. (1992). *Green Marketing*. UK: Longman group Ltd.
- Peattie, K. (1995). *Environmental Marketing Management: Meeting the Green Challenge*. University of Michigan: Pitman.
- Peattie, K. (1999). Trappings versus substance in the greening of marketing planning. *Journal of Strategic Marketing*, 7, 131-148.

- Peattie, K., & Crane, A. (2005). Green marketing: Legend, myth, farce or prophesy? *Qualitative Market Research: An International Journal*, 8(4), 357-370. doi: 10.1108/13522750510619733
- Peter, J. P., & Olson, J. C. (1996). *Consumer behaviour and marketing strategy* (4th ed.). Chicago: Irwin.
- Pfeifer, L. (2000). *Sachverhalte, konstruktion und wirklichkeit*. Wien: Selbstverlag.
- Pickering, J. F., & Greator, M. (1980). Evaluations of individual consumer durables: differences between owners and non-owners and buyers and non-buyers. *Journal of the Marketing Research Society*, 22(2), 97-114.
- Pickett-Baker, J. R., & Ozaki, R. (2008). Pro-environmental products: Marketing influence on consumer purchase decision. *Journal of Consumer Marketing*, 25(5), 281-293.
- Polonsky, M. J., Grau, S. L., & Garma, R. (2010). The new greenwash? Potential marketing problems with carbon offsets. *International Journal of Business Studies*, 18(1), 49-54.
- Prothero, A. (1990). Green consumerism and the societal marketing concept: Marketing strategies for the 1990s. *Journal of Marketing Management*, 6(2), 87-103
- Pujari, D., Peattie, K., & Wright, G. (2003). Green and competitive: Influences on environmental new product development performance. *Journal of Business Research*, 56(8), 281-293.
- Puris, X. (1995). *The Complexity of Research Measure*. Paris: Ajax.
- Rahbar, E., & Wahid, N. A. (2010). Ethno-cultural differences and consumer understanding of eco-labels: An empirical study in Malaysia. *Journal of Sustainable Development*, 3(3), 255-262.

- Rahbar, E., & Wahid, N. A. (2011). Investigation of green marketing tools' effect on consumers' purchase behaviour. *Business Strategy Series*, 12(2), 73-83. doi: 10.1108/17515631111114877
- Rahim, M. A., & Buntzman, G. F. (1989). Supervisory power bases, styles of handling conflict with subordinates, and subordinate compliance and satisfaction. *Journal of Psychology*, 123(2), 195-210.
- Ramus, C. A., & Montiel, I. (2005). When are corporate environmental policies a form of greenwashing? *Business & Society*, 44(4), 377-414. doi: 10.1177/0007650305278120
- Reizenstein, R. C., Hills, G. E., & Philpot, J. W. (1974). *Willingness to pay for control of air pollution: A demographic analysis*, Chicago, IL.
- Rivera-Camino, J. (2007). Re-evaluating green marketing strategy: a stakeholder perspective *European Journal of Marketing*, 41(11/12), 1328-1358.
- Roarty, M. (1997). Greening business in a market economy. *European Business Review*, 97(5), 244-254.
- Roberts, J. A. (1996). Green consumers in the 1990s: Profile and implications for advertising. *Journal of Business Research*, 36(3), 217-232.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different at all: A cross-discipline view of trust. *Academy of Management Review*, 23(3), 393-404.
- Sandahl, D. M., & Robertson, R. (1989). Social determinants of environmental concern: Specification and test of the model. *Environment and Behavior*, 21(1), 57-81.
- Sandelovsky, M. (1995). Sample size in qualitative research. *Journal in Nursing and Health*, 18, 179-183.
- Sarantakos, S. (2005). *Social Research* (3rd ed.). Basingstoke: Palgrave Macmillan.

- Schahn, J., & Holzer, E. (1990). Studies of individual environmental concern: The role of knowledge, gender, and background variables. *Environment and Behavior*, 22.
- Schorsch, J. (1990). Are corporations playing clean with green? . *Business and Society Review*, 1, 6-9.
- Schuhwerk, M. R., & Lefkoff-Hagius, R. (1995). Green or non-green? Does type of appeal matter when advertising a green product? *Journal of Advertising*, 24(2), 45-54.
- Schultz, P. (2000). Empathizing with nature: The effects of perspective taking on concern for environmental issues. *Journal of Social Issues*, 56, 391-406.
- Schurr, P. H., & Ozanne, J. L. (1985). Influences on exchange processes: Buyer's preconceptions of a seller's trustworthiness and bargaining toughness. *Journal of Consumer Research*, 11(4), 939-953.
- Schwandt, T. A. (2001). *Dictionary of Qualitative Inquiry*. Thousand Oaks, CA: Sage.
- Schwarz, G. (1978). Estimating the dimension of a model. *The Annals of Statistics*, 6(2), 461-464.
- Sekaran, U. (2003). Internet banking: An update from the frontlines. *ABA Banking Journal*, 92(1), 51-53.
- Selltiz, C., Wrightsman, L. J., & Cook, S. W. (1976). *Research methods in social relations*. New York: Holt, Rinehart and Winston.
- Shimp, T. A. (2003). *Integrated marketing communications: Advertising, promotions, and other marcom tools*. In J. W. Clahoun (Ed.), *Marketing Best Practices* (2nd ed.). USA: Thomson Learning.

