

UNIVERSITY OF KWAZULU-NATAL

**FACTORS INFLUENCING GREEN PRACTICES AMONGST
SOUTH AFRICAN FOOD RETAILERS**

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DECLARATION

I, Yodit Fisseha Ghebrehiwet declare that:

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- (ii) This dissertation has not been submitted for any degree or examination at any other university.
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Date 21 August 2019

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ABSTRACT

The growing population globally and the finite resources on earth necessitated the need for the prudent utilisation of natural resources through sustainable production and use. As a result, it has become common knowledge to business entities to support initiatives towards environmental protection. Food retail stores are amongst the immediate role players that could contribute to shifting ordinary business activities into greener practices. Thus, most retailers are adopting green practices in their daily business operations with varying degrees of success. The specific research questions asked in this study are which factors influence green practices in the food retail sector in South Africa; and what is the level of green practices in the food retail sector in this country. The theoretical section of the study focuses on understanding the underlining literature on the meaning of green and green practice and factors influencing it. The study adopted a mixed-methods research approach. Eight food retail stores participated in the study. The primary data was gathered employing face-to-face interviews with 23 managers and personally administered questionnaires distributed to 105 employees from which full responses were attained. A purposive sampling technique was used to select managers and employees. Content analysis was adopted to analyse the qualitative data and SPSS for descriptive statistics as well as univariate regression analysis to understand the relationship between the different variables. As per the objectives of the study, that is to identify the influencing factors and determine the level of green practices in the South African food retail sector, the findings of the study showed that different driving factors lead the food retail sector to implement green practices. There are also differences in the degree of implementation of green practices. The empirical data suggested that the dependent variable, namely the employee initiative to perform green practice, is significantly influenced by the independent variables. Despite the smaller sample size and limited geographic distribution due to logistical constraints, the study provides enough evidence in the progress made and in the limitations that exist within the food retail sector when it comes to the promotion and implementation of green practices. This study may be used as base-line information for other similar studies that are more comprehensive.

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CHAPTER ONE: INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 Introduction

This chapter presents the background to the study to clarify the understanding of the core elements of the dissertation. The chapter outlines the research problem statement, specific research questions and research objectives, the significance and justification of the study, and the chapter outline and conclusions. This depicts how the dissertation is structured and, in doing so, familiarises readers with the layout and contents of the study.

1.2 Background to the study

Continuous exploitation of natural resources and the emission of hazardous chemicals by individuals and business entities cause environmental risks and resource scarcity which affect the earth negatively (Bhattacharya, Jain and Choudhary, 2011:6). To cope with this situation, a “green” concept was developed by professionals as a means to protect the environment and preserve natural resources (Bhattacharya *et al.*, 2011:6). Different researchers define “green” by using it interchangeably with words like “organic”, “eco-friendly” and “sustainable”. The term “green” can represent products, systems and services that save energy; are made from renewable resources; are recyclable, all-natural, environmentally friendly, durable, low maintenance, reusable, biodegradable, free from ozone-depleting substances; and gained from local resources and manufacturers (Punchee, 2011:2). In addition, “green” includes sustainable, eco-friendly or natural operations that conserve natural resources, eliminates waste, and minimize harmful gas emissions (Singh, 2010:4). Bhattacharya *et al.* (2011:6) stated that “green” presents ecological sustainability and covers many different concerns, including air, water and land pollution, energy usage and efficiency, and waste generation, and recycling. “Green practice” as a concept interests many big business organizations since it affects the organizational image of economic, environmental and social aspects. There are factors leading (forcing) many organizations to change towards a “green” organizational culture. Some of these factors are government regulations, customer demand, the increase in the cost of raw materials, and the cost of technology and fuel (Bhattacharya *et al.*, 2011:8).

1.3 Research problem statement

Green practice describes the implementation of environmentally friendly activities that have an impact on taking care of society’s health and low-cost production and conserving natural resources for the coming generation (Claro, Neto and Claro, 2013:365). Failing to perform green, the retailers may face some difficulties, including low market share, high production cost, reputational damage, losing customers, being out of competition, and government intervention (fines, higher tax rates) (Ayoub and Juji, 2012:195). As per Bertels, Papania and Papania, 2010:6), greening organizational practices enable business longevity because implementing this strategy supports healthy economic, social and

environmental systems. As a result, food retailers are initiating and implementing green practices as a daily activity to ensure success in their business operations. However, to achieve this success, a comprehensive understanding of the factors influencing the adoption and the actual implementation of green practice is required.

1.4 Research gap

Studies had been conducted and reviewed to identify the factors influencing green practices in different business sectors. For example, Claro *et al.* (2013) suggested the concept of “Sustainability drivers in food retail”. These drivers were categorised into internal drivers (resource-based view, human resource, process capability, human resources capabilities, and customer drives capability); supplier relationship drivers (inter-organizational processes and policies, and supplier communication); and external drivers (uncertainty, competition and economy). Dhull and Narwal (2016) described in their publication “Drivers and barriers in green supply chain management adaptation: A state-of-art review” the drivers of green practices as internal and external. The internal drivers include the “environmental mission of the organization”, ethical value of the organization, employees’ involvement or motivation and the desire to minimize costs. The external drivers are government legislation and regulation, customers, competition, marketing and suppliers. Another example is the drivers pointed out as external and internal drivers in the published dissertation by Reddy (2016), “Factors affecting green supply chain management (GSCM) initiatives: A case study at “Cipla Medpro manufacturing”. He described external drivers as government and policy regulation, suppliers, customers, market, competitors and society, while management support, organizational structure, strategy and cost are considered as internal factors of green practices. Naidoo and Gasparatos (2018) also mentioned factors affecting green practice in their publication “Corporate environmental sustainability in the retail sector: drivers, strategies and performance measurement”. These drivers were profitability, environmental policy and stakeholder pressure. However, there is no conclusive research on factors influencing green practices in food retail stores. Moreover, there is no research done on South African food retailers. Thus, this study was set out to analyse factors influencing green practices amongst South African food retailers.

Furthermore, since the factors are related to social, economic and regulatory policies, different food retailers located in different places may experience different factors initiating green practices. To mention a few, it could depend on the type of customers (Dabija, Bejan and Grant, 2018:174), types of suppliers (Naidoo and Gasparatos, 2018:126), customers’ purchasing power (Dabija *et al.*, 2018:174) and the force of rules and regulations intervention (Dhull and Narwal, 2016:65). Thus, it is clear that there is a need to understand and analyse factors influencing green practices amongst South African food retailers. This study fills the knowledge gap on this important subject by means of the research undertaken amongst Pretoria-North food retailers in South Africa.

1.5 The overall aim of the research

The overall aim of this research is to identify the driving factors and understand the extent of green practices amongst South African food retailers.

1.6 Research questions

The research project focuses on factors influencing green practices in the food retail sector. The specific research questions addressed are:

1. What are the driving factors of green practices amongst South African food retailers?
2. What is the extent of green practices amongst South African food retailers?

1.7 Research objectives

The research objectives are:

1. to identify the driving factors of green practices amongst South African food retailers; and
2. to identify the extent of green practices amongst South African food retailers.

1.8 Significance of the study

Achieving the objectives of the study will have significant importance in changing many aspects of green practices in food retail stores. It may be possible to change the perception of managers by improving working habits that are more sustainable; by being role models for their employees; and by encouraging their employees to practice green marketing in their daily business activities and even in their private lives. Moreover, it may help managers to consider environmentally friendly practices as the main focus rather than an optional business activity. Furthermore, regular green practices in the sector will be significant in changing the perception and attitude of societies through members of food retail stores sharing their knowledge and techniques.

1.9 Justification of the study

Many organizations are aware of the environmental sustainability concept and its importance in the success of a business. However, many organizations are yet to introduce sustainability measures at their workplaces (Naidoo and Gasparatos, 2018:126). It is clear that high-energy consumption, resource wastage and production costs exist, as well as reprocessing and inefficient utilization of resources and similar activities. Because of some hindrances, many organizations are discouraged from implementing green practices at their workplaces. Therefore, this study analysed the data and identified the factors influencing green practices of the food retail sector in South Africa and the extent to which it practices green in its daily business operation.

1.10 Chapter outline

Chapter one: Introduction and overview of the study

The focus of this chapter is to introduce the research topic and provide an overview of the study. It encompasses the problem statement, background to the study, research objectives and questions, and the significance and justification of the study. The chapter also provides an outline of the sections ahead as indicated below.

Chapter Two: A literature review

This chapter consists of theoretical concepts. It encompasses the introduction, background, meaning of green and green practice; how green practices develop in business stores; the drivers in adopting green practices in the food retail sector; how to embed green practices in the food retail sector; barriers to embedding green practices in the food retail sector; overcoming barriers to adoption of green practices; benefits of adopting green practices; and a conceptual framework and conclusion.

Chapter Three: Research methodology

This chapter explains the methodology used in conducting this research. It provides research philosophies; the problem statement and objectives; the design of the research, population and sampling technique; the data collection method; the data analysis method; the ethical considerations; the limitation of the study; and a conclusion.

Chapter Four: Findings

This chapter presents the qualitative and quantitative findings of the study. It contains thematic representation and analysis of the interview-derived qualitative data while subjecting the questionnaire data to quantitative analysis in the form of descriptive and regression analysis. The chapter further presents detailed results, using both thematic coding (frequencies of themes) and graphical representation of the quantitatively analysed variables.

Chapter Five: Discussions of the results

This chapter discusses the findings of the study in relation to the theoretical descriptions used to achieve the research objectives. The results are discussed in line with key thematic areas such as business strategy, institutional involvement, organizational initiatives, suppliers' initiatives, socio-economy influences (social concern initiatives and customers' preferences), resource management (resource unitization and waste control), organizational challenges (management and skill-based), supplier-related challenges and customer-related challenges. The chapter also includes a study framework and conclusion.

Chapter Six: Conclusions and recommendations

Green practice at retail level plays a crucial role in changing the business world into sustainably dealing with retail activities. This chapter provides concluding remarks and way forward, based on the findings of the study.

1.11 Conclusion

Green practice at retail level plays a crucial role in changing market bases and the business world into a sustainable business activity. The aim of the study is to identify the factors influencing green practices in the food retail sector and to what extent it executes green practices in its daily business activities. Chapter Two deals with the theoretical concept (literature review) of the study. It creates a deep understanding of the general concepts discussed in the study. This will be achieved by addressing the research questions and attaining the objectives outlined above.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The literature review presents the various theoretical discussions to the study. The background describes how the concept “green” generates and emerges in the business sector. The chapter also defines the terms “green” and “green practices” to give a clear understanding of its core meaning and application in the food retail sector. It illustrates how green practices develop in the business sector. It elaborates on possible factors that influence managers to embed or implement green practices, and on means to introduce green practices in the food retail sector, challenges that negatively affect managers from adopting green practices and means to overcome the challenges and benefits of green practices in the successful performance of the food retail sector. Moreover, a conceptual framework is designed to summarise the literature review.

The importance of the literature study is that it will lead to a better understanding of the research topic and may be used as a guideline to generate interviews and questionnaires and also as a reference during recommendations.

2.2 Literature review

Our planet has been affected by environmental risks and a scarcity of resources caused by the emission of hazardous chemicals and the continuous exploitation of natural resources (Bhattacharya, Jain and Choudhary, 2011:6). As a result, a “green” concept was developed by professionals to be used as an instrument to motivate individuals and businesses to protect the environment and conserve natural resources (Bhattacharya *et al.*, 2011:6). The United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992 also played a crucial role in raising concern over the environment. It called on every nation to give priority to action on environmental protection by avoiding environmental degradation and natural resource exploitation (Tanner and Kast, 2003:884; Naidoo and Gasparatos, 2018:126). Generally, natural resource conservation and environmental protection, through the adoption of green thinking by organizations, has brought about significant improvements in performance through cost minimization, clean and technological production, and waste minimization. Fortes (2009:57) described the mutual benefits that the organization and the environment gain from implementing green practice as a win-win situation. It can be explained that, if an organization is able to manufacture green products using renewable energy and recyclable materials, it means that it is achieving economically efficient ways of production. In other words, using renewable energy and recyclable materials protects the environment from harmful chemicals and reduces the exploitation of natural resources. Moreover, green production has benefits in advancing the design and quality of products, since being green starts from product design and assures the life cycle of the product (Stott, n.d.:7; Lavorata, 2014:1; Reddy, 2016:28). Therefore, efficient and effective product design and longer

life cycles of the product are other means of environmental sustainability through waste minimization and less reprocessing (Tseng *et al.* 2013:2; Reddy, 2016:29; Petljak, Zuauf, Stulec, Seuring and Wagner, 2018). Being green also deals with taking responsibility for protecting society by avoiding careless use of natural resources and emission of harmful gases to the environment.

2.2.1 What do “green” and “green practice” mean?

Different researchers had defined the term “green”. The term “green” can be used interchangeably with words like “organic”, “eco-friendly” and “sustainable”. The term “green” can represent products, systems and services that save energy, are made from renewable resources, are recyclable, all-natural, environmentally friendly, durable, low maintenance, reusable, biodegradable, free from ozone-depleting substances, and gained from local resources and manufacturers (Punchee, 2011:2, Reddy, 2016:23). The term “green” is used to describe a sustainable, eco-friendly or natural operation that conserves natural resources, eliminates waste, and minimizes harmful gas emissions (Singh, 2010:4). “‘Green’ has served as an umbrella for energy utilization, environmental management, and waste remediation, and focuses on the critical frontiers of economics, science, technology and policy. Economics represents human choice. Science captures the knowledge and technology for implementation, and policy represents the boundaries established to constrain or encourage human choice” (Singh, 2010:4). Bhattacharya *et al.* (2011:6) also stated that “green” focus on ecological sustainability and covers many different concerns including air, water and land pollution, energy usage and efficiency, waste generation, recycling, etcetera (Dabija *et al.*, 2018:173). “Green” as a concept interests many big business organizations since it affects the organizational image from an economic, environmental and social point of view.

Green practice implies responsible business activities to prevent environmentally harmful practices, inefficient utilization of resources, and the destruction of natural resources (Gilbert, 2007:1; Smith and Perks, 2010:4; Reddy, 2016:23). According to Smith (2003:1) and Friend (2009:5), green practices are environment-oriented activities encompassing the use of organic and natural products to build factories, tighter protection against emissions, and environmentally friendly sourcing of materials (Smith and Perks, 2010:4; Petljak *et al.*, 2018). The green practice is the efficient utilisation of natural resources to achieve effective outputs, using materials such as paper, plastic, electronics, glass and aluminium for recycling and using sustainable products (recycled, plant-based or organically grown) (Smith and Perks, 2010:4). According to Gupta and Kumar (2013:316), green practice initiates the efficient use of resources that results in wise managerial cost and waste administration. This has positive effects on the financial capacity of the firm (Naidoo and Gasparatos, 2018:137). Green practice teaches managers to adopt technology, research and information systems for sustainability development. It helps to identify areas in which a store can be more efficient.

