Factors Influencing the Consumer Decision-Making Process Regarding Green Fast-Moving Consumer Goods in the Greater Durban Area

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Bianca Dorasamy

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Prof. J.P Govender (PhD)

ABSTRACT

There is an urgency regarding climate change. Consequently, environmental consciousness among consumers is more prominent now than in the past. However, although the motives for buying green products have generated scholarly interest due to environmental concerns, there is a gap in the literature in understanding consumer green purchase intention and actual purchase behaviour from developing countries. This study, therefore, aims to develop and test the applicability of green consumption of FMCG products grounded in the Theory of Planned Behaviour (TPB) and thus address the "attitudes–behaviour" gap documented in the literature from the perspective of South African consumers.

A quantitative research approach following a descriptive research design was used to examine the factors influencing consumer purchase intention and the actual behaviour of Fast-Moving Consumer Goods in the Greater Durban Area, South Africa. The study uses non-probability convenient sampling collected from 381 South Africans residing in the greater Durban area of KwaZulu-Natal province. Structural equation modelling was applied in analysing the data.

The finding of the study shows that pro-environmental attitude and perceived value (quality) of green FMCG products positively influenced green FMCG purchase intention, which in turn, positively impacted the actual purchase behaviour of green FMCG products. The findings further show that perceived value may be a barrier to green FMCG purchase intention, although the relationship was insignificant. This study provides practical implications for FMCG marketers in their bid to shift from conventional products to green products.

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DECLARATION

I, Bianca Dorasamy, hereby declare that this dissertation is wholly my work and that all the references are accurately reported to the best of my knowledge. Furthermore, this work has not been submitted for a degree at any other university.

_____

Bianca Dorasamy

DEDICATION

I dedicated my dissertation to my loving mother, Ragani Dorasamy. You have and will forever remain my biggest supporter in life. I love you, mum.

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Foremost, I would like to acknowledge and thank God for the opportunity of pursuing and completing my master's degree and for granting me the wisdom, strength and support during the years leading up to the completion of my dissertation.

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ACRONYMS

AVE	Average Variance Extracted
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
EFA	Exploratory Factor Analysis
FMCG	Fast-Moving Consumer Goods
GFI	Goodness of Fit Index
MSV	Maximum Shared Variance
RMSEA	Root Mean Square Error of Approximation
SDG	Sustainable Development Goal
SEM	Structural Equation Model
TLI	Tucker-Lewis Index
TPB	Theory of Planned Behaviour

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CHAPTER ONE - INTRODUCTION

1.1 BACKGROUND AND CONTEXT OF THE STUDY

Environmental sustainability has risen to the top of the worldwide political agenda in recent decades and is now regarded as a significant innovation engine. As a result, the number of businesses creating green products is fast expanding, and customers are becoming more interested in them. According to Joshi and Rahman (2015: 128), environmentally responsible purchasing is vital, as unplanned purchasing of goods can severely damage the environment. Consumers are thus considered to hold the capability to prevent or decrease environmental damage by purchasing green products. Yadav and Pathak (2017: 114) opined that an individual's green consumption behaviour could effectively minimise the negative impacts of consumption on the environment. Studies examining green consumer purchase patterns or the drivers behind green products have been published since the early 1990s (Ritter *et al.* 2015: 507; Suki 2016: 2896). However, many of these studies were mostly viewed from the context of developed countries. As such, there has been a gap in the literature in understanding consumer green purchase behaviour from that of a developing country like South Africa. From a marketing perspective, this study envisaged that understanding the consumer's purchase intention towards green products, particularly the Fast Moving Consumer Goods (FMCGs) that are green, is highly important. It is beneficial as it could help eliminate the obstacles in South African consumer green consumption habits.

Fast Moving Consumer Goods are retail products that are quickly consumed (FMCGs). FMCGs are unique in that they are often low-involvement items that many cosumers consistently buy and use on a daily basis (Dwivedi and McDonald 2018: 1388). FMCG are usually everyday low-priced, low-risk products that are consumed within a short period and require very little thought when purchasing (Makhutla 2014: 39). Worldwide, the consumer packaged goods market in 2014 was $8tn and may grow to $14tn by 2025 (McKinsey 2015: 1). In South Africa, the FMCG industry had surpassed a trillion rand based on 2011 estimate, and the industry grew in volume by an average of 3.45% in nominal terms from 2012 to 2016 (PWC 2012: 1). Hence,

one could rightly be assumed that the FMCG landscape in South Africa is maturing and changing with the introduction of new platforms and retail outlets. For example, there has been an increase in convenience stores, discount retailers and online shopping across the country (Van Niekerk 2018: 13).

Despite the above laudable economic contribution of FMCG to South Africa's economy, it is important to note that the majority of FMCG businesses use processes, which generate a lot of trash that must be disposed of at various points along the supply chain of goods from manufacturing to consumption (Makhutla 2014: 39). From an environmental perspective, Martin-Rios *et al.* (2018: 196) assert that waste management is the key to the green initiative. The author moots that manufacturers, wholesalers, and retailers of FMCG have a social responsibility towards their consumer's environment. According to Niedermeier, Emberger-Klein and Menrad (2021: 1823), green FMCGs may replace conventional FMCGs, which are frequently derived from fossil fuels. Green FMCG products range from non-food FMCGs such as batteries (Coşkun, Vocino and Polonsky 2017: 115), tissue papers (Barbarossa and De Pelsmacker 2016: 230), sanitary pads (Cha and Park 2019: 130), biocosmetics (Liobikienė and Bernatonienė 2017: 109), biofuels, electric cars, or green textiles to a wide variety of FMCGs such as food and beverages (Buder, Feldmann and Hamm 2014: 390; Schäufele and Hamm 2018: 1).

Compared to conventional FMCG products, green FMCGs differs not only in how often they are used and bought but also in the impacts that consumers anticipate when purchasing these things, the act of their consumption, or their intentions when making their product choices (Giulio *et al.* 2014: 45). It is for this reason that environmentally friendly product features may excite a strong desire to purchase. For this reason, Makhutla (2014: 39) reveals that many FMCG companies are beginning to take steps towards ensuring that their products are produced in line with environmentally friendly conditions. Consequently, there is a paradigm shift in green consciousness as companies are moving from reducing pollution directly to changing their product design (Baqer 2012: 37). Corroborating further, Zhang and Dong (2020: 2) note that companies are abandoning products that are relatively polluting to the environment or harm to human health and turning to environmental protection products.

Niedermeier, Emberger-Klein and Menrad (2021: 1823) claim that although pro-environmental feelings are one of the most significant factors influencing pro-environmental behaviour, such attitudes may not always convert to ecologically beneficial purchasing behaviour. Owing to this and given that other variables may have a role in this process, it becomes beneficial to look at the factors influencing customers' decisions to buy green products and their actual purchase behaviour. This study, therefore, aims to develop and test the applicability of green consumption of FMCG products grounded in the Theory of Planned Behaviour (TPB) and thus address the "attitudes–behaviour" gap documented in the literature from the perspective of South African consumers.

1.2 RESEARCH PROBLEM

Despite consumers' concerns and a strong desire to uplift the environment, this does not increase green purchases (Young, Hwang, McDonald, and Oates 2010:20; Zahan *et al.* 2020: 38745). Additionally, a recent study in the second-largest city in the province of KwaZulu-Natal, Pietermaritzburg, indicates that there is a gap between respondents' environmental concerns and actual green purchase behaviour of green products (Mkhize 2017: 114). It is known as a "green gap". Anva and Venter (2014:183) refer to this as an attitude-behaviour "gap". Therefore, marketers must identify factors influencing the consumers' purchasing process to better target and segment consumer markets effectively and efficiently (Mkhize 2017:110). Hence, the problem to be addressed in this study is the gap between consumers' attitudes and behaviour towards green FMCG products.

The study will test the applicability of green consumption of FMCG products grounded in the Theory of Planned Behaviour (TPB) to address the perceived attitude-behaviour gap. While TPB has been widely used in the literature to explain the attitudes-behaviour gap (Zhang and Dong 2020: 6), there is limited evidence of its application in tested consumer buying decisions concerning FMCG products. This study will therefore aim to extend the application of TPB in understanding South African consumers buying decisions with regards to green FMCG products.

1.3 AIM OF THE STUDY

The aim of this study is to identify the factors that influence consumer behaviour during the decision-making process for green FMCG products in the greater Durban area.

1.4 STUDY OBJECTIVES

The objectives of this study are:

• To assess the influence of the green marketing mix on purchase behaviour towards green FMCG products.

• To identify how selected socio-demographic characteristics of participants may influence consumer behaviour towards green FMCG products.

• To determine the influence of environmental knowledge on consumer behaviour towards green FMCG products.

1.5 RATIONALE/SIGNIFICANCE OF THE STUDY

The purpose of this study is to identify factors that influence the green purchase behaviour of green Fast Moving Consumer Goods (FMCG) among consumers in Durban. Consumers' consciousness concerning the repercussions of their buying behaviour on both their health as well as the environment is becoming more of a concern now than it was in the past (Ottman 2017:7). Extant literature suggests that an individual green consumption habit could effectively minimise the negative impact of consumption on the environment (Yadav and Pathak 2017: 114). While studies in the past on green FMCG purchase intention and behaviour of consumers were primarily done in the context of developed countries (A Niedermeier et al., 2021: 1), there has been a gap in the literature in understanding consumer green purchase behaviour from that of a developing country like South Africa. Therefore, this study has practical and theoretical implications for understanding the consumer decision-making process concerning FMCG green products. Thus, the researcher envisaged that the study's findings should provide marketers with a better understanding of consumer attitudes and behaviour towards green products.

Furthermore, research findings could assist marketers and act as a guide on improving the business's green marketing efforts to positively influence the purchase behaviour of green FMCG products in the greater Durban area. Therefore, this study aligns with the United Nations Sustainable Development Goal (SDG13), which addresses urgent action to combat climate change and its environmental impacts.

1.6 DELIMITATION OF THE STUDY

Although the finding has a broader implication for green FMCG consumer purchase-decision, the study was, delimited to consumers residing in the Greater Durban Area.

1.7 STRUCTURE OF THE DISSERTATION

This study consists of five chapters:

Chapter 1: Introduction

This chapter provides a general background and provides a context for the study. The sections covered discussion on the research problem concerning climate change and the rationale for green purchases. It enabled the research to align with the sustainable development goal, particularly SDG 3, which addresses climate change. The preceding chapter discussed the introduction and rationale for the study, research problem, and objectives.

Chapter 2: Literature Review

This chapter outlines the review of the related literature for the study by providing a concise overview of green marketing and marketing mix. Current and relevant scholarly articles on green marketing were reviewed and discussed. The factors influencing green purchasing behaviour were also covered, as there has been a shortage of evidence from the South African perspective. The last section reviews the literature relating to the TPB and provides a conceptual framework and hypothesis development

Chapter 3: Research Methodology and Design

This chapter describes the research process in depth, including the research design, sampling method, data collection method, and analysis.

Chapter 4: Analysis and Presentation of results

This chapter presented quantitative data analyses and interpreted the study findings by drawing from relevant literature to support the results.

Chapter 5: Discussion

This chapter discusses the results in line with the research objectives. In addition, the framework developed was also detailed in this chapter.

Chapter 7: Summary of findings, conclusions, and recommendations.

The study was summarised based on the results obtained and recommendations for future research.

1.8 SUMMARY

Chapter one has provided a review and the background to the green FMCG consumer-decision making process. In addition, the chapter brought about awareness and the importance of understanding the consumer attitude-behaviour gap towards green FMCG products.

CHAPTER TWO - LITERATURE REVIEW

2.1 INTRODUCTION

Environmental sustainability has risen to the top of the worldwide political agenda in recent decades and is now regarded as a significant innovation engine. As a result, the number of businesses creating green products is fast expanding, and customers are becoming more interested in them. Understanding the primary attributes of green products, determining factors affecting their price and consumers' willingness to pay more for them, sales channels, and promotional tools (the 4Ps of Green Marketing) would be extremely useful for businesses aiming to design, develop, and green market products.

This chapter reviews the literature on green marketing and the perceived influence on consumer decision-making on green products. The review presents an overview of green marketing. Overall, the literature review will be structured into five sections. Section One will introduce green marketing. Section Two will describe the marketing mix and its relevance to green marketing. Section Three will introduce fast-moving consumer goods. Section Four introduces green consumers and the segmentation of green consumers. Finally, section Five discusses the Theory of Planned Behaviour as the study's theoretical framework.

2.2 THE CONCEPT OF GREEN MARKETING AND ITS EVOLUTION

Due to the concern for the environment, fuelled by the rapid depletion of the earth’s resources, the concept of green marketing has increasingly become an essential subject of social discourse in recent years (Zhang and Dong 2020: 1). Since customers want to know what a product can offer before making a purchase choice, green products are therefore considered as a crucial component of developing marketing trends (Thgersen *et al.* 2016: 3). Business organisations have responded to this by gradually incorporating green marketing methods into their projects as a strategy to arouse social conscience in their efforts to reach consumers with their green messages (Kardos, Gabor and Cristache 2019: 1). According to Papadas, Avlonitis, and Carrigan (2017: 237), businesses that adopt holistic environmental strategies not only convey to their stakeholders that they are aware of the financial risks and

significance of the current environmental challenges, but also that they see green marketing as an opportunity for both internal and external growth. Low business costs, greater income, competitive advantage through differentiation, and business development are some of these options (Kirilova and Vaklieva-Bancheva 2017: 493). Business organisations are increasingly adopting environmentally friendly strategies based on the famous slogans "reduce, reuse, recycle" (Wild and Wild 2016: 36).

The adoption of green marketing is also influenced by pressure from environmental stakeholders and the need to acquire a competitive edge (Papadas *et al.* 2019: 633). Dabija et al. (2017: 27) also support the growing demand from stakeholders, particularly customers, to rethink company strategy and include environmentally friendly ways. As a result, firms are rapidly embracing green marketing techniques, according to Kardos *et al.* (2019: 2), by manufacturing green goods, repackaging their products in environmentally friendly packages, and promoting green products using ecolabels, among other things. Furthermore, the United Nations' Sustainable Development Goals (SDGs) adopted in 2015 contain a worldwide commitment to environmental sustainability, encouraging businesses to operate more sustainably (Pimonenko *et al.* 2020: 1).

In the last decade, considerable efforts have been made to address pressing environmental challenges and operationalise green marketing (Papadas, Avlonitis and Carrigan 2017: 236). Over time, other related ideas, such as environmental and sustainability marketing, have arisen. They are now used interchangeably in the literature (Chuwa and Ibokette 2020: 1). Early research on green marketing, for example, was premised on ecological issues and thus introduced concepts such as ecological marketing (Henion and Kinnear 1976), green marketing (Ottman 1993), and or environmental marketing (Peattie and Peattie 1995). However, Papadas, Avlonitis and Carrigan (2017: 237) points out that these studies primarily draw attention to the negative impacts of marketing on the natural environment. While ecological marketing focused on the most toxic and damaging industries (such as mining or chemicals), only a small fraction of these industries have embraced ecological principles in their marketing strategies (Papadas, Avlonitis and Carrigan 2017: 237).

From a historical perspective, many organisations in the business saw environmental issues as a barrier and a financial consideration rather than a marketing role

(Shrivastava 1995: 936). According to Geels and his colleague, some organisations still hold similar ideas (Geels et al. 2015: 3). Green or environmental marketing, in contrast to ecological marketing, focuses on environmental problems like species extinction and ecosystem degradation rather than only energy use and resource depletion (Papadas, Avlonitis and Carrigan 2017: 236).

Gibbs and O'Neill (2017: 161) assert that environmental concerns are becoming a key component of products for competitive advantage. Secondly, there is a much wider adoption of environmentally friendly behaviour across all businesses, in contrast to the ecological marketing age, where the major focus is on what still constitutes the front-line polluters (Papadas, Avlonitis and Carrigan 2017: 237). As a result, green/environmental marketing is prevalent in the consumer goods sectors of electronics, apparel, services, and tourism (Gershoff and Frels 2015: 102) and other items (Wells *et al*. 2015: 400).

In recent decades, the term green marketing has prevailed in many academic studies and literature. This may be attributed to the unique promise to deliver both commercial and environmental sector wins. According to Kardos *et al.* (2019: 2), green marketing heralds a new dimension of a company's economic, social, and environmental responsibility. Green marketing thus seeks to address the lack of fit between modern marketing practices and the ecological and social realities and the broader marketing environment (Papadas, Avlonitis and Carrigan 2017: 241). Taking cognisance of the various terminologies and concepts of green marketing, the widely accepted term green marketing was used for this study. Choudhary and Gokarn (2013: 27) define green marketing as the marketing of a product or an organisation that contributes to environmental sustainability and minimal depletion of the natural environment. While some scholars limit the scope of green marketing activities solely to the promotion of products that hold ecological attributes, Taghian, Polonsky and D'Souza (2016: 236) argued that green marketing comprises strategic components of marketing such as product, packaging, price, and promotion. The marketing component leads to the departure for the next section, which focuses on the influence of green marketing mix on the consumer decision-making process.

2.3 THE GREEN MARKETING MIX

The marketing mix arose from a single P (price) of microeconomic theory, which gained traction after McCarthy 1964 introduced the 4P idea from the initial concept of Neil Borden, who first invented the term "marketing mix" in 1953. The 4Ps stand for product, pricing, placement, and promotion, which according to Braciníková and Matušínská (2017: 36), is one of the most often used marketing mix classifications. In recent decades, the traditional approach of viewing marketing mix from the producer's perspective has shifted to the customer's viewpoint (Braciníková and Matušínská 2017: 36). Consequently, product, pricing, location, and promotion are traditionally viewed as a set of controllable tactical marketing tactics that a company uses to elicit the reaction it wants from its target market (Kotler and Keller 2011: 133). This view is also supported by Yeng and Yazdanifard (2015: 19), who argued that marketing mix is the different ways invented by a company to bring a product or service to the market.

From a marketing context, Goh *et al.* (2019: 113) noted that every business has its unique marketing mix. According to the authors, other influencing variables may be included in the marketing mix, which isn't restricted to the four Ps (Goh *et al.* 2019: 133). However, environmental issues are more prominent in the green marketing mix. From the perspective of green marketing, Chuwa and Ibokette (2020: 22) viewed the green marketing mix as a method to rethinking the core marketing mix of product, pricing, promotion, and location in a way that considers environmental sustainability. Govender and Govender (2016:78) see green marketing as a product, pricing, promotion, and distribution composition designed to conserve the environment.

Firms that encourage green marketing, according to Madeira (2019: 112), attempt to reconfigure the essential aspects of the marketing mix to focus on the sustainability pillars of reducing, reusing, recycling, and a circular economy. Furthermore, Kirgiz (2016: 6) found that businesses have begun to consider the social advantages of using the green marketing idea in addition to economic growth and profit. In this scenario, green marketing formed the foundation for manufacturing, marketing, and distribution operations to influence product demand by considering environmental consequences (Chairunnisa, Fahmi and Jahroh 2019: 322).

While the marketing mix is conventional, Mahmoud (2019:20) advised that when implementing green marketing, marketers must be innovative when the 4Ps are

strategically employed. The author further explains that green marketing is the result of changing market conditions to meet the expectations of the market (Mahmoud 2019:20). Kardos *et al.* (2019: 2) suggest that green marketing could be improved by reorganising the four marketing mix elements of the product, promotion, location, and pricing to include an environmental objective. The suggestion resonates with Arseculeratne and Yazdanifard (2014: 133), who noted that a green perspective governs each element in the marketing mix. Each component of the green marketing mix is illustrated in Figure 2.1. The relevance of green products, pricing, promotion, and distribution in green marketing is explained in the subsequent subsections below.

Figure 2. 1: Framework for the 4 Ps of the green marketing mix (adapted from Armstrong *et al.* 2014: 76)

2.3.1 Green Product

Green products and environmental products are used frequently to explain products that conserve the environment by preserving resources and minimising harmful agents, waste, and pollution (Mahmoud 2019: 22). In recent decades, several scholars have attempted to define green products. Yeng and Yazdanifard (2015: 19) assert that green products are regarded as products that are designed to decrease the consumption of natural resources used, as well as lessen the adverse effects of the product's life cycle on the environment. Dangelico and Vocalelli (2017: 1271) defined a green product as a green product that "strives to conserve or enhance the natural environment by saving energy and resources and minimising or eliminating the usage of harmful agents, pollution, and waste." According to Madeira (2019: 113), a green product can be reused or recycled, employs efficient manufacturing techniques, is biodegradable, conserves natural resources, and has a low environmental impact. Goh *et al.* (2019: 117) further stated that a green product uses fewer resources, less energy, and lower emissions. Chairunnisa, Fahmi and Jahroh (2019: 322) describe a green product as any product that could be recycled and does not include elements harmful to the environment.

Drawing from the above definition of green products, one could subsume that the fundamental concept of green products is environmental sustainability. As such, Narula and Desore (2016: 5) aver that a product life cycle that involves an eco-friendly distribution and promotion process but neglects environmental sustainability in the production of the product can never be regarded as a green product. In simple terms, a green product is a product that has been manufactured through an ecological process for environmental sustainability. Therefore, advocates of green products believe that to generate environmentally friendly goods and technology, product designs, models, and manufacturing methods must be reconsidered (Chuwa and Ibokette 2020: 22).