- Sparks, P., & Shepherd, R. (1992). Self-identity and the theory of planned behaviour: Assessing the role of identification with "green consumerism". *Social Psychology Quarterly*, 55(4), 388-399.
- Stafford, E., Polonsky, M. J., & Hartman, C. (2000). Environmental NGO-business collaboration and strategic bridging: A case analysis of the Greenpeace-Foron Alliance. *Business Strategy and the Environment*, 9(2), 122-145.
- Steenkamp, J. B. E. M., & Geyskens, I. (2006). How country characteristics affect the perceived value of websites. *Journal of Marketing*, 70(3), 136-150.
- Steiger, J. H., & Lind, J. C. (1980). Statistically based tests for the number of common factors. *Paper presented at the Annual spring Meeting of the Psychometric Society*, Iowa City, US.
- Stern, P. (1992). What psychology knows about energy conservation. *American Psychologist*, 47, 1224-1232.
- Stevens, J. (1996). *Applied multivariate statistics for the social sciences* (3rd ed.). NJ: Lawrence Erlbaum Assoc.
- Straughan, R., & Roberts, J. (1999). Environmental segmentation alternatives: A look at green consumer behavior in the new millennium. *Journal of Consumer Marketing*, 16(6), 558-575.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications, Inc.
- Suchard, H. T., & Polonsky, M. J. (1991). A theory of environmental buyer behavior and its validity: The environmental action-behaviour model. *Paper presented at the AMA Summer Educators' Conference Proceedings*, Chicago, IL.

- Sudman, S., Bradburn, N. M., & Schwarz, N. (1996). *Thinking about answers: The application of cognitive processes to survey methodology*. San Francisco: Jossey-Bass.
- Suri, R., Kohli, C., & Monroe, K. B. (2007). The effects of perceived scarcity on consumers' processing of price information. *Journal of the Academy of Marketing Science*, 35(1), 89-100.
- Sweeney, J. C., Soutar, G. N., & Johnson, L. W. (1999). The role of perceived risk in the quality-value relationship: A study in a retail environment. *Journal of Retailing*, 75(1), 77-105.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Boston: Allyn & Bacon.
- Tanner, C., & Kast, S. W. (2003). Promoting sustainable consumption: Determinants of green purchases by Swiss consumers. *Psychology and Marketing*, 20(10), 883-892.
- Teas, R. K., & Agrawal, S. (2000). The effects of extrinsic product cues on consumers' perceptions of quality, sacrifice, and value. *Journal of the Academy of Marketing Science*, 28(2), 278-290.
- TerraChoice. (2009). *The seven sins of greenwashing*. Ottawa, ON: TerraChoice Environmental Marketing Inc.
- Thøgersen, J. (1996). *The demand for environmentally friendly packaging in Germany*. (MAPP Working Paper. Department of Marketing). The Aarhus School of Business. Aarhus.
- Thøgersen, J. (1999). The ethical consumer: Moral norms and packaging choice. *Journal Of Consumer Policy*, (22), 439-460.

- Thøgersen, J. (2000). Psychological determinants of paying attention to eco-labels in purchase decisions: Model development and multinational validation. *Journal of Consumer Policy*, (23), 285-313.
- Tobin, G. A., & Begley, C. M. (2002). Triangulation as a method of inquiry. *Journal of Critical Inquiry Into Curriculum and Instruction*, 3(3), 7-11.
- Tobin, G. A., & Begley, C. M. (2004). Methodological rigour within a qualitative framework. *Journal of Advanced Nursing*, 48(4), 388-396.
- Tobin, J. (1959). On the predictive value of consumer intentions and attitudes. *The Review of Economics and Statistics*, 41(1), 1-11.
- Travers, M. (2002). *Qualitative research through case studies*. Thousand Oaks, California: Sage Publications Inc.
- Triebswetter, U. J., & Wackerbauer, J. (2008). Integrated environmental product innovation and impacts on company competitiveness: A case study of the automotive industry in the region of Munich. *European Environmental*. 18, 30-44.
- Tucker, L. R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, 38(1), 1-10.
- Valenzuela, F. (2007). *The influence of switching barriers on service recovery evaluation in the retail banking industry in Chile: Construct development and testing*. (Doctoral dissertation). Armidale: University of New England.
- Van Lierre, K., & Dunlap, R. (1981). Environmental concern, does it make a difference how it's measured? *Environment and Behavior*, 13(6), 651-676.
- Vandermerwe, S., & Oliff, M. (1990). Customers drive corporations green. *Long Range Planning*, 26(6), 10-16.