A food retail sector implementing green practices can achieve a good image, economic efficiency, great financial profits and market shares (Naidoo and Gasparatos, 2018:129), a great level of employee commitment, increased customer satisfaction, reduced unwanted organizational idiosyncratic risk and increased business performance (Gleim, Smith, Andrews, Joseph and Cronin, 2013:45). However, many researchers describe how changing ordinary business practices into green practices may bring about challenges and barriers that hinder business organizations from showing dramatic changes (Schein, 1993:85; Gleim et al., 2013; Petljak et al., 2018). Challenges can be a manager's mindset, sustainability investment cost, customers' loyalty, and low human resource capability. Thus, there is a need for an effort to develop a formal and informal strategy and tactics, both at the top-down and bottom-up levels of a business organization (Bertels et al., 2010:7).

2.2.2 How does green practice develop in business organizations?

From the time the ideal of green practice emerged, many governmental institutions, as well as local and international business organizations, considered incorporating it into their strategies (Christelis, 2013:19). The current increased human life expectancy and birth rates result in a growing world population, which causes a greater consumption of natural resources and a reduction of living standards, though, in some cases, lifestyles have become more sophisticated (UNWCED, 1987; Martin-Pena, Diaz-Garrido and Sanchez-Lopez, 2014:220).

Additionally, population growth, industrialization and urbanization demand excessive use of natural resources, resulting in high carbon emission and waste (Mengue and Ozanne, 2005:431; Bhattacharya et al., 2011:7; Mwanza and Mbohwa, 2017:654). This means most business organizations are using environmentally unsustainable production systems to meet the high quantity demand of the population. As a result of environmentally harmful practices, the planet is being affected by climate changes, droughts, floods, water and air pollution, loss of species, farmland erosion and depletion of earth resources (Tanner and Kast, 2003:884; Dhull and Narwal, 2016:64). These negative effects directly or indirectly affect many business sectors economically and socially (Smith and Perks, 2010:2; Naidoo and Gasparatos, 2018:129).

Thus, as a crucial topic, several scholars are attempting to address this issue from different perspectives and come up with different immediate solutions. The immediate remedies suggested by Tanner and Kast (2003:884) and Martin-Pena et al. (2014:220) are a change in human behaviour and in the cultural practices of society, business and industries (Gonzalez-Benito and Gonzalez-Benito, 2005:1; Mwanza and Mbohwa, 2017:654). In addition to external pressures (factors) like governmental regulations, environmental regulations, customer groups and communities (Smith and Perks, 2010:2; Mwanza and Mbohwa, 2017:654), green practices in business organizations, specifically the retail sector, are seen as a remedy to avoid environmentally unfriendly practices in order to have sustainable development (Linnenluecke and Griffiths, 2010:358).

2.2.3 Drivers in adopting green practices in the food retail sector

Traditionally, business organizations are expected to deliver goods and services to satisfy the demand, maintain profits, pay taxes and create employment opportunities (Du Plessis and Grobler, 2014:267). The degree of implementing organizational strategies and objectives varies in terms of their “vision, objectives, priorities and scope: international vs domestic, organizational structures, initiatives, policy mechanisms and programs, and levels of implementation at regional and local levels” (Albareda et al., 2008:354). However, due to some drivers, the traditional way of business performance has to be changed to address environmental sustainability and social concerns. The driving factors like government incentives, customer demand, society, competition, high cost of energy and input price, and technology (Bhattacharya et al., 2011:6) influence firms to change their strategies into sustainability, while performing normal business strategies successfully (Gupta and Kumar, 2013:316, Du Plessis and Grobler, 2014:267). The driving factors are categorised into internal drivers, supply relationships and external factors (Claro et al., 2013:365).

2.2.3.1 Internal drivers

The internal drivers imply the resource-based view of the retailers, which underlines the “unique and valuable resources of the firm to achieve a sustainable competitive advantage” (Claro et al., 2013:365). Internal drivers are considered as intra-organizational factors such as the personal commitment of leaders, issues of cost reduction, middle management policy, entrepreneurs’ as well as investors’ pressure factors that have a positive relationship with green practice adoption (Walker, Di Sisto and McBain, 2008:70). Furthermore, the personal and ethical values of the founder of the retail store filtered throughout the organization will have effects on changing the attitude and perception of employees within the store (Dhull and Narwal, 2016:65). Retail sector managers’ behavioural change towards green practices is also affected by the market, macro-economy, society, public opinion, non-governmental organizations, financial institutes (investors, bank, financial firms and insurance companies) and public administration (Martin-Pena et al., 2014:220). Moreover, frequent investor pressure can force managers to respond to environmental policies. The three internal drivers identified by Claro et al. (2013:365) are described as follows.

- **Internal capability**

Capability is a special resource of a firm which represents human resource capability, customer capability and process capability to assess the impact on sustainability investments (Claro et al., 2013:365). Human resource capability is concerned with the power of human skills to encourage sustainability investments. This indicates the importance of employees’ ability to fulfil social and environmental responsibilities in alignment with business objectives. Like any store, retailers need different skills, knowledge and attitudes from their employees. Sustainability-oriented and skilled employees in a retail store can upgrade managerial vision on sustainable investment (Linnenluecke and

Griffiths, 2010:358). Human resource skills can be upgraded by creating opportunities for employees and managers to participate in environmental sustainability workshops and conferences and by hosting meetings with environmental experts. Thus, positive change in sustainable practice through internal organizational initiatives can be achieved via top management's support, human resource management, employee empowerment, environmental training and teamwork, and reward systems.

Customer capability also leads to investment in sustainability. Customers' awareness of social and environmental issues often causes them to shift their preferences to green products. This drives retailers to adjust managerial decisions towards sustainability (Linnenluecke and Griffiths, 2010:358; Naidoo and Gasparatos, 2018:129).

A process capability study may be used to assess the process of change (whether the negative effect on the environment has been successfully addressed) without adversely affecting the day-to-day operations and quality services, management costs and customer relationships (Claro *et al.*, 2013:366).

- **Marketing strategy**

Promoting green practices as a marketing strategy can enable the food retail sector to achieve competitive advantage. These days, many food retail sector performances are measured by the rate of ability to change product displays according to their customers' needs (Azevedo, Carvalho and Machado, 2011:850). Bhattacharya *et al.* (2011:8) described how many business organizations use the greening principle as a differentiation strategy to increase the market share of their product and achieve competitive advantage (Naidoo and Gasparatos, 2018:129). At present, customers are aware of the importance of the green production concept, which shifts their preference to green products (Bhattacharya *et al.*, 2011:14; Smith and Perks, 2010:3; Dabija *et al.*, 2018:174). As a result, many retail stores are shifting their ordinary business practices to green practices (Gupta and Kumar, 2013:311).

This strategy aims to present sustainability as a core focus of the retail store to attract numerous customers and achieve an advantage over other retailers (Monczka, Handfield, Giunipero, Patterson and Waters, 2010:159). Performing sustainability as a differentiation strategy requires manipulating marketing techniques to increase awareness of the environment and teach customers about the benefits of green practices (Gupta and Kumar, 2013:312; Dabija *et al.*, 2018:174). That means clearly explaining the retailer's shift to green products and practices and the importance of these aspects to the environment and society (customers). As a result, customers develop trust and remain loyal, which allows the retailer to build a strong brand image. Thus, to meet customers' preferences, as well as maintain sustainability differentiation strategies, the retail store's aims and objectives remain focused on green policies.

- **Profitability**

Naidoo and Gasparatos (2018:129) stated that profitability is one of the internal drivers that leads many food retailers towards green practices. Since green practices initiate cost saving in terms of reducing waste, recycling and efficient utilization of resources, food retailers are encouraged to adopt green practices (Govindan, Diabat and Shankar, 2015:184). Profitability, or gains of green practices, can be seen in the initial and long-term levels of the business journey. At the initial stage, saving electricity and water and controlling waste can benefit a business in terms of avoiding additional costs. As a long-term strategy, installing an eco-friendly lighting or solar system and water-saving pipes, stocking certified health products, recruiting green-oriented staff and creating a green working environment can make retailers profitable through low utility costs, customer loyalty, an improved image, and by maintaining a competitive advantage (Martin-Pena et al., 2014:222).

2.2.3.2 Supplier relationship drivers

Well-developed supplier relationships through communication, inter-organization process and environmental policy can lead retailers to invest in sustainability (Claro et al., 2013:365). Developing good relationships with suppliers means that there is a clear understanding of the desires of both parties. The relationship can be maintained through transparent communication, clear environmental policies and a clear process (Petljak et al., 2018). The relationship can also help the food retail sector to overcome barriers and solve challenges to promote green practices. For instance, during the purchasing process, retailers should have procurement policies that specifically describe the type of (green) product they require to satisfy their consumers.

Suppliers for their part should be abiding by environmental policies and procurement policies to supply the right product (Monczka et al., 2010:142; Reddy, 2016:31). Sustainability production systems starting from designing, material use, packaging and the whole process should be described to the retailers. Furthermore, FoodLogiQ (2017) encourages suppliers to be transparent with their customers about the food they supply. Since supply is connected with food safety and sustainability issues, transparency significantly increases customer loyalty. Allowing customers to tour a production site enables them to gain information about processes.

Additionally, briefly defining green practice benefits in terms of cost, health and life cycle, sending samples for testing, sometimes inviting retailers to meetings on environmental sustainability, creating opportunities to participate in internal and external workshops and seminars, all these can strengthen the bond between suppliers and retailers and change the attitudes and perceptions of retailers concerning environmental issues. Informal gathering opportunities also lead to informal conversations and an exchange of ideas that create concrete relationships which are of mutual benefit to suppliers and retail stores. The suppliers can also support the retailers by providing environmental sustainability education, training and assistance to achieve good environmental results. Thus, suppliers' transparency and their

efforts to assist their customers may lead to a close bond between them. It increases satisfaction and encourages participants to take the initiative to practice green (Monczka et al., 2010:174).

2.2.3.3 External drivers

There are external factors that affect the practices of the food retail sector and facilitate a change to green practices. Such factors include government legislation, customers' demands, marketing strategy, government environmental regulations, technology, and others (Berns et al., 2009:24; Bhattacharya et al., 2011:8).

- **Government intervention**

Government regulation and legislation are common external incentives for adoption of environmental measures (Linnenluecke and Griffiths, 2010:358; Dhull and Narwal, 2016:65). Green practices at the food retail sector can be imposed by governmental regulations and national policies (Claro et al., 2013:365). Government plays an important role in defining clear policy frameworks of action to inspire and motivate organizations (business, non-governmental and governmental). The government has to be reliable in implementing the policies and promoting an advanced corporate social responsibility (CSR) agenda at national and international levels (Albareda et al., 2008:357; (Du Plessis and Grobler, 2014:268). Thus, through implementing the policies and setting an example, the government could have the influence and power to change business organizations and societies into green practices.

Ayoub and Juji (2012:195) explained some of the government actions in the food retail sector by promoting the use of renewable energy through short-term and long-term strategies. The short term-strategies focus on motivation and creation of an environment to use renewable energy. The government provides subsidy and tax exemption (Reddy, 2016:28) as an incentive to the food retail sector, using environmentally friendly production systems and charging high tax rates to discourage those who do not consider green practices in their business plans. Unstructured initiatives are the second short-term strategy where the government develops programmes and provides capital grants to support research and development plans to increase local initiatives and achieve green societies.

The long-term strategies include the government's plan to control the use of renewable energy in the market through feed-in tariff and quota obligations strategies. The feed-in tariff strategy enables the government to determine the price of renewable energy to stabilize the price market and would allow organizations to buy renewable energy at a suitable level of profit. The term "quota obligation" means that the government decides on a certain volume of renewable energy required, and producer companies agree to produce that amount of renewable energy. The standard measurements are Tradable Green Certificates (TGC) (each certificate represents the generation of a certain amount of energy) and the renewable portfolio standard (Ayoub and Juji, 2012:195).

- **Environmental regulation**

Environmental regulation is an external factor that obliges the business food retail sector to achieve the minimum standard of environmental performance set by the government (Schaltegger and Synnestvedt, 2002:340; Linnenluecke and Griffiths, 2010:358), and imposes penalties and fines in case they fail to meet the minimum standard expected by the regulation (Papagiannakis and Lioukas, 2012:44). Hence, to stand as a business and enter into a competition, the retailers are pressurized to implement the minimum standards of environmental regulations set by the government (Reddy, 2016:32). To achieve the minimum standards, managers implement initiatives to practise sustainable activities like reducing pollution, minimizing waste, saving energy, and so on. This means that the managers start to concern themselves with environmentally sustainable practices to avoid the consequences and to survive in the competitive market (Mwaza and Mbohwa, 2017:654). Naidoo and Gasparatos (2018:129) suggested that even though there are rules and regulations imposed by governments, government fines may not influence or scare some retailers to abide by the regulations. The authors surmised that putting retailers names on a “shame list” of worst unsustainable retailers, could cause them considerable losses in the public image, resulting in more significant financial loss than paying the government fine.

According to Gonzalez-Benito and Gonzalez-Benito (2005:5) and Mwanza and Mbohwa (2017:654), environmental regulations promote innovations in business organization in two ways, namely product-related and process-related. Product-related regulations deal with the quality of a product, advanced product features and sustainable designs, and production cost minimization through recyclable packaging and reusable materials. Process-related regulations focus on ways to “generate material saving, reduce downtime, or convert wastes into valuable forms” (Gonzalez-Benito and Gonzalez-Benito, 2005:5). Therefore, respecting environmental regulations can promote business retailers’ performance through environmental responses. Thus, based on these ideas, Gonzalez-Benito and Gonzalez-Benito (2005:5) hypothesised that there is a positive relationship between practising environmental regulations and the development of business performances which also depends on environmental management systems and ways to address environmental regulations (Du Plessis and Grobler, 2014:270).

- **Competition and economic uncertainty**

External drivers like competitive pressure and economic uncertainty force retailers to incorporate social and environmental practices (Claro et al., 2013:365). Competition is one of the most powerful means of strengthening business performance in many food retail sectors (Reddy, 2016:32). Competitiveness is linked to satisfying the current demand of most consumers, focusing on environmentally sustainable practices like displaying healthy foodstuffs, using recyclable and reusable materials, applying electrically efficient and effective cooling and cooking systems, accompanied with good customer services – which, in turn, create new green customers and consumers (Dabija et al., 2018:174). These

are the techniques most food retail sectors use to attract customers and which enable them to survive in the market (Berns, et al., 2009: 25; Naidoo and Gasparatos (2018:129). On the other hand, Llbery and Maye (2005:331) suggested that environmental risks may cause problems. Unpredictable weather conditions complicate the production of food crops which subject farmers and the food retail sector to huge price fluctuations. This may cause an unbalanced supply of food products with demand. As a result, retailers are becoming serious in their efforts to take measures to minimize the causes of environmental risks (Martin-Pena et al., 2014:222).