For a product to be considered green, Yeng and Yazdanifard (2015:19) outlined that the manufactured product design should be eco-friendly and that pollution and contamination should be reduced during the packaging process. It is supported by Dangelico and Vocalelli (2017: 1271), who highlight the attributes of a green product to include reusability, decreased resources, recycling, efficiency, durability,

reparability, compostability, safe transport, and health advantages as green product qualities. Furthermore, according to Ottman and Mallen (2014:1), consumers desire green products as these products conserve the environment and are healthy and are of higher quality. Hence, as advised by Chuwa and Ibokette (2020: 22), consumers must not only find green products worthwhile but also perceive them to be so.

Several pieces of empirical evidence support the relationship between consumers' perception of green products and purchase intention. Research in Zimbabwe revealed that product quality positively influences the purchase intention of green products (Chikosha 2018:102). In addition, the author said that positive customer perception towards green products is due to product quality (Chikosha 2018:102). Manget, Roche and Munnich (2009: 1) also discovered that consumers value green products' benefits due to the superior quality, health, and safety benefits and conservation of energy costs. As noted by Evelina, Kusumawati and Nimran (2020:613), functional value is attained when a product satisfies the utilitarian needs of a consumer. In addition, functional value motivates green consumers to purchase. Furthermore, the cost and benefits of the product are determining factors when an individual purchases a green product (Elliot 2013:299). Chikosha (2018:12), however, warned that for a consumer, the environmental benefits are generally compared to the cost of the product.

2.3.2 Green Price

Price is defined as the amount that the consumer pays for a product or service and is considered a critical element of the marketing mix (Mahmoud 2019: 22). Green pricing aims to account for both economic and environmental expenses to provide value to customers while still allowing the company to make a profit (Goh *et al.* 2019: 117). Setting prices for green products that balance customers' price sensitivity with their willingness to pay extra for items' environmental performance is known as green pricing (Dangelico and Vocalelli 2017: 1271).

According to Madeira (2019: 113), green product pricing policies should include economic and environmental factors and represent a fair value for products or services. As such, the pricing should give importance to customers, be acceptable to partners, and provide a reasonable profit for the company (Davari and Strutton 2014:

566). It is essential as the firm must meet the current requirements of the people without jeopardising its ability to meet future demands (Sartoretto *et al.* 2018: 75). However, Goh *et al.* (2019: 117) warned that the cost of creating green products could be greater than that of conventional products owing to the additional value in terms of functionality, design, and performance, which may compel consumers to pay a higher price. This agrees with Davari and Strutton (2015: 566) that premiums for green products are necessary due to the increased production costs of green products compared to the conventional ones that are not green.

Yeng and Yazdanifard (2015:19) moot that going green is pricey for a business organisation. This is attributed to the various cost of green products such as teaching nations, gadgets, the establishment of modern technology, absorbing extrinsic costs as well as converting waste into recycled products (Yeng and Yazdanifard 2015:19). Chairunnisa, Fahmi and Jahroh (2019: 322) further argued that the additional expenses to minimise energy use in the manufacturing process, as well as resource efficiency, lead to the development of premium or normal prices for environmentally friendly products. Furthermore, raw materials and ecologically friendly equipment are purchased at exorbitant rates with short-term contracts (Kirgiz 2016: 13). As a result, the company's green price is generally more than comparable items that do not use the ecologically friendly idea. Equally worth mentioning is that the production expenses, material costs, and greater taxation, according to Dangelico and Vocalelli (2017), can all lead to higher pricing for green products.

Nevertheless, Yazdanifard and Mercy (2011: 638) stressed that the price of a green product must be affordable for the customer to encourage their purchase. Shaw (2020: 46) concurred with this and concluded that the high price of green products negatively affects the purchase intention of green products. Hence, green pricing must consider the customers, planet, and profit in such a way that benefits the health of their employees and communities to ensure efficient productivity (Mahmoud 2019: 23).

Given that prices are inextricably connected to a customer's desire to pay, the ability to effectively convey value and desirable green attributes allows businesses to charge premium pricing (Chuwa and Ibokette 2020: 26). Customers' price sensitivity is linked to their ethical qualities, according to Dangelico and Vocalelli (2017: 1271). However,

consumers are typically more ready to acquire items that offer societal or environmental advantages. For example, a study carried out by Anvar and Venter (2014: 183) indicated that the younger demographic demands green products, demonstrating buying power and willingness to purchase premium-priced green products. Equally significant, a research study done on 27 000 respondents in 27 European countries yielded a high percentage of 96% willing to purchase green products at a premium price. Similarly, a study undergone in Swedish indicated that 88.8% of the respondents are prepared to pay a higher price for green products (Pirani and Secondi 2011: 69).

The studies mentioned above give credence to the assertion made by de Medeiros, Ribeiro and Cortimiglia (2016: 159) that customers will pay a premium for a perceived product value. According to Sharma (2011: 153), the perceived value is linked to green products' improved performance, design, function, visual appeal, and or taste. Besides these, Singh (2013: 49) added environmental benefits as a bonus to the perceived quality of green products. The perceived benefits of green products help explain why a green product is priced at a premium price (Yeng and Yazdanifard 2015:19). Bukhari (2011: 379) advised that green marketing should take cognisance of the perceived value of green products while charging a premium price. In a nutshell, it could be inferred that the higher the perceived value of green products because of effective marketing communications, the more ready customers are to pay premium pricing (Chuwa and Ibokette 2020: 26).

2.3.4 Green Promotion

According to Madeira (2019: 113), green promotion relates to the company's communication methods for conveying of green products ideas and information. Yeng and Yazdanifard (2015: 20) state that promotional materials of a business are necessary for green marketing. The authors outlined a significant way by which the information about going green is relayed to the customers. These include direct marketing, sales promotions, advertising, and public relations (Yeng and Yazdanifard 2015: 20). Among these marketing promotional routes, public relations and advertising are recognised as the most broadly used platforms to launch the green initiative of a business (Yeng and Yazdanifard 2015: 20).

However, the green promotion has been the focus of criticism owing to questions about what is conveyed and what is done by the company (Madeira 2019: 113). While critics of green promotion have sometimes referred to it as greenwashing, nevertheless, communication methods are intended to convey information about a company's efforts, commitments, and accomplishments in terms of environmental preservation (Davari and Strutton 2014: 566; Sartoretto *et al.* 2018: 75). Madeira (2019: 113) therefore caution that all communication strategies and activities, including advertising, public relations, promotions, signs, and coupons, should ensure that the messages delivered to customers and partners are informed and ethical. Goh et al. (2019: 115) concur that the green messages must be clear and easy to understand without confusing the customers.

Richards (2013: 78) refers to green advertising as explicitly communicating the relationship between the green product and the environment, encouraging an ecologically friendly way of life (with or without mentioning the product), as well as highlighting the business image of environmental responsibility. According to Rahbar and Abdul Wahid (2011: 73), green advertising aims to influence consumers to purchase products that are not harmful to the environment and to highlight the positive repercussions of their purchase decision to themselves and the environment. Resonating with the author, Narula and Desore (2016: 5) explained that buyers are enticed emotionally to a product through green advertising. Hence, marketers exploit this as a powerful tool to influence consumer preference and decision-making (Ahern 2013: 1).

According to Dangelico and Vocalelli (2017: 1272), green advertisements must provide; detailed, complete, accessible, understandable, and transparent information about the green product. Consequently, when customers are unfamiliar with the product, the visual appeal of the package is exploited as an effective marketing technique (Govender and Govender 2016: 79). The authors further reveal that packaging makes the product marketable by serving to contain, identify, characterize, protect, exhibit, and promote it. Accordingly, it is thought that a consumer's decision to purchase a green product is significantly influenced by the packaging (Agyeman 2014: 190). For example, empirical evidence shows that women consumers judge the quality of the content of products manufactured to establish whether it is with

recycled material through the labelling of green products (Narula and Desore 2016: 5). Moreover, research has confirmed that packaging influences the buying behaviour of women consumers when compared to their male counterparts (Davis 2014: 1).

Another promotional tool used for green product advertisement is green labelling. Green labelling, also known as eco-labelling, is an essential component of green marketing since it informs customers about the product's reliability in terms of its environmental commitment (Chuwa and Ibokette 2020: 25). Eco-labelling informs consumers that the items in issue are environmentally benign and create minimal environmental harm during their manufacture, usage, or disposal. Eco-labelling assures customers of the benefits of environmentally friendly products, such as durability, health benefits, and energy efficiency, and consequently influences their purchasing decisions (Khan *et al.* 2020: 1). According to Chairunnisa, Fahmi and Jahroh (2019: 325), eco-labelling is a significant instrument in the green promotion since it represents a product's technical capabilities, conveys a company's green marketing philosophy, creates distinction, promotes brand image, and assures customers. The author claims that eco-friendly labelling persuaded around 70% of buyers to purchase green products.

Drawing from the above narrative, one could easily deduce that the way and manner a product is promoted may influence purchase behaviour. Rathod (2018: 25) points out that consumer always uses and buy different products based on their perception of the given products. The author, however, acknowledged that in the current era of globalisation, consumers' needs and wants change (Rathod 2018: 40).

2.3.5 Green Place

Green place and distribution are other crucial components of the green marketing mix. Dangelico and Vocalelli (2017: 1271) define green place as the management tactics that relate to the distribution, from production to consumption of green products, including reverse logistics. This is particularly important given that consumers rarely actively search for green products. As such, decisions on how and where to make green products available are essential (Dangelico and Vocalelli 2017:1272).

To achieve the green mandate in terms of place, Chuwa and Ibokette (2020: 26) note that the corporate environment and distribution networks must be environmentally pleasant, conveniently accessible, and operate on renewable energy. In the same light, Madeira (2019: 115) advised that businesses should be able to persuade customers to return unwanted products for reuse, recycling, or the production of new raw materials. Furthermore, according to (Goh *et al.* 2019: 117), the green distribution network should be redesigned to include secondary markets for by-products or recycled items. In addition, the authors claim that the system must be user-friendly to encourage customers to recycle old items or packaging (Goh *et al.* 2019: 117).

With the above in mind, it becomes essential to identify factors influencing the purchase of green products, particularly green FMCGs.

2.4 FAST-MOVING CONSUMER GOODS

Fast Moving Consumer Goods are retail products that are quickly consumed (FMCG). FMCGs have the particular traits of being low-involvement items that many customers consistently buy and use on a daily basis (Dwivedi and McDonald 2018: 1388). Food and non-food products can be distinguished within the FMCG sector. Makhutla (2014: 39) noted that much FMCG is consumed within a short period and thus has a short shelf life. The author further reveals that FMCG products cut across many consumer goods, which include a wide range of frequently purchased products like non-durable goods such as soft drinks, toiletries, cosmetics, oral hygiene products, shaving products, and grocery items such as meat, fruits, or dairy products (Makhutla 2014: 39). While FMCG is sold fast at significantly lower prices with a small profit margin in terms of retail sales, Forsberg and Löfvenberg 2011(2011: 3), however, revealed that due to the large quantities sold, the cumulative profits become significant.

FMCG products are typically inexpensive, low-risk, and need minimal consideration when being purchased (Makhutla 2014: 39). FMCG brands are typically low-involvement products with limited inherent/objective authenticity (Dwivedi and McDonald 2018: 1388). The global market for consumer packaged goods was $8 trillion in 2014 and is expected to reach $14 trillion by 2025 (McKinsey 2015: 1). The FMCG industry in South Africa had surpassed a trillion rand based on a 2011 estimate.

The industry grew in volume by an average of 3.45% in nominal terms from 2012 through 2016 (PWC 2012: 1). Hence, one could rightly be assumed that the FMCG landscape in South Africa is maturing and changing with the introduction of new platforms and retail outlets. For example, there has been an increase in the number of convenience stores, discount retailers and online shopping across the country (Van Niekerk 2018: 13). Table 2.1 lists some of the major store groups and familiar brands of FMCG in South Africa. Owing to this, Makhutla (2014: 39) points out that the consumption of FMCG has increased substantially. The author also reveals that the FMCG sector is among the largest sectors in the South African economy.

Table 2. 1: Major stores and FMCG brands in South Africa

Major stores	**Major Brands**
Pick n Pay	Tiger brands
Shoprite Checkers	National brands
Spar	Pioneer foods
Massmart	Unilever SA
Woolworths	SABMiller
Clicks	

Source: Van Niekerk (2018: 1)

Despite the above-mentioned economic contribution of FMCG to the South African economy, it is worth stating here that the majority of FMCG companies are process-based, which results in significant waste generation and disposal at various points from production in the supply chain of goods to consumption (Makhutla 2014: 39). From an environmental perspective, Martin-Rios *et al.* (2018:196) assert that waste management is the key to the green initiative. The author moots that manufacturers, wholesalers, and retailers of FMCG companies have a social duty to protect the environment of their customers. It is imperative given the fact that FMCG is consumed daily. Their by-products are often discarded inappropriately, which could compromise the integrity of the environment (Makhutla 2014: 39). While it has become fashionable and politically correct for FMCG companies to advertise themselves as green companies, it is, however, worth noting that the materials used in the packaging of these products litter the streets and other open areas within the community (Makhutla 2014: 43). Hence, it becomes critical that FMCG adopts a complete green initiative not

just in their goods but also in the packaging and processing of the products to minimise environmental concern and pollution.

2.4.1 Green versus conventional FMCG products

Unnamalai (2016: 380) refers to green products as products that do not pollute the environment, are recyclable, or are conserved with natural ingredients. According to Tomasin (2013:274), green products are products established to reduce the environmental impact during product development, manufacturing, usage, and disposal. De Angelis, Adıgüzel and Amatulli (2017:1515) refer to green products as products that do not harm the environment. The authors indicated that such products include products that use biologically friendly materials, consume minimum energy and resources, and are recyclable (De Angelis, Adıgüzel and Amatulli 2017:1515).

The central recurring theme from the above definition of a green product is the ecological consciousness of the environment of such products. It suggests green products differ from conventional products that do not consider preserving the environment. According to Niedermeier, Emberger-Klein and Menrad (2021: 1823), green FMCGs can replace conventional FMCGs, often based on fossil resources. Green FMCG products range from non-food FMCGs such as batteries (Coşkun, Vocino and Polonsky 2017: 115), tissue papers (Barbarossa and Pastore 2016: 230), sanitary pads (Cha and Park 2019), biocosmetics (Liobikienė and Bernatonienė, 2017), biofuels, electric cars, or green textiles to a wide variety of FMCGs to food and beverages (Buder, Feldmann and Hamm 2014: 390; Schäufele and Hamm 2018: 1). FMCGs stand out from the rest of the green product category since many customers often and regularly buy and consume these items in their everyday lives, frequently in a kind of habitual manner (Niedermeier, Emberger-Klein and Menrad 2021: 1).

When compared to conventional FMCG items, green FMCG differs not only in how frequently they are used and purchased but also in the act of consumption, the consumer's intention when making a purchase decision, or the results that the consumer anticipates when purchasing these products (Di Giulio *et al.* 2014: 53). It is for this reason that environmentally friendly product features may excite a strong desire to purchase. For this reason, Makhutla (2014: 11) reveals that many FMCG companies are beginning to take steps towards ensuring that their products are

produced in line with environmentally friendly conditions. Consequently, there is a paradigm shift in green consciousness as companies are moving from reducing pollution directly to changing their product design (Baqer 2012: 37). Corroborating further, Zhang and Dong (2020: 2) noted that companies are abandoning products that are relatively polluting to the environment or harm to human health and turned to environmental protection products.

Although pro-environmental sentiments are one of the most important influencing elements of pro-environmental behaviour, Niedermeier, Emberger-Klein and Menrad (2021: 1823) argue that such beliefs may not necessarily translate to environmentally friendly buying behaviour. Given that other variables may have a role in this process, it becomes beneficial to look at the factors influencing customers' decisions to buy green products.

2.4.2 Drivers and perceived barriers related to the green product purchase decision

According to Joshi and Rahman (2015: 128), environmentally responsible purchasing is vital, as unplanned purchasing of goods can severely damage the environment. Consequently, consumers can prevent or decrease environmental damage by purchasing green products. Yadav and Pathak (2017: 114) opined that individuals' green consumption behaviour could effectively minimise the negative impacts of consumption on the environment. Studies examining the buying habits of green consumers or the drivers behind green products have been published since the early 1990s (Ritter, Borchardt, Vaccaro, Pereira and Almeida 2015: 507; Suki 2016: 2893). Most of these studies define "green products" as goods created to protect the environment, maybe by using fewer resources or having less of an adverse environmental impact.

While several people are generally health-conscious and who prefer consuming green products, there is a group who do not consume them due to some factors (Rathod 2018: 37). Niedermeier, Emberger-Klein and Menrad (2021: 1) reveal these factors or better captured “drivers” of consumer purchase of green FMCG products to include values, perceived effectiveness, and trust acts (quality), and costs perception (price). For instance, according to Zhang and Dong (2020: 2), customers are not interested in

green products because of their attitudes toward consumption, their aversion to new technology, or their distaste for the higher prices associated with the products. It has subsequently presented sales obstacles for these products (Zhang and Dong 2020: 2).

The above concern of green product consumption necessitates investigating and understanding the influencing factors of green product purchase. In reviewing the literature on green and conventional products, consumer's perceptions of the product's perceived quality, effectiveness, and even price have been mixed. Due to this, scholars are now examining factors influencing consumers to purchase green products. By identifying these factors, Cheung and To (2019: 145) believed that researchers could better understand how to influence consumers' attitudes towards green which could induce green purchase behaviour. This section highlights an extensive literature review on the drivers of green products.

2.4.2.1 Values and lack of trust in green products

According to Cheung and To (2019: 145), specific attributes of the green product, such as quality, degree of aesthetics, and the number of functions, may influence consumers' attitudes towards purchase. For example, Almossawi (2014: 10) cited that some consumers consider green products less effective than conventional products. Similarly, Morel and Kwakye (2012: 28) note that consumers think traditional products (using chemicals) are more efficient than green ones (natural ingredients). Furthermore, Rathod (2018: 37) reveals that many consumers perceived green products as not of good quality, preventing them from buying. The author elaborated that some people are not entirely convinced that green products are generally good when compared to conventional products, which they are used to.

Contrary to the above, other authors (Othman and Mallen 2014: 1; Chikosha 2018: 77) reported that green products are healthy and of higher quality when compared to conventional ones. These findings may be attributed to consumers' perceived values of green products. It is corroborated by Raza *et al.* (2020: 95), who said that consumer-perceived values play an essential role in developing their purchase behaviour towards green products. Their work further supports the findings of Yadav and Pathak (2017: 121), who found that perceived values positively influence

consumers' intention to purchase green products. It is corroborated by Ritter *et al.* (2015: 507), who said that the quality of green products influenced consumers' green purchase intention and behaviour.

Additionally, Cheung and To (2019: 146) reported that customers feel adopting green products could benefit and strengthen favourable views toward environmental conservation since they use less energy or resources. Furthermore, it makes sense to concur with Cheung and To (2019: 146), who claimed that the benefits of saving energy and resources may motivate consumers to buy more eco-friendly goods. However, the authors cautioned that regardless of consumers' intentions to support the environment, if green products are inferior to conventional ones, consumers may purchase fewer green products because they may not notice a significant difference between using green products and conventional ones (Cheung and To 2019: 146).

The above contentious view may be attributed to perceived risks and lack of trust in some commercially available green products. For example, according to Niedermeier, Emberger-Klein and Menrad (2021: 3), consumers who doubt the veracity of claims of eco-friendly products may not be willing to pay more for such a product. Likewise, consumers may not pay more when unsure of such products' values and performance. In addition, Niedermeier *et al*. (2020: 1824) contend that consumers' skepticism about a product's ability to be sustainable or as effective as a conventional product may prevent them from purchasing a green product. This perspective is in line with Joshi and Rahman's (2015: 128) assertion that a lack of confidence may deter consumers from buying green products.

2.4.2.2 Pricing

Another controversy and or contradiction surrounding green products among consumers is the price. Niedermeier, Emberger-Klein and Menrad (2021: 2) hinted that the cost of a green product may become a barrier to consumer purchase. While it is right to assume that price may certainly not be the sole barrier to green product purchase, several authors, however, stated that the high cost of green products might deter people from purchasing them (Barber, Bishop and Gruen 2014: 218; Liobikienė and Bernatonienė 2017: 112). More so, an earlier study reported that some consumers view the price of green products as more expensive than conventional ones (Chang

2011: 20). Regardless of the price, other scholars have argued that many environmental-friendly convinced consumers will go extra to pay more for green products due to the health and environmental benefits of the products (Davari and Strutton 2014: 566; Kainz 2016: 8; Scherer, Emberger-Klein and Menrad 2017: 2; 2018: 61). Other academics have therefore claimed that, in some situations, customers expect greater prices for green products and lose faith in them when they have a cheaper price (Kahraman and Kazançoglu 2019: 1224).