- Vining, J., & Ebreo, A. (1990). What makes a recycler? A comparison of recyclers and nonrecyclers. *Environmental Behavior*, 2(12), 55-73.
- Wagner, M. (2009). National culture, regulation and country interaction effects on the association of environmental management systems with environmentally beneficial innovation. *Business Strategy and the Environment*, 18(122-136).
- Walsh, A. (1990). *Statistics for the social sciences: With computer applications*. New York: Harper and Row Publishers Inc.
- Weber, L. (1991). Behind the green veil. *Alternatives*, 17(4).
- Webster, F. E. J. (1975). Determining the characteristics of the socially conscious consumer. *Journal of Consumer Research*, 2(12), 188-196.
- Wee, Y. S., & Quazi, H. (2005). Development and validation of critical factors of environmental management. *Industrial Management and Data Systems*, 105, 96-114.
- Wheeler, M., Sharp, A., & Nancy-Thiel, M. (2013). The effect of 'green' messages on brand purchase and brand rejection. *Australasian Marketing Journal*, 21(2), 107-110.
- Wong, V., Turner, W., & Stoneman, P. (1996). Marketing strategies and market prospects for environmentally-friendly consumer products. *British Journal of Management*, 7(3), 263-281.
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2-22.
- Zhuang, W., Cumiskey, K. J., Xiao, Q., & Alford, B. L. (2010). The impact of perceived value on behaviour intention: An empirical study. *Journal of Global Business Management*, 6(2), 1-7.

Zuur, S., & Fuchs, N. (2010). *Addressing the action gap between intention and actual behavior, within the context of organic food purchases*. Agriculture Section. Goetheanum. Dornach, Switzerland.

LIST OF ACRONYMS

ABS	Australian Bureau of Statistics
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
ECCB	ecologically conscious consumer behaviour
ECVI	Expected Cross-Validation Index
EFA	Exploratory Factor Analysis
FMCGs	Fast Moving Consumer Goods
HREC	Human Research Ethics Committee
IFI	Incremental Fit Index
MANOVA	Multivariate analysis of variance
NEO	natural environmental orientation
PCE	perceived consumer effectiveness
RMSEA	Root Mean-Square Error of Approximation
SEM	Structural Equation Modelling
TLI	Tucker-Lewis Index
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
UNE	University of New England

APPENDICES

APPENDIX 1A

QUESTIONS FOR THE IN-DEPTH INTERVIEW (QUALITATIVE PHASE)

A. Questions related to green products

1. What do you as a consumer of supermarket goods see as environmentally conscious behaviour in your daily life (Allow for time on this question)
2. When prompted with the term “green product” what comes to your mind? ”(Allow for time on this question)
3. What are the features that you generally seek for in purchasing a FMCG?
4. Do you consider eco-friendly packaging to be an important product attribute?
5. Are natural ingredients important for certain types of FMCGs?
6. What are your thoughts on advertising for green products?
7. Does your culture and background play a role in your decision to buy or not to buy green products? Can you elaborate upon this?
8. What effect would price have on your decision to buy or not buy a green product?
9. What effect would availability have on your decision to buy or not buy a green product?

B. Questions related to purchase intentions

10. Do you currently buy green products? If Yes, go to Q11. If No, go to Q12.
11. What of added features or attributes do you seek to continue purchasing green products?
12. What factors do you think would encourage you to actively seek out and purchase green products?
13. Would you recommend green products to family and friends?

C. Negative experiences

14. Can you cite examples of green products which have not met your expectations and have not performed as you would have wished them to? (Allow time for this question)

D. Concluding questions

15. What are your overall comments on green products? The pros and cons.
16. Is there anything else you would like to add or ask, or feel was relevant to this interview?

Thank you very much for participating in this interview. It is very much appreciated.

Would you like a copy of the findings from the research?