- **Social concerns and awareness**

Social pressure is another external pressure to adopt green practices in the food retail sector (Linnenluecke and Griffiths, 2010:358; Du Plessis and Grobler, 2014:270; Reddy, 2016:23). People's concern and awareness about environmental risks (global warming, floods, earthquake, unpredictable weather) caused by the exploitation of natural resources and unsustainable environmental activities, have forced societies to change their perception and attitude. They now focus on conservation and the effective use of natural resources and finding possibilities to minimize environmental risks (Llbery and Maye, 2005:331; Mwanza and Mbohwa, 2017:654). The peoples' new environmental zeal dictates their day-to-day activities, starting at the food they purchase from the food retail sector. They are concerned about the types of food products they choose to consume and choose to buy from stores that sell healthy foodstuffs and maintain a good environmental image. This has led retailers to enhance competition and boost green practices. In other ways, the proximity of the food retail sector to consumers also increases the influence of societal needs on retailers' attitude towards the protection of the environment (Martin-Pena et al., 2014:222; Claro et al., 2013:365).

- **Customer demand**

Customer demand for green products has the potential to influence food retailers to shift ordinary business activities into sustainable business activities. As suggested by Naidoo and Gasparatos (2018:129), customers' growing awareness and health consciousness affect many retailers to display health products in their store, which, in turn, affect the revenue of retailers. This also creates competition amongst retailers to take a bigger share of the market (Hwang and Chung, 2019:293). Moreover, customer pressure is not only on product selection; it is also in the choice of selecting the right retailer.

Moreover, customers' purchasing power has a significant impact on the decision managers make on whether to go green (Schaltegger and Synnestvedt, 2002:340). Based on the economic theory, if customers feel that the price for green products is too high and if it is costly to research to find alternatives or information about the value of green products, they are likely to remain loyal to non-

green products. Besides, the customers' decision whether to buy green products is also highly influenced by the preferences of family, friends and other groups (Gleim et al., 2013:46).

2.2.4 How to embed green practices in the food retail sector

Embedding green practices in any organization requires strategic approaches to enable the adoption thereof. To begin with, those in leadership positions in the food retail sector require knowledge and understanding about being green and its benefits to the success of their business. They need to be able to transfer their knowledge to their employees so that they, too, may realize the strategic goals of the business (Ramirez, Gonzalez and Moreira, 2014:18). Managers and leaders should guide their employees who realise they are expected to promote the strategic objectives coming from their managers and leaders. Likewise, being an example in performing green practices at their workplace also plays a crucial role in persuading employees to pursue environmentally friendly practices outside the workplace. Therefore, top-level human resources being a role model can inspire medium- and bottom-level human resources to incorporate green practices in the daily activities of the food retail sector (Lozano, Ceuleman and Seatter, 2015: 207).

As members of an organization, employers and employees are the main role players in adopting green practices. Human resource management can be a driver for environmental sustainability performances by linking its activities and objectives with sustainability goals and addressing an eco-focus agenda (Mandip, 2012:244).

Bertels et al. (2010:9) advised that informal practices nurtured by respective managers can foster the adoption of green practices at food retail sectors. Informal practices can include giving supportive ideas, being a model, creating links with employees, telling stories, creating sustainable policies, assigning responsibility, incentivising systems, developing reports, implementing sustainability initiatives, conducting experiments, seeking external help, back-casting, scanning, developing new products and services, and piloting and providing benchmarks (Claro et al., 2013:365).

Senior, as well as middle management, should encourage their employees to make sustainable decisions at the workplace. Giving employees a chance to express their understanding of sustainable practices in the food retail sector motivates them to promote company policy. Also, senior and middle management should practise what they preach instead of merely giving orders. They should demonstrate sustainability leadership by 'walking the walk' and 'talking the talk', participate in on-going discussions about sustainability expectations, prioritize sustainability in decision-making and giving attention to the work of sustainability committees. Employees' participation in the sustainable operation and decision-making creates a bond with managers that can strengthen employer-employee relationships (Margaretha and Saragih, 2013:5). Such relationships enable them to openly discuss and exchange personal values and learn from each other's experiences and, likewise, motivate employees to practise their

sustainability values and behaviours in the workplace. Relationships can also be an initiative to start sustainability practices in their communities (Margaretha and Saragih, 2013:6).

Reporting sustainable performance by publishing CSR reports that include a retail store's sustainability progress, earlier set goals, plans and commitments can help as a source of recognition as well as a motivating factor for other members (Naidoo and Gasparatos, 2018:129). Additionally, introducing incentive systems by including sustainability measurements in employees' performance evaluations and assessments programmes and using them as criteria for promotions, bonuses and benefits, contributes towards sustainable practice. Performance measurement mechanisms should ensure that targets are within employees' control so that they can be rewarded for initiatives taken (Margaretha and Saragih, 2013:6).

Adding sustainability policies to a retail store's strategy (like health and safety, ethical and climate change policies), implementing sustainability codes of conduct, and creating supplier sustainability performance policies or procurement policies can improve working habits of retail store members and enable them to abide by the sustainability policies and regulations (Bertels et al., 2010:9). The most essential international codes that recognize business sustainability performances are ISO 14001 (Azevedo et al., 2011:852) and the EU's EMAS (Eco-Management and Audit Scheme) (Martin-Pena et al., 2014:220). ISO 14001 is an international standard for environmental management which certifies companies' green performance in manufacturing, usage and disposal strategies (Naidoo and Gasparatos, 2018:133; Dhull and Narwal, 2016:62). In the case of South Africa, ISO14001 serves as a framework for the EMAS where any small or large business store gets certification from a third party (Green Business R) (Govindan et al., 2015:185). Many business stores use ISO 14001 in response to external pressure from customers, consumers and competitors (Smith and Perks, 2010:2).

Furthermore, adopting green practices in the food retail sector requires an in-depth knowledge of customers' requirements for management to amend their strategies, structures and principles while achieving business goals (Gupta and Kumar, 2013:316). As suggested by Tanner and Kast (2003:886), researching customers' preferences, perceptions and understanding of sustainable development can influence managers' decision-making in their stores. Based on the outcome of the research, managers realise how a product contributes to their stores' sustainability image, and they gain knowledge about sustainability and how to adopt practices in their stores and so on.

Smith and Perks (2010:4) suggested essential activities be performed at a management level to introduce green practices in the food retail sector. E-recruitment is a sustainable activity designed to minimise recruitment costs (Smith and Perks, 2010:4). It is a process of hiring people, using electronic sources such as the internet. E-recruitment can be facilitated through a company's website or commercial jobs board websites to advertise vacant positions in the company. E-recruitment facilitates the recruitment process by minimizing time and cost, requiring less paperwork, and having unlimited access to people

across borders, wherever there is internet access (Kaur, 2015:78). The electronic, human resource system (e-HR) is also an advanced means to keep records of employees and easily track their performance (Margaretha and Saragih, 2013:5).

As a business policy, creating socially, economically, and environmentally friendly business activities, as well as green buildings, enhances a healthy working environment and healthy staff (Smith and Perks, 2010:4). Increasing employees' sustainability awareness by using education and environmental sustainability and social responsibility training also increases members' understanding about social concerns, resources utilization, and the sustainable use of natural resources with minimum waste (Margaretha and Saragih, 2013:3).

Employing experts in environmental development to create strategies and develop policies can shift the normal operation of retailers to sustainability. Appointing new board members to add unique external perspectives on sustainability will serve to address environmental issues and satisfy stakeholder expectations on social issues, economic and environmental performance. Hiring sustainability-oriented personnel enhances the implementation of environmentally friendly management systems. This can develop as a habit and be retained as a culture in the store. Reward systems are also essential to encourage green activities (Linnenluecke and Griffiths, 2010:358). However, the objectives have to link with the strategy, value and culture of the retail store (Mandip, 2012:244). The rewards have to appeal to the personnel who are supposed to be motivated. The rewards, either in the form of incentives or other benefits, should reach the employees as set out in the retailers' reward policies and strategies. This helps to avoid confusion due to subjective judgement and bias.

Teleconferencing technology is an advanced means of interacting with people located in distant places (Commonwealth of learning, 2004:14). It plays a big role in extending sustainability knowledge through live education, training and development. It is also a means of communication at a business or corporate level, in governance, professional and medical services. It reduces travel time and resource expenses (Commonwealth of learning, 2004:14; Smith and Perks, 2010:4). Therefore, introducing teleconferencing as a means of communication allows retailers to use sustainable technology.

Moreover, abiding by government sustainability regulations and environmental laws deliver sustainable returns to investors, address customers' preferences and identify and respond to emerging societal trends. These are some of the most important advantages a manager should keep in mind when he considers ways in which to adopt green practices (Mandip, 2012:244; Smith and Perks, 2010:4).

Even though the above points are valuable and relevant to the introduction of green practices in the food retail sector, many challenges hinder managers from changing ordinary business practices into green practices (Lozano et al., 2015:207).

2.2.5 Barriers to embedding green practices in the food retail sector

Going green has been an interesting topic during the last several years, yet many business organizations have not adequately implemented it due to some barriers (Lozano et al., 2015:207). Barriers describe circumstances or human understandings that prevent an organization from considering green or environmental sustainability issues in their strategy (Ramirez et al., 2014:18). Many researchers have identified barriers that stop managers from adopting green practices. The barriers include a lack of personnel training, cost and commitment; pressure for lower prices; a lack of legitimacy of sustainability efforts, regulation and supplier commitment, and industry-specific barriers.

Confusion in accepting the definition of “green” (Tseng et al., 2013:3; Smith and Perks, 2010:5) and a lack of clarity in its implementation (Linnenluecke and Griffiths, 2010:357) are the first challenges many retailers face. Based on the findings of some scholars, the term “green” has ambiguous definitions which can create confusion in the understanding and perception of the concept. Unclear sustainable implementation rules and procedures also prevent managers from going ahead with introducing green practices.

Costs are negatively associated with the introduction of environmentally sustainable measures. It is feared that the cost involved with introducing environmentally friendly inputs and expensive green products will push up the selling price of those products (Ramirez et al., 2014:18). This might disgruntle customers who are unwilling to pay higher prices. In other words, many retail store managers will prefer to devote most of their shelf space to affordable products to keep or respect their customers’ loyalty.

Challenges in gaining access to environmentally sustainable products are an additional barrier for food retailers. Retail managers calculate their profit based on time, cost, product availability, etcetera. The delivery of environmentally sustainable products may unexpectedly be delayed, or they may be hard to find. There are high production and certification costs that affect the availability of satisfactory quantities (supply) to demand. This does not encourage retailers to include green products in their planning or displays (Chkanikova and Lehner, 2014:5).

There are more challenges in introducing green practices into food retail services (Ramirez et al., 2014:18). Being sustainable means changing systems of procurement from ordinary to advanced systems. The set-up cost, administration cost, environmental training cost (Ramirez et al., 2014:18), auditing fees, time taken by documentation and efforts in complying with the specifications (Martin-Pena et al., 2014:222) are considered as investing costs. Such costs may discourage managers who fear that benefits such as low pollution, better environmental management, or new contracts will not compensate for costs incurred. Hence, a lack of knowledge of the benefits of green practices and insufficient information can cause managers to doubt the benefits they are promised for practising sustainability (Martin-Pena et al., 2014:222).

The more significance managers attach to monetary cost-benefit analysis in making environmental decisions, the lower the level of business environmental responsiveness (Papagiannakis and Lioukas, 2012:43; Ramirez et al., 2014:18). The food retail sector's initiatives in responding to the environmental issue can be affected by the managers' business priorities, resource allocation and cost-benefit analyses. The more emphasis that managers place on cost-benefit assessment, the less their emphasis on adopting environmental practices will be. In analysing the cost and benefits of environmental practices, managers can easily notice the cost because it is monetarily quantifiable, whereas sustainability benefits are subjective. Sustainability benefits can be measured either by the increase in the number of customers, the upgraded image of the store, or a good relationship with stakeholders. Additional information (research) is often required to identify further benefits (Papagiannakis and Lioukas, 2012:44). Thus, if it is costly to collect this additional information regarding the benefits of environmental practices, managers may be discouraged to invest in environmental responsibility.

A lack of supplier credibility, creativity and execution negatively affect environmentally sustainable practices in the retail store. A product's sustainability begins at the designing stage, which determines the lifecycle, capacity and capability of the product in protecting the environment. Thus, a lack of suppliers' innovation, minimum product life diversification, low production capacity and poor reliability hinders the adoption of environmentally sustainable measures. Furthermore, trust between suppliers and retailers is a serious matter. The relationship between supplier and customer is always based on trust, so suppliers' reliability and trustworthiness are necessary to build long-term relationships with their customers, the retailers (Ramirez et al., 2014:18).

An inadequate organizational structure – the lack of a responsible body or business unit to undertake environmental issues and sustainable initiatives in the organization – is another drawback. Martin-Pena et al. (2014:227) agreed that an inadequate design of the organizational structure and a lack of responsible human resources are barriers in considering environmental sustainability as a crucial strategy in the food retail sector's business objectives. The authors added that a lack of a responsible body creates difficulties in the flow of information regarding environmental sustainability aspects and blocks internal and external communication commitments to all levels of the organization (Martin-Pena et al., 2014:223). Inflexible organizational culture and high resistance to changing leaders' and employees' mindsets, is negatively associated with the adoption of environmentally sustainable measures. Habits and routines in adopting environmentally friendly goods and services will always affect the flexibility of retailers' operations (Ramirez et al., 2014:20). As a consequence, employees and employers may not be committed to the environment, since there is no opportunity to provide environmentally sustainable education and training to the members of the store. Thus, a lack of knowledge, training and qualifications does not encourage people at the workplace to think about green practices.

Managers' attitude and perception are essential in adopting green practices, and they have influential power in shaping the direction and the level at which environmental sustainability is introduced in the food retail sector. A negative attitude and perception of managers towards sustainability can hinder the implementation of green managerial systems in the food retail sector. Papagiannakis and Lioukas (2012:42) analysed managers' attitude and values about different factors (personal values, subjective norms, self-efficacy, monetary cost-benefit assessment and environmental regulation), which influence their decision-making in introducing corporate environmental responsibilities.

There is a direct relationship between the environmental attitudes of managers and the level of business environmental responsiveness (Papagiannakis and Lioukas, 2012:43). Briefly, a positive approach by managers towards environmental protection can facilitate the inclusion of environmental considerations in the retail business's decisions and operations. As a result, there will be more discussion about the environment issue, and this could influence the staff's behaviour at a lower level and change their attitude towards sustainable practices. Positive environmental attitudes and managers' values are likely to elicit a positive response from the business (Ramirez et al., 2014:20). Thus, corporate environmental responsibility can be created, determining the degree to which the food retail sector react to the natural environment. Managers' values influence corporate environmental responsiveness indirectly because value guides them to identify what is important or unimportant when deciding whether to adopt green practices. The value may encourage retail store members to win ecological responses, and managers like to modify working habits according to their values. On the other hand, managers' behaviour influences environmental behaviour indirectly by shaping environmental attitudes (Papagiannakis and Lioukas, 2012:43).