2.4.2.3 Habits and convenience perception

Another barrier to green purchase behaviour uncovered in the literature is habitual consumers. According to Niedermeier, Emberger-Klein and Menrad (2021: 3), consumers are incredibly loyal to the brands they frequently use. Hence, these consumers do not explicitly search for alternative brands if they are satisfied with and devoted to the products they are already using (Mishra, Kesharwani and Das 2016: 78). Previous research has demonstrated that customers who have a strong preference for a particular brand frequently purchase these goods on a regular basis, forming a sort of habit (Joshi and Rahman 2015: 130). As a result, customers occasionally hesitate to choose a green product or, worse still, are ignorant that one is available. Lack of motivation to engage in sustainable consumption may be caused by a lack of pertinent knowledge (Shao, Taisch and Ortega-Mier 2016: 3185).

2.4.2.4 Pro-environmental attitude

Consumers with a pro-environment mentality are frequently referred to as "green consumers." Because of this mindset, green consumers take actions that either reduce the environmental harm caused by their consumption or even promote it (Ertz, Karakas, and Sarigöllü 2016:3971). Furthermore, several recent studies have shown the positive influence of pro-environmental attitudes on the purchase behaviour of green products (Chekima *et al.* 2016: 3436; Mishal *et al.* 2017: 682; Robinot, Ertz and Durif 2017: 605; Scherer, Emberger-Klein and Menrad 2017: 1; 2018: 53; Klein, Emberger-Klein and Menrad 2020: 1). According to Niedermeier, Emberger-Klein, and Menrad (2021: 1823), consumers who feel that they can make a difference for the environment are more likely to consider how their purchases will affect the environment and are consequently more aware of their environment.

Drawing from the above review of the drivers of green purchase behaviour, one could deduce that the perceived quality, effectiveness, and price of green products over conventional products largely remain debatable due to the above variations in consumer perception. Moreover, there has been inconclusive research on the antecedents of green purchase behaviour among consumers (Atkinson and Kim 2015: 37). As such, it becomes critical to establish the factors that influence green product purchase, particularly among South African consumers. According to Rathod (2018: 25), consumers, in several cases, buy and use different products based on their perception of the given products. However, Mehta, Jain and Mehta (2011: 101) point out that consumer perception develops based on the effectiveness with which the green products have been marketed. However, the marketing of green products in the past has not been effective in ensuring the benefits of consumption of the products (Morel and Kwakye 2012: 11). To address the above concern, Rathod (2018: 25) noted that several firms have put their efforts when it comes to marketing to get customers attention and drive positive impressions of the products offered. Besides, advertising green products can help place a green product on appeal to differentiate a product from conventional products (Morel and Kwakye 2012: 11). This is particularly important, as it has been observed that some consumers are not familiar with green products and has no friends to provide information on green products (Morel and Kwakye 2012: 11; Rathod 2018: 39).

2.5 GREEN CONSUMERISM

While the previous section examines the FMCG products by comparing their attributes with that of conventional ones, this section delves into green consumerism. Over the past few years, green consumption has evolved beyond a fad. Green consumption has become an important field of research in marketing. Green consumerism, according to Hamilton (2010:573), is the campaign by environmentalists, companies, and governments to persuade people to purchase goods and services that have less negative environmental effects throughout their production, distribution, and disposal. Makhutla (2014: 17) refers to green consumerism as recycling, purchasing, and using eco-friendly products that minimise environmental damage. Similarly, Akenji (2014: 13) refers to green consumerism as the production, promotion, and preferential consumption of goods and services based on their pro-environment claims.

The central premise of green consumerism is environmental sustainability. It is, therefore, reasonable to assume that promoting green consumerism among consumers will help sustain the environment. According to Zhu and Sarkis (2016: 290), green consumerism encompasses a broader social awareness of green consumer behaviours. Forsberg and Löfvenberg (2011: 3) thus describe green consumers as environmentally conscious consumers who is buying, willing to or saying they will be buying socially desirable FMCG. Jaiswal *et al.* (2020: 793) indicate that green consumers are usually involved in purchasing and consuming products considered green, environmentally friendly, and sustainable.

Of interest, and as argued by Handayani and Prayogo (2017: 28), it is not easy to transition from environmental knowledge to really adopting green habits and behaviours. The authors went on to say that while some consumers might be willing to purchase sustainable goods, very few really do. Akenji's (2014: 13) recommendations for eco-labelling programs for goods and services, public awareness campaigns, eco-efficient production standards and process certification, green public procurement by governments and public institutions, and recycling initiatives for post-use products all become very helpful in promoting green consumption. However, Baqer (2012:37) argues that finding a balance between upholding economic growth and environmental preservation is a common challenge when promoting green consumerism. The author claims that consumers are more likely to adopt responsible and conscientious consumption habits as they are increasingly conscious of environmental issues. In agreeing with this, Rathod (2018: 36) reveals that many people nowadays are concerned about their environment and thus would most likely engage in different practices which will ensure environmental sustainability.

Although consumers are shifting towards sustainable consumption, Jaiswal *et al.* (2020: 792) warned that their attitudes towards eco-friendly practices might not be the same for different consumer groups. This view supports the work of Van Niekerk (2018: 14), who said that consumers always use and buy other products based on their perception of the given products. In South Africa, for example, the consumer profile is very dynamic. Consumers in this market are known for being extremely price sensitive and prioritising value for money when making decisions (Van Niekerk 2018:

14). The result is that the sector routinely holds "special price deals" to entice customers in the hopes of increasing the number of products purchased at cheaper rates (Van Niekerk 2018: 14). Therefore, boosting green consumption will require an understanding of customer perception of a certain product based on their socio-demographic profile.

2.5.1 Socio-demographic segmentation of green consumers

There have already been a number of segmentation studies published in the literature to describe the distinctive traits of green customers and how they differ from others (Haan et al. 2018: 264; Golob and Kronegger 2019: 1). According to Niedermeier, Emberger-Klein and Menrad (2021: 1823), consumer segmentation is an essential tool for dealing with the often strongly differing consumer preferences in many markets for fast-moving consumer goods. More details regarding consumer sentiments are also something that many merchants would like to know (Diekmann, Kölle, Laumann, and Geßner 2015: 1).

According to Tkaczynski and Rundle-Thiele (2011: 426), the marketing field has always been focused on how consumers differ from one another. The author makes the argument that due to the apparent variations in consumers' likes, preferences, and purchasing behaviour, all customers cannot be treated equally in a real-world marketplace. Owing to this, green market segmentation has thus become the best approach towards understanding the psyche of green consumers, particularly to distinguished green consumers based on their homogenous pro-environmental attributes (Ottman 2011: 29). Several studies on green consumer research typified the homogenous characteristics into three critical criteria, which are demographic, psychographic, and behavioural characterisations (Nittala 2014: 138; Afonso *et al.* 2018: 137; Jaiswal *et al.* 2020: 794). However, this subtheme offers a comprehensive explanation of the classification and profile of green consumers based on socio-demographic factors.

It's important to note that during the 1970s and 1980s, consumer marketing increasingly used socio-demographic characteristics (Afonso *et al.* 2018: 139). It, therefore, becomes essential to analyse demographic factors, as these factors are significant determinants of buying behaviour (Shahsavar, Kubeš and Baran 2020: 1).

Shahsavar, Kube, and Baran (2020: 1) assert that segmenting consumers based on their demographic profiles is predicated on the premise that demography may produce various clusters of consumers, each of whom may exhibit different attitudes and purchasing tendencies. According to Rajagopal, Mahajan, and Priya (2021: 2314), demographic parameters including age, gender, income, and education level have a substantial impact on consumers' decisions to buy green products. In addition, socio-demographic factors are being used to analyze the connection between environmental consciousness and green consumption (Kirmani and Khan 2016: 73; Sultan *et al.* 2018: 163).

2.5.1.1 Age and gender

According to Ali and Ahmad (2016: 103), the age of respondents significantly impacts their attitude towards green purchases. The author found that respondents between the age of 25 to 30 years old have a favourable attitude towards green purchases compared to respondents between the ages of 18 and 24. Another study reported that youths are more environmentally conscious than older people (Akehurst *et al.* 2012: 975).

The influence of gender on green purchase decisions has remained largely debated and contentious, with several authors arriving at different conclusions. Ali and Ahmad (2016: 103) observed through research by Tan and Lau (2010) that there is no significant variance in environmental attitudes and attitudes towards greens purchase between male and female students. On the contrary, Gan *et al.* (2008: 100) noticed in their study that there is a significant variance in the purchase frequency of green products between men and women. The author cited that women purchase more eco-friendly food and healthcare products than men. Resonating with him, Akehurst *et al.* (2012: 975) reveal that women consumers are more sensitive towards household purchasing than men. As such, females are willing to purchase green products at a premium price compared to men. However, Sinnappan and Rahman (2011: 129) found that gender does not influence the willingness to purchase green products at a premium price.

2.5.1.2 Education Level

While some authors had argued that the higher the education level, the lower the purchase intention (Ali and Ahmad 2016: 102), however, a study carried out by Gan *et al.* (2008: 100) uncovered that the purchase decision of green products is favourable among respondents that hold a postgraduate degree. Similarly, other research has found that the probability of purchasing organic products is higher among the college-educated (Wee *et al.* 2014: 392). Another study indicates that respondents with a higher education level buy green products; nevertheless, they are sceptical about green advertisement campaigns (Nittala 2014: 149).

Furthermore, research indicates that respondents holding a higher level of education have a better understanding of environmental issues and are delicate towards these issues (Barge, More and Bhola 2014:2). In addition, research indicates that consumers that are educated show environmental awareness, environmental knowledge and are aware of green products (Barge, More and Bhola 2014:2).

Additionally, other studies have argued that consumers with high educational levels are more likely to grasp the green phenomenon (Afonso *et al.* 2018: 137; Jaiswal *et al.* 2020: 795). Nittala (2014: 142), however, caution that the level of education does not translate into consumers' green purchase decision over quality and price.

2.5.1.3 Income

Regarding the consumer's income, Barge, More and Bhola (2014:2) observed a significant relationship between the level of income and purchase intention of green products. According to the authors, consumers with higher income purchase green foods frequently compared to those without lower incomes. From an environmental context, Barge, More and Bhola (2014:2) concluded that consumers with a higher income agree that green products benefit the environment. More so, it was found that green purchase behaviour was more prominent among high-income, older families and high-level occupation groups (Ngobo 2011: 90).

2.5.1.4 Location

While it has been suggested that consumers from affluent families are aware of the benefits associated with the use of green products, there are, however, some who are ignorant of green products. Rathod (2018: 36) observed that the latter are primarily consumers from rural areas and are semi-illiterate and illiterate. The reasons noted for the groups' limited knowledge of green products were attributed to poor marketing efforts. Van Staden and Van der Merwe (2017: 65) note that retailers marketing messages, in most cases, do not reach people who are illiterate with difficulties reading the labels. It has hitherto contributed to a shortage of knowledge among these groups. Consequently, these groups of consumers may not be aware of the different benefits of using eco-friendly products.

2.5.1.5 Variations in socio-demographic variables in a green consumer purchase decision

While the above subtheme highlighted the roles of the consumer's socio-demographic variables on green purchase intentions, one could draw out the roles each demographic plays that remain contentious. Gonzalez *et al*. (2015: 287) attribute this discrepancy in the efficacy of several demographic factors to explain pro-environmental behaviours to the variations in cultural context. For instance, while earlier studies in the USA had found that female and married consumers were more inclined to pay higher prices for environmentally friendly products (Laroche *et al*. 2001: 503), a study in the Egyptian market found that male consumers are more aware than female consumers of ecological issues and green purchases (Mostafa 2007: 220). For instance, in Australia, older and middle-aged Australian customers were shown to have higher levels of label dissatisfaction (D'Souza *et al*. 2007: 371).

In addition to the aforementioned, findings regarding the impact of socio-demographic factors on green consumption are debatable. Akehurst, Afonso, and Gonçalves, 2012: 972), and more recent studies suggest that this influence is waning or has disappeared (Nath, Agrawal, Gautam and Sharma 2015: 168; Klein, Emberger-Klein, Menrad, Möhring and Blesin 2019: 33). This is in contrast to older studies that showed an impact on green consumption habits ((Diamantopoulos, Schlegelmilch, Sinkovics and Bohlen 2003: 465; Jain and Kaur 2006: 107). However, Panzone, Hilton, Sale, and

Cohen (2016: 77) demonstrate that age or gender can significantly affect grocery store green shopping.

Given the above dynamics and variations in the socio-demographic variables in explaining green purchase decisions, other scholars (Khare 2015: 314; Kirmani and Khan, 2016: 73) see demographic factors as insignificant for green consumption behaviour. Given this concern, some scholars (Awad 2011: 55; Jaiswal *et al.* 2020: 792; Mehta and Chahal 2021: 902) have suggested that the segmentation of green consumers be performed by classifying green consumers into distinct groups based on their attitudinal and behaviour perceptions towards environmental measures. For segmentation, attitudinal factors or motives, such as reasons for purchasing, attitudes, and values, or behavioural factors, such as behaviours or frequency of green purchases, are frequently used (Balderjahn, Peyer, Seegebarth, Wiedmann and Weber 2018: 83).

Moreover, it is noted in the literature that consumer's psychographic characteristics were more effective than socio-demographic characteristics to explain or understand green consumers' purchase decisions in a varied cultural context (Akehurst *et al.* 2012: 975; Saleem *et al.* 2018: 17). The next section examines the role of psychological variables on the green purchase decision.

2.5.2 The role of psychological variables on green purchase decision

Recent studies noted that while manufacturers have developed environmentally friendly products, many consumers show a lack of interest in these products (Jung, Choi and Oh, 2018: 2; Zhang and Dong, 2020: 2). Coderoni and Perito (2020: 2) points out that the perceived lack of interest may be linked to the consumer's consumption values, the premium price of these products, and resistance to new technologies. The consequence of this may result in sales obstacles for these products (Zhang and Dong 2020:2). In agreeing with the position of Zhang and Dong (2020: 2), it becomes practical and significant to understand the influencing factors of consumers' green product purchase behaviour for green marketing.

In recent years, several attempts were pushed forward to develop and understand the motives behind consumer behaviour (Feil *et al.* 2020: 1). While these studies lend

some insights into factors influencing a green purchase decision, there is a knowledge gap about the motives that promulgate the actual purchase decision. Moreover, despite the great achievement made in consumer behaviour, from a South African perspective, there is room for further advancement in understanding consumer purchase behaviour of green products. The subtheme, therefore, explores the role of psychological variables on the green purchase decision.

According to Zhang and Dong (2020: 7), psychological variables are composed mainly of attitude, environmental consciousness, values, and beliefs. According to the authors, the said psychological variables profoundly affected consumer behaviour, which could result in significant differences in consumer purchase intention. Additionally, Zhang and Dong (2020: 14) note that consumers guilt-ridden by human activities on the plant, for example, will ultimately avoid harming the environment when purchasing products. Hence when could easily subsume that the intention to protect or purchase green products comes from the consumer's attitude towards the environment. Moreover, several academics concur that attitude is the primary element influencing customers' desire to make green purchases (Laureti and Benedetti 2018: 3367; Sharma and Foropon 2019: 1018). As a result, academics have focused their research the most on the connection between attitude and green purchasing. In contrast, most consumer theories that examine the impact of individual characteristics on green purchasing behaviour hold that green purchasing behaviour is influenced by consumers' environmental attitudes as a result of their environmental knowledge and beliefs (Cheung and To 2019: 145; Patel, Rohit, and Yagnik 2020: 1; Xu *et al.* 2020: 1).

2.6 THEORETICAL FRAMEWORK

According to Zhang and Dong (2020: 6), the theoretical concept of some environmental behaviour has clear applicability in the analysis of green purchase behaviour. The authors explain this by pointing out that making green purchases is a common private environmental practice. As a result, psychology and the interaction of internal and external forces have been the primary lenses through which the majority of academics have viewed consumer theory (Zhang and Dong 2020: 6). Green consumer theories based on psychology hold the belief that people's pro-environmental behaviour is primarily influenced by psychological factors, with a focus

on the impact of perceived behavioural regulation, attitude, beliefs, moral standards, and other elements on consumers' purchasing intention or behaviour for green goods (Zhang and Dong 2020: 6).

The widely used consumer theories include theories such as the theory of Planned Behaviour (TPB) by Ajzen (1991: 179), Value–Attitude–Behaviour Model (VAB) by Homer and Kahle (1998:638), Value–Norm–Belief Theory of Environmentalism (VBN) by Stern *et al.* (1999:81), the integrated model, the Attitude–Behaviour–Conditions Model (ABC) by Guagnano, Stern and Dietz (1995: 699). While the ABC investigates green purchasing behaviour from both social and psychological perspectives, the Theory of Reasoned Behaviour, Theory of Planned Behaviour, Norm Activation Model, and Models of Value–Attitude–Behaviour and Value–Belief–Norm concentrate on environmental behaviour from a psychological perspective (Zhang and Dong 2020: 6). From an environmental point of view, the theory of planned behaviour was adopted as the theoretical framework underpinning the study.

2.6.1 Theory of Planned Behaviour

One of the most popular and useful theories for examining pro-environmental behaviour is the TPB (Rahman and Reynolds 2019: 47; Nimri *et al*. 2020a: 535). The TPB is lauded for its frugality in assessing reasonable behaviour since it is commonly employed in social psychology. TPB's straightforward form enables a full examination of how intentions and behaviour develop by simultaneously taking into account volitional and non-volitional factors (Ajzen 2020: 316). TPB, attitude toward the behaviour, subjective injunctive norms, subjective descriptive norms, and perceived behavioural regulation are the direct constructs of the theory, as shown in Figure 2.2. (Fishbein and Ajzen 2011:22).

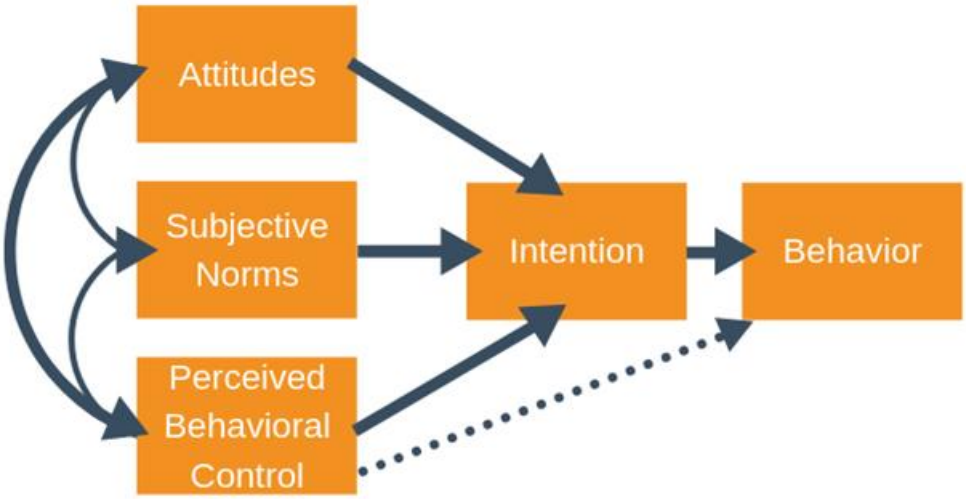

Figure 2. 2: Theory of planned behaviour (adapted from Tornikoski and Maalaoui 2019: 537)

Ajzen (2020: 318) explain that a person's overall assessment of specific behaviour is known as attitude. By contrast, Subjective injunctive norms refer to the acceptance of influential individuals on what is accepted and not supported by these referents, whereas subjective descriptive norms refer to the majority's view of what is commonly done (Smith and Louis 2008: 649; Nimri *et al.* 2020b: 152). Perceived behavioural regulation refers to a person's understanding of the possible challenges and barriers in carrying out a particular behaviour (Ajzen 1991: 179). These opportunities and resources may include time, money, expertise, and trust, influencing one's ability to participate in a particular behaviour (Chen and Tung 2014: 223). The higher the individual's intention to participate in the conduct in question, the more favourable the attitude and social standard are, and the greater the perceived influence is (Fishbein and Ajzen 2011: 22; De Leeuw, Valois, Ajzen, and Schmidt 2015: 128).

According to the seminal work of Ajzen (1991: 179), the TPB paradigm considers behaviour as a feature of salient beliefs (indirect constructs of the theory) that are relevant to the behaviour. Individuals may have a variety of beliefs about any given action, but only the most essential beliefs can influence their behavioural intentions

(Ajzen 2020: 314). Human behaviour is driven by three types of considerations, according to TPB: beliefs about the perceived consequences of the behaviour (behavioural beliefs), beliefs about the normative perceptions and behaviours of significant referents (normative beliefs), and beliefs about the nature of influences that assist or impede performing a particular behaviour (normative beliefs) (control beliefs). Behavioural beliefs produce a favourable or unfavourable attitude toward the behaviour, normative beliefs produce perceptions of social coercion, and regulation beliefs produce perceived behavioural control in their aggregates (Ajzen 2020: 314). Simply put, the composite indices of behavioural, normative, and control beliefs serve as formative markers, capturing the fundamental determinants of behaviours, social norms, and perceived control expectations, which can be used to forecast intentions (Ajzen 2020: 314). People would rationally consider the consequences of their actions before making behaviour decisions, according to the Theory of Reasoned Action (TRA). Ajzen expanded on the TRA by proposing the Theory of Planned Behaviour, which included assumed behavioural regulation. Before deciding on a course of action, Ajzen suggests that people consider the repercussions of their actions and whether they can carry them out (Ajzen 2020: 314).