APPENDIX 1B



School of Business, Economics
& Public Policy
University of New England
Armidale NSW 2351
Australia
Phone 61 2 6773 2201
Fax 61 2 6773 3148
www.une.edu.au

Information Sheet for Participants

Research Project: An investigation of the profile of the green consumer segment and the factors that affect consumers' green product purchase intentions in the case of fast moving consumer goods

I wish to invite you to participate in my research on the above topic. The details of the study follow and I hope you will consider being involved.

I am a PhD candidate from the School of Business, Economics, and Public Policy at the University of New England specializing in Marketing. In order to understand the demographic and lifestyle characteristics, and the factors that affect consumers' purchase intention of green products, I am undertaking this research.

Participation in the research is voluntary and as a participant you are free to withdraw consent and to discontinue participation in the activity at any time without prejudice. These interviews will be voice recorded or electronically captured. Following the interview, a transcript will be provided to you if you wish to see one. Any information or personal details gathered in the course of the study will remain confidential. No individual will be identified by name in any publication of the results. All names will be replaced by pseudonyms; this will ensure that you are not identifiable.

The voice recordings will be kept in a locked filing cabinet at the researcher's office. The transcriptions and other data will be kept in the same manner for five (5) years following thesis submission and then destroyed. Only the investigators will have access to the data.

It is anticipated that this research will be completed by the end of 2013. The results may also be presented at conferences or written up in journals without identifying any information.

This project has been approved by the Human Research Ethics Committee of the University of New England (Approval No. HE11-208, Valid to 18/11/2012).

Should you have any complaints concerning the manner in which this research is conducted, please contact the Research Ethics Officer at the following address:

Research Services
University of New England
Armidale, NSW 2351
Telephone: (02) 6773 3449 Facsimile: (02) 6773 3543
Email: ethics@une.edu.au

I hope you will be able to participate in my research project. Please feel free to ask any questions about the research. Looking forward to speaking with you soon.

Yours sincerely

Md. Rumman Hassan (PhD candidate)
Email: mhassan4@une.edu.au
Phone: (02) 6773 4556

Dr. Jennifer Rindfleish (Principal supervisor)
Email: jrindfle@une.edu.au
Phone: (02) 6773 2552

Dr. Fredy-Roberto Valenzuela (Co-supervisor)
Email: fvalenz2@une.edu.au
Phone: (02) 6773 2054

APPENDIX 1C

Consent Form for Participants

Research Project: An investigation of the profile of the green consumer segment and the factors that affect consumers' green product purchase intentions in the case of fast moving consumer goods

I,, have read the information contained in the Information Sheet for Participants and any questions I have asked have been answered to my satisfaction. Yes/No

I agree to participate in this activity, realising that I may withdraw at any time. Yes/No

I agree that research data gathered for the study may be published using a pseudonym Yes/No

I agree to the interview having my voice recorded and transcribed. Yes/No

.....

Participant

Date

.....

Researcher

Date

APPENDIX 1D



Ethics Office
Research Development & Integrity
Research Division
Armidale NSW 2351
Australia
Phone 02 6773 3449
Fax 02 6773 3543
jo-ann.sozou@une.edu.au
www.une.edu.au/research-services

HUMAN RESEARCH ETHICS COMMITTEE

MEMORANDUM TO: Dr J Rindfleisch, Dr F Valenzuela & Mr Hassan
School of Business, Economics & Public Policy

This is to advise you that the Human Research Ethics Committee has approved the following:

PROJECT TITLE: An investigation of the profile of the green consumer segment and the factors that affect consumers' green product purchase intention in the case of fast moving consumer goods.

APPROVAL No.: HE11-208

COMMENCEMENT DATE: 18/11/2011

APPROVAL VALID TO: 18/11/2012

COMMENTS: Nil. Conditions met in full.

The Human Research Ethics Committee may grant approval for up to a maximum of three years. For approval periods greater than 12 months, researchers are required to submit an application for renewal at each twelve-month period. All researchers are required to submit a Final Report at the completion of their project. The Progress/Final Report Form is available at the following web address: <http://www.une.edu.au/research-services/researchdevelopment/integrity/ethics/human-ethics/hrectforms.php>

The *NHMRC National Statement on Ethical Conduct in Research Involving Humans* requires that researchers must report immediately to the Human Research Ethics Committee anything that might affect ethical acceptance of the protocol. This includes adverse reactions of participants, proposed changes in the protocol, and any other unforeseen events that might affect the continued ethical acceptability of the project.

In issuing this approval number, it is required that all data and consent forms are stored in a secure location for a minimum period of five years. These documents may be required for compliance audit processes during that time. If the location at which data and documentation are retained is changed within that five year period, the Research Ethics Officer should be advised of the new location.