Managers' values affect environmental response decisions. The personal values are set as self-efficacy, self-transcendence and self-enhancement of managers (Papagiannakis and Lioukas 2012:43; Ramirez et al., 2014:20). Managers' higher level of self-efficacy in handling environmental issues increases business's environmental responsiveness. According to Bandura (1994:71), self-efficacy is defined as "people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives". That is, self-efficacy represents a personal belief that one can accomplish the required tasks. Self-efficacy influences an individual's choices since people put more effort into tasks and take more risks when they believe they can succeed. Managers with a higher level of self-efficacy on environmental concerns believe that they have the required knowledge, skills and ability to handle the environmental issues and are ready to make efforts and take risks to achieve environmental responses (Papagiannakis and Lioukas, 2012:43).

Managers' self-transcendence and their level of business environmental responsiveness and attitudes are directly related (Papagiannakis and Lioukas 2012:43; Ramirez et al., 2014:20). "Transcendence refers to the very highest and most inclusive or holistic levels of human consciousness, behaving and

relating, as ends rather than means, to oneself, to significant others, to human beings in general, to other species, to nature, and the cosmos” (Garcia-Romeu, 2010:26). Self-transcendence guides a manager’s attitude towards social and environmental concerns. Whenever managers make business decisions, their values will prevent them from employing environmentally unfriendly strategies that will harm society and the environment.

Self-enhancement may prove a problem. There is an inverse relationship between a manager’s efforts to enhance his image and his attitude and response to the environment (Papagiannakis and Lioukas 2012:43; Ramirez et al., 2014:20). “Self-enhancement denotes a class of psychological phenomena that involve taking a tendentious positive view of oneself” (Sedikides and Gregg, 2008:102). When managers feel good about themselves and overconfident that they are doing is right, they often tend to ignore new developments and management systems and fall victim to fast-growing technology and the development of global business around them. Therefore, managers with self-enhanced personal values are less likely to respond to environmental issues.

Managers need to adapt their environmental sustainability position to stakeholders’ environmental expectations. Stakeholders, who could be suppliers or customers, have the power to pressure retail store managers concerning environmental responses (Menichini and Rosati, 2013:551; Schaltegger and Synnestevedt, 2002:340). Stakeholders’ environmental expectations could positively influence business environmental responses in various ways. They have the power to control and negatively affect those food retail stores that practise environmentally unfriendly activities either by boycotting their product or stopping deliveries until retailers fulfil their requirements. This occurs because stakeholders control valuable resources. Furthermore, social pressure obliges managers to consider environmental concerns. Besides, managers may be persuaded that fulfilling environmental expectations is a business opportunity to create strong integration with the stakeholders, gain market legitimacy and boost the business image. Therefore, the more managers respond to stakeholders’ expectations, the more sensitive will they become to the environment (Papagiannakis and Lioukas, 2012:44).

The relationship between the degree of importance that managers place on environmental regulation and business environmental responsiveness has an inverted U-shaped form (Papagiannakis and Lioukas, 2012:43). As Martin-Pena et al. (2014:222) highlighted, the inflexibility “(in terms of deadline and the form of adaptation)” and complexity of environmental regulations as well as their implementation make managers less concerned about environmental practices. This significantly affects retailers’ image.

A lack of mechanisms to measure, track and report sustainability performances, prevents managers from recognizing the intangible benefits and costs of sustainability (Bernes, 2009:27). Briefly, sustainability performance assessment mechanisms enable retailers to identify the positive and negative aspects of sustainability performance and sustainability activities in progress. They also identify shortcomings so that action can be taken to correct the problems and help retailers to assess the importance of

environmental sustainability to the economy. The above-mentioned barriers, however, may prevent managers either from introducing green thinking in their strategy or implementing it in their daily retail activities.

2.2.6 Overcoming barriers to the adoption of green practices

A precise definition of environmental policy, clear objectives and long-term environmental plans concerning well defined environmental responsibilities are essential steps to take at the initial stages of change to overcome difficulties in implementing green practices. Managers' values and attitudes have significance in maintaining high levels of environmental responsiveness. Accordingly, the food retail sector should screen candidates' characteristics versus environmental responsibilities when hiring persons to fill environmental management positions. The food retail sector should also promote managers' environmental awareness by offering environmental seminars and ecological events. This will enhance a successful or better outcome in maintaining environmental responsiveness. Managers should also give attention to the environmental expectations of stakeholders (Papagiannakis and Lioukas, 2013:48). Moreover, they need to hire environmentally-oriented full-time employees dedicated to environmental management and top up their capacity by providing natural environment training programmes associated with measurement and assessment mechanisms, which can analyse to what extent the employees are equipped to adopt and practise environmentally friendly production systems at the food retail store (Gonzalez-Benito and Gonzalez-Benito, 2005:3).

Ramirez et al. (2014:21) identified three broad categories of strategies that could help managers overcome the barriers to adopting green practices as a business strategy in the food retail sector. The strategies are related to supplier's communications, offerings and actions.

Good and clear communication with environmentally sustainable suppliers builds positive relationships. Lee and Klasse (2008: 574) suggested that suppliers are an asset, providing technologies and skills that enable the food retail sector to respond to environmental requirements in a timely and decisive manner to satisfy their customers. Suppliers can also provide education and training to managers and employees to help them gain environmental knowledge and information. This knowledge will enable them to learn what sustainability means and its positive effects on the performance of a retail store. Having an environmentally oriented relationship with stakeholders like "employees, customers, consumers, supply chain partners, competitors, investors, lenders, insurers, nongovernmental organizations, media, the government and society" (Berns et al., 2009:25) also helps to overcome barriers. The relationship can be created through communication means such as participation in environmental conservation programmes, environmental reporting and active management of environmental claims (Lee and Klassen, 2008:574). This makes the business life of

retailers easy. There will be an easy flow of information, an opportunity for funding, investment, incentive, public image and others that will enable managers to think green.

Strategies should be introduced whereby environmentally sustainable suppliers should ensure that their products are honestly sustainable, not functionally deficient and truly beneficiary to the food retail sector (Naidoo and Gasparatos, 2018:131). The products should be environmentally friendly products that are designed and made considering environmental issues throughout the lifecycle of the product (Lee and Klassen, 2008:574). ISO 14001 certificates can respond to the mandates of environmental certification whereby retailers can earn public recognition for maintaining environmental standards (Gonzalez-Benito and Gonzalez-Benito, 2005:3). Retailers should also take measures to assure that the products are healthy and sustainable. Testing mechanisms should be introduced to assure that a product is green. Procurement policies should specify the criteria for the products to be supplied. The products should achieve valid international certification (ISO 14001) to prove that they are free of hazardous materials, which could be assured by hazardous material protocols that include banned-material lists and test methods. Suppliers should submit “material composition data” for required products, specifying the ingredients used to make the product and the manufacturing process. The retailers should also push the top management team of the suppliers to increase their awareness about the environment and be proactive to the global environmental issue (Lee and Klassen, 2008:579). The authors added that retailers can provide environmental sustainability training to suppliers.

A green supplier’s initiatives to create a close relationship with its customers (retailers) will facilitate the transfer of green ideas. Maintaining such a relationship is related to supplier capacity, service levels and pricing structure. A supplier’s capacity to fill large orders can indicate its capacity as a feasible supplier. Lowering prices with longevity and usage rate of the customer, and providing useful services by informing the customer of new product designs and services can motivate the food retail sector to create a good relationship (Ramirez et al., 2014:21). To sum up, managers are required to be alert to the above-mentioned points to overcome the challenges they face.

2.2.7 Benefits derived from adopting green practices

The green practice is a major issue for many organizations in developing their business plans and organizational culture to survive and increase their market shares (Naidoo and Gasparatos, 2018:128). The food retail sector which performs green practices resulting in sustainable development through economic, social and environmental benefits concurrently are called “triple bottom line” (Claro et al., 2013:366). “Triple bottom line” is a sustainable performance assessment of retailers by outsiders such as stakeholders. It judges business success in terms of people, planet and profit (Gleim et al., 2013:44). Different systems can identify an environmentally sustainable retail sector that achieves credibility using environmentally friendly packaging (utilization of reusable packages), environmentally friendly

purchasing practices and other environmental practices. ISO 14001 is common. It benefits business stores to create a strong environmental image that can attract environment-oriented customers and suppliers. It also enables them to compete in the global economy by meeting its standards (Azevedo et al., 2011:852; Smith and Perks, 2010:2).

Alignment with the international standards for environmentally friendly quality (ISO 14001) improves the reputation of the food retailers' stores in the competitive market. It also improves the relationship with stakeholders such as investors, insurance companies, employees and others. Conformity to global standard quality measurement means avoiding liabilities or penalties from the respective body (Gonzalez-Benito and Gonzalez-Benito, 2013:3; Martin-Pena et al., 2014:222). Green business practices have both economic and environmental advantages. These advantages are seen from two perspectives. First, an organization can gain an advantage over its competitors by adopting a resource-based perspective on competitive advantage and environmentally sustainable practices as a unique resource. Second, an organization can match its resources and capabilities with these demands through a strategic-fit perspective, that is, the ability to deliver the level of environmental performances demanded by green stakeholders (Harris and Crane, 2002:216). This can develop the relationship with the stakeholders, satisfy the customers, minimize penalties for not implementing environmental regulations and create a good store image, all of which will boost sales and market share (Martin-Pena et al., 2014:222).

A sustainability policy also improves the human resources capacity of the food retail sector. Informal communication between employees and managers is an opportunity to transmit environmental knowledge and attitudes throughout the store. That means informal communication is one of the means of improving sustainability at the workplace and creating and strengthening relationships and understanding. Thus, it generates the intangible benefit of employees' satisfaction and motivation which will have a huge effect on the success of the implementation of environmental policy in the store (Martin-Pena et al., 2014:222).

Changing managers' perceptions and attitudes towards environmentally sustainable practices can benefit the food retail sector by improving information systems, reputation, incentives, and human resource training and adequate skills (Martin-Pena et al., 2014:221). Green business practices can motivate employees of the food retail sector not only to adopt green practices at the workplace but also to develop them as a norm to be practised in their daily activities. This will, in turn, directly or indirectly influence their families and communities. Moreover, retailers' proximity to the end-consumers and the economic impact of policy on them, can play a leading role in promoting green practices in societies and influence other businesses to develop similar policies (Bertels et al., 2010:6; Hwang and Chung, 2019:293). Naidoo and Gasparatos (2018:127) clarified that retail sectors could play a central role in motivating and persuading suppliers and customers to adopt green practices in their businesses.

Retailers can influence suppliers by applying the green purchasing policy and criteria to select sustainable suppliers. Customers are end-users of retailers; therefore retailers can shift customers' preferences by retailing healthy products, promoting their products and teaching their customers the benefits of green products by displaying on big screens.

Implementing environmentally sustainable policies can benefit the food retail sector as a source of finance (Martin-Pena et al., 2014:222). Most funding organizations' priority criterion is measured on the capability of any business organization to respond to the call for environmental sustainability practices. Thus, a retail store focused on protecting the environment by reducing carbon emission and waste, and on the careful utilization of resources (water and energy), benefits, as it is more likely to receive financial support. This encourages managers to adopt clean technologies and technological transitions from traditional to advanced sustainable processes (Martin-Pena et al., 2014:222; Annabeth, 2018:6).

Table 2.1 Practical implications for different dimensions of sustainability

Dimensions of sustainability	Triple bottom line	Green initiative	Superior performance
Economic	Planet	Reduction in Carbon dioxide emission	Efficient resource utilization
	People	Reduction in energy requirements	Effective supply chain management
	Profit	Fuel efficiency	Improved profitability
Social	Planet	Organic growth	Efficient marketing
	People	Socially responsible actions	Efficient resource planning
	Profit	Efficient product recycling	Efficient product management
Environmental	People	Transparent actions	Efficient customer facing
	Planet	Efficient ecological footprints	Efficient use of information
	Profit	Integration of upstream and downstream movements	Improved market assessment

Source: Gupta and Kumar (2014:314)

Food retailers that have a good environmental sustainability image can capitalize on the goodwill of investors and serve their interests by expanding their business (Martin-Pena et al., 2014:222). They can,

for instance, increase the size of the store and have a massive display of healthy foodstuffs. This can help balance the demand and supply of healthy products in the market economy. Moreover, retailers can open branches to ease the accessibility of green products to the community and increase their capability by providing inter-organizational teaching and learning activities promoting environmental sustainability. As benefits of green practices, reduction in costs and improvement in productivity (efficiency), by eliminating waste and substituting materials that do not add value, generate cost reductions (Martin-Pena et al., 2014:222). Gupta and Kumar (2013:314) mention three sustainable dimensions that trigger green practices that affect the performance of the food retail sector, as seen in Table 2.1.

2.3 Conceptual framework

The conceptual framework presents a graphically summarised presentation of the study, as illustrated in Figure 2.1. The origin of the study is the problems facing our planet as a result of global warming, natural resource exploitation, carbon emission, pollution and chemical waste (Bhattacharya et al., 2011:7; Mengue and Ozanne, 2005:431). These have led many professionals to research to identify the causes, some of which proved to be environmentally unfriendly practices of business organizations and industries. Chekima et al. (2017:1438) elaborated that the unsustainable practices and consequent serious effects thereof brought an increase in the knowledge about sustainability and, in turn, motivated many retailers to practice sustainable business operations. As a result, internal, external and supplier relationship drivers are identified as factors of green practices in business organizations. The external drivers are governmental interventions, environmental regulations, competition and economic uncertainty, social concern and awareness and customer demand. The internal drivers include the internal capability of human resources, customers and process capability, marketing strategy, and profitability of the business. The supplier relationship indicates the inter-organization process, environmental policy and communication. Even though these factors are primary reasons for many retailers wanting to practice green, numerous obstacles are hindering many retailers from adopting green practices. These include managers' attitude and perception, inadequate organizational structure, a lack of suppliers' credibility, creativity and execution, cost, and customer purchasing power. To avoid these barriers, a precise definition of environmental policy, clear objectives and long-term environmental plans about well-defined environmental responsibilities are required. Besides, good and clear communication with environmentally sustainable suppliers, green practice education and training are critical aspects which retailers should consider beneficial for the adoption and implementation of green practices. This conceptual framework attempts to summarise and present the interdependence of these complex variables of the study.

2.4 Conclusion

Green practices in the food retail sector are becoming a crucial strategy in achieving competitive advantage. It has been mentioned that being green offers many benefits to a business as well as to the

environment. Recognition for social responsibility is achieved along with success in business objectives. However, many food retailers are slow in introducing environmentally sustainable behaviour to their daily business operations. This can be due to poor management systems or a lack of knowledge in calculating the outcomes of being green. However, pressures are coming from different angles that push the food retail sector to adopt green practices. Some, such as customer preferences, government regulations, competition, cost, environment regulations, human resource capability, etcetera, are motivations to accept and implement green practices. Therefore, mental capacity development of human resources and improved daily working behaviour encourage retail sector managers to improve their business strategy, activity and operation to achieve a competitive advantage.