2.6.2 Empirical studies and criticism of TPB

Many empirical studies have demonstrated the effectiveness of TPB's interpretation of behaviour (Moser 2015: 167; Yadav and Pathak 2016: 732), and it has since become the most common theory for studying green purchasing behaviour (Zhang and Dong 2020: 8). Rezai *et al.* (2012: 4496), for example, used TPB to study 1355 Malaysian consumers' green food purchasing behaviour, and their empirical findings indicate that attitude, subjective norms, and perceived behavioural control are the key factors influencing purchase behaviour. Likewise, judge *et al.* (2019: 259) obtained similar results when they expected customer purchases of green housing.

Although TPB is the most used in recent years, TPB's application in the analysis of green consumption activity has some limitations (Zhang and Dong 2020: 8). TPB, for starters, assumes that the people who are being studied are logical. However, except for bulk goods, cars, homes, and home appliances, most consumers stick to their previous buying patterns when purchasing commodities, and TPB cannot fully justify

this behaviour. As a result, when using TPB to research customer purchasing behaviour, Zhang and Dong (2020: 8) proposed that the addition of the customer's past purchase history, purchase patterns, and other non-rational variables investigate the impact of irrational factors on purchase behaviour. Another limitation of the theory is that TPB focuses mainly on the psychological level's effect on actions while ignoring the result of external influences.

Owing to the above-perceived limitations, academics have broadened their reach. For example, psychological factors such as consumer innovation, environmental interest, and perceived importance have been applied to TPB as pre-variables or mediating variables to boost the model's explanatory capacity (Yadav and Pathak 2017: 114; Kautish *et al.* 2019: 1425). The additions have improved the original model's understanding by significantly expanding TPB's research perspective on green consumption conduct (Zhang and Dong 2020: 8). Based on this. The TPB was streamlined in this study to measure the factors influencing the purchase decision of green products.

2.7 CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

The conceptual model attempt to facilitate the understanding of factors driving the purchase of green products in the South African context regarding fast-moving consumer goods. More specifically, the conceptual model focuses on psychological variables that influence green purchase intention and the actual purchase behaviour of FMCG products. Recent studies noted that while manufacturers have developed environmentally friendly products, many consumers show a lack of interest in these products (Jung *et al.* 2020: 2; Zhang and Dong 2020: 2). Coderoni and Perito (2020: 2) point out that the perceived lack of interest may be linked to the consumer's consumption values, the premium price of these products, and resistance to new technologies. The consequence of this may result in sales obstacles for these products (Zhang and Dong, 2020: 2). In agreeing with the position of Zhang and Dong (2020), it becomes practical significance to understand the influencing factors of consumers' green product purchase behaviour for green marketing.

Several attempts in recent years pushed forward to develop and understand the motives behind consumers' behaviour (Feil *et al.* 2020: 1). While these studies lend some insights into factors influencing a green purchase intention, there is a knowledge gap about the motives that promulgate the actual purchase behaviour. Moreover, despite the great achievement made in consumer behaviour, from a South African perspective, there is room for further advancement in understanding consumer purchase behaviour of green products.

2.7.1 The perceived role of pro-environmental attitude on green purchase intention

According to Zhang and Dong (2020: 2), psychological variables are composed mainly of attitude, environmental consciousness, values and beliefs. According to the authors, the said psychological variables profoundly affected consumer behaviour, which could result in significant differences in consumers' purchase intentions. Green consumers are often described as consumers with a positive attitude towards the environment. Owing to this attitude, green consumers engage in activities that minimise environmental harm through their consumption or even support it through consumption (Ertz *et al.* 2016: 3971). Several recent studies have shown the positive influence of pro-environmental attitudes on the purchase behaviour of green products (Robinot *et al.* 2017; Scherer *et al.* 2018; Klein *et al.* 2020). Niedermeier *et al.* (2021:1823) explain that the feeling of being able to do something for the environment usually leads consumers to take the impact of their purchases on the environment into account and thus usually leads to a higher awareness of their environment. As such, it becomes critical to establish the factors influencing green product purchases, particularly among South African consumers. According to Rathod (2018: 25), consumers, in several cases, buy and use different products based on their perception of the given products. Thus, in light of the existing literature, it is therefore hypothesised in the current study that:

H1: *There is a positive relationship between the perceived pro-environmental attitudes and the green purchase intention.*

2.7.2 The perceived role of values (quality) and lack of trust in green products on green purchase intention

According to Cheung and To (2019: 145), specific attributes of the green product, such as the quality, degree of aesthetics, and number of functions, may influence consumers' attitudes towards purchase. Furthermore, the authors note that since green products consume less energy or resources, consumers believe that using such products could be beneficial and strengthen favourable attitudes towards environmental protection (Cheung and To 2019: 145). More so, it is reasonable to agree with Cheung and To (2019: 145) that the value gained from saving energy and resources could influence a drive to purchase more green products. Nevertheless, the authors, as mentioned earlier, warned that regardless of the environmental intention of the consumers, if green products are of lower quality than the conventional ones, consumers may purchase fewer green products - as they may find no substantial difference in using green products from that of traditional products (Cheung and To 2019:145).

Equally, and according to Niedermeier *et al.* (2021: 1823), the doubt in consumers' minds that a product is sustainable or less effective than a conventional product can be an obstacle to purchasing green products. This view aligns with Joshi and Rahman (2015: 128) that a lack of trust can act as a purchase barrier to green products. Thus, considering the existing literature, it is therefore hypothesised in the current study that:

H2: *There is a positive relationship between the perceived values and the green purchase intention.*

2.7.3 The perceived role of price on green purchase intention

The cost of a green product may become a barrier to consumer purchase. While it is right to assume that price may not be the sole barrier to green product purchase, several authors stated that the high cost of green products might deter people from purchasing them (Barber *et al.* 2014: 218; Liobikienė and Bernatonienė 2017: 112). More so, an earlier study reported that some consumers view the price of green products as more expensive than conventional ones (Chang 2011: 20). Regardless

of the price, other scholars have argued that many environmental-friendly convinced consumers will go extra to pay more for green products due to the health and environmental benefits of the products (Davari and Strutton 2014: 566; Kainz 2016: 8; Scherer *et al.* 2018: 61) while others argued that consumers, in some circumstances, expect green items to cost more, and place less faith in them if they are cheaper (Kahraman and Kazançoğlu 2019: 1224). In South Africa, for example, the consumer profile is very dynamic. It is characterised by consumers who are exceptionally priced sensitive, prioritising value for money as a driver of choice (Van Niekerk 2018: 14). As a result, the industry frequently has "special price sales" to attract consumers in the hope of higher purchase volumes of products at lower prices (Van Niekerk 2018: 14). Hence, understanding consumers' perception of a given product in terms of its price will be critical in promoting green consumption. Thus, considering the existing literature, it is therefore hypothesised in the current study that:

H3: *A positive relationship exists between the perceived product price and green purchase intention.*

2.7.4 The relationship between green purchase intention and actual purchase behaviour

Forsberg and Löfvenberg (2011: 3) describe green consumers as environmentally conscious consumer who is buying, willing to or saying they will be buying socially desirable FMCG. Jaiswal *et al.* (2020: 793) indicate that green consumers are typically involved in purchasing and consuming products considered green, environmentally friendly, and sustainable. Of interest to this study, and as Handayani (2017: 28) argued, it is not easy to transition from environmental knowledge to really adopting green habits and behaviours. Elaborating further, the author explained that consumers might be willing to buy sustainable products, but very few realise their purchase intention. Thus, in light of the existing literature, it is therefore hypothesised in the current study that:

H4: *There is a positive relationship between the perceived purchase intention and the actual purchase behaviour of green products.*

The above-hypothesised relationships can be depicted in the conceptual model reflected in Figure 2.2. The conceptual model represents the primary constructs of this study and their relationships with one another. In this conceptual model, perceived pro-environmental attitude, perceived value (quality), and perceived price are the predictor variables, while customer purchase intention is the mediating variable. The customer's actual purchase behaviour is the sole outcome variable.

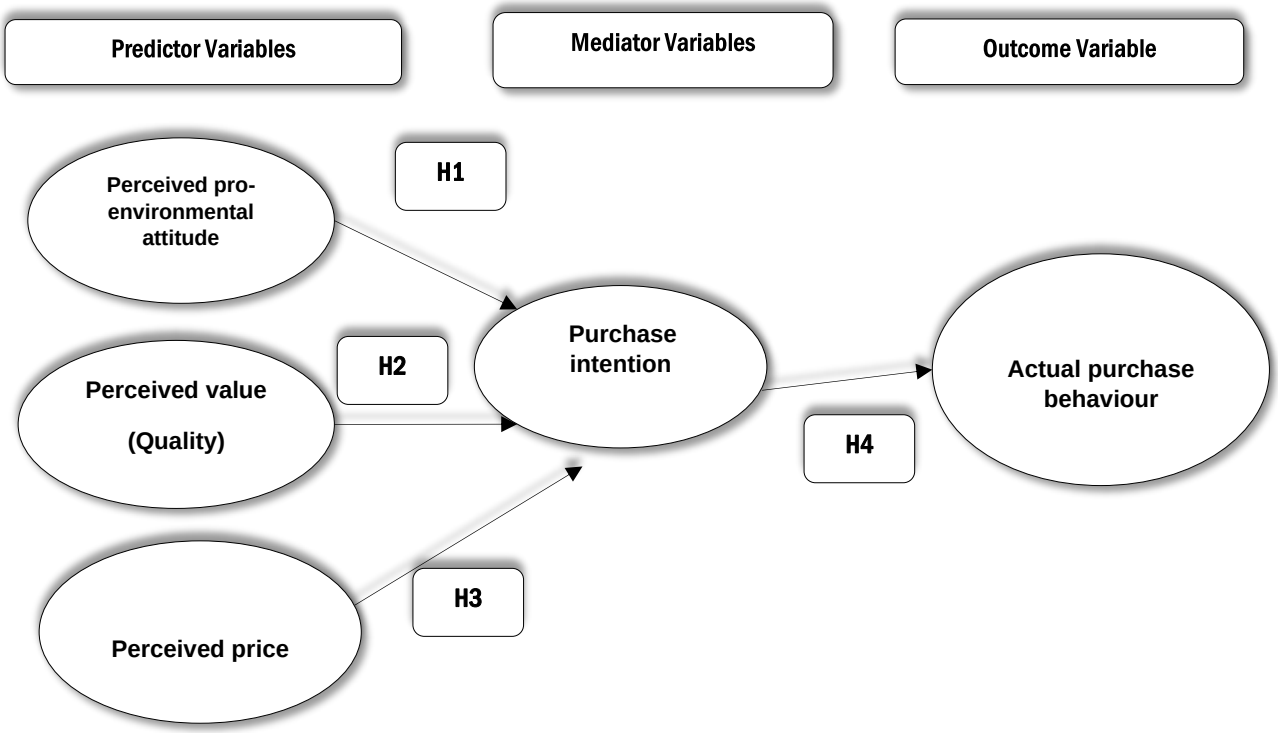

Figure 2. 3: Conceptualised research model

2.8 CONCLUSION

The chapter compares the differences and advantages of green products over conventional products that are not green. It was uncovered that green products are made with harmless ingredients that do not pollute the environment, unlike their counterpart that is not green. Owing to the quest to sustain the environment, the green consumerism concept, an environmental sustainability activism, was reviewed. In the chapter, it was uncovered that the socio-demographic characteristics of the consumer play a critical role in the green purchase. It was discovered that consumers' gender, age group, income and education level might influence their knowledge of green

products and purchase behaviour. Psychological variables such as attitude and beliefs were found to influence green purchase behaviour. Hence, the TPB, which sought to explain the role of psychological constructs in consumer purchase behaviour, were used as the underpinning theory to understand the factors that influence green purchasing behaviour. The next chapter, therefore, provides the methodology adopted in the study.

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter describes the research process in depth, including the research design and methodology. Areas such as data collection and instruments were covered, explaining how questionnaires were administered to the participants and how the data were collected. The target population and sampling procedure were also discussed in detail. The approach and design of the research measurements used to collect and analyse data, pilot study, ethical considerations, validity, and reliability were detailed in the chapter.

3.2 RESEARCH DESIGN

Terre Blanche, Durrheim, and Painter (2010:162) explain that research design is a strategic framework or plan that guides the research activity to ensure that sound conclusions are reached. According to Van Wyk (2012:13), research design focuses on the product of how the study will be planned to achieve the study goals. The research can be subsumed as the overall strategy that the researcher chooses to integrate the different components of the study coherently and logically, which ensures that the research problem is effectively addressed (Gray 2020:144). This study adopted a descriptive research design to identify the factors influencing consumer behaviour during the decision-making process for green FMCG products in the greater Durban area, South Africa. According to Murphy (2018: 1), the benefit of the descriptive design is that a large amount of data can be collected quickly. As a result, this design was beneficial to use because it allowed the researcher to identify factors influencing green. Neuman (2014: 38) notes that descriptive research presents a picture of the specific details of a situation, social setting, or relationship. This study is descriptive, given that the researcher aimed to identify the factors influencing consumer behaviour during the decision-making process for green FMCG products in the greater Durban area. Figure 3.1 depicts the research design for the study. It highlights the process and methods adopted by the researcher.

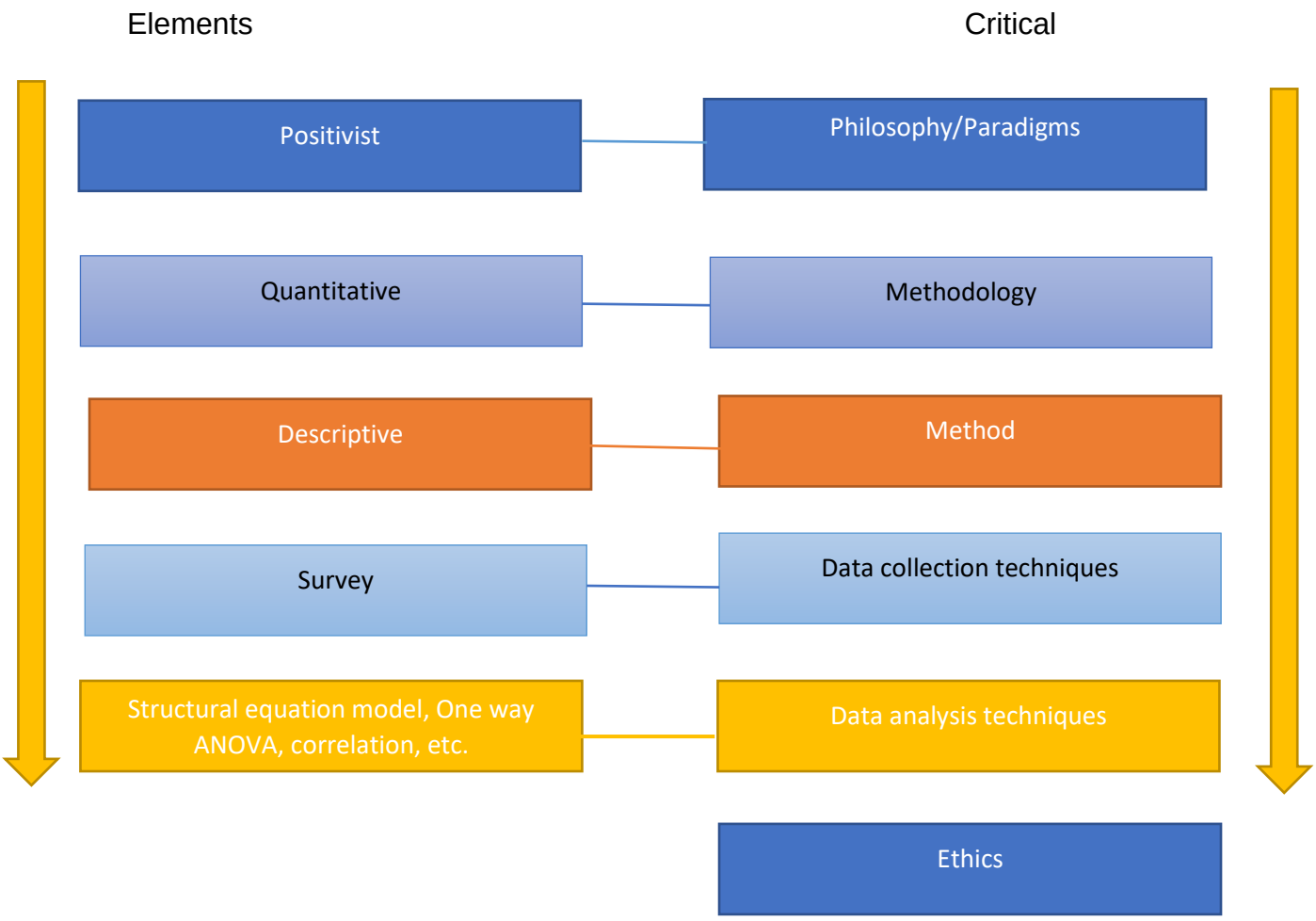

Figure 3. 1: Research design approaches

3.3 RESEARCH APPROACH

Van Wyk (2012:13) explains that research methodology focuses on selecting research processes and the tools and procedures used. This study adopted a quantitative research approach to address the key research objectives. As such, the research method adopted in the study uses deductive processes (testing ideas against observation) as against inductive processes (developing ideas from observations). As Creswell and Plano-Clark (2011:86) explain, inductive approaches are associated with qualitative research, whereas deductive procedures are quantitative.

In this study, using the theory of planned behaviour, a quantitative approach was appropriate to identify the factors influencing consumer behaviour during the decision-making process for green FMCG products in the greater Durban area. The information collected from the respondents was tested/set against the conceptual framework based on the theory of planned behaviour. Quantitative research methods are systematic and structured and include structured data collection techniques, as well as the quantification and measurement of concepts (Connaway and Powell 2010: 3). Saunders *et al*. (2016:166) explain that quantitative methods examined the relationship between variables measured numerically, which are then analysed using numeral and statistical techniques. According to Leedy and Ormrod (2010: 94), the quantitative research approach is associated with a cross-sectional survey. It uses a descriptive research design, which consists of measurement scales to measure the phenomena under study. Neuman (2014: 44) reveals that cross-sectional gathers data at multiple time points and provide more of a "moving picture" of events, people, or social relations across time. This study is, therefore, cross-sectional as the views of the respondents in the greater Durban area were collected and analysed at once without further studying the changes in their responses.

Leedy and Ormrod (2014: 101) state that data collected in quantitative research is analysed using statistical methods, and the results involve quantifiable numbers, which could then be interpreted using statistics and graphs and subsequently communicated as aggregated data. In agreement with Saunders *et al.* (2016: 179), it is easier to explain and understand the results obtained using quantitative methods. In addition, this made it easier to compare the collected data. Thus, quantitative methods emphasise the objectivity and reliability of the study outcome and encourage replication (Bhattacharyya, 2012:129).

3.4 TARGET POPULATION

According to Collis and Hussey (2013: 97), a study population is an aggregate of all people or objects under consideration for research purposes. Cooper and Schindler (2014: 388) refer to a study population as people or things sharing common characteristics that the researcher aspires to conclude based on the sample, while

Neuman (2014:247) define it as a large pool from which sampling elements are drawn to generalise the findings. It is worth stating here that the research objectives, formulated hypothesis, and study background helped inform the researcher in selecting the target population. The target population, according to Alvi (2016:10), consists of all participants who satisfy the prerequisites for a research project. Residents of the greater Durban region in the South African province of KwaZulu-Natal who are 18 years of age or older, have purchased or used a green product in the past six months are the study's target demographic. This is to ensure that respondents have experience with green consumption, and could therefore provide more accurate answers are the study's target demographic.

The population of greater Durban obtained from Statistics South Africa was used as a sampling frame representative of the population. The greater Durban area has a population of about 3.8 million people (Statistics South Africa 2016). As defined by Terre Blanche *et al*. (2010:133), a sampling frame is a list of all the members of the population who are eligible for inclusion in a sample. However, for this study, it is not practical to use the whole target population due to cost and time constraints. Hence, the sample size was estimated from the target population, which was used to generalise the research findings.

3.5 SAMPLING DESIGN AND SAMPLING TECHNIQUE

A sample is a set of cases a researcher selects from a large pool and generalised to the population (Neuman 2014:246). Terre Blanche *et al.* (2010:48) refer to sampling as selecting research respondents from an entire population. According to the author, this process involves decisions about which people, settings, events, behaviours, and social strategies to observe (Terre Blanche *et al.* 2010:48). Since the researcher aim to identify factors influencing the consumer decision-making process of green FMCG products in the greater Durban area, the respondents for the study were only drawn from those residing within the greater Durban area. Therefore, it ensured that the elements selected for a sample accurately resembled the parameters of the population they were chosen from. Check and Schutt (2012:96) mention that sampling involves selecting a sub-section representing the population to obtain information regarding the phenomenon of interest. The main aim was to choose a sample representative of the

people, which according to Neuman (2014:246), allowed the researcher to conclude the study.

There are two types of sampling techniques: probability sampling and non-probability sampling. In probability sampling, there are higher chances that each member of the target population will be selected. Non-probability methods, by contrast, use the researchers' judgment, and there is no assurance that each element of the target population will be represented in the target sample (Leedy and Ormrod 2010: 212). Therefore, this study utilised non-probability sampling to select the study sample.