18/11/2011


Jo-Ann Sozou
Secretary/Research Ethics Officer

A11/110

APPENDIX 2A

QUESTIONNAIRE

The questionnaire relates to the factors that potentially influence your purchase intentions in the context of eco-friendly Fast Moving Consumer Goods (FMCGs). Examples of FMCGs include non-durable goods such as grocery items, soft drinks, toiletries, etc. It would be appreciated if you take some time to fill out the questionnaire.

PART A

BEHAVIOURAL QUESTIONS

Please tick (✓) the most appropriate box.

A1. How often do you shop for groceries?

- Daily
- Weekly
- Fortnightly
- Monthly
- Other (please specify)_____

A2. Who does the grocery shopping in your family (you can choose more than one option)?

- Yourself
- Partner/spouse
- Jointly (yourself and your partner)
- Parents
- Other (please specify)_____

A3. Which of the following best describes you?

- I am a major green purchaser and recycler.
- I will buy green but will not make lifestyle changes.

- I care about the environment but would only spend a little more to buy green.
- I think caring for the environment is somebody else's problem.
- I don't care about environmental issues.

A4. Please indicate which of the following activities you engage in (you can choose more than one).

- Use biodegradable soaps and detergents
- Avoid buying aerosol products
- Read labels to see if products are environmentally safe
- Buy products made or packaged in recycled materials
- Buy products that can be refilled
- Avoid buying products from companies who are not environmentally responsible
- Recycle bottles, cans or glass
- Recycle newspapers
- Compost garden waste
- Take your own bag to the supermarket
- Cut down on car use
- Contribute money to environmentally friendly causes
- Volunteer for an environmental group
- Write to politicians
- Other _____

A5. Do you always make a conscious effort to purchase Fast Moving Consumer Goods (non-durable goods such as grocery items, soft drinks, toiletries, etc.) that are eco-friendly? Please briefly explain why.

- Yes,
because _____
- No,
because _____
- I do, but not always
because _____

A6. Do you always purchase Fast Moving Consumer Goods (non-durable goods such as grocery items, soft drinks, toiletries, etc.) that are eco-friendly? Please briefly explain why.

- Yes,
because _____
- No,
because _____
- I do, but not always
because _____

A7. What portion of your grocery shopping would be classified as eco-friendly?

_____ out of 100%

PART B

The following questions relate to green product purchase intentions and the factors that have an impact on those intentions. Please indicate the degree of your agreement or disagreement with each statement by ticking (✓) the most appropriate box.

The scale below defines the response number.

1 = Strongly Disagree

2 = Disagree

3 = Neither Agree Nor Disagree

4 = Agree

5 = Strongly Agree

Example:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	1	2	3	4	5
I am always careful when crossing the road	1	2	3	4	5 ✓

The following questions relate to the various Marketing factors that impact your intention to purchase eco-friendly Fast Moving Consumer Goods (examples include non-durable goods such as grocery items, soft drinks, toiletries, etc.)

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Green products offer good value for money	1	2	3	4	5
Green products' environmental performance meets your expectations	1	2	3	4	5
I purchase green products because they have more environmental concern than regular products	1	2	3	4	5
I purchase green products because they are environmentally friendly	1	2	3	4	5
I purchase environmentally friendly products because they have more benefits than other products	1	2	3	4	5
I find that the price charged by green products is reasonable	1	2	3	4	5
I find green products offer good quality/benefits	1	2	3	4	5
I am willing to pay more for an eco-friendly product	1	2	3	4	5
The contents of environmental advertising are of little relevance to my daily life	1	2	3	4	5
Environmental advertisements are poorly produced and unattractive	1	2	3	4	5

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Environmental advertisements are always exaggerated	1	2	3	4	5
I find arguments presented in the advertisements for eco-friendly products to be unconvincing	1	2	3	4	5
The manufacturer (advertiser) of the advertised product does not bear an eco-friendly image	1	2	3	4	5
I am willing to rely on information conveyed by environmental advertisements when making purchase related decisions	1	2	3	4	5
I always read product labels	1	2	3	4	5
The contents of eco-labels are easy to understand	1	2	3	4	5
I can rely on the claims made on eco-labels	1	2	3	4	5
Eco-labels are always exaggerated	1	2	3	4	5
I find eco-labels from regulatory bodies to be more credible than those of the manufacturers	1	2	3	4	5
I am willing to rely on information conveyed by eco-labels when making purchase related decisions	1	2	3	4	5
I find eco-friendly products to be readily available	1	2	3	4	5