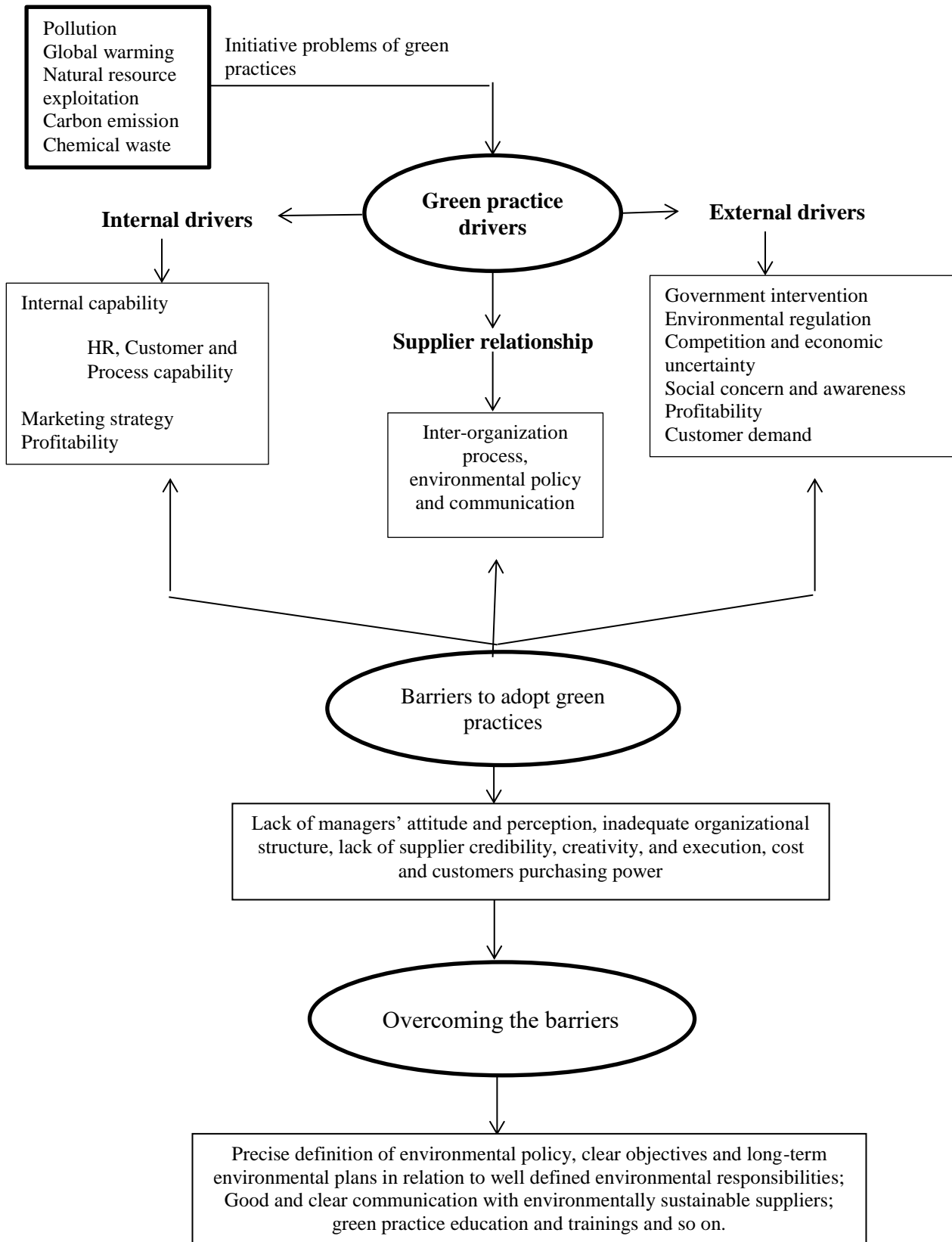


Figure 2.1: **Conceptual framework of the study**

Source: Own compilation

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the methodological practices that were implemented in the study. It emphasizes the philosophical perception which the researcher explored, the available information on the topic, as well as an understanding of the actual green practices of the food retail sector. The chapter also describes the qualitative, quantitative and mixed research approaches the researcher followed, using the right type of data collection methods and analysis. It deals with the study site, the population and sampling techniques, the data collection methods, the data analyses methods, and the reliability and validity of data quality control systems. It also examines the ethical principles that have to be adhered to during and after the study, and the limitations which occurred during the study.

The purpose of the chapter is to select the right combination of methods resulting in a better understanding of the findings, a meaningful discussion of the study and the achievement of better conclusions and recommendations.

3.2 The research philosophy

The philosophical assumption is a researcher's thinking about the nature of a problem and the knowledge obtained based on the researcher's perception. Generally, there are three philosophical assumptions: positivist, interpretive and critical (Myers, 2009:23). Positivist research philosophy generally seeks knowledge phenomena based on measuring and observing to find an objective result (Farquhar, 2012:18, Myers, 2009:23). Positivist is mostly natural science philosophy, but currently, it is also applied in social science research. It is designed to be objective, testable and independent of theoretical explanation.

Interpretive philosophical assumption interprets views in terms of life experience. It subjectively interprets the meanings and actions of a variable based on its subject frame of reference (Farquhar, 2012:19). In this case, the research design explores the title of the research rather than to test the facts interpreted theoretically. Critical research philosophy is less commonly used. It assumes that social reality is historically constituted, produced and reproduced by people (Myers, 2009:34).

This research followed an interpretive philosophical research assumption whereby the researcher aimed to explore important information about factors influencing green practices in the food retail sector. The information was collected by interviewing managers and distributing questionnaires to employees in the food retail sector. The data was then analysed qualitatively and quantitatively.

3.3 Research design and methodology

Research design describes the road map of the overall research project (Myers (2009:8; Mchunu, 2012:9). It is a plan for data collection, data measurement and data analysis prepared to achieve the

objectives of the research (Sekaran and Bougie, 2016:98). There are different types of research designs as suggested by Sekaran and Bougie (2009:102). Exploratory, descriptive, casual, hypothesis testing and case study analysis are some of the various types of research designs. They vary based on the degree at which the research topic is researched (knowledge availability), the research question and the feasibility of the study. As the research passes the stages from exploratory to a more advanced hypothesis testing and case study type of research, it becomes more specific and precise because it deals with more detailed research problems (Sekaran and Bougie, 2009:102).

Exploratory research design is used when there is no or limited knowledge about a topic. An exploratory design is a source of new information about a study (Hair, Money, Samouel and Page, 2007:154).

Descriptive design is more detailed than exploratory research. It is applicable when there is a need to ensure accuracy and to be able to describe the features of the variables of interest in a condition. That means when there is a need to learn and describe the properties and characteristics of an organization (Hair et al., 2007:153; Sekaran and Bougie, 2016:43). The causal study is applicable when it is necessary to test if there is a variable that affects other variables to change (Sekaran and Bougie, 2016:44).

Hypothesis testing is important to find a relationship, variation and interdependence as well as cause-and-effect relationship of different variables. The case study analysis is important when there is a need to conduct in-depth research on a particular organization (Sekaran and Bougie, 2009:108).

Exploratory and case study research designs were used in this study. The exploratory design was applied since there was limited knowledge about the topic (Influencing factors of green practices in the food retail sector) and it was necessary to find relevant literature to use as a reference to answer the research questions. An exploratory design is applicable in academic resources to obtain a deeper understanding of the subject matter. The literature explored concerned the meaning of “green” and “green practices”, the means to embed green practices in the food retail sector, the driving factors to introduce green practices, the barriers and how to overcome them, and the benefits of green practices in the food retail sector. It added supportive academic knowledge to the study. Therefore, using exploratory research design in this study enabled the researcher to gain a broad understanding of the topic chosen to study.

The case study design was applicable where the study was done in the organizations (the food retail sector). It described in detail the actual level of green practices in the food retail sector and the factors that enable the food retail sector to practise sustainability. This helped to identify the level of green practices in the food retail sector and the driving factors that enable the food retail sector to introduce or implement green practices.

Therefore, applying both exploratory and case study designs in this study enabled the researcher to explore the available knowledge about the factors influencing green practices in the food retail sector, to understand the actual activities promoting green practices in the food retail sector and to reach informative conclusions and recommendations. The following sub-sections provide details of the research design and methodology.

3.3.1 Research approaches

Any research can be classified as either qualitative or quantitative, based on the type of data collection method, presentation and analysis (Thomas, 2010:320; LoBiondo-Wood and Haber, 2017:8). Qualitative research aims to explore attitudes, behaviour and experiences through contacting individuals using interviews, observation, fieldwork and focus groups, and to analyse the results in written format (Dawson, 2009:14; LoBiondo-Wood and Haber, 2017:8). Some examples of qualitative data sources are interviews, focus groups, observation, questionnaires, document and text, researcher's impression and reaction (Brief, 2012:2). Case study research, action research, ethnography and ground theory are some types of qualitative research. Qualitative research benefits by conducting in-depth research in a small sample size. It helps the researcher to consider the data source while interviewing (Myers, 2009:8; LoBiondo-Wood and Haber, 2017:8) and it also adds flexibility in terms of adjusting the sample size to fit the requirements of the study (Mchunu, 2012:9).

Quantitative research methods were first introduced in natural science to study natural phenomena (Myers, 2009:8; LoBiondo-Wood and Haber, 2017:8). In social sciences, they focus on statistical and numerical data interpretations where the data sources are questionnaires and structured interviews (Dawson, 2009:15). Some examples of quantitative research are surveys, laboratory experiments, simulation, mathematical modelling, structured equation modelling, statistical analysis and econometrics (Myers, 2009:8; LoBiondo-Wood and Haber, 2017:8). It is of benefit to the researcher when there are large sample sizes, as it is easy to reach participants through the internet, postal services and other means of communication. Quantitative research, however, limits the researcher who needs to explore information in depth. Its main drawbacks are that it ignores the social and cultural aspects of organizations, information gaps during analyses, the labour-intensive data collection process and limited personal involvement in directing the collection process (Brief, 2012:6).

Qualitative and quantitative approaches can also be distinguished by the type of data they report. The qualitative research approach contains mostly descriptively written reports whereas the quantitative research approach mainly deals with numerical data and empirical analysis with a brief explanation (Brief, 2012:5; LoBiondo-Wood and Haber, 2017:8). The approaches use different conceptual frameworks. The quantitative approach uses a scientific method which applies objectively approved procedures to achieve objectives with reliable statistical reports. The reliability is attained with large

sample sizes (Brief, 2012:8). In the qualitative approach, a smaller sample is considered to represent the targeted population (Pellissier, 2007:19). Large sample size can be more complex, require many resources, is time-consuming (Mchunu, 2012:9), and the analysis will be multi-layered (Brief, 2012:8).

A mixed methods research approach applies both quantitative and qualitative data collection methods in a study. It enables a researcher to focus on the study from different angles and helps in collecting rich data (Rambaran, 2016:19). Using mixed qualitative and quantitative data collection methods can benefit the researcher in various ways. For example, the data can be collected by interviewing as well as distributing questionnaires to the sample size (Brief, 2012:4). Then, the data can be presented numerically and in written format. The researcher can gain broad as well as an in-depth understanding of the subject matter both through subjective and objective analysis of the responses. According to Peersman, mixing the two methods rather than using them separately, offers more pros than cons and increases the reliability and validity of the outcomes (Peersman, 2014:4).

This research deals with the green practices of the food retail sector. Depending on the aspect of this research, both qualitative and quantitative methods (that is, a mixed research approach) were implemented. The qualitative data that was gathered reviewed the green practices from the perspective of the management of the stores; and the quantitative data reflected the employees' perspective. The qualitative data were collected during face-to-face interviews with managers. To collect quantitative data, questionnaires were distributed to employees. Employing a mixed research approach enabled the researcher to explore rich data which could be analysed numerically and in written format; and minimising the errors that could happen using a pure qualitative or quantitative research approach. Therefore, using a mixed approach strengthened the quality of the research outcome.

3.3.2 Study site

This section deals with a description of the study area. The study focused on the food retail sector located in Pretoria North in Gauteng Province. A total of eight stores were selected to participate in the study as presented in Table 3.1.

3.3.3 Target population and sampling technique

To answer the research questions and fulfil the research objectives, there is a need to select the target population from which the researcher expects to get relevant data. "Sampling is a subset of the targeted population" (Sekaran and Bougie, 2009:263). Sampling is the process of selecting informant size using different methods. Elements and objects of the target population available for selection during sampling are called sampling units and the available elements and objects in the target population are known as the sample frame (Hair et al., 2007:173). The sample should represent the sampling frame. According to Sekaran and Bougie (2009:268), different factors need to be considered when selecting the appropriate sampling size. These are: "research objectives, the extent of precision, desire (confidence

interval), the acceptable risk in predicting the level of precision (confidence level), the amount of variability in the population itself, the cost and time limitations, and the size of the population itself’.

Table 3.1 The types of items retailed by the sector

Food retail sector	Types of items retailed
Store A	Food items
Store B	Food, clothing, household items
Store C	Food items
Store D	Food, clothing, household items
Store E	Food, clothing, household items
Store F	Food, clothing, household items
Store G	Food items
Store H	Food items

There are probability and non-probability sampling techniques. Probability sampling techniques are used when every element of the targeted population has an equal chance to be selected. That means each element of the population has a probability of being included in the sample, whereas non-probability sampling techniques do not give members of the target population an equal chance to be selected or included in the sample. Non-probability samples are well suited for certain exploratory research designs (RemenyiWilliams, Money, and Swartz, 2005:193). Non-probability sampling is simple and less costly in time and moneywise than probability sampling techniques. Some examples of probability sampling techniques are simple random sampling, stratified random sampling, systematic sampling and cluster sampling (Sekaran and Bougie, 2009:270; and Hair et al., 2007:174).

Simple random sampling is a sampling method where each element of the population has an equal chance to be included in the sample. It is arbitrary in the selection of an element within the sample frame. Stratified random sampling is randomly selecting of members where the researcher wants to stratify the element with gender, age, race and nationality. Stratified random sampling is more convenient in small size than simple random sampling. That means the probability of selecting only one gender is nil. Systematic and cluster sampling is probability sampling techniques which are more convenient to represent the entire population than simple and stratified sampling methods. In systematic sampling, every Nth member of the population (perhaps every 10th member, or every 100th member) is selected to be included in the sample unit. In N/n , N is the total population size and n is the required sample size. The starting element is selected using simple random sampling. Cluster sampling is a method whereby sample populations are divided into separate groups called clusters; followed by selecting a simple random cluster from the population and undertaking data analysis using the sampled

cluster. Both systematic and cluster sampling can be used in combination with simple and stratified random sampling methods (Peersman, 2014:7).