According to Alvi (2016:13), non-probability techniques allow the researcher to choose the sample elements as they wish or wherever they can find them (Alvil 2016: 13). Kumar (2014:188) listed non-probability sampling to include quota sampling, accidental sampling, purposive sampling, expert sampling, and snowballing sampling. A non-probability, a convenience-sampling method was employed, as it is inexpensive as well as provides data of value (Stockemer, Stockemer and Glaeser 2019: 62). In convenience sampling, the researcher selects the research respondents base on their availability, accessibility, and ability to obtain their consent, especially under unusual circumstances (Yin 2016: 334). This approach was most applicable as it was not easy to access the respondents due to the social distancing issues and non-physical contact caused by the impact of the COVID-19 pandemic. Therefore, the researcher posted the survey questionnaire on social media (Facebook, WhatsApp, and Instagram) to encourage the respondents residing within the greater Durban area to participate in the study. The choice of these social media platforms was premised on large fellowship of the target population on the platforms.

3.6 SAMPLE SIZE

The sample size refers to the number of respondents included in the study. Vogt and Johnson (2011:347) indicate that a larger sample size is preferred as it lowers the standard errors. However, according to Chawla and Sodhi (2011), the size of the sample depends on the essential characteristics of the population, the type of information required and the available funding and time constraints. Thus, sample size Sekaran and Bougie (2016:259) explain that sample size selection is dependent

on the level of confidence or confidence interval required in one's study to provide adequately generalisable data that may be in line with that of the target population. According to Kotrlik and Higgins (2001: 43), the sample size for a survey can be estimated with the Cochran formula:

$$n = Z\sqrt{p(1-q)}/ME$$

Where:

n= sample size

z= 1.96 (95% confidence interval)

p= estimated proportion of the population probability proportion

q= 1-P

ME= Margin of error

This current study used the above formula to calculate the sample size. The greater Durban area has about 3.8 million people (Statistics South Africa 2016). The estimated sample of 385 was calculated using the formula with a 50% distribution and a 5% margin of error.

3.7 QUESTIONNAIRE DEVELOPMENT

According to Brace (2018: 7), the measured theoretical constructs are the determining factors for the choice of measurement methodology. In this study, the questionnaire was the instrument of data collection. The role of the questionnaire is to elicit the information required to enable the researcher to answer the survey's objectives (Brace 2018:7). Terre Blanche *et al.* (2010:484) define it as a group of written questions that are used to gather information from the respondents. While the questionnaire may be regarded as complex measurement instruments, they are advantageous in that they are economical, ensure confidentiality as questionnaires can be answered anonymously and provide a quick and easy way of collecting data (Patten 2016).

Brosnan (2021:125) advised that a questionnaire must be appropriately designed to ensure that the research questions are addressed, and that accurate and appropriate data is collected. In this study, the questionnaire was developed and distributed to the

respondents. The questionnaire included closed-ended questions in which the respondents were required to select an answer from a list of options provided by the researcher.

The survey questions were developed with slight modifications based on existing measures from past research and adapted to fit the research context on green purchase intention and behaviour. A multi-item 5-point Likert-type scales, where 1 =" strongly disagrees" and 5= "strongly agree employed. The questionnaire consisted of three sections; the first consisted of the respondents' demographic data, and the second comprised the questions that measured the study constructs. The second part consists of questions that measure marketing mix elements, specifically, the four Ps. The third part of the questionnaire consists of three constructs, which include consumer-perceived pro-environmental attitude toward green FMCG, consumer perception of the green FMCG values (quality) over conventional FMCG, consumer perception purchase intention of green FMCG, consumer perception of green FMCG price, and consumer actual purchase behaviour of green FMCG.

The pro-environmental attitude of green consumers toward green FMCG was measured by three items adapted from Unnamalai (2016: 382). Consumers' perception of green FMCG values (quality) over conventional ones measured by three items, and perception of green FMCG price measured by three items adapted, were adapted from (Niedermeier *et al.* 2021: 4). Three items were used to measure consumers' purchase intention, adapted from (Prakash and Pathak 2017: 387), and Jaiswal *et al.* (2020: 794). Finally, three items were used to measure green consumers' actual purchase behaviour, adapted from (Yadav and Pathak 2017: 387).

3.8 DATA COLLECTION AND SAMPLE CHARACTERISTICS

The primary objective of a survey should be to collect reliable, valid, and unbiased data from a representative sample promptly and without resource constraints (Mutepfa and Tapera 2019: 5). According to the authors, the process of responding to questions and modes of data collection has different effects on the validity and quality of data collected during the research (Mutepfa and Tapera 2019: 541). In this study, online surveys were used for data collection. It was considered due to the health risks posed

by the COVID-19 pandemic through contact with human respondents in this research. Another reason for the choice of online surveys is that the Covid-19 regulations and the lockdown restrictions imposed by the South African government made it difficult for the researcher to engage with respondents at the different research sites as most of the respondents are working online. Moreover, online surveys are replacing traditional surveys (Ikart, 2019:199). As such, an online survey has become the primary data collection method over the last 20 years. It is mainly to the advantage of its cost-effectiveness, a large population can be reached at virtually no cost (Stockemer, Stockemer and Glaeser, 2019: 62). Thus, the online survey technique was deemed suitable for collecting data in this cross-sectional study in which the researcher will contact respondents only once.

The online questionnaire was created using Survey Monkey sent to 385 social media contacts of the researcher within the geographical coverage of the research area. The questionnaire was only in English, a common local language in the greater Durban area. Data was gathered from June 24 to July 8, 2020. In total, 381 questionnaires were completed via survey monkey and deemed usable for statistical analysis, which comprises the sample size. A response rate of 99.96% was considered appropriate for the study. While the questionnaires were completed without the researcher's presence, proper instructions were provided that explained the nature of the study to the respondent. In addition, they required informed consent from the respondent before collecting the data from the respondent. Brace (2018: 36) notes that self-completion methods can benefit from the complete absence of an interviewer as it removes a significant source of potential bias in the responses and makes it easier for respondents to be honest about sensitive subjects.

3.9 PILOT STUDY

Terre Blanche *et al*. (2010:490) recommend piloting a study to check its feasibility and practicality before administering it to the final sample. Accordingly, the researcher piloted the study with ten respondents who were not part of the final study. Piloting the study increased its reliability, validity, and practicability. In addition, the finding of the pilot study helped the researcher to redesign the questionnaire and address its

shortcoming of the questionnaire. In addition, the pilot study was used to address the face validity of the measuring instrument.

3.10 RELIABILITY AND VALIDITY

The questionnaire was pre-tested for validity and reliability. The instrument's reliability was tested using Cronbach's alpha to check for internal consistency, while factor analysis was computed to establish if the tool attained construct validity.

3.11.1 Reliability of study

Thomas (2013:138) refers to reliability as the extent to which a research instrument will give the same results on different occasions. Mohajan (2017:58) views reliability as the consistency, stability, and repeatability of results; that is, the result of a researcher is considered. The reliability was measured using Cronbach Alpha to measure internal consistency. The Cronbach alpha values proposed by George and Mallery (2011) were used as a benchmark to determine the reliability. It was determined by taking several items in the same construct to see if they correlate.

3.11.2 Validity of the study

Gray (2020:164) refers to validity as the extent to which any measuring instrument measures what it is intended to measure. Thomas (2013:140) reveals two types of validity, instrument-based and experimental. Instrument-based validity includes (construct validity, content validity, predictive validity, face validity and ecological validity). In this study, validity was ensured using construct validity. Thomas (2013:140) defines construct validity as the extent to which the results of a test (or another instrument) correlate with the theoretical construct for which it seeks to act as an assessment. Terre Blanche *et al*. (2010:151) note that construct validation includes three steps viz, specify a set of theoretical relationships between constraints, test the hypothesis empirically, and interpret the pattern of relationships in terms of how they clarify the construct validity of the measure.

Construct validity is further subdivided into convergent validity and discriminate validity. In concurrent validity, the validity is gauged by comparing it to measures of the same concept developed through other methods to assess how well the items are

together (convergent validity) or distinguish different people on certain behaviours (discriminate validity)" (Singh 2007:79). Convergent validity was examined by observing the inter-correlation between measurement items and the research construct. Discriminant validity was examined by observing the construct correlation matrix (Singh 2007:79). In this study, the researcher applied the standardised regression weights generated using the AMOS statistical software to assess both the convergent and discriminant validity.

3.12 ETHICAL CONSIDERATION

The Faculty Research Ethics Committee (98/18FREC) provided ethical approval and granted authorization to perform the study. All participants in the study received information on the study's goals and purpose (Appendix B). Furthermore, each respondent was made aware of the opportunity to opt-out at any time if they so desired (Appendix C). Respondents who expressed the desire to participate in the study provided informed consent in the form of written approval. The identity, such as the names and Identity numbers of the respondents, were not included in the questionnaire.

3.13 DATA PREPARATION

Data preparation is a vital component in ensuring the quality of the research outcome and thus is estimated to take up to 80 % of the overall analysis time. According to Aguinis *et al.* (2019:8) report, data preparation takes place after data collection and before data analysis and includes editing, coding, and entering data. It thus ensures the accuracy of the data and the conversion from raw form to reduced and classified forms that are more appropriate for analysis. In preparation for the data before analysis, the researcher ensures that the proper questions and responses exported from the survey- monkey match what was initially coded and captured.

3.14 DATA ANALYSIS

Bradley (2013: 319) notes that it is critical to analyse and interpret obtained data to provide answers for the research objectives. Lester *et al.* (2020:98) define data analysis as the statistical and qualitative consideration of data collected by the researcher. Since this study is quantitative. The researcher applied statistical methods

in analysing the data. It was in line with the position of Leedy and Ormond (2014: 315), who said that the research objectives could only be achieved by determining the meaning of the data and its significance to the research problem. Data collected from the questionnaire were analysed using the Statistical Package for the Social Sciences (SPSS® - Version 28 Chicago, IL, USA).

3.14.1 Descriptive and inferential statistics

The data analysis and presentation used both descriptive and inferential statistics. Grand-Clement, Baruch, and van Gorp (2018: 57) define descriptive statistics as a statistical technique effective for organizing, summarizing, and explaining a set of survey data. According to Neuman (2014: 396), descriptive statistics can be categorised into the number of variables which include univariate, bivariate, or multiple variates. In this study, the researcher uses univariate descriptive statistical procedures to analyse and present the socio-demographics gathered from the survey data. Bar graphs and frequency distribution tables were used to present the data. Neuman (2014: 396) notes that presenting univariable using a frequency distribution table is the easiest way to describe the numerical data.

Regarding inferential statistical analysis, Neuman (2014: 422) reveals that it builds on probability theory to test hypotheses, make inferences from a sample to a population, and test whether the descriptive results are likely to be due to random factors or to a real relationship. It concurs with Johnson and Christensen (2012: 4), who said that inferential statistics use the laws of probability to make inferences and draw conclusions about the sample data. In this study, the conceptual framework was tested using inferential statistics. It was presented using the arithmetic means and standard deviations.

3.14.2 Factor analysis

Additionally, factor analysis was computed to identify constructs among observed variables and provide valid evidence. Factor analysis is a statistical procedure used for data reduction through a linear combination of different variables with similar characteristics (Boslaugh 2013: 291). Pallant (2011: 181) explains that factor analysis is beneficial for refining measurement scales. According to Watkins (2018: 220), factor

analysis can help identify common factors that explain the order and structure of measured variables. Factor analysis was therefore used to test if each of the items loaded in the identified constructs. In order to evaluate and validate the identified constructs in the conceptual framework put forth by the researcher, both exploratory and confirmatory factor analyses were performed.

Exploratory factor analysis uses the principal component analysis (PCA) extraction method and Varimax rotation on each of the items measuring the respective constructs (Green price, green place, green promotion, green value, pro-environmental attitude, green purchase intention, and green purchase behaviour). According to Shrestha (2021: 7), the Bartlett's Test of Sphericity must be statistically significant for the condition of EFA and the Kaiser-Meyer value must be more than 0.5. All of the constructs' Kaiser-Meyer values were higher than the suggested levels, and Bartlett's Test of Sphericity was statistically significant, indicating the adequacy of the correlation matrix.

On the other hand, confirmatory factor analysis (CFA) is an analytical tool that allows the researcher to explore hypotheses about what constructs the question test is measuring and provides an empirical basis for scientific interpretation (Everitt and Skrondal 2011:161). The function of CFA is to evaluate how well the latent (unobserved)variables are measured by the observed variables (Kolesnikov 2009). As such, CFA is seen as a “complex and sophisticated set of techniques used in the research process to test specific hypotheses or theories concerning the structure underlying a set of variables” (Shrestha 2021:4). In this study, the CFA was applied to validate the identified constructs from the EFA analysis.

3.14.3 One-way Analysis of variance

Equally, an Analysis of variance (ANOVA) was computed to test the relationship between the demographic variables and the identified constructs. According to Leedy and Ormrod (2015: 259), ANOVA is a statistical procedure used to calculate variation (difference) within a data set and then assess how that variation translates into variation across the groups.

3.14.4 Structural equation model

Added to the above, structural equation modelling (SEM) was computed to identify which of the constructs predicts service quality in the selected university. Structural equation modelling is a statistical procedure for testing relationships between observed (measured) and unobserved (latent) variables (Leedy and Ormrod 2015: 259). When using structural equation modelling, all scales should have a minimum of three measurement items (Hair *et al.* 2017: 614). Therefore, the researcher considered a five-point scale. The SEM was analysed using AMOS software (IBM version 28). The general model fit in both measurements, and the structural model is examined using goodness-of-fit indices, including the Chi-square ratio, which controls the model complexity, Comparative fit index (CFI), Normed Fit Index (NFI), Tucker Lewis Index (TLI), Incremental Fit Index (IFI) and Root Mean Square Error of Approximation (RMSEA).

3.15 SUMMARY AND CONCLUSION

The above chapter presented the research design and the methodology chosen for the study. In addition, the chapter provides a detailed explanation of how the researcher aims to carry out the research process and data collection. The instrument of data collection and the process of development of the questionnaire were also detailed in the chapter.

The next chapter discusses the analysis and interpretation of the study findings.

CHAPTER FOUR: INTERPRETATION OF THE FINDINGS

4.1 INTRODUCTION

This chapter presents the results and interprets the data gathered on the factors influencing consumer decision-making concerning green FMCG products. In this study, the questionnaire was the primary tool used to collect data and was distributed electronically via survey monkey on social media platforms to users within Durban, South Africa. The data collected from the responses were analysed with SPSS (version 28®) concerning the objectives outlined in Chapter one.

For ease of interpretation, the presentation of the results is structured in three parts. The first part provides the demographic information of the respondents. The second part details the empirical finding of the study, while the third part presents the theoretical result of the study. In total, 381 respondents completed the electronic survey, constituting a high response rate of 98.96%.

4.2 DEMOGRAPHIC CHARACTERISTICS

This section details the social demographic characteristics of the respondents.

4.2.1 Age group

As shown in Table 4.1, 44.1% of the respondents were within 25-34 years of age, 24.9% were within 18-24 years, 11.3% were within 35-44 years of age, while those within 45-54 years of age, 55-64 years of age, and 65 and above years of age were 8.4%, 8.1%, and 3.1%, respectively. Overall, the analysis indicates that the majority, 80.3%, are in their youthful age (18 years age - 44 years age).

Table 4. 1: Age group of the respondents

		Frequency	Percent
Age group	18-24	95	24.9
	25-34	168	44.1
	35-44	43	11.3
	45-54	32	8.4
	55-64	31	8.1
	65+	12	3.1
	Total	381	100.0

4.2.2 Gender

The gender of the respondents is shown in Table 4.2. Most of the respondents, 60.4%, were females, while males constituted only 39.6%.

Table 4. 2: Gender of respondents

		Frequency	Percent
Gender	Female	230	60.4
	Male	151	39.6
	Total	381	100.0

4.2.3 Highest Qualification

The highest qualification of the respondents is given in Table 4.3. The data show that most (37.5%) had a Graduate qualification, 28.1% had a postgraduate qualification,

26.2% had Matric (Grade 12 National Certificate), 2.9% held below Matric Certificate, and 0.3% had no form of education. In addition, 5% indicated having other types of qualifications. The analysis suggests that many respondents hold a post Matric level qualification.

Table 4. 3: Respondents' highest qualification

		Frequency	Percent
Qualification	No formal education	1	0.3
	Below Matric	11	2.9
	Matric	100	26.2
	Graduate	143	37.5
	Postgraduate	107	28.1
	Other	19	5.0
	Total	381	100

4.2.4 Average monthly income

The average monthly income of the respondents is detailed in Table 4.4. The data show that most (41.2%) earn on average between R10000 and R29999, 24.1% earn on average between R3000 and R9999, 17.8% earn on average between R30000 or greater, and 16.8% earn on average less than R3000.

Table 4. 4: Respondents' average monthly income

		Frequency	Percent
Income	Income <R3000 per month	64	16.8
	Between R 3 000 and R 9 999	92	24.1
	Between R 10 000 and R 29 999	157	41.2
	R 30 000 or Greater	66	17.8
	Total	381	100

4.2.5 Area of residence

As shown in Table 4.5, most (89.8%) of the respondents reside in the Suburban area of Durban, 4.5% in the Central Business District, 3.9% live in Township, and 1.8% are Rural dwellers.

Table 4. 5: Respondents' area of residence.

		Frequency	Percent
Area	Rural	7	1.8
	Township	15	3.9
	CBD - Central Business District	17	4.5
	Sub-urban	342	89.8
	Total	381	100.0

4.3 RELIABILITY OF THE RESEARCH INSTRUMENT

Before discussing the study's empirical and theoretical findings, this section deliberately focused on reliability. Reliability was analysed by estimating the coefficient of several items measuring the same constructs. For example, a reliability coefficient with Cronbach's α of 0.6.70 indicates an acceptable level of reliability and 0.8 or higher is an excellent level (Ursachi *et al.* 2015: 681).

Table 4. 6**: Reliability of the study questionnaire**

Section	Sub-section	N of Items	Cronbach's Alpha
Marketing MIX Factors	Promotion	3	0.643
	Product values	3	0.784
	Pricing	3	0.890
	Place	2	0.231
Decision making	Attitude	3	0.988
	Intention	3	0.864
	Purchase behaviour	3	0.988

The internal consistency of the survey instrument's constructs was assessed using the calculated Cronbach's coefficients. Cronbach's alpha for the items measuring promotion (alpha=0.643) and product values (alpha=0.784), as reported in Table 4.6, was higher than the permitted minimum value. The Cronbach's alpha values were very good for the following items: measurement and pricing (=0.890), attitude (=0.890), intention (=0.890), and green purchase behaviour (=0.890). This shows some degree of uniformity in the respondents' scoring of the items. The items assessing place Cronbach's, however (=0.231), fell below the permissible level. It may be attributable

to some level of inconsistency in the scoring pattern of the respondents on statements measuring place.

4.4 ANALYSIS BASED ON EMPIRICAL FINDINGS

The analysis and presentation of results based on the empirical findings are presented in this section. The empirical analysis was structured in two parts. The first part presents the findings of the marketing mix elements (4Ps), while the second part presents the results of the factors influencing green purchase decision-making.

4.4.1 Marketing mix factors

This section reports on the marketing mix factors. The marketing mix examination includes promotion, product values, price, and place. It sought to answer the first objective, assessing the influence of the green marketing mix on purchase behaviour towards green FMCG products. A Chi-square test was performed to determine if the respondents' responses per options (strongly disagree, disagree, neither agree nor disagree, agree and strongly agree) were different. The results were first presented in percentages and further analysed based on the level of agreement or disagreement.

4.4.1.1 promotion

The scoring pattern of the respondents on the statements measuring the influence of promotion on a green product purchase decision. Most of the respondents, 84.8%, agreed (agree=55.4%; strongly agree=29.4%) that advertisements for green FMCG products are effective in creating environmental awareness. Equally, many (60.1%) of the respondents indicated (agree=36.7%; strongly agree=23.4%) that they often look for product labelling/packaging (certifications) before making a purchase. Hence, it was understandable that the majority (84%) acknowledged (agree=51.2%; strongly agree=32.8%) that product packaging and labelling assist them in making an informed decision about what they would purchase.

The mean values shown in Table 4.7 suggests that the respondents "agree" with the statements. The 1st statement had the highest mean score, which offers more respondents believe that advertisements for green FMCG products are more effective in creating environmental awareness than any of the other statements. The Chi-

Square test indicates that all of the assertions had statistically significant score patterns (p< 0.001) based on the degree of significance shown in Table 4.7.