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I will delay my purchase if the eco-friendly product I want is not available	1	2	3	4	5
I will take the effort of going to another shop if I can't find the eco-friendly product I am looking for	1	2	3	4	5
I feel that green products' environmental reputation are generally reliable	1	2	3	4	5
I feel that green products' environmental performance are generally reliable	1	2	3	4	5
I feel that green products' environmental claims are generally trustworthy	1	2	3	4	5
Green products keep promises and commitments for environmental protection	1	2	3	4	5
I intend to purchase green product(s) because of its (their) environmental concern	1	2	3	4	5
I intend to purchase green product(s) in the future because of its (their) environmental performance	1	2	3	4	5
I would definitely intend to buy eco-friendly products	1	2	3	4	5
I intend to recommend green products to family and friends	1	2	3	4	5

PART C

The following questions relate to the various personal and social factors that impact your intention to purchase eco-friendly Fast Moving Consumer Goods (examples include non-durable goods such as grocery items, soft drinks, toiletries, etc.)

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
People who influence my behaviour encourage me to buy eco-friendly products	1	2	3	4	5
My decision to purchase eco-friendly products is influenced by my friends	1	2	3	4	5
My decision to purchase eco-friendly products is influenced by my family members	1	2	3	4	5
My decision to purchase eco-friendly products is influenced by my colleagues	1	2	3	4	5
My upbringing has taught me the importance of eco-friendly products	1	2	3	4	5
In my culture looking after the environment is an important facet of life	1	2	3	4	5
My religious views play an important role in influencing me to purchase eco-friendly products	1	2	3	4	5
My political views play an important role in influencing me to purchase eco-friendly products	1	2	3	4	5

PART D

DEMOGRAPHIC QUESTIONS

Please tick (✓) the most appropriate box.

D1. Please indicate your gender

- Male
- Female

D2. What is your age?

- 18-21
- 22-25
- 26-30
- 31-40
- 41-50
- 51-60
- 61 or over

D3. What is the highest level of education you have completed?

- Primary school
- Secondary (or High) school
- Vocational education and training (TAFE)
- Undergraduate
- Post graduate

D4. Please estimate your gross annual income

- \$20,000 and under
- \$20,001 - \$35,000
- \$35,001 - \$50,000
- \$50,001-\$65,000
- \$65,001-\$80,000
- \$80,001 and over

D5. How would you describe your ethnic background?

- Anglo-Australian
- Asian
- Middle Eastern
- New Zealander
- Other (please specify) _____

D6. What is your occupation? _____

D7. Which of the following represents your employment status?

- Full-time
- Part-time
- Casual
- Self-employed
- Unemployed

D8. Please indicate your marital status

- Single
- Married
- Divorced
- Other (please specify) _____

D9. How many children do you have? _____

APPENDIX 2B



School of Business
University of New England
Armidale NSW 2351
Australia
Phone 02 6773 2201
Fax 02 6773 3148
www.une.edu.au/business-school

INFORMATION SHEET For PARTICIPANTS

I wish to invite you to participate in my research project, described below.

My name is Md. Rumman Hassan and I am conducting this research as part of my PhD in the School of Business at the University of New England. My supervisors are Dr. Jennifer Rindfleish and Dr. Fredy-Roberto Valenzuela.

Research Project	The title of the project
Aim of the research	The research aims to explore the profile of the green consumer segment and the factors that affect consumers' green product purchase intention in the case of fast moving consumer goods.
Interview	I would like to invite you to participate in a survey. The survey will take approximately thirty minutes.
Confidentiality	Any information or personal details gathered in the course of the study will remain confidential. No individual will be identified by name in any publication of the results. All names will be replaced by pseudonyms; this will ensure that you are not identifiable.
Participation is Voluntary	Please understand that your involvement in this study is voluntary and I respect your right to withdraw from the study at any time. You may discontinue the survey at any time without consequence and you do not need to provide any explanation if you decide not to participate or withdraw at any time.
Questions	The interview questions will not be of a sensitive nature: rather they are general, aiming to enable you to enhance my knowledge of the factors that influence consumers' green product purchase intentions.
Use of information	I will use information from the survey as part of my doctoral thesis, which I expect to complete in February 2014. Information from the survey may also be used in journal articles and conference presentations before and after this date. At all time, I will safeguard your identity by presenting the information in way that will not allow you to be identified.
Upsetting issues	It is unlikely that this research will raise any personal or upsetting issues but if it does you may wish to contact your local Community Health Centre (1800 600 681).

Storage of information

I will keep hardcopy recordings and notes of the survey in a locked cabinet at the researcher's office at the University of New England's School of Business. Any electronic data will be kept on a password protected computer in the same School. Only the research team will have access to the data.

Disposal of information

All the data collected in this research will be kept for a minimum of five years after successful submission of my thesis, after which it will be disposed of by deleting relevant computer files, and destroying or shredding hardcopy materials.