A non-probability sampling includes convenience sampling, purposive sampling or judgemental sampling, snowball sampling and quota sampling (Peersman, 2014:7; Sekaran and Bougie, 2009:174; Remenyi et al., 2005:193 and Hair et al., 2007:174). The purposive sampling technique is commonly used in qualitative research (Elo, Kaariainen, Kanste, Polkki, Utriainen and Kyngas, 2014:4). Thus, it is important in this study.

The purposive or judgemental sampling technique is the non-random deliberate selection of respondents based on the quality of the required knowledge the respondent possesses (experience, resources, or previous researches) (Coyne, 1997:624; Tongco, 2007:147; Peersman, 2014:7; Etikan, Musa and Alkassim, 2016:2). This type of sampling technique enables the researcher to be flexible in selecting the right respondent to the study. That means it allows distinguishing and selecting respondents who have knowledge and experience of the subject matter. It also focuses on the ability of the respondents to participate, their interest in sharing the information and ability to express their knowledge, as well as their availability and willingness to be a respondent (Etikan et al., 2016:2). It also suits the small sample size, is relatively reasonable cost-wise and lends itself to collecting in-depth information. The limitation of this sampling technique is that it might not represent the population size because different researchers may use different ways to obtain a sample (Peersman, 2014:7). It is also difficult to understand the trustworthiness of the sampling system unless it is explained in detail (Elo et al., 2014:4).

Based on the above points, the food retail sector in Pretoria North, Gauteng Province was the target population of the research. This sector was selected using the purposive sampling technique. The criteria for selecting those food retailers were based on the nature of the product they retail, the similarity of the commodity they retail and the operation they practise within the sector. This enabled the researcher to compare green practice implementations between the retailers (Christelis, 2013:36). Moreover, since the data is required to be collected using personally administered questionnaires and face-to-face interview methods, it was important to consider the sector proximity for the convenient and easy approaching of the sites (Peersman, 2014:3). More importantly, for ethical considerations, store managers' permission was required to collect the data. Therefore, the ability of the retailers to grant permission to participate in the research was significant in their selection.

Out of the available food retail sector, eight food retail stores were chosen, using the purposive or judgmental sampling technique. Since the study target was to assess the performance of these retailers in implementing green practices, it was necessary to understand their objectives from the managerial and employee perspectives. Thus, managers and employees were the participants (informants) in the study. Besides, since the study focused on the food retail sector, in the case of mixed retailing stores (food, clothing and household items) like Store B, Store D, Store E and Store F, only managers and

employees working in the food retailing section participated in the study. This was done to develop comparative data sets amongst the sector. Regarding the other selected food retail stores like Store A, Store B, Store G and Store H, which retail only food items, all sampled staff were participants in the study.

In using purposive sampling, the researcher was able to identify the respondents with the knowledge and experience of the required information as well as their interest to share their experience. In purposive sampling, it is impossible to specify the sampling size since it is a non-probability sampling of participants from the given population, which is called total population sampling (Etikan et al., 2016:3). That means from the available managers in the food retail sector; the relevant managers were taken to participate in the study. Therefore, using the purposive or judgmental sampling technique, each manager was selected deliberately by considering their position (Peersman, 2014:7). That means it was assumed that the types of management duty they are performing would enable them to answer the research questions. Therefore, the sample size of managers to participate in the study was limited to those points.

The participants (informants) were selected based on the information extracted from the human resource (HR) unit of each store. The HR unit provided the number of managers and the total number of employees working in the food section. The researcher purposively selected the managers and employees who were capable, available and willing to participate in the study. Therefore, the qualitative and quantitative data were collected by interviewing and distributing personally administered questionnaires to purposively selected managers and employees, respectively.

The interview process was based on the managers' responsibility or duty in the stores. That means, their activities concerning the control of the store's resources and waste management, and their relationship with the employees and suppliers were considered. Accordingly, the researcher interviewed hot food managers, deli managers, perishable food managers, bakery managers, butchery managers, admin managers, receiving managers, grocery managers and store branch managers.

Originally, the targeted sample of managers and employees was 46 and 193, respectively, based on information obtained from the individual stores. However, the figures included those managers and employees working on other commodities like clothing, household and cleaning materials. Since the objective of the study focused on green practices of food retail stores, the actual number of participants shrank to 23 managers and 105 employees. A 100% response rate was obtained from sampled managers and employees.

3.3.4 Data collection methods

A data collection method can be selected based on the type of research approach identified for use in the study (Myer, 2009:122). In qualitative research, interviews, participant observation and fieldwork are the most common data collection methods (Farquhar, 2012:73; Myer, 2009:122). These methods are examples of using primary data sources (first-hand information) where data is generated from direct contact with the people or organization. Primary data adds depth and reliability to the research. However, it is expensive in terms of time and money (Sekaran and Bougie, 2009:181). Secondary data are sourced from published books, journal articles, newspaper articles, company records and archives, government publications and websites – information that has already been collected by previous publishers (Myer, 2009:122). Secondary data collection saves time and money but it could limit the researcher in finding new or up-to-date information that provides answers to the subject matter of the research question (Brief, 2012:3; Hair et al., 2007:128; Sekaran and Bougie, 2009:184).

There are different types of primary data collection methods. The common ones are: interviews (face-to-face interviews, telephone interviews), focus groups, questionnaires (personally administered questionnaires, email-based questionnaires) and observation studies (Sanelowski, 2000:250; Sekaran and Bougie, 2009:193 and Peersman, 2014:3). Face-to-face interviewing means data collection by interacting personally. Telephonic interviewing is used when the respondents are geographically located in different places. Structured questions are suitable for use during telephonic interviews because they make getting quick responses easy. However, it is expensive, makes it difficult to understand body language responses, and it can easily be interrupted by network problems (Sekaran and Bougie, 2009:194). In the case of face-to-face interviews, the researcher can have verbal and non-verbal information from the interviewee and also have a chance to discuss and understand vague ideas. It is mostly used in an exploratory research design where the researcher needs a deep understanding of the topic of the research. However, it is expensive if the sample size is large, and it might introduce bias (Hair et al., 2007:196; Sekaran and Bougie, 2009:186).

Interview questions can be designed in different ways. They can be structured, semi-structured, or unstructured (loosely structured) (Mason, 2017:109). They differ according to the degree of flexibility the interviewer uses to explore data. Flexibility and in-depth data collection are low in the structured interview method because the questions are designed in a closed format so that it restricts the researcher from asking beyond the written questions. Flexibility is higher in unstructured than in semi-structured and structured questions (Dawson, 2009:27; Myer, 2009:123; Hair et al., 2007 p.196). Unstructured questions are open-ended, and the researcher can generate a follow-up question(s) from the response of the informants, which helps to extract in-depth information. The semi-structured interview lies in between and is most commonly used in qualitative research. It contains both open-ended and closed

types of questions, where the researcher does not have to follow the sequence of the interview questions (Dawson, 2009:27; Myer, 2009:123; Hair et al., 2007:196; Mason, 2017:109).

Data can also be collected by distributing questionnaires either personally or through the postal services and/or electronic mailing. Personally administered questionnaires are used when the researcher personally distributes the questionnaires to the respondents to answer the questions. It provides an opportunity to create rapport during the introduction of the questions and enables the researcher to explain questions that are not clear to the respondents. This method is employed when the participants are located in manageable proximities. When using personally administered questionnaires, there is a probability of getting a 100% response rate. In the case of mail and electronic mails, the questionnaires are sent to the postal and electronic mail addresses of the respondents, respectively. Both are appropriate when the respondents are in scattered locations, where reaching each respondent in person is practically impossible. Electronic mails are cheap, easy to monitor and can reach respondents fast across borders. However, careful sampling is necessary since the respondents might not have internet access or the know-how to complete web-based questionnaires (Hair et al., 2007:208; Sekaran and Bougie, 2009:210). Mailed questionnaires have lower response rates than other means of data collection (Sekaran and Bougie, 2009:197).

Observation is another method of data collection. It is the detection of information using the power of sight during an interview. Observation study is mostly applied in behavioural research and has an advantage in that it enables the researcher to collect rich data. This type of study is mostly applicable in lab activities, events and work environments (Kothari, 2009:96; Hair et al., 2007:193; Sekaran and Bougie, 2009:211).

Research can be conducted by using more than one method of data collection, which is known as the mixed data collection method. This type of method employs multiple data collection methods like qualitative and quantitative. For instance, questionnaire, interview and observation methods can be used. This assists the researcher to explore valuable data using different methods. It also helps for cross-checking of data collected from the same respondents, using different methods, and increases the validity of the outcomes (Peersman, 2014:1; Sekaran and Bougie, 2009:216).

Both primary and secondary sources of data were used in this study. The primary data was collected through face-to-face interviews and personally administered questionnaires (Sekaran and Bougie, 2016:37). The use of the mixed data collection method enabled the researcher to explore in-depth information and collect objective responses. Quantitative and qualitative data collection methods are complementary to each other; thus applying both minimize the disadvantages of each method (Peersman, 2014:4). Use of both methods is convenient in an exploratory case study research design. A tape recorder was used to record the face to face interviews, but this depended on permission to use the

appliance being granted by the store (Brief, 2012:3). Consequently, out of 23 interviewees, two interviewees did not want to be recorded, and one interviewee gave the responses in written format.

The interview planned for this study was made up of semi-structured questions which were prepared before the interview (Appendix 4). The design of the questions can increase consistency across interviews and allow informants to answer freely and express their ideas in more detail. The researcher also has the freedom to ask questions and generate questions from the answers to collect in-depth information. The interview consists of an introduction, questions and a thank you statement. The introductory section explains the researcher's name, the level of the study, the name of the school or university, the topic and aim of the research, and ethical issues. The confidentiality of the respondents' information and the right to leave or withdraw from participation is assured. The questions are categorized as a general understanding, human resource development, green practice performance evaluation, relationship with suppliers and plans of the food retail store. The first section of the interview identifies the general understanding and perception of managers about green and green practices, green practice implementation and the initiatives to implement green activities. The human resource development section measures food retailers' techniques to promote green practices in terms of recruitment strategy; employees' knowledge enhancement; managers' initiatives for informal interaction and being role models; rewarding systems; and responsible body in the organizational structure. The green practice performance evaluation section explores retailers' green performance measurement and evaluation techniques, challenges in implementing green practices and how retailers accommodate customer demand for green products. As far as retailers' procurement policy is concerned, the relationship with the supplier section enables the gathering of information in this regard, to check if suppliers abide by the international quality control standards and their initiatives to promote retailers' green practices.

The questionnaire prepared based on the literature review, is divided into two sections. Section one deals with the employees' (informants') personal information, including gender, age, work position and work experiences. Section two has five sub-sections, namely general understanding, management motivation, challenges, customer demand on green products and resource consumption. These elements have the potential to explore the extent of green practice implementation by different food retailers. This section, therefore, assessed employees' level of general understanding regarding green and green practice, its effect in business and their perception of such practices. Management motivation, the third section, deals with the role of management in promoting green practices. It encompasses the availability of education and training to employees; the availability of a responsible unit in the organizational structure; managers' initiatives in performing green practices; their being role models and supportive of employees' initiatives; reward system, and employer-employee informal interaction. This section enables the researcher to identify the internal initiatives to green practices and the extent to which food retailers are practising those activities. Questions used to identify the challenges faced in implementing

green practices, the demand for green products and resource consumption efficiency of retailers help to gauge the extent of food retailers' green practices. The questions were closed-ended and measured on an ordinal measurement scale (Appendix 4).

Ordinal measurement is giving an order to the degree of choices. It does not tell the distance between the two choices. That means, it is impossible to say the first choice is twice or half of the second choice (Dawson, 2009:21). It works better with the measuring of non-numeric concepts, for instance, attitudes and emotions like happiness, discomfort, or satisfaction. The central tendency can be measured using mode or median statistical concepts (Parumasur, 2014:6). Thus, in this study, a five-level ordinal measurement scale, ranging from 5-1; where 5 is very high, 4 is high, 3 is medium, 2 is low and 1 is very low, was used. Importantly, this enabled the researcher to analyse the level of green practices implementation in the food retail sector.

3.3.5 Pre-testing

Pre-testing is an important step in identifying the drawbacks of the interview questions and questionnaires. The importance of pilot testing is to make sure the participant in the study not only understands the question but also understands the meaning in the same way. It helps to know if some questions are sensitive to the participants and how much time is needed to finish the interview or questionnaire. According to Collins (2003:230), pre-testing helps to identify words which have double meanings or are unclear, and leading questions that can influence the respondents' judgement in their responses – all of which may have an impact on the result of the data (Reddy, 2016:68). The interview questions for this study were pre-tested by a person in a managerial position, whereas some employees assisted in pre-testing the questionnaire. This helped to measure the clarity of the questions and determine whether they were misleading or redundant. Interviews took place in a private room provided by the management so that the interview process could be conducted without interruption. The managers felt confident in responding. Moreover, the interviews were conducted at an agreed time so that the managers were available to receive the researcher. Moreover, additional notes were taken after each interview to make sure the necessary information was captured and could be used as a summary or additional clarification during analysis.

3.3.6 Data analysis

According to Thomas (2010:318), data analysis is the process of ordering and structuring collected data to create knowledge. Data analysis is learning processes where a researcher can gain a detailed understanding of the study by continual filtering of knowledge through interpretation (Taylor, Bogdan and Devault, 2015:168). There are qualitative and quantitative data analysis methods. In qualitative research, the data collected, using qualitative data collection methods (interviews, observation and focus groups), are analysed in the form of sentences and paragraphs; whereas in quantitative data analysis,

data collected applying quantitative data collection methods (questionnaires) are analysed in the form of numbers (Brief, 2012:5). “Qualitative research analysis is a dynamic and creative process” (Taylor et al., 2015:169).

In qualitative research, data analysis is much harder than in quantitative research (Brief, 2012:13). This is because qualitative data is needed for inductive reasoning, thinking and theorising rather than it being a technical and mechanical process. In the case of quantitative research, the data needs to be interpreted objectively, applying formulas for calculations or using software to analyse the data and reach objective conclusions. In qualitative data analysis, the quality of the analysis depends on the experience of the researcher in interpreting data in a way that makes sense and is conducive to clear understanding.

Qualitative research is not dependant on a division of labour between data collector and coders like the quantitative analysis. That means a researcher can collect and code the data hand in hand by him/herself or in a team (Thomas, 2010:318). In other words, while the data is being collected, the responses can also be coded and analysed at the same time. Software systems that can be used to code and analyse qualitative data include NVivo, ATLAS.ti, Hyper Research (Research ware) and Dedoose (a web-based coding system). These computer-based coding systems are mostly used for high research capacity (Taylor et al., 2015:169). There are different types of qualitative data analysis methods: thematic analysis, comparative analysis, content analysis and discourse analysis. The content analysis method is the most commonly used for qualitative data (Dawson, 2009:116; Miles, Huberman and Saldana, 2014:8). Content analysis is the process of analysing data by coding similar contents. It is the reduction of large unstructured written content into convenient data which is relevant to the research objectives (Peersman, 2014:10). Numbers or words are used to code responses in categories, which are then analysed using conceptual or relational analysis. The advantage of this method is that it allows a researcher to analyse large volumes of written information (Dawson, 2009:122).