Table 4. 7: Respondents' rating on the influence of promotion on green product awareness and purchase

Focus Area Question	Influence of promotion (n = 381)					Mean	Std.	*P*-value
	SD	D	NAD	A	SA			
Advertisements for green FMCG products are effective in creating environmental awareness (PM1)	0.5%.	4.2%	10.5%	55.4%	29.4%	4.09	0.780	0.000***
I often look for product labelling/packaging (certifications) before making a purchase (PM2)	3.4%	14.4%	22%	36.7%	23.4%	3.62	1.095	0.000***
Product packaging and labelling assist me in making an informed decision about what I am going to purchase (PM3)	1.0%	5.2%	9.7%	51.2%	32.8%	4.09	0.850	0.000***
P*** <1% Likert scale= Strongly Agree (SA), Agree (A), Neither agree nor disagree (NAD), Disagree (D), Strongly Disagree (SD)								

4.4.1.2 Product values

The scoring pattern of the respondents on the statements measuring the influence products have on the green product purchase decision is given in Table 4.8. The majority (74.5%) of the respondents indicated (agree=48%; strongly agree=26.5%) that green FMCG products are better than conventional FMCG products. Similarly, most (76.9%) of the respondents agreed (agree=49.6%; strongly agree=27.3%) that Green FMCG products are healthy. There was agreement (agree= 55.9%; strongly agree=33.9%) by most (89.8%) of the respondents that green FMCG products are beneficial to the environment

The mean values measured for all the statements are greater than 3.5. It means that the respondents "agree" with the statements. The 3rd statement, "Green FMCG products are beneficial to the environment", had the highest mean value. The Chi-Square test indicates that all of the assertions had statistically significant score patterns (p< 0.001) based on the degree of significance shown in Table 4.8.

Table 4. 8: Respondents' rating on the influence of product on green product awareness and purchase

Focus Area Question	Influence of product values (n = 381)					Mean	Std.	*P*-value
	SD	D	NAD	A	SA			
Green FMCG products are better than conventional FMCG products	0.3%	2.6%	22.6%	48%	26.5%	4.28	0.788	0.000***
Green FMCG products are healthy	0.3%	1.6%	21.3%	49.6%	27.3%	4.03	0.757	0.000***
Green FMCG products are beneficial to the environment	0.3%	1.0%	8.9%	55.9%	33.9%	3.96	0.668	0.000***

P*** <1%
Likert scale= Strongly Agree (SA), Agree (A), Neither agree nor disagree (NAD), Disagree (D), Strongly Disagree (SD)

4.4.1.3 Pricing

The scoring pattern of the respondents on the statements measuring the influence of pricing on the green product purchase decision is given in Table 4.9. Many of the respondents 69.3% agreed (agree=36.5%; strongly agree=32.8%) that green FMCG products are highly-priced, while 24.4% neither agree nor disagree, and only 6.3% in disagreement (strongly disagree=0.5%; disagree=5.8%). It suggests that many respondents assumed that green FMCG products are highly-priced. More so, many of the respondents 70.3% believed (agree=45.4%; strongly agree=24.9%) that the price of green FMCG products affects their purchasing decision, while 21.3% were neutral, and only 8.3% disagreed (strongly disagree=1%; disagree=7.3%). The high percentage of those in agreement suggest that green product price affects the respondents' purchase decision.

Equally, most (70.1%) of the respondents agreed (agree=44.6%; strongly agree=25.5%) with the price of green FMCG products commensurate with its benefits, while 21.3% were neutral, and only 8.7% were disagreement (strongly disagree=1.6%; disagree=7.1%). The high percentage of agreement is indicative that respondents commensurate the price of green products to the benefits the products offer. Thus, if

the products have good benefits, consumers would be willing to pay the commensurate price for them.

The mean values for two of the statements are greater than 3.5. It means that the respondents "agree" with the statements. It can also be gathered that 1st statement had the highest mean value, which suggests that more of the respondents believe green FMCG products are highly-priced. The Chi-Square test indicates that all of the assertions had statistically significant score patterns ($p < 0.001$) based on the degree of significance shown in Table 4.9.

Table 4. 9: Respondents' rating on the influence of pricing on green product awareness and purchase

Focus Area Question	Influence of pricing (n = 381)					Mean	Std.	*P*-value
	SD	D	NAD	A	SA			
Green FMCG products are highly priced	0.5%	5.8%	24.4%	36.5%	32.8%	3.95	0.922	0.000***
The price of green FMCG products affects my purchasing decision	1.0%	7.3%	21.3%	45.4%	24.9%	3.86	0.912	0.000***
The price of green FMCG products commensurate with their benefits	1.6%	7.1%	21.3%	44.6%	25.5%	3.85	0.934	0.000***

P ***<1%
Likert scale= Strongly Agree (SA), Agree (A), Neither agree nor disagree (NAD), Disagree (D), Strongly Disagree (SD)

4.4.1.4 Place

The scoring pattern of the respondents on the statements measuring the influence of place on the green product purchase decision is given in Table 4.10. A mixed reaction to the statement, "Green FMCG products are easily accessible in stores. It emerged that while 31.5% disagreed (strongly disagree=1.6%; disagree=29.9%), 33.6% others neither disagree nor agree, and 34.9% supported the statement (agree=28.3%; strongly agree=6.6%). It is supported by 61.4% who disagreed (strongly disagree=11.5%; disagree=49.9%) with the statement that lack of accessibility to green FMCG products does not prevent them from purchasing the products. It thus meant that lack of accessibility prevented the respondents from purchasing green FMCG products

The mean value measured for the 1st statement was closest to 'neutral'. It suggests that the respondents did not agree or disagree with the statement. However, the mean value for the 2nd statement was below 3, which indicates that many of the respondents 'agree' that lack of accessibility to green FMCG products indeed prevents them from purchasing green products. Based on the level of significance indicated in Table 4.10, the Chi-Square test suggested that there was a statistically significant scoring pattern for the 2nd statement (P<0.01) while there was no difference in the 1st statement (P>0.05).

Table 4. 10: Respondents' rating on the influence of place on green product awareness and purchase

Focus Area Question	Influence of place (n = 46)					Mean	Std.	*P*-value
	SD	D	NAD	A	SA			
Green FMCG products are easily accessible in stores	1.6%	29.9%	33.6%	28.3%	6.6%	3.08	0.935	0.951*
The lack of accessibility to green FMCG products does not prevent me from purchasing green products	11.5%	49.9%	28.3%	9.2%	1.0%	2.83	0.846	0.000***
P ***<1% P *>5% Likert scale= Strongly Agree (SA), Agree (A), Neither agree nor disagree (NAD), Disagree (D), Strongly Disagree (SD)								

4.4.1.5 Relationship between socio-demographic variables and green marketing mix

This section examines the relationship between the socio-demographic variables (age, education, gender, monthly income, and location) and the four-marketing mix (promotion, product values, pricing, and place. One-way Analysis of Variance (ANOVA) was used to compare the mean differences between the marketing mix construct and the identified socio-demographic variables. The results are summarised in Table 4.11

The ANOVA results suggest that there were no significant differences measured between the respondent's gender, age group, monthly income, and the marketing mix elements (product value, price, promotion, and place) (P>0.05). It suggests that regardless of the respondent's gender, age group, and monthly income, their views on

the marketing mix elements in their purchase decision are the same. However, there were statistically significant differences between the respondent's residence and the influence placed on green FMCG products (P=0.037). It suggests that the scoring of the statements that measured the place of green products differs by the respondent's residence. It was found that the mean value for those who reside in the CBD (M=3.06±0.58) was the highest, while those living in sub-urban had the lowest mean (M=2.70±0.67). It suggests that more respondents from the CBD sub-urban disagreed that the place of green products influences their purchase decision.

Table 4. 11: The level of relationship existing between socio-demographic variables and place of green product

Demographics	Perceived values		Perceived price		*Perceived promotion*		*Perceived place*	
	Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*	*Mean*	*SD*
Gender								
Female	4.08	0.59	3.93	0.83	3.96	0.69	2.73	0.65
Male	4.06	0.66	3.82	0.84	3.90	0.72	2.74	0.71
F ratio	0.059		1.498		0.774		0.036	
Sig.	(0.809)		(0.222)		(0.380)		(0.849)	
Age								
18–24 years	4.05	0.61	3.84	0.87	3.88	0.64	2.71	0.56
25–34 years	4.01	0.61	3.98	0.81	3.87	0.73	2.67	0.71
35–44 years	4.03	0.65	3.77	0.76	4.03	0.64	2.86	0.66
45–54 years	4.24	0.59	3.95	0.84	4.04	0.66	2.84	0.79
55-64 years	4.24	0.66	3.69	0.88	4.12	0.83	2.81	0.65
65 years and more	4.42	0.49	3.72	0.98	4.17	0.66	2.88	0.57
F ratio	2.068		1.175		1.396		0.981	
Sig.	(0.069)		(0.321)		(0.225)		(0.429)	
Education								
No formal education	3.33	0.00	4.00	0.00	3.33	0.00	3.00	0.00
Below matric	4.45	0.52	3.45	1.06	4.24	0.56	3.00	0.55
Matric	4.11	0.57	3.94	0.87	4.08	0.71	2.80	0.65
Graduate	4.05	0.60	3.91	0.79	3.85	0.70	2.67	0.66
Postgraduate	4.07	0.69	3.87	0.82	3.87	0.70	2.73	0.73
Other	3.95	0.62	3.81	0.95	4.02	0.61	2.76	0.63
F ratio	1.396		0.750		2.157		0.822	
Sig.	(0.225)		(0.587)		(0.058)		(0.532)	
Income (net per month)								
Less than 3000 rand	4.13	0.61	3.76	0.90	4.05	0.65	2.83	0.61
3000-9999 rand	4.00	0.52	4.00	0.80	3.94	0.70	2.71	0.63
10000-29,999 rand	4.10	0.63	3.94	0.80	3.96	0.64	2.69	0.70
30,000 or more rand	4.10	0.72	3.84	0.89	3.75	0.88	2.70	0.72
F ratio	0.784		1.308		2.154		0.660	
Sig.	(0.504)		(0.271)		(0.093)		(0.577)	
Residence								
Rural	4.238	0.630	3.714	1.062	4.33	0.67	2.91	0.61
Township	4.178	0.689	3.378	1.023	4.31	0.57	3.03	0.69

CBD	3.922	0.584	3.824	0.898	3.92	0.60	3.06	0.58
Sub-urban	4.073	0.617	3.916	0.815	3.91	0.71	2.70	0.67
F ratio	0.649		2.149		2.381		2.853	
Sig.	(0.584)		(0.094)		(0.069)		(**0.037****)	

4.4.1.6 Association among elements of the marketing mix

This section examines the association among the various marketing mix elements (4Ps). A Pearson correlation was used to assess the elements' relationship (Table 4.12). It was found that promotion correlates with product value (r=0.379; P<0.01). It implies that as the promotion of green products increases, the product value increases and vice versa. Although promotion correlates with the place, the association was weak (r=0.107; P=0.036). In addition, there was a weak association between the product value and the price of green products (r=0.162; P=0.002). However, the place of green products was negatively associated with the price (r=-0.324; P<0.01). It implies that as place increases (agreement that places influence green product purchase), the price decreases (agreement that price influences green product purchase.

Table 4. 12: Pearson correlation showing the associating existing among elements of the marketing mix

		Promotion	Values	Price	Place
Promotion	Pearson Correlation	1	.379**	-.005	.107*
	Sig. (2-tailed)		<.001	.916	.036
	N	381	381	381	381
Values	Pearson Correlation	.379**	1	.162**	-.034
	Sig. (2-tailed)	<.001		.002	.508
	N	381	381	381	381
Price	Pearson Correlation	-.005	.162**	1	-.324**
	Sig. (2-tailed)	.916	.002		<.001
	N	381	381	381	381
Place	Pearson Correlation	.107*	-.034	-.324**	1
	Sig. (2-tailed)	.036	.508	<.001	
	N	381	381	381	381
**. Correlation is significant at the 0.01 level (2-tailed).					
*. Correlation is significant at the 0.05 level (2-tailed).					

4.4.2 Factors influencing the green product decision-making process

This section reports the factors influencing the respondents' decision-making for green FMCG products. The factors include pro-environmental attitudes, green purchase

intention and green purchase behaviour. In addition, it sought to answer the third objective, which is to assess the influence of knowledge on consumer purchase behaviour towards green FMCG products. A Chi-square test was performed to determine if the respondents' responses per options (strongly disagree, disagree, neither agree nor disagree, agree and strongly agree) were different. The results were first presented in percentages and further analysed based on the level of agreement or disagreement.

4.4.2.1 Pro-environmental attitude

The scoring pattern of the respondents on the statements measuring the influence of pro-environmental attitudes on the green product purchase decision is given in Table 4.13. Many of the respondents 68.2% agreed (agree=45.1%; strongly agree=23.1%) that green FMCG protects the environment, while 23.1% neither agree nor disagree, and only 8.6% in disagreement (strongly disagree=1.0%; disagree=7.6%). It implies that a good percentage of the respondents believe that green FMCG products protect the environment. In addition, there was agreement (agree=44.6%; strongly agree=23.6%) by most of the respondents (68.2%) that green FMCG meets environmental expectations, while 23.1% were neutral, and only 8.6% disagreed (strongly disagree=1.3%; disagree=7.3%). The high percentage of those in agreement suggest that green product meets environmental expectations.

There was agreement (agree=45.7%; strongly agree=22.8%) by most (68.5%) of the respondents that they often think about how the environment can be sustained and improved, while 23.1% were neutral, and only 8.4% disagreed (strongly disagree=0.5%; disagree=7.9%). The high percentage of agreement is indicative that respondents are environmentally conscious consumers.

The mean values for two of the statements are greater than 3.5. The respondents "agree" with the statements and thus demonstrate pro-environmental attitudes towards the environment. Based on the level of significance indicated in Table 4.13, the Chi-Square test suggested a statistically significant scoring pattern for all the statements ($P<0.01$).

Table 4. 13: Respondents' rating on the influence of pro-environmental attitudes, green product awareness, and purchase

Focus Area Question	Pro-environmental attitude (n = 381)					Mean	Std.	*P*-value
	SD	D	NAD	A	SA			
Green FMCG protects the environment	1.0%	7.6%	23.1%	45.1%	23.1%	3.82	0.91	0.000***
Green FMCG meets environmental expectations	1.3%	7.3%	23.1%	44.6%	23.6%	3.82	0.92	0.000***
I often think about how the environment can be sustained and improved.	0.5%	7.9%	23.1%	45.7%	22.8%	3.82	0.89	0.000***
P ***<1% Likert scale= Strongly Agree (SA), Agree (A), Neither agree nor disagree (NAD), Disagree (D), Strongly Disagree (SD)								

4.4.2.2 Purchase intention

The scoring pattern of the respondents on the statements measuring their purchase intention is given in Table 4.14. Many of the respondents (87.9%) agreed (agree=44.1%; strongly agree=43.8%) with the statement, "I am more willing to purchase an FMCG product that is beneficial to my health, in comparison to a product that is not". It suggests that many of the respondents will purchase FMCG products that benefit their health. In addition, there was agreement by most (78.7%) of the respondents with "I am more willing to purchase an FMCG product that is beneficial to the environment, in comparison to a product that is not". It implies that a significant percentage of the respondents will purchase FMCG product that is beneficial to the environment.

There was significant agreement by most (79%) of the respondents with the statement, "I am more willing to purchase an FMCG product that will sustain the environment, in comparison to a product that is not". The high percentage of the agreement indicates that respondents intend to purchase environmentally sustainable products.

The finding is also supported by the mean values shown in Table 4.14, which were all responses for the three statements above 3.5. It means that the respondents "agree" with the statements. It can also be gathered that 1st statement had the highest mean

value, which suggests that more of the respondents have the intention to purchase products that are beneficial to their health. The Chi-Square test indicates a statistically significant difference for two statements (p< 0.001) based on the degree of significance shown in Table 4.14.

Table 4. 14: Respondents' rating on purchase intention

Focus Area Question	Purchase intention (n = 381)					Mean	Std.	*P*-value
	SD	D	NAD	A	SA			
I am more willing to purchase an FMCG product that benefits my health than a product that is not.	0.3%	2.9%	8.9%	44.1%	43.8%	4.28	0.77	0.000***
I am more willing to purchase an FMCG product that is beneficial to the environment in comparison to a product that is not	0.8%	6.6%	13.9%	47.2%	31.5%	4.02	0.88	0.000***
I am more willing to purchase an FMCG product that will sustain the environment in comparison to a product that is not	0.5%	6.3%	14.2%	47.2%	31.8%	4.03	0.87	0.000***

P ***<1%
Likert scale= Strongly Agree (SA), Agree (A), Neither agree nor disagree (NAD), Disagree (D), Strongly Disagree (SD)

4.4.2.3 Purchase behaviour

The scoring pattern of the respondents on the statements measuring the actual purchase behaviour is given in Table 4.15. There was agreement by most of the respondents with the statement "I am motivated to purchase eco-friendly FMCG products" (77.7%), "Green marketing motivates me to purchase green FMCG consumer goods" (77.4%), and "I have resources, time, and opportunities to purchase green FMCG products" (77.7%).

The above is further supported by the mean values in Table 4.15, which were all above 3.5. It means that the respondents "agree" with the statements. It can also be gathered that 1st statement had the highest mean value, which suggests that more of the respondents believe they are motivated to purchase eco-friendly products. Finally, the

Chi-Square test indicates a statistically significant difference for two statements (p< 0.001) based on the degree of significance shown in Table 4.15.

Table 4. 15: Respondents' rating on purchase behaviour

Focus Area Question	Purchase behaviour (n = 381)					Mean	Std.	*P*-value
	SD	D	NAD	A	SA			
I am motivated to purchase eco-friendly FMCG products.	1.6%	5.2%	15.5%	54.9%	22.8%	3.92	0.86	0.000***
Green marketing motivates me to purchase green FMCG consumer goods.	1.3%	5.8%	15.5%	55.6%	21.8%	3.91	0.85	0.000***
I have resources, time, and opportunities to purchase green FMCG products.	1.3%	5.5%	15.5%	54.6%	23.1%	3.93	0.85	0.000***

P ***<1%
Likert scale= Strongly Agree (SA), Agree (A), Neither agree nor disagree (NAD), Disagree (D), Strongly Disagree (SD)

4.4.2.4 Relationship between socio-demographic variables and factors influencing purchase decision

This section examines the relationship between the socio-demographic variables (age, education, gender, monthly income, and location) and the factors influencing green FMCG product purchase decisions (pro-environmental attitude, purchase intention, and purchase behaviour).

Regarding pro-environmental attitude, no significant difference was found for all the socio-demographic variables (P>0.05). In terms of purchase intention, no difference was found for the respondents' gender, education, residence, monthly income, and purchase intention (P>0.05). However, there were statistically significant differences in the respondents' age group and their purchase intention (p<0.001). It suggests that the scoring of the statements that measured purchase intention differs by the respondent's age group. Furthermore, it was found that the mean value for older respondents was higher compared to those found for younger ones. It implies that older respondents have greater purchase intentions than younger ones.

Regarding the respondents' purchase behaviour, no difference was found for gender, age group, income, and residence (P>0.05). However, there was a statistically

significant difference in the respondents' education level and purchase behaviour (P=0.028). Furthermore, it was found that respondents with a postgraduate level of qualification (M=3.98±0.63) had the highest agreement on purchase behaviour, while the lowest was found for those with no education (M=1.67±0.00).

Table 4. 16: The level of relationship existing between socio-demographic variables and place of green product

	Pro-environmental attitude		Purchase intention		Purchase behaviour	
Demographics	*M*	*SD*	*M*	*SD*	*M*	*SD*
Gender						
Female	3.81	0.89	4.12	0.74	3.95	0.79
Male	3.83	0.86	4.10	0.76	3.87	0.90
F ratio	0.033		0.110		1.007	
Sig.	(0.857)		(0.740)		(0.316)	
Age						
18-24 years	3.73	0.98	3.99	0.82	3.96	0.93
25-34 years	3.83	0.89	3.97	0.76	3.89	0.84
35-44 years	3.81	0.90	4.34	0.57	3.84	0.75
45-54 years	4.01	0.87	4.47	0.53	4.01	0.74
55-64 years	3.77	0.79	4.45	0.62	3.92	0.88
65 years and more	4.06	0.72	4.47	0.46	4.06	0.63
F ratio	0.665		6.252		0.302	
Sig.	(0.651)		(0.000*)		(0.911)	
Education						
No education	4.33	0.00	2.67	0.00	1.67	0.00
Below matric	4.00	0.75	4.61	0.47	4.18	0.87
Matric	3.92	0.95	4.16	0.78	4.00	0.73
Graduate	3.84	0.87	4.08	0.71	3.95	0.81
Postgraduate	3.69	0.91	4.06	0.78	3.78	0.96
Other	3.75	0.82	4.21	0.65	3.98	0.63
F ratio	0.832		2.029		0.074	
Sig.	(0.527)		(0.074)		(0.028*)	
Income (net per month)						
Less than 3000 rand	3.891	0.889	4.146	0.797	3.927	0.839
3000-9999 rand	3.712	0.876	4.041	0.728	3.903	0.780
10000-29,999 rand	3.895	0.920	4.113	0.716	3.933	0.848
30,000 or more rand	3.776	0.886	4.154	0.817	3.906	0.921
F ratio	0.962		0.375		0.032	
Sig.	(0.411)		(0.771)		(0.992)	
Residence						
Rural	4.289	0.756	4.289	0.848	4.286	0.756
Township	3.956	1.227	4.511	0.589	3.844	1.208
CBD	3.647	0.702	3.961	0.576	3.824	0.809
Sub-urban	3.817	0.893	4.094	0.757	3.918	0.826
F ratio	0.949		1.851		0.555	
Sig.	(0.417)		(0.138)		(0.645)	

4.5 THEORETICAL FINDINGS AND HYPOTHESES TESTING

The analysis and presentation of results based on the theoretical findings and hypothesis testing for the study are presented in this section. Structural equation modelling (SEM) was used to test the proposed model. The testing of the proposed measurement model was carried out in two stages. The first stage entails testing the measurement model and confirming its validity and reliability of the measurement model. The stage involves testing the structural path model. The model fit indices are found to test the models' suitability at both stages (measurement and structural).