Approval

This project has been approved by the Human Research Ethics Committee of the University of New England (Approval No: HE13-195, Valid to 08/08/2014).

Contact details

Feel free to contact me with any questions about this research by email at rhassan3@une.edu.au or by phone on 02 6773 4556.

You may also contact my supervisors. My Principal supervisor's name is Dr. Jennifer Rindfleish and she can be contacted at jrindfle@une.edu.au or 02 6773 2552 and my Co-supervisors name is Dr. Fredy-Roberto Valenzuela and he can be at fvalenz2@une.edu.au or 02 6773 2054.

Complaints

Should you have any complaints concerning the manner in which this research is conducted, please contact the Research Ethics Officer at:
Research Services
University of New England
Armidale, NSW 2351
Tel: (02) 6773 3449 Fax: (02) 6773 3543
Email: ethics@une.edu.au

Thank you for considering this request and I look forward to further contact with you.

Regards,

Md. Rumman Hassan

APPENDIX 2C

CONSENT FORM
for
PARTICIPANTS

Research Project: An investigation of the profile of the green consumer segment and the factors that affect consumers' green product purchase intention in the case of fast moving consumer goods

I,, have read the information contained in the Information Sheet for Participants and any questions I have asked have been answered to my satisfaction. Yes/No

I agree to participate in this activity, realising that I may withdraw at any time. Yes/No

I agree that research data gathered for the study may be published using a pseudonym Yes/No

I agree that I may be quoted using a pseudonym Yes/No

I am older than 18 years of age Yes/No

.....
Participant Date

.....
Researcher Date

APPENDIX 2D



Ethics Office
Research Development & Integrity
Research Division
Armidale NSW 2351
Australia
Phone 02 6773 3449
Fax 02 6773 3543
jo-ann.sozou@une.edu.au
www.une.edu.au/research-services

HUMAN RESEARCH ETHICS COMMITTEE

MEMORANDUM TO: Dr Jennifer Rindfleish, Mr Rumman Hassan & Mr Fredy Valenzuela-Abaca

UNE Business School

This is to advise you that the Human Research Ethics Committee has approved the following:

PROJECT TITLE: An investigation of the profile of the green consumer segment and the factors that affect consumers' green product purchase intention in the case of fast moving consumer goods.

APPROVAL No.: HE13-195

COMMENCEMENT DATE: 08 August, 2013

APPROVAL VALID TO: 08 August, 2014

COMMENTS: Nil. Conditions met in full

The Human Research Ethics Committee may grant approval for up to a maximum of three years. For approval periods greater than 12 months, researchers are required to submit an application for renewal at each twelve-month period. All researchers are required to submit a Final Report at the completion of their project. The Progress/Final Report Form is available at the following web address:
<http://www.une.edu.au/research-services/researchdevelopment/integrity/ethics/human-ethics/hrc/forms.php>

The NHMRC National Statement on Ethical Conduct in Research Involving Humans requires that researchers must report immediately to the Human Research Ethics Committee anything that might affect ethical acceptance of the protocol. This includes adverse reactions of participants, proposed changes in the protocol, and any other unforeseen events that might affect the continued ethical acceptability of the project.

In issuing this approval number, it is required that all data and consent forms are stored in a secure location for a minimum period of five years. These documents may be required for compliance audit processes during that time. If the location at which data and documentation are retained is changed within that five year period, the Research Ethics Officer should be advised of the new location.



Jo-Ann Sozou
Secretary/Research Ethics Officer

08/08/2013

A13/2287

APPENDIX 3A

DEMOGRAPHIC FACTORS

MANOVA Results – Tests of Interaction between Gender and Green Product Purchase Intention

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Purchase Intention	4.149	1	4.149	6.548	<.05

Dependent Variable	Gender	Mean	Std. Error
Purchase Intention	Male	3.469	.067
	Female	3.701	.062

MANOVA Results – Tests of Interaction between Age and Green Product Purchase Intention

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Purchase Intention	21.364	6	3.561	6.064	<.001

Difference in Green Product Purchase Intention across Various Age Groups

Dependent Variable	Age	Mean	Std. Error
Purchase Intention	18-21	3.210	.085
	22-25	3.536	.103
	26-30	3.667	.123
	31-40	3.825	.094
	41-50	3.840	.112
	51-60	3.736	.181
	61-100	4.625	.542

MANOVA Results – Tests of Interaction between Education Level and Green Product Purchase Intention

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Purchase Intention	19.954	3	6.651	11.349	<.001

Difference in Green Product Purchase Intention across Various Education Levels

Dependent Variable	Education Level	Mean	Std. Error
Purchase Intention	Secondary (or High) School	3.235	.085
	Vocational Education and training (TAFE)	3.623	.095
	Undergraduate	3.609	.079
	Postgraduate	3.961	.091