There are three steps to follow in qualitative content analysis: data reduction, data display and drawing of conclusions (Sekaran and Bougie, 2009:370; Hair et al., 2007:291; Miles et al., 2014:46). Data reduction is the first step in the analysis process. It is a process of selecting, coding and classifying the data into manageable portions through coding and categorizing. Coding indicates the process of reducing the data, rearranging and integrating it to form theory and to draw valuable conclusions. “By counting the frequency of a word or a phrase in a given data set the prevalence of thematic responses across the respondents will be scored to undertake the data reduction” (Ryan and Bernard, 2000:776). Data presentation is the next step in the analysis process. It is a way of displaying the data in brief. It is a way of summarizing the data in the form of graphs, matrix, quotes, or charts that could enable the researcher and reader to understand the data easily. Microsoft Office Excel is an easy means to summarize the data in a clear format. Drawing conclusions is the last step. Based on the displayed data,

conclusions will be drawn from the reduced set of data (Sakaran and Bougie, 2009:370; Miles et al., 2014:46).

In this study, thematic analysis was used to interpret the qualitative data. Thematic analysis is a form of content analysis (Rambaran, 2016:19). Thematic analysis is a process of analysing large qualitative data sets in the form of themes and patterns (Ibrahim, 2012:41). The thematic analysis identifies themes that are meaningful and interesting to address the research questions. It is a widely used analysis method (Jugder, 2016:2). Thematic analysis is a flexible qualitative analysis method that can be used in both deductive and inductive methodology (Ibrahim, 2012:41). Maguire and Delahunt (2017:3354), suggest six steps to follow when analysing qualitative data. Step one is to be aware of the data, that means to read the transcribed data and memorise it. The second step is to create codes; this step is the process of reducing big data into manageable meaningful data. The third step is to create themes. The coded words become organized into broad, significant patterns which clarify particular issues to address research objectives. The fourth step is to revise created themes and to make sure they are coherent and make sense. The fifth step is to define, that is to create a relationship between themes. The last step is writing the report.

The researcher recorded each interview and transcribed it into the Microsoft office word program. In addition to the summary narratives of the interview content, interview transcript was subjected to thematic analysis using the free online software QDA Miner Lite; a product of the Provalis Research. The thematic analysis examines specific themes within a data by using a coding system, which, in turn, allows the effective identification of themes through recognition of key moments in the data set. Interpretation of data is then made by comparing code frequencies. Coded frequency (Appendix 5) shows the repetition of coded words in transcribed interviews.

The quantitative data were analysed using SPSS version 24 data analysis software, using the univariate analysis method. SPSS is a commonly used data analysis method in the social sciences. It is used to interpret data numerically and present it in tables and graphs. SPSS is also a multipurpose package that permits various types of analyses, data transformations and forms of output (Arkkelin, 2014:2). Two approaches were used to analyse and present quantitative data. Descriptive statistics were used to summarise questionnaire data, and univariate regression analysis was used to determine the statistical significance of the relationship of the variables examined (Parumasur, 2014:11). The predominantly ordinal data was captured and scored into various categories such as very high = 5; high = 4; medium = 4; low = 2 and very low = 1. This was then subjected to descriptive statistics to determine statistical indicators such as frequency, percentages and case processing summaries as presented in the results section and Appendices 6 and 7.

Univariate regression analysis was used to determine the presence of relationship amongst the various variables tested. “Univariate analysis is when one variable is analysed at a time, using measurements of

central tendency, dispersion and frequency of distribution” (Mtshali 2017:19). Univariate analysis is when there is only one dependent variable (Punch and Oancea, 2014:156). The Odds Ratio (OR) was used to determine the statistical significance of the association between the dependent variable and the independent variables. An OR value of one indicates a statistically significant association between the variables compared (Lang, Secic and Lang, 2006; Acock, 2009:272).

3.3.7 Data quality control

Reliability means when the outcome of the research remains consistent whenever the same techniques are applied repeatedly at different times (Peersman, 2014:6; Mohamad, Sulaiman, Sern and Salleh, 2015:164; Lobiondo-Wood and Haber, 2017:292). Data which is collected carefully using suitable methods and analysed critically is proof of reliability (Brief, 2012:6). Golafshani (2003:598) describes three types of reliability in qualitative research: “(1) the degree to which a measurement, given repeatedly, remains the same (2) the stability of a measurement over time; and (3) the similarity of measurements within a given time”. Reliability deals with consistency, accuracy, precision, stability, equivalence and homogeneity (Lobiondo-Wood and Haber, 2017:298). Reliability testing methods can be used to measure the stability and consistency of the research that makes reliability much easier to understand.

The validity, on the other hand, will assure that the research is true and reliable. Validity means that individual scores of research techniques are meaningful and contribute to good conclusions from the sample population to be studied (Mohamad et al., 2015:165). Validity is a test to determine if a study measures what it originally intended to address or how well it imitates the reality it claims to have achieved (Freedman (1987:7). "A study is scientifically valid provided it is designed to yield reliable information, according to accepted principles of research practice, concerning the hypothesis being tested” (Freedman, 1987:7). The validity of the study depends on the ability of the researcher in managing the systems used during data collection and analysis. Therefore, “Asking the right questions in the right ways at the right time and of the right informant is vital to achieving reliable, valid and usable assessment information” (Brief, 2012:10).

As per the literature, reliability means that when research is conducted using the same techniques and sample size at some other time, the result will be similar or remain the same. For instance, if someone else should employ the same techniques (e.g. exploratory and case study design, non-probability purposive sampling, face-to-face interviewing and personally administrative questionnaires, and the analysis techniques, content and SPSS, respectively) at some other time, the study should show the same or similar results.

The reliability and validity of the research depend on the adequacy of data collection and analysis (Peersman, 2014, p6). The validity of this research incorporates construct internal and external validity.

Construct validity represents measuring the theoretical aspects of the research. It indicates the design and concept of the theory (LoBiondo-Wood and Haber, 2017:294). Internal validity refers to variables relationship within the study. It shows the effect of dependent variables on the change of independent variables. External validity deals with the generalizability of the findings to the population. That is a representation of the sample to additional population or other environmental conditions (LoBiondo-Wood and Haber, 2017, p.179). In this research, to maintain validity, a recording appliance was used to avoid missing important information during interviews.

Additionally, the reliability of the qualitative part of the research can be assured by minimizing or avoiding errors and biases on the part of the respondents or the researcher. Respondents' error occurs when the quality of the information that they provide is affected by some situation (Schmidt and Hunter, 2015:67). Researchers' bias is when the data collected (recorded data) is interpreted subjectively (LoBiondo-Wood and Haber, 2017:179).

The trustworthiness of the qualitative data depends on the appropriate selection of data collection methods, sampling strategy and data analysis methods (Elo et al., 2014:2). As the authors indicated, to assure the trustworthiness of the qualitative study the researcher should take enough time to think and select the right techniques. In this study, the researcher ensured the trustworthiness of the data by adopting open and semi-structured or unstructured interview data collection, purposive sampling and content analysis methods. Moreover, the trustworthiness of qualitative research is measured based on Guba's model of trustworthiness and other related criteria. These include credibility, dependability, conformability, transferability (Guba, 1981:80), confirm-ability (Morrow, 2005: 251) and authenticity (Elo et al., 2014:2). Credibility refers to how the findings of the research are real and true. It confirms how good the research design and practice is. It is aligned with internal validity (Morrow, 2005:251; Reddy, 2016:69). Dependability means consistency of the data over time and in different situations. It resembles reliability (Marrow, 2005:251; Reddy, 2016:69). Transferability emphasises demonstration of the research findings in similar situations, populations and phenomena. The transferability of qualitative study can be assured by providing enough evidence of the findings. It is aligned to external validity that focuses on the generalizability of the study (Morrow, 2005:252; (Reddy, 2016:69). Conformability assures the extent of research outcomes, that is, their accuracy, relevance, or meaning, and similarity when studied by different independent people. It is related to the objectivity of the study (Reddy, 2016:69). Confirm-ability indicates the level of neutrality of the study findings without the researcher's motivations and bias (Morrow, 2005:251). Authenticity denotes the extent of the researcher's fairness and faithfulness to show the range of reality (Olivia, 2016; Elo et al., 2014:2).

To ensure the data quality of the study, the researcher followed all the ethical principles of research in getting the permission of the participants and contacting them, since data quality is positively related to ethical concerns. To prevent misunderstanding, the interview questions and the questionnaires were

pre-tested by volunteers with characteristics and experience similar to the respondents'. The researcher made sure, first of all, that the topic would be clear to the respondents to ensure that responses would be in line with the subject matter. During the interviews, responses were recorded in quality recording material and key points were noted. After each interview, a summary of each response was jotted down by the researcher. The recorded interview was transcribed by the researcher. It was done using "clear hearing" headsets, a device which can operate backwards, pause and play.

The reliability and validity of quantitative data are determined by the method of data collection and the analysis made. The researcher ensured that there was no misunderstanding about the topic before the data collection process started. The questions addressed the objectives of the research and the data was organized and carefully analysed by the software (SPSS) to give a concrete result. Frequency and univariate descriptive statistics were used to analyse and retain the quality of the quantitative data. The data are presented in the form of tables and graphs.

Relevant literature was used as a reference during analysis to interpret data correctly and affect the validity and reliability of the study positively. According to Freedman (1987:7) and Punch and Oancea (2014:69), there is a strong relationship between the validity of the research and ethical considerations. The researcher, therefore, went to great lengths to remain ethical, gather relevant data and analyse it correctly to achieve reliable and valid research outcomes.

3.4 Ethical considerations

Ethical clearance was granted by the University Of KwaZulu-Natal's Research Ethics Committee (Appendix 1).

3.5 Conclusion

This chapter provided the general research tools used to shape the study and achieve the objectives of the study. The study followed an exploratory case study research design. Purposive sampling following a mixed research approach (qualitative and quantitative); face-to-face semi-structured interviews and personally administered closed-ended questionnaires used as data collection methods; and thematic and univariate regression analysis systems were used to gather and analyse qualitative and quantitative data. The study passed through ethical procedures. The results of the study will be presented in the next chapter.

CHAPTER FOUR: FINDINGS

4.1 Introduction

This chapter presents the findings of the study. The data are analysed and presented in manageable themes and sub-themes to provide a meaningful research study. The presentation of the data set as per the objectives of the study is based on the findings from each store. The findings focus on the actual implementation of green policies in the stores. This chapter offers a coding of the food retail stores and a presentation of the qualitative and quantitative analysis. The qualitative data were analysed by thematic analysis and the quantitative data by descriptive statistics and univariate regression analysis.

4.2 Qualitative data presentation

4.2.1 Coding the food retail stores and respondents

In fulfilling the commitment to keep the confidentiality of the food retail stores, they are coded as Store A, Store B, Store C, Store D, Store E, Store F, Store G and Store H. The participants (managers) of each food retail store are also coded as Manager 1, Manager 2, and so on. Table 4.1 shows the actual sample size of managers interviewed.

Table 4.1 Determining respondent sample size for interviews

Food retail sector	Total number of managers	Purposefully selected managers
Store A	5	3
Store B	3	2
Store C	4	2
Store D	1	1
Store E	5	4
Store F	4	3
Store G	8	5
Store H	3	3
Total number of managers participated		23

4.2.2 Themes of the study

Table 4.2 Themes of the study

Theme	Sub-theme	Quotas
Business strategy		<i>Being a leader in sustainable business</i>
Institutional involvement		<i>Government rules and regulations as initiatives</i> <i>Supplier compliance with national environmental rules and regulations</i> <i>Hygiene and food safety auditing</i>
Organizational initiatives	Human resource development	<i>Employee development programme</i>
	Managerial attributes	<i>Managerial support and being a role model</i> <i>Recruitment strategy to promote green practices</i> <i>Rewards by management</i> <i>Measurement and evaluation by management</i>
Resource management	Resource utilization	<i>Cost of adopting the resource-efficient system as a challenge</i> <i>Efficient and economical use of water and electricity</i> <i>Sustainable utilisation of resources</i>
	Waste control	<i>Recycling (collect boxes and sell to recycling company)</i> <i>Waste minimization and reuse</i>
Organizational challenges	Management challenges	<i>Lack of responsible unit of green practice</i> <i>Lack of management support and rewards</i> <i>Lack of green performance measurement and evaluation</i> <i>Managers' poor relationship with suppliers</i> <i>Cost in terms of hiring staffs to separate packaging material</i> <i>Cost-changing business plan setups</i>
	Skill-based challenges	<i>Lack of training and education</i> <i>A limited number of human resources (both skill and number)</i> <i>Different attitudes and perceptions of store employees and managers</i>
Suppliers involvement	Suppliers initiatives	<i>Improve packaging material</i> <i>Receiving training</i> <i>Comply with quality control rules</i>

Theme	Sub-theme	Quotas
		<i>Meet quality standards of the store</i>
	Suppliers related challenges	<i>Shortage of supplies of green product</i> <i>Lack of suppliers' involvement</i>
Socio-economy influences	Social concern	<i>Social concern as initiative to green practice</i>
		<i>Social corporate investment in green activity</i>
	Customers' preferences	<i>Customer demand</i>
	Customer-related challenges	<i>Customers' attitude and predetermined perception</i> <i>Customers' high price expectation</i> <i>Customer loyalty</i> <i>Competition</i>

Table 4.2 tabulates the themes, sub-themes and quotas of the study based on the findings of the data collected from interviewing the managers in terms of the research objectives. To address the first objective (the analysing of the driving factors of green practices amongst South African food retailers), internal and external driving factors were identified. Institutional involvement, supplier involvement and socio-economic influences are the external drivers. These themes describe governmental and environmental rules and regulations, hygiene and food safety auditing, suppliers' initiatives, social concern, and customers' preferences as sub-themes to explain the external drivers of the food retail sector. The internal drives are a business strategy and organizational initiatives in the form of human resource development, and managers' initiatives in promoting and implementing green practices.

The second objective (the identification of the extent of green practices by the South African food retailers) was analysed by the theme of resource management. This includes the capacity of food retailers in resource utilization and waste control, the availability of education and training to enhance members' knowledge of green practices (skills-based), as well as the attitude and perception of managers and employees regarding green practices. This objective also describes managers' relationship with their suppliers on purchasing green food products; their knowledge on the sources of their products, and the capacity of food retailers to accommodate green customers' demands. Since it was identified that the majority of participated food retailers had limitations in the above areas, these limitations were defined as challenges which are further discussed in Chapter Six.

4.2.3 Business strategy

In stores A, B, C and D, the switch to green practices was due to the changing business strategy of the sector. The aim of the stores was for their businesses to be sustainable, which led to an adaptation of their business strategy to advance green practices. The strategy is in line with a concept called Good

Business Journey (GBJ). GBJ is an on-going process to achieve sustainability in a company's supply chain and daily operations. It is a measurement tool that reflects how the stores respond to environmental protection in terms of food quality, customer service and renovation.