4.5.1 Scale reliability and construct validity of the measurement model

Both exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were carried out using the AMOS 27 program to evaluate the dimensionality, validity, and reliability of the components (perceived intention, perceived value, perceived price, pro-environmental attitudes, and purchase behaviour). Cronbach's alpha was used to evaluate the scale dependability of the five constructs. The Cronbach's alpha for the five constructs ranged from 0.784-0.988, as reported in Table 4.17. It met the condition for internal consistency of the scale reliability (Hair *et al.* 2015: 600). Additionally, each of the constructs' mean values for the elements was higher than 3. The mean value measured for perceived intention ranged from 4.02-4.28, perceived value ranged from 3.98-4.22, perceived price ranged from 3.85-3.95, actual purchase behaviour ranged from 3.91-3.93, and perceived attitude were all 3.82, which suggests that there was strong agreement in all the items in the constructs.

Table 4. 17: Factor loading coefficient, Cronbach's alpha, the mean and standard deviation of the constructs

CONSTRUCT	Measured variables		Factor Loadings	Mean (SD)	Cronbach's Alpha
Perceived Intention	I1	I am more willing to purchase an FMCG product that benefits my health than a product that is not.	.706	4.28 (0.767)	0.864
	I2	I am more willing to purchase an FMCG product that is beneficial to the environment in comparison to a product that is not	.909	4.02 (0.888)	
	I3	I am more willing to purchase an FMCG product that will sustain the environment in comparison to a product that is not	.904	4.03 (0.871)	
Perceived Value	V1	Green FMCG products are better than conventional FMCG products	.677	3.98 (0.788)	0.784
	V2	Green FMCG products are healthy	.833	4.02 (0.757)	
	V3	Green FMCG products are beneficial to the environment	.832	4.22 (0.668)	
Perceived price	P1	Green FMCG products are highly priced	.787	3.95 (0.922)	0.890
	P2	The price of green FMCG products affects my purchasing decision	.963	3.86 (0.912)	
	P3	The price of green FMCG products commensurate with their benefits	.954	3.85 (0.934)	
Purchase behaviour	B1	I am motivated to purchase eco-friendly FMCG products.	.924	3.92 (0.855)	0.988
	B2	Green marketing motivates me to purchase green FMCG consumer goods.	.921	3.91 (0.846)	
	B3	I have resources, time, and opportunities to purchase green FMCG products.	.927	3.93 (0.849)	
Perceived attitude	A1	Green FMCG protects the environment	.950	3.82 (0.911)	0.988
	A2	Green FMCG meets environmental expectations	.940	3.82 (0.921)	
	A3	I often think about how the environment can be sustained and improved.	.951	3.82 (0.890)	

Table 4.18 presents information regarding the construct validity of the measurement model. Estimating convergent and discriminant validity measures allowed for the evaluation of the construct validity. All measurement components, latent variables, loadings, composite reliability, average extracted variance (AVE), and maximum

shared square variance are included (MSV). Using CFA, the analysis investigates how to quantify the latent constructs obtained from the measured variables (Everitt and Skrondal 2010: 365). When composite reliability exceeds the average variance extracted (AVE) and the AVE is more than 0.5, convergent validity is achieved (Mimouni-Chaabane and Volle 2010: 34). The same is true for discriminant validity, which is reached when AVE exceeds the maximum shared square variance (MSV). All latent variables have AVE values above the cutoff of 0.5, in the range of 0.567 to 0.966 (Mimouni-Chaabane and Volle 2010: 34). This shows that the convergent validity of all latent variables is acceptable. It may be concluded that the latent variables have sufficient discriminant validity because the value of the AVE for each concept is higher than MSV values. Additionally, all constructs' combined reliability is higher than the 0.70 limits, indicating satisfactory reliability (Alalwan *et al.* 2018: 128). Therefore, it may be claimed that the measuring model's construct validity is high.

Table 4. 18: Composite reliability, average variance extracted, and maximum shared square values

	Cronbach's alpha	CR	AVE	MSV	MaxR(H)	Behaviour	Intention	Attitude	Price	Value
Behaviour	0.988	0.988	0.965	0.271	0.989	**0.982**				
Intention	0.864	0.888	0.737	0.208	0.988	0.405	**0.859**			
Attitude	0.988	0.989	0.966	0.204	0.991	0.452	0.347	**0.983**		
Price	0.890	0.909	0.776	0.028	0.998	0.011	-0.004	0.064	**0.881**	
Value	0.784	0.796	0.567	0.271	0.811	0.521	0.456	0.378	0.166	**0.753**

The overall fit of the model was assessed by multiple fit criteria. The normed chi-square (cmindf) is an absolute fit index obtained by dividing χ^2 by df. It is recommended that a cmindf be acceptable, the value should be greater than 1 but less than 5 (Hair *et al.* 2015: 600). Another fit index used is the Goodness of fit index (GFI). Hu and Bentler (1999) recommended the GFI value to be ≥0.9. The third fitness index used is the Comparative fit index (CFI). Alalwan *et al*. (2018: 128) recommended the acceptable value to be ≥0.9. The Tucker–Lewis index (TLI) was also used to assess the model's fitness. Hair et al. (2015) recommended a cut-off value for the TLI to be ≥0.9. The final fit index is the Root mean square error of approximation (RMSEA). The RMSEA value is recommended to be between 0.05 and 0.08 (Mimouni-Chaabane and Volle 2010: 34). The model fit indices are as follows: chi-square = 188.241; df =

80; cmindf=2.353; CFI = 0.986; GFI=0.940; TLI = 0.981; RMSEA =0.060, which suggests that the measurement model is acceptable.

4.5.2 Hypotheses testing

The second data analysis stage involved converting the measurement model found in stage 1 into a path model that shows the relationships between the latent variables (Figure 4.1). This path model is then used to test the effect of the independent variables (IVs) on the dependent variables (DVs). An SEM was also employed to test all the hypothesised relationships among the latent variables. It was utilised given that SEM allows simultaneous evaluation of multiple related independent and dependent relationships and considers measurement estimates among the constructs (Hair *et al.* 2009). The resulting SEM with estimated standardised relationships is given in Figure 4.1. The goodness-of-fitness indices are as follows: chi-square = 188.241; df = 80; cmindf=3.366; CFI = 0.974; GFI=0.914; TLI = 0.967; RMSEA =0.079, which suggests that the measurement model is acceptable.

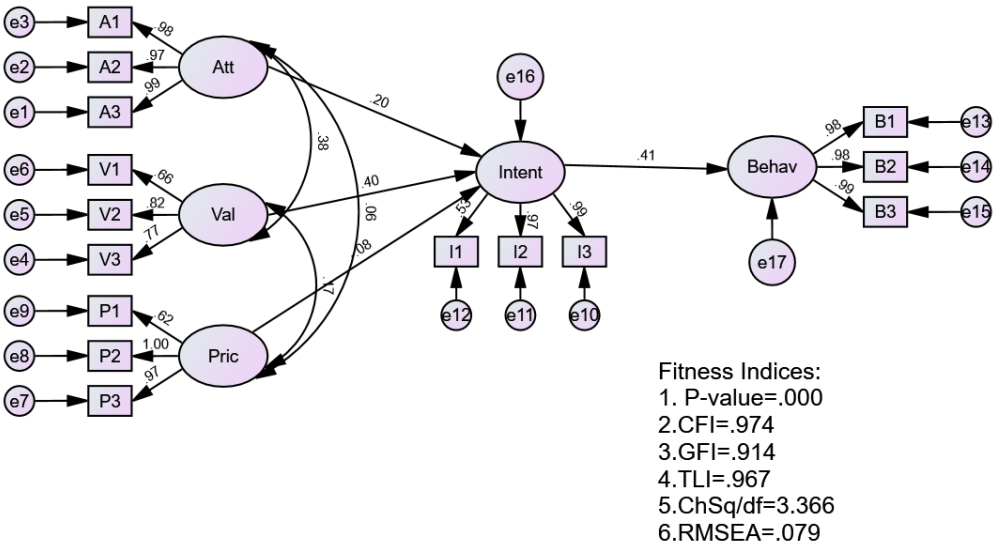

Figure 4. 1: SEM model showing the relationship among the constructs in the proposed model

As shown in Table 4.19, the path from the perceived pro-environmental attitudes and perceived purchase intention was significant ($\beta = 0.222$; $p < 0.001$), implying that respondents with pro-environmental attitudes have the intention to purchase green FMCG products. The decision rule accepts the hypothesis (H1) that states a positive relationship exists between the perceived pro-environmental attitudes and the green purchase intention.

Likewise, the path from the perceived value (quality) to perceived purchase intention was also significant ($\beta = 0.665$; $p < 0.001$), which implies that the respondents who perceived the value (quality) of green FMCG products have the intention to purchase the product. The decision rule thereby is to accept the hypothesis (H2) that states: there is a positive relationship between the perceived pro-environmental attitudes and the green purchase intention

Similarly, the path from perceived purchase intention and actual purchase behaviour was significant ($\beta = 0.396$; $p < 0.001$). It indicates that the respondents' purchase intentions directly influence their purchase behaviour. The decision rule, thereby, is to accept the hypothesis (H4) that states: there is a positive relationship between the perceived purchase intention and the actual purchase behaviour of green products.

On the contrary, the path from the perceived price and perceived purchase intention was not significant ($\beta = -0.078$; $P > 0.05$). It implies that the respondents who perceived the price of green FMCG as high do have a decrease in their purchase intention. Therefore, the decision rule rejects the hypothesis (H3) that states a positive relationship exists between the perceived product price and green purchase intention.

Overall, the path from perceived value and purchase intention exhibits the strongest, most direct, and most positive relationship between the latent variables with a factor loading or correlation index of $\beta = .665$, rendering the path the most prominent in the structural framework.

Table 4. 19: Path regression estimate of the proposed model

Hypothesis	Dependent		Independent	**Estimate**	**SE.**	**CR.**	**P**	**Decision**
H1	Perceived purchase intention	<---	Pro-environmental attitudes	.200	.050	4.027	<.001*	Supported
H2	Perceived purchase intention	<---	Perceived Value (quality)	.665	.100	6.628	<.001*	Supported
H3	Perceived purchase intention	<---	Perceived Price	-.078	.044	-1.767	.077	Not supported
H4	Actual purchase behaviour	<---	Perceived purchase intention	.396	.046	8.523	<.001*	Supported

* Indicates significance at 95% level

4.6 CONCLUSION

In summary, the above chapter presented and analysed the data on the factors influencing the consumer decision-making process regarding green FMCG in the greater Durban Area. Various analytical techniques were employed to analyse and present the data, including descriptive and inferential analysis. The descriptive data was first presented, and the demographic using frequency distribution tables. Next, inferential statistics on the research constructs were analysed using One-way Analysis. Finally, structural equation modelling (SEM) was used to fit the model and test the research hypotheses. The following chapter discusses the research findings for the literature and the research objectives.

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.1 INTRODUCTION

This chapter discusses the study's findings, which were presented in the previous chapter. Results in this chapter are presented per the research objectives set out at the beginning of the study, following the logical order prescribed by the research objectives and hypotheses formulated. This section of the study aims to showcase the extent to which the research objectives have been met by providing the findings linked to the hypotheses and conceptual framework.

Extant literature suggests that an individual green consumption habit could effectively minimise the negative impact of consumption on the environment. However, while studies in the past on green FMCG purchase intention and behaviour of consumers were primarily done in the context of developed countries (Niedermeier et al. 2021: 1), there has been a gap in the literature in understanding consumer green purchase behaviour from that of a developing country like South Africa. More particularly, and from South African marketers' perspective, understanding the consumers' purchase intention towards Fast-moving consumer goods that are green is highly important. It is beneficial as it could help eliminate the obstacles in South African consumer green consumption habits. This study, therefore, provides practical implications for FMCG companies in their bid to shift from conventional products to green products.

5.2 THE INFLUENCE OF THE GREEN MARKETING MIX ON PURCHASE BEHAVIOUR TOWARDS GREEN FMCG PRODUCTS

Previous scholars reported that many environmental-friendly convinced consumers would go the extra to pay more for green products due to the health and environmental benefits of the products (Davari and Strutton 2014: 566; Kainz 2016: 8; Scherer *et al.* 2018: 61). Nevertheless, it is critical to note here that although South African consumers (Greater Durban area) are conscious of the environmental and value of green FMCG products but may not be willing to purchase or pay more for these products. It is supported by the finding results that show most (70.3%) of the respondents agree that the price of green products affects their purchasing decision.

This finding may be attributed to the price sensitivity of the consumers in South Africa, which prioritised value for money as a driver of choice (Van Niekerk, 2018: 14). Marketers, as well as companies that offer green products, must, therefore, rethink their strategies, especially concerning the pricing of green FMCG products. More specifically, companies should invest more in providing “special price sales” to attract more consumers to drive their green vision. It is imperative, particularly as corporate social responsibility for manufacturers, wholesalers, and retailers of FMCG products to ensure the products' environmental sustainability through their consumers' consumption habits (Martin-Rios *et al.* 2018: 196).

Moreover, the finding of this study reveals that green FMCG purchase intention is the value and quality the green consumers attach to the products. For example, most of the respondents agreed that green FMCG products are better than conventional FMCG products (74.5%), healthy (76.9%), and beneficial to the environment (89.8%). The finding agrees with other scholars such as Othman and Mallen (2014: 1) and Chikosha (2018: 77) that green products are healthy and of higher quality when compared to conventional ones. It is meant that the value green consumers have for green FMCG, particularly the perceived health benefits derived from green FMCG might have influenced their purchase intention. It is corroborated by Razaa *et al.* (2020: 80) findings that consumer-perceived values play an essential role in developing their purchase behaviour towards green products. The finding also supports the results of Yadav and Pathak (2017: 114), who found that perceived values positively influence consumers’ intention to purchase green products.

In terms of the influence of green promotion, this study's findings revealed significant agreement on the role of promotion in green purchases. For example, most of the respondents (84.8%) agreed that green FMCG product advertisements effectively create environmental awareness. This finding agrees with the core tenant of green advertisement, which is to create environmental awareness (Rahbar and Abdul Wahid 2011: 73). Equally, it was found that most (60.1%) of the respondents agreed to often look for product labelling/packing before making a purchase decision. It may be associated with the fact that green labelling informs customers about the product’s reliability in terms of its environmental commitment (Chuwa and Ibokette 2020: 25).

Moreover, eco-labelling informs consumers that the items in issue are environmentally benign and create minimal environmental harm during their manufacture, usage, or disposal (Khan *et al.* 2020: 1). This could also help explain why most (84%) of the respondents agreed that product packaging and labelling assist them in making an informed decision about what they are going to purchase. The finding was slightly higher than those of Chairunnisa, Fahmi and Jahroh (2019: 325), that eco-friendly labelling persuaded around 70% of buyers to purchase green products. It thus meant that eco-labelling is a significant instrument in the green promotion. From a practical perspective, South African marketers can exploit the advantage of eco-labelling in green promotion and purchase. It concurs with Ahern (2013: 1), which suggests that marketers use eco-labelling as a powerful tool to influence consumer preference and decision-making. It is even more relevant as consumers are enticed emotionally to a product through green advertising (Narula and Desore 2016: 5).

5.3 THE INFLUENCE OF SOCIO-DEMOGRAPHIC CHARACTERISTICS ON CONSUMER PURCHASE INTENTION AND BEHAVIOUR TOWARDS GREEN FMCG PRODUCT

Shahsavar, Kubeš and Baran (2020: 1) assert that segmenting consumers based on their demographic profiles is predicated on the premise that demography may produce various clusters of consumers, each of whom may exhibit different attitudes and purchasing tendencies. In this study, the perceptions of the respondents based on their socio-demographic characteristics were compared with pro-environmental attitudes, purchase intentions and actual purchase behaviour. In contrast, previous studies have found that socio-demographic factors like age, income, location, and gender influence green pro-environmental attitudes (Rajagopal, Mahajan and Priya 2021: 2314). This study did not find any differences. Nevertheless, it was observed from the study findings that older respondents had higher/better pro-environmental attitudes than the younger ones. It is contrary to Akehurst *et al.* (2012: 975), who reported that youth are more environmentally conscious than the older age group. The most likely explanation for this may be associated with the differences in cultural context (Gonzalez *et al.* 2015: 287). Besides, scholars have argued that the role of each socio-demographic variable in influencing pro-environmental behaviour remains contentious. For instance, Hojnik *et al.* (2020: 1695) found that the older consumers get, the higher their pro-environmental commitment. Therefore, it agrees with this

study, showing older respondents had better environmental attitudes towards green FMCG.

Moreover, the respondents' perceptions about green FMCG purchase intention were significantly different by age, while no difference was observed for other socio-demographic variables ($p<0.001$). Older respondents had a higher/better purchase intention of green FMCG products (i.e., more willing to purchase an FMCG product that is beneficial to my health, purchase an FMCG product that is beneficial to the environment, purchase an FMCG product that will sustain the environment) than the younger ones. The plausible explanation for this may be associated with the respondents' mindset being more oriented toward their children, grandchildren, and future on the planet. It can therefore be said that as individuals age, their desire to preserve the environment for future generations to have the possibility to live a quality life also increases (Hojnik *et al.* 2020: 1695).

In contrast to earlier research that indicated a substantial difference between gender and customer views of eco-products, environmental commitment, and green purchase intention (Hojnik et al. 2020), this study found no such difference. It thus implies that gender does not influence how South African consumers purchase green FMCG products. The finding agrees with Ali and Ahmad (2016: 103) observed through research conducted by Tan and Lau (2010) that there is no significant variance in environmental attitudes and attitudes towards greens purchase between male and female respondents. Nevertheless, contrary to the position that women had a higher/better perception of eco-products than men, this study's finding suggests that the male respondents' pro-environmental attitudes were higher/better than females. However, females expressed greater green FMCG product purchase intention and behaviour than male respondents. The finding concurs with Akehurst *et al.* (2012: 975), who revealed that women consumers are more sensitive towards household purchasing than men. As such, females are more willing to purchase green products than men. The finding also agrees with Hojnik *et al.* (2020: 1695), who observe a higher level of green purchase intention among women than men.

In terms of the respondents' education, it was discovered that only the green purchase behaviour seemed to be influenced by the level of education, with consumers with the lowest levels of education (i.e., below matric and matric) expressing more aggressive

purchasing behaviour than those with higher levels of education (i.e., bachelor's degree and postgraduate) as well as those with no education. These results somewhat agree with those of Pinto *et al.* (2011: 112) and Hojnik *et al*. (2020: 1695), who discovered that consumers who buy green products typically had less education.

Furthermore, the results of this study contradict those of Chekima *et al.* (2016: 3436), who discovered that consumers with higher education levels (college and university degrees) seem to have a greater degree of green buy intention than do shoppers with lesser education (high school and lower). Finally, the findings of this study indicate that none of the components of green consumerism is influenced by the respondents' average monthly income or place of residence.

5.4 THE INFLUENCE OF PRO-ENVIRONMENTAL ATTITUDE, PURCHASE INTENTION ON CONSUMER BEHAVIOUR TOWARDS GREEN FMCG

Hojnik *et al.* (2020: 1695) point out that there is a growing market for goods that meet consumers' immediate demands as well as long-term environmental goals. As such, there has been increasing interest among scholars who aimed to investigate the purchasing behaviour of green consumers or the motives for buying green products (Ritter *et al.* 2015: 507; Suki 2016: 2896). It is asserted that buyers evaluate things they want to buy taking into account both their advantages and potential effects on the environment (Hojnik *et al.* 2020: 1695). It implies that even though a product is ecologically friendly, it may still be abandoned if it has a harmful influence on the environment or if it does not meet the needs and wishes of the customer. Consisting with this, it emerged from the study finding that green consumers consider the environmental consequence and the value (quality) of the products in their purchase intention.

Although pro-environmental sentiments are one of the most important influencing elements of pro-environmental behaviour, Andreas Niedermeier *et al.* (2021) argue that such beliefs may not necessarily translate to environmentally friendly buying behaviour. Nevertheless, the finding of this study suggests that the consumers' purchase intention of green FMCG products results in actual behaviour, at least in the case of the greater Durban area, South African consumers. Furthermore, it was found

that green consumers are driven into purchasing green FMCG products through green purchase intention, driven by their pro-environmental attitudes and the perception of the value (quality) of FMCG products (Table 3).

Furthermore, the finding of this study in terms of the influence of pro-environmental attitudes and purchase intention agrees with other scholars who have shown the positive impact of pro-environmental perspectives on the purchase behaviour of green products (Robinot *et al.* 2017; Scherer *et al.* 2018; Klein *et al.* 2020). The plausible explanation for this could be linked to the feeling of being able to do something for the environment. It can be corroborated by Andreas Niedermeier *et al.* (2021), who said that the feeling of being able to do something for the environment usually leads consumers to take the impact of their purchases on the environment into account and thus usually leads to a higher awareness of their environment. Equally, Hsu *et al.* (2017: 145) observe that as communities, policies, and nations have become more aware of various environmental issues, consumer behaviour has evolved and green product purchases have become more prevalent. This factor might also affect consumers' plans to buy environmentally friendly FMCG.