MANOVA Results – Tests of Interaction between Gross Annual Income and Green Product Purchase Intention

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Purchase Intention	19.954	3	6.651	11.349	<.001

Note: With the use of the Wilk's criterion, green product purchase intention was found not to be significantly related to gross annual income ($p > .05$)

MANOVA Results – Tests of Interaction between Ethnic Background and Green Product Purchase Intention

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Purchase Intention	15.383	4	6.651	3.846	<.001

Difference in Green Product Purchase Intention across People from Different Ethnic Backgrounds

Dependent Variable	Education Level	Mean	Std. Error
Purchase Intention	Anglo-Australian	3.676	.064
	Asian	3.617	.076
	Middle Eastern	2.944	.139
	New Zealander	4.000	.777
	Other	3.524	.155

MANOVA Results – Tests of Interaction between Occupation and Green Product Purchase Intention

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Purchase Intention	8.974	9	.997	1.572	>.05

Note: With the use of the Wilk's criterion, green product purchase intention was found not to be significantly related to occupation ($p > .05$)

MANOVA Results – Tests of Interaction between Employment Status and Green Product Purchase Intention

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Purchase Intention	7.263	9	.946	1.534	>.05

Note: With the use of the Wilk’s criterion, green product purchase intention was found not to be significantly related to occupation ($p>.05$)

MANOVA Results – Tests of Interaction between Marital Status and Green Product Purchase Intention

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Purchase Intention	8.650	3	2.883	4.628	<.005

Difference in Green Product Purchase Intention across People from Different Ethnic Backgrounds

Dependent Variable	Education Level	Mean	Std. Error
Purchase Intention	Single	3.453	.061
	Married/De-Facto	3.788	.073
	Divorced	3.658	.322
	Other	3.511	.168

MANOVA Results – Tests of Interaction between Number of Children and Green Product Purchase Intention

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Purchase Intention	5.940	5	1.188	1.868	>.05

Note: With the use of the Wilk's criterion, green product purchase intention was found not to be significantly related to the number of children in a household ($p > .05$)

APPENDIX 3B

BEHAVIOURAL FACTORS

MANOVA Results – Tests of Interaction between Frequency of Shopping and Green Product Purchase Intention

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Purchase Intention	.667	4	.167	.256	>.05

Note: With the use of the Wilk's criterion, green product purchase intention was found not to be significantly related to the frequency of shopping ($p > .05$)

MANOVA Results – Tests of Interaction between Person Doing the Shopping in the Household and Green Product Purchase Intention

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Purchase Intention	7.873	4	1.968	.829	>.05

Note: With the use of the Wilk's criterion, green product purchase intention was found not to be significantly related to the who does the shopping in the household ($p > .05$)

MANOVA Results – Tests of Interaction between a Person's Attitude towards the Environment and Green Product Purchase Intention

Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Purchase Intention	57.039	4	14.260	30.575	<.001

Dependent Variable	Attitude towards the Environment	Mean	Std. Error
Purchase Intention	Major green purchaser and recycler	4.144	.654
	Will buy green but will	3.696	.675

	not make lifestyle changes		
	Think caring for the environment is somebody else's problem	2.458	.797
	Don't care about environmental issues	2.250	.795

MANOVA Results – Tests of Interaction between Various Environmental Friendly Activities that People Engage in and Green Product Purchase Intention

Dependent Variable	Independent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Purchase Intention	Use biodegradable soaps and detergent	7.290	1	7.290	11.695	<.001
	Avoid buying aerosol products	10.559	1	10.559	17.232	<.001
	Read labels to see if products are environmentally safe	30.252	1	30.252	55.123	<.001
	Buy products made or packaged in recyclable materials	21.270	1	21.270	36.801	<.001
	Buy products	8.646	1	8.646	13.968	<.001

	that can be refilled					
	Avoid buying products from companies that are not environmentally responsible	18.291	1	18.291	31.126	<.001
	Recycle newspapers	.206	1	.206	.319	<.001
	Compost garden waste	10.003	1	10.003	16.277	<.001
	Take own bag to shopping	25.973	1	25.973	46.158	<.001
	Contribute money to environmental friendly causes	11.852	1	11.852	19.476	<.001
	Volunteer for an environmental group	6.025	1	3.013	4.785	<.05

Note: With the use of the Wilk's criterion, green product purchase intention was found not to be significantly related to activities that included recycling bottles, cans, or glass, cutting down on car use, writing to politicians regarding environmental issues, and engaging in other environmental friendly activities ($p > .05$)