5.5 CONCEPTUAL FRAMEWORK AND THEORETICAL CONTRIBUTION OF THE STUDY

In line with the study hypotheses, and except perceived price, the results from the structural equation model confirmed significant positive relationships between two of the predictors of the green purchase intention, as well as between the green purchase intention and actual purchase behaviour. The findings of this study agree with the growing body of literature on green purchase behaviour by showing that consumers' perceived pro-environmental attitudes and perceived value (quality) of green FMCG products positively influence their green purchase intention, which further mediates the relationship with actual purchase behaviour.

The finding of this study is consistent with other scholars' models, such as Nguyen *et al.* (2016: 98), Yadav and Pathak (2017: 114), and more recently, Hojnik *et al.* (2020: 1695). Thus, the finding of this study contributes to the growing research investigating green purchase intention and behaviour anchored in Azjen's TPB. This study, therefore, tested and conceptually extended TPB first proposed by Azjen in the context

of green FMCG consumption from the context of developing countries in Africa. The model also revealed the importance of price in green purchase intention in Africa and corroborated with other scholars who note the high of green products may become a barrier to consumer purchase intention. Overall, the findings of this study suggest that the TPB model can be streamlined to study the attitude-behaviour gap of green FMCG products as it provides a robust explanation of green FMCG actual purchase behaviour.

5.6 CONCLUSION

In conclusion, the study exhaustively examined the applicability of behaviour theory (attitude–intention–behaviour model) in understanding green consumer purchase intention and actual purchasing behaviour of green FMCG. As such, the study extends Ajzen's TPB (1991) model by modifying it to fit the context of green purchase intention and actual purchase behaviour of FMCG in developing countries. The researchers proposed and tested a model on 381 green consumers over 18 years and above in the study. The data indicates that consumers' pro-environmental attitudes and perceived value (quality) influence their green purchase intention of FMCG products. The study also found that green purchase intentions directly translate to the actual purchase behaviour of FMCG products. Nevertheless, marketers, retailers and manufacturers in South Africa must understand that the price of green FMCG products may serve as a barrier to green consumption of FMCG products. This is essential if they hope to achieve their corporate social responsibility to the environment by driving green consumption habits among South African consumers who are mainly priced sensitive.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The primary purpose of this study was to identify the factors that influence consumer behaviour during the decision-making process for green FMCG products in the greater Durban Area. The chapter summaries outlined the main findings from the literature review and the primary research objectives. In line with achieving the research objectives, this chapter provides recommendations on how green FMCG producers can effectively eliminate obstacles among South African consumer green consumption habits. This study provides practical implications for green FMCG companies in their bid to shift from conventional products to green products.

6.2 FINDINGS OF THE STUDY

This section explains the overall findings of the study from the literature review and primary research.

6.2.1 Findings of the literature review

The findings from the literature review are presented in line with the research objectives.

6.2.1.1 The green marketing mix and purchase behaviour towards green FMCG products

From the perspective of green marketing, Chuwa and Ibokette (2020: 22) viewed the green marketing mix as a method to rethinking the core marketing mix of product, pricing, promotion, and location in a way that considers environmental sustainability. From the literature review, it was uncovered consumers desire green products as these products conserve the environment and are healthy and are of higher quality (Ottman and Mallen 2014:1). It was also discovered that product quality positively influences the purchase intention of green products (Chikosha 2018:102). Nonetheless, it was uncovered from the literature review that the price of a green product must be affordable for the customer to encourage their purchase (Yazdanifard

and Mercy 2011: 638). It was found that the high price of green products negatively affects the purchase intention of green products (Shaw 2020: 46).

Furthermore, it was uncovered in the literature review that the higher the perceived value of green products because of effective marketing communications, the more ready customers are to pay premium pricing (Chuwa and Ibokette 2020: 26). It was uncovered that packaging influences the buying behaviour of women consumers when compared to their male counterparts (Davis 2014: 1).

6.2.1.2 Influence of sociodemographic characteristics on consumer behaviour towards green FMCG products

From the literature review, it was uncovered that demographic factors such as age, gender, income, and level of education highlight a significant influence on the purchase behaviour of green products (Rajagopal, Mahajan and Priya 2021: 2314). For example, it was uncovered that the respondents' age significantly impacts their attitude towards green purchases (Ali and Ahmad (2016: 103). However, the role of gender in green purchase decisions was contentious in the literature review. Besides this, the role of education level on green purchase intention was also debatable. While some authors, such as Ali and Ahmad (2016: 102), found that the higher the education level, the lower the purchase intention, others, such as Wee *et al.* (2014: 392), found that the probability of purchasing organic products is higher among the college educated.

In terms of income bracket, it was uncovered from the literature review that there was a significant relationship between the level of income and purchase intention (Barge, More and Bhola 2014:2). It was found that those with higher income purchase green foods frequently in comparison to those without lower income (Barge, More and Bhola 2014:2). More so, it was uncovered the location of the consumer such as the rural and urban divide do influence their green purchase behaviour (Rathod 2018: 36)

6.2.1.3 Identifying the drivers of green FMCG products

It was uncovered in the literature review that the attributes of green products, such as the level of quality, degree of aesthetics, and the number of functions, might influence consumers' attitudes towards the purchase (Cheung and To 2019: 145). For instance,

it was found that consumer perceived values play an essential role in developing their purchase behaviour towards green products (Raza *et al.* 2020: 95). On the other hand, it was found that that the cost of a green product may become a barrier to consumer purchase (Niedermeier, Emberger-Klein and Menrad 2021: 2).

Furthermore, it emerged from the literature review that consumer habits and convenience perception influence purchase behaviour (Joshi and Rahman 2015: 130). Equally, the consumer's pro-environmental attitude positively influences their purchase behaviour of green products (Klein, Emberger-Klein and Menrad 2020: 1).

6.2.2 Findings of the primary study

The findings of the present study are in line with this study's research objectives.

6.2.2.1 Influence of the green marketing mix on purchase behaviour towards green FMCG products

The key findings from this study revealed that advertisements for green FMCG products effectively create environmental awareness. The result also revealed that most of the respondents agreed to often look for product labelling/packing before making a purchase decision and that product packaging and labelling assist them in making an informed decision about what they will purchase.

Regarding the influence of green value, the critical finding reveals that most green FMCG products are better than conventional FMCG products, healthy, and beneficial to the environment. It was therefore assumed that the positive influence of the value consumers place on green FMCG might influence purchase decision-making. However, while the literature review documented that t many environmental-friendly convinced consumers will go the extra to pay more for green products due to the health and environmental benefits of the products, the critical finding of the study reveals that most of the respondents may not be willing to purchase or pay more for these products. Moreover, the result indicates that green product prices affect their purchasing decision.

6.2.2.2 Influence of the socio-demographic factors on purchase behaviour towards green FMCG products

Although there was no significant difference found between the respondents' socio-demographic factors like age, income, location, and gender and their green pro-environmental attitudes, nevertheless, it was observed that older respondents had higher/better pro-environmental attitudes than the younger ones. The critical finding also showed that the respondents' perceptions of green FMCG purchase intention were significantly different by age, while no difference was observed for other socio-demographic variables. Older respondents had a higher/better purchase intention of green FMCG products than the younger ones.

This study's key finding suggests that the male respondents' pro-environmental attitudes were higher/better than females. However, females expressed greater green FMCG product purchase intention and behaviour than male respondents. More so, it was found that respondents with a lower level of education significantly expressed greater purchase behaviour than those with a higher level of education. Overall, the results of this study show that the respondents' average monthly income and residence do not determine any of the green consumerism components.

6.2.2.3 Influence of pro-environmental attitude and purchase intention on consumer behaviour towards green FMCG products

The key finding that emerged from this objective is that green consumers consider the environmental consequence and the value (quality) of the products in their purchase intention. The finding of this study suggests that the consumers' purchase intention of green FMCG products results in actual behaviour. It was found that green consumers are driven into purchasing green FMCG products through green purchase intention, driven by their pro-environmental attitudes and the perception of the value (quality) of FMCG products.

6.3 SUMMARY OF THE FINDINGS

The following conclusions were drawn from the study findings:

6.4.1 Conclusions of the findings related to the Influence of the green marketing mix on purchase behaviour towards green FMCG products

In line with achieving the research objective of the study, which was to assess the influence of the green marketing mix on purchase behaviour towards green FMCG products, the study conclusively suggests that advertisements for green FMCG products are effective in creating environmental awareness. Furthermore, the study concludes that product labelling/packing before making a purchase decision and product packaging and labelling assist them in making an informed decision about what they will purchase. It was also concluded that price determines green FMCG product purchasing decisions.

6.4.2 Conclusions of the findings related to the influence of the socio-demographic factors on purchase behaviour towards green FMCG products

In line with achieving the research objective of the study, which was to identify how participants' selected socio-demographic characteristics may influence consumer behaviour towards green FMCG products, this study conclusively suggests that the socio-demographic factors had no significant influence on green FMCG products' pro-environmental attitudes. However, it was found older respondents had a better FMCG products purchase intention. It was found that respondents with a lower level of education significantly expressed greater purchase behaviour than those with a higher level of education.

6.4.3 Conclusions of the findings related to the influence of pro-environmental attitude and purchase intention on consumer behaviour towards green FMCG products

In line with achieving the research objective of the study, which was to determine the influence of pro-environmental attitude and purchase intention on consumer behaviour towards green FMCG products, it was found that green consumers are driven into purchasing green FMCG products through green purchase intention, which in turn is driven by their pro-environmental attitudes and the perception of the value (quality) of FMCG products.

6.5 RECOMMENDATIONS OF THE STUDY

Drawing from the research hypotheses tested and the literature review, the following recommendations are proposed:

6.5.1 Eco-labelling of green FMCG products

This study highly recommends marketers and green product manufacturers eco-label their products. This has been found to influence purchase intention and behaviour. Besides, eco-labelling of green FMCG products provides rich and robust information for the consumers to validate and authenticate the product's claims. Therefore, the study envisaged that eco-labelling green FMCG products could help consumers make an informed decision regarding their purchase. In addition, it could help prevent consumers from buying products that do not meet the green mandate.

6.5.2 Special price offer for green FMCG products

This study recommends that marketers and manufacturers offer a form of price rebase for green FMCG products. It has been suggested in the literature review South African consumers are price sensitive and will react to an increase in the price of a product. However, this study also shows that price affects the respondents' purchase decisions. Thus, offering competitive and special prices to South African consumers will increase their purchase intention and behaviour, which is good for the climate and environment.

6.5.3 Education on the importance of buying green products

It has been said in the literature review that some consumers do not think green products are of better quality than conventional ones. However, the finding showed that most respondents believe that green FMCG products are healthy and benefit the environment. Thus, South African consumers should be educated on the benefits of green FMCG products and how purchase decisions can influence or harm the environment.

6.5.4 Green marketing campaign and awareness

Part of the research finding is that socio-demographic factors to some extent influence green pro-environmental attitudes and purchase behaviour. From a marketing

context, the green campaign can be carried out to promote green FMCG among certain segments of South African consumers who may not see value in the green purchase. The campaign may be in the form of green advertisement and awareness. Green product awareness is essential as it may help change the perspective of South African consumers who are overly price-sensitive. The benefit of this is that South African consumers may become willing to pay higher prices as long as they appreciate and believe in the value of green products.

6.5.5 Government policies on green products

The sustainability of the environment for future generations is a collective action of everyone. The government being the custodian of society, can make polices to ensure responsible consumption. Part of the policy can be in the form of a subsidy for manufacturers of green products. This may help in the reduction of the cost of manufacturing green products, which will, in turn, reduce the cost of green products.

6.5.6 Incentivizing green purchase

Retailers of green products may adopt a reward system in the form of a loyalty card for every green purchase. This will positively influence consumers' green purchase behaviour.

6.6 LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

While the study model has broader applicability in understanding green FMCG products' purchase intention and actual purchase behaviour from a South African perspective, the study was limited to the Greater Durban area, which may affect its generalizability. Hence, further research must be carried out in our provinces in South Africa to gain a holistic view of green consumer purchasing intention and the actual behaviour of FMCG products. Another limitation of the study is that the researcher applies convenient sampling using the researcher's social media contact. Therefore, it may have crip in some form of bias and may lead respondents to adjust their answers to appear politically correct or socially acceptable (Park et al., 2012). Nevertheless, the researcher tried to avoid the presumed biases by providing complete anonymity to the respondents.

6.7 CONCLUSION

The study has successfully tested the applicability of behaviour theory (attitude–intention–behaviour model) in understanding green consumer purchase intention and actual purchasing behaviour of green FMCG. The conclusion drawn from the study is that consumers' pro-environmental attitudes and perceived value (quality) influence their green purchase intention of FMCG products. Furthermore, the study also found that green purchase intentions directly translate to the actual purchase behaviour of FMCG products. Therefore, several recommendations were offered to help accelerate green FMCG products' purchase behaviour.

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APPENDIX A: ETHICS APPROVAL LETTER

MANAGEMENT SCIENCES: FACULTY RESEARCH ETHICS COMMITTEE (FREC)

25 April 2019

Student Name: Miss B. Dorasamy
Student No: 21343757
FREC REF: 98/18FREC

Dear Miss B. Dorasamy

MASTERS OF MANAGEMENT SCIENCES: MARKETING

TITLE: Consumer Decision Making Regarding Green Fast Moving consumer goods in the Durban Area

Please be advised that the FREC Committee has reviewed your proposal and the following decision was made: **Approved – Ethics Level 2**

Date of FRC Approval: 28 November 2018

Approval has been granted for a period of two years from the above FRC date, after which you are required to apply for safety monitoring and annual recertification. Please use the form located at the Faculty. This form must be submitted to the FREC at least 3 months before the ethics approval for the study expires.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the FREC according to the FREC SOP's.
Please note that ANY amendments in the approved proposal require the approval of the FREC as outlined in the FREC SOP's.

Yours sincerely

Prof JP Govender
Chairperson: Faculty Research Ethics Committee

APPENDIX B: LETTER OF INFORMATION

Consumer Decision Making Process Regarding Green Fast Moving Consumer Goods in The Durban Area.

I, Bianca Dorasamy, am currently undertaking a research project as part of my studies towards a master's degree in Technology: Master of Management Science in Marketing at Durban University of Technology. The aim of this study is to identify the factors that influence decision-making process of green Fast Moving Consumer Goods (FMCG) among consumers in the greater Durban area.

It is hoped that results obtained from this study will both contribute to the academia as well as aid marketers with information that will aid strategically aid in selling green FMCG products to consumers residing in the greater Durban area.

Administration of questionnaire is undertaken (electronically) personally by researcher. The questionnaire will take approximately 10 minutes. Only participants 18 years and above are eligible to participate as per research requirements. Participation is voluntary, furthermore, you are welcome to withdraw from the study should you wish to at any given time without giving reasons, and without prejudice or any adverse consequences.

You are only required to answer questions stipulated on the questionnaire, after the questionnaire is complete, the information you provide will only be used for research purposes. The information you provide will be kept safe, moreover, anonymity as well as confidentiality is assured and will be maintain by researcher.

Furthermore, participation in this study poses no risk or discomfort to you in any way. You will not be liable or expected to cover any expense towards this study. Moreover, no type of remuneration will be awarded for participating in study.

Should you need to contact me regarding any aspect of this research, you can do so either by e-mail: dorasamybianca@gmail.com or telephonically: 064 750 2134.

Furthermore, in the event of any problems or queries you can contact my academic supervisor, Prof, Jeevarathnam P Govender via email: govendej@dut.ac.za , or you can contact the Institutional Research Ethics administrator on 031 373 2900. Complaints can be reported to the DVC: TIP, Prof F. Otieno on 031 373 2382 or dvctip@dut.ac.za

APPENDIX C: CONSENT

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, Bianca Dorasamy Number: _____,
- I have also received, read, and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

_____ _____ _____

Full Name of Participant **Date** **Time** **Signature / Right Thumbprint**

I, _Bianca Dorasamy_____ herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

_____ _____ _____

Full Name of Researcher **Date** **Signature**

_____ _____ _____

Full Name of Witness (If applicable) **Date** **Signature**

_____ _____ _____

Full Name of Legal Guardian (If applicable) **Date** **Signature**

APPENDIX D: INVITATION LETTER

Faculty of Management Sciences

Department of Public Management & Economics

Date

Dear Participant,

I am conducting research as part of my master's studies to identify the factors that influence consumer behaviour during the decision-making process of Green Fast Moving Consumer Goods (FMCG) among consumers in the greater Durban area. As part of my study, I am administering a questionnaire to obtain information on consumer attitudes and behaviours towards green products.

I would highly appreciate your participation in this study. If you are willing to participate in this study, would you please complete the questionnaire, it will only take approximately 10 minutes of your time.

Confidentiality of information will be respected.

Thank you for your co-operation

Yours sincerely,

Bianca Dorasamy

064 750 2134

APPENDIX E: DRAFT QUESTIONNAIRE:

SECTION A: DEMOGRAPHIC MEASURES

1. Age: …….

2. Gender:

Female		Male	

3. Highest Level of Qualification:

No Education	
Below Matric	
Matric	
Graduate	
Post-Graduate	
Other	

4. Please select your relevant income range after tax:

Income $<$ R 3 000 per month	
R 3 000 ≤ Income $<$ R 10 000 per month	
R 10 000 ≤ Income $<$ R 30 000 per month	
Income ≥ R 30 000 per month	

5. Where in Durban do you reside?

Rural		Township		CBD		Suburban	

SECTION B: MARKETING MIX FACTORS:

This section contains multiple choice questions which require respondents to indicate by marking X at the level which they agree or disagree.

SA-Strongly Agree, A-Agree, N-Neutral, D-Disagree SD-Strongly disagree

Promotion:

	Strongly Disagree	Disagree	Agree nor Disagree	Agree	Strongly Agree
1. Advertisements for green FMCG products are effective in creating environmental awareness (PM1)					
2. I often look for product labelling/packaging (certifications) before making a purchase (PM2)					
3. Product packaging and labelling assist me in making an informed decision about what I am going to purchase (PM3)					

Product:

	Strongly Disagree	Disagree	Agree nor Disagree	Agree	Strongly Agree
4. Green FMCG products are better than conventional FMCG products					
5. Green FMCG products are healthy					
6. Green FMCG products are beneficial to the environment					

Pricing:

	Strongly Disagree	Disagree	Agree nor Disagree	Agree	Strongly Agree
7. Green FMCG products are highly-priced					
8. The price of green FMCG products affects my purchasing decision					
9. The price of green FMCG products commensurate with its benefits					

Place:

	Strongly Disagree	Disagree	Agree nor Disagree	Agree	Strongly Agree
10. Green FMCG products are easily accessible in stores					
11. Lack of accessibility to green FMCG products do not prevent me from purchasing green products					

Section C: Environmental Knowledge

This section contains multiple choice questions which require respondents to indicate by marking X at the level which they agree or disagree.

SA-Strongly Agree, A-Agree, N-Neutral, D-Disagree SD-Strongly disagree

Attitude:

	Strongly Disagree	Disagree	Agree nor Disagree	Agree	Strongly Agree
12. Green FMCG protects the environment					
13. Green FMCG meets environmental expectations					
14. I often think about how the environment can be sustained and improved.					

Purchase intention:

	Strongly Disagree	Disagree	Agree nor Disagree	Agree	Strongly Agree
15. I am more willing to purchase an FMCG product that is beneficial to my health, in comparison to a product that is not.					
16. I am more willing to purchase an FMCG product that is beneficial to the environment, in comparison to a product that is not					
17. I am more willing to purchase an FMCG product that will sustain the environment, in comparison to a product that is not					

Purchase Behaviour:

	Strongly Disagree	Disagree	Agree nor Disagree	Agree	Strongly Agree
18. I am motivated to purchase eco-friendly FMCG products.					
19. Green marketing motivates me to purchase green FMCG consumer goods.					
20. I have resources, time, and opportunities to purchase green FMCG products.					

APPENDIX F: EDITORIAL LETTER:

Triedstone Consulting RC: 2020/429060/07

* Copyediting * Data Analysis * Market/Social Research * Digital Marketing

Chester House,
Chester Road,
Rondebosch, 7700
Cape Town, South Africa.
triedstoneconsulting@gmail.com

09 December 2022.

Ms Bianca Dorasamy
Department of Marketing and Retail Management
Faculty of Management Sciences
The Durban University of Technology.

Editing Certificate

We certify that the thesis titled: ***Factors Influencing the Consumer Decision-Making Process Regarding Green Fast-Moving Consumer Goods in the Greater Durban Area*** was proofread and edited for grammar, spelling, punctuation, and overall academic writing integrity. The editors ensured no alterations to the author's original intended meanings during the review. Furthermore, the editors tracked all recommendations and amendments with the Microsoft Word "Track Changes" feature. Therefore, the author had the option to accept or reject each change.

Thank you for the opportunity.

Sincerely,

Joseph Olusegun Adebayo, PhD.

APPENDIX G: TURNITIN REPORT:

Turnitin

ORIGINALITY REPORT

19%	13%	11%	9%
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