“Our company as a business has its business strategy that deals with sustainable practices and sustainable farming” [Store B, Manager 2].

“The store comes up with a good business journey (GBJ). GBJ measures implementation on how we look after the lands or resources. They are part of performance measurement (key performance indicators)” [Store D, Manager 1].

4.2.4 Institutional involvement

The study found evidence of institutional involvement in the implementation of green activities in the food retail sector. Common green activities were identified in the sector, as well as the effect of the rules and regulations enforced by the government regarding environmental protection. As indicated by Store A, Manager 1, and Store G, Manager 1, the government pushed stores to adopt environmentally-friendly planning and activities in the store structure. The government also sent inspectors on unexpected visits to check the standards of the stores as well as the quality of the products. The managers explained that some governmental rules and regulations forced food retail stores to abide by minimum standards.

Moreover, it was found that suppliers abided by international environmental protection quality control measures. Managers in Stores A, B, C and D ensured that their suppliers complied with these rules. Store G's Manager 1 also assured the researcher that their suppliers were accredited by the SABS “The SABS is a leading global provider of standards, management systems, business improvement and regulatory approval information” (SABS, 2018:2).

“I think it is the government pushing the company to comply with the rules and regulations that makes eco-friendly more important” [Store G, Manager 2].

Hygiene and food safety were practised in each store. There were regular training sessions for employees, especially those working in service areas like bakery, butchery, hot food and deli. Companies provided a third party to audit the hygiene and food safety performance of each store, measuring performance against the accepted standards. Thus, the unexpected visits of those auditors compelled the food retail sector to implement green activities daily.

“There is a Hygiene Company that gave us training regarding hygiene and safety issues. This company is the auditor for our daily hygienic performance. There is a standard set for them to measure the hygiene of the store” [Store E, Manager 2].

4.2.5 Organizational initiatives

This section focuses on the initiatives and principles of the food retail sector and on their human resources development and the managerial traits that enable them to adopt or enhance green practices in the stores.

4.2.5.1 Human resource development

Recruitment: The recruitment strategy of the different food retail stores followed similar procedures. In none of the stores, was the recruitment done at store level. It was done at head office or divisional level. The stores did not have a say in hiring environmentally minded employees. After they were employed, orientation began. The sector provided week-long workshops or induction programmes for the new staff members to catch up with the particular company's policies, their responsibilities, hygiene and food safety, and so on.

In the case of Stores A, B, C and D, the same process followed recruitment. Once recruits were hired, they attended an induction programme for a week. They were shown videos about the rules and regulations of the company, their responsibilities, and what the store expected from them, about GBJ concepts and their effect; and what activities the business was involved in. Manager 2 of Store C reported that the induction process also focused on performance measurement and scorecard. The scorecard measures performance in terms of saving electricity and water and selling reusable bags.

“We do at divisional level for recruitment. They assist in the process. They give induction and give the training to make people aware about sustainability” [Store A, Manager 2].

Similarly, in Stores E and F, the recruitment was done at head office. They sent recruits for induction programmes to gain an understanding of the operational expectations of the company. Regarding Store G, the newly hired employees were sent for induction to gain knowledge regarding hygiene and how to keep their store neat. In-Store H, the hiring process was done at the regional level, and the newly hired persons were made aware of hygiene, food safety and first aid during the induction period.

Employee development: Human resource management in the food retail sector is concerned with improving employees' understanding of green and green practices, as is confirmed by the findings of this study. In Stores A, B, C and D, management practised the same techniques in upgrading their employees' understanding of green practices. Audio-visual learning (knowledge-based videos), posting notes on the notice board, an online information system, weekly meetings and regular training were the techniques they used to upgrade their staff's knowledge about the good business journey of the company. The audio-visual video taught the general sustainability activities of the company and their other benchmarks. The management at the head office also created an online system to give every employee access to applicable information.

“There is a website; the head office puts everything online about the business journey in the system. Everyone needs to go and read. If there is anything new, we discuss it every Sunday in a 2 hours meeting. We explain about the good business journey that is updated from head office every time. Every employee has access to read the required information in the computer” [Store A, Manager 3].

Information was also diffused to staff by posting notes on a board. “Knowledge to share” (KTS) was a board or space on a wall which was accessible to every staff member. Information circulated by head office to the different stores was printed out and posted here so that everybody would be informed. There were weekly updates and meetings to discuss and share new knowledge.

“In the case of daily information or communication, there is a board. We call it “key knowledge to share”. It is located where every staff member passes through in the store weekly. They are prepared in a very simple way to make it simple to understand for those with complexity in reading so that they become alert about what is going on in the store” [Store B, Manager 2].

Regarding Stores E and F, there was monthly training in hygiene and food safety for the managers but not for the employees.

“There was no training in environmentally friendly practices. Our section managers took training regarding hygiene and safety issues offered by the Hygiene Company. This company is the auditor for our daily hygienic performance. There is a standard set for them to measure the hygiene of the store” [Store E, Manager 2].

In-Store G, Manager 1 explained that certain persons were selected for training and education regarding environmental activities. The aim was for them to transfer their knowledge to the other staff members of the store. Manager 5 added that there were training sessions at the departmental level; however, the implementation depended on the attitude and perception of the staff. In-Store H there was training regarding health and hygiene and first aid for specific employees.

4.2.5.2 Managerial attributes

The ability of a manager to create informal communication, to serve as a role model and to reward performance, has a positive impact on the initiatives employees take to implement green practices in the food retail sector.

Informal interaction: This study found that there was some informal communication regarding green practices between the employees and managers in the stores. However, it was up to the managers to take the initiative to communicate information to their staff. In the case of Store A, Manager 3 remarked that when urgent information was sent from head office, and the staff had to be informed, the staff controller would print the information and gather the staff members for less than 10 minutes to inform them. In-Store B, Manager 2 described the means she used to interact with the staff as the “knowledge

to share board”. In the case of Store D, Manager 1 would informally call the staff for a 10-minute meeting to discuss urgent issues. In the case of other stores (E, F, G and H), there was little informal interaction between managers and employees regarding green practices. Time to discuss issues that came up was limited, these managers explained.

“We don’t have much time to sit down for hours and discuss it. We want to do it. But it has to go hand in hand” [Store G, Manager 1].

The managers suggested that the companies should create time and opportunities for casual discussion of green practices.

Role model: The managers had different ideas about serving as role models for their staff members. Manager 1 of Store A set an example by saving water, and Manager 2 by motivating customers to buy veggies and healthy products. Store B’s Manager 2 persuaded customers to buy reusable bags and Store D’s Manager 1 contributed to a charity such as organizations caring for the aged.

“What you have to say is what you do. It is very important to “walk the talk”. What you talk, you should do. So I have to be [an] example to influence them” [Store C, Manager 2].

Rewards: In Store A, B, C and D, the managers had the same reward system to encourage their employees to support green practices. The reward system was part of the good business journey of the sector. The performance was measured on saving water and electricity, and fabric bag sales. Staff members and stores competed to best perform those activities. There were weekly, and monthly assessments by the management, and standards were set for each performance by the head office.

“We do have a competition for selling fabric bags. Those who score a high number of sales, we reward with a monthly competition award. There is a gift card and at the meeting, we acknowledge them” [Store B, Manager 2].

Employees working as cashiers had the opportunity to sell those bags to customers. The cashiers who sold the largest number of fabric bags got two types of rewards. The first was “on-the spot-recognition” - a gift voucher that could be used to buy the waste products or “budget foods” in the store. The second was a quarterly amount of R1500 and a special dinner. Stores E, F, G and H offered no rewards to their employees – only a “thank you”.

“There is no reward for the employees” [Store E, Manager 2].

Incentive: Though expenses motivate stores to implement measures to save resources, some stores implement further sustainable activities. In Stores A, B, C and D, there was an incentive for managers and employees to adopt green practices. The incentive was granted to employees who saved resources and reduced the use of plastic bags by customers.

“Incentive is the factor that pushes us to save those things” [Store A, Manager 3].

Responsible unit: The responsible unit is a body in the organizational structure of the food retail sector which is accountable for green practices. In the case of Stores A, B, C and D, there were a cabinet body in the head office and sections at divisional and regional levels, which were responsible for sustainability activities. Store performances were reported to these officials for assessment and feedback. The unit was responsible for measuring, evaluating and providing feedback on the green performances of the stores. Store A’s Manager 1 stated that the green performance measurement of for instance water and electricity was done through an online meter system. The system measured the daily consumption of electricity and water in the store. The system could easily detect if there was a leakage, or excess consumption or supply. Based on the online metering, a scorecard measured the performance of a store in terms of electricity, water and fabric bag sales and a report was sent to the responsible body at the regional level for evaluation and feedback. Store D Manager 1 stated that the evaluation was given in the form of colours. If the performance was red, it meant that the performance was below the minimum target, yellow was average, green was safe and blue was beyond expectation.

“There is a cabinet body in the head office, at divisional level and appointed regional managers and people in the store that we normally get feedback or report what we do daily regarding it. That is why they put measurements on water, reusable bag sales and electricity so that they take their evaluation” [Store A, Manager 3].

4.2.6 Resource management

This section addresses the concerns of food retail stores about resource utilization and waste control.

4.2.6.1 Resource utilization

The respondents were asked for information regarding resource utilization in their stores. Energy-saving was one of the GBJ activities in Stores A, B, C and D. As explained by Store A’s Manager 1 and Store C’s, Manager 1, their stores had been recently constructed. The electric system was of a sensor type. The energy at head office and the distribution centre (DC) in Cape Town was supplied by a solar system (Store A, B, C and D Managers). Store A’s, Manager 1 added that the company planned to use solar systems in their other stores too. The after-hours lighting systems of all stores were controlled in the head office. 100% of the lights were switched on 15 minutes before the stores opened. 15 minutes after the store closed, the lighting went down to 50%, and after 10 pm, when the last shift closed, only emergency lights were on. This happened automatically. Furthermore, the electric and water consumption of the stores was measured using an online system (Store A, Manager 1).

Furthermore, using carbon dioxide (Co₂) natural gas instead of synthetic gas for refrigeration was another of the sustainable activities of the sector. Co₂ does not have the same impact on the environment

than synthetic gas has. It also uses less energy. Store D's Manager 1 explained that the refrigerators had an air-breathing system which circulated the cold air to keep products fresh at all times. The manager added that the cool temperature in the food market came from the breathing of the refrigerators so that it was unnecessary to operate an air conditioner. The activities of Stores A, B, C and D also concerned saving water, another sustainability issue in the sector. Companies played a role in saving the main scarce resource in South Africa, and water-saving measures were a priority of the stores. Manager 1 in Store A stated that the government was pushing the stores to save lots of water. The mechanisms the stores used to save water were lowering the flow of water, installing push-button toilets and immediately attending to leakages.

"To be honest, the government puts a lot of pressure on the company to save lots of water. However, we as a company also prioritize saving" [Store A, Manager 1].

"We monitor the flow of our water. We don't have any water that drips or leaks. It is maintained at any cost. We have low consumption of water" [Store D, Manager 1].

In Stores E and F, the implementation of green practices included saving water and electricity, waste management and recycling. The lighting systems of the stores were automatically controlled in the head office. In the morning, before the shops opened, 90% of the lights were off. During trading hours, the lights were 100% on and when the stores closed, all lights except emergency lights were turned off. In the case of Store G, Manager 1 commented that the store used energy-saving bulbs to save electricity.

"Electricity, we make sure all the lights are switched off except the fridges, it is 24/7 on. All the light in the store must be off. All light bulbs are energy-saving bulbs" [Store G, Manager 1].

"We use buckets to clean but we use too much water because we will be audited by hygiene auditors and it will be an issue for us" [Store E, Manager 2].

4.2.6.2 Waste control

Waste management is about the effective utilization of resources with a minimum of waste. Most managers suggested that waste meant losing money; thus each food retail store made efforts to minimize waste. All the stores applied a "rotation" system, which meant displaying items near their sell-by date in front of fresh items on the shelves. Moreover, the "7-minute rule" applied to products like meat. It means displaying perishable products like meat for only seven minutes on the shelf and then returning them to the fridge, before repeating the rotation with another batch of meat.

"Perishable foods from receiving to display to customers follow 7min rules. It is making sure not to expose the products at a temperature where the quality of the product deteriorates" [Store F, Manager 1].

In-Store A, B, C and D, when products reached the end of their shelf life or their sell-by date, they were removed from the shelves and considered as “waste products” or “budget food”. According to the managers, waste products or budget food were those products of which their shelf life was between their sell-by date and their use-by date. The following day, those products became ready to be sold at the waste shop, which was located inside the store behind the store market place. These products were allowed to be bought by staff members and police officers at discounted prices (minus 30-75%). The staff’s purchasing time was between 7:30 am and 2:00 pm and the police officers’ between 2:00 and 4:00 pm. After 4:00 pm, whatever was leftover would be donated to charity organizations. The police officers were required to be in uniform. The reason for selling to police officers was that their presence contributed to the security of the shop.

In Stores E and F, waste control was done by avoiding overproduction. The volume of production was based on customer demand, which depended on season and time. For example, mid and end of month times were peak season, so production was increased. Like the other stores, the management of Stores E and F also marked down the prices of products between their sell-by date and use-by date, but for the benefit of customers. Then the unsold leftover products were donated to charity. Products which were dangerous to consume including damaged packed foods were destroyed by the receiving department.

“We produce little by little a day. We do our production based on customers’ demand. During lower weeks, our production is low and high weeks like mid and end of the month, it is more. So depending on this we control our wastes” [Store E, Manager 1].

In-Store G, at the store level, there were initiatives to save energy and water; there were waste management and recycling. The store sells a wide range of food products. There are fruit and vegetables, hot food, butchery, bakery, fishery, grocery, dairy, café and others. Sustainability measures were implemented in those sections. Regarding waste management in the grocery section, products with three days to expiry date like eggs, cheeses and milk, were removed from the shelves and given to the bakery department to make cakes, biscuits etcetera. Wines and related products were sent to the food market to be sold by the glass at retail prices. Fresh yoghurts were moved to the outdoor section to make breakfast fruit shakes. Juices were marked down and sold to the staff on condition that they would be consumed only by adults.

Moreover, based on the information extracted from the butchery section, it can be assumed that meat due to expire (lamb, beef and pork) was used to make sausages. The chicken was marinated and sold at a discounted price. After passing all the above waste management processes, left-over expired products were sent back to the suppliers. Company-sourced brands and food waste were returned to their distribution centres for proper disposal.

“To minimize the waste for the groceries, we allocate them to other sections to prepare fresh foods”
[Store G, Manager 4].

Recycling: deals with the participation of the food retail sector in recycling used packaging and other materials. It was found that all the stores in the study remained true to their commitment to recycling. In each store, there were staff members responsible for folding boxes and sending them to recycling companies.

Store A, B, C and D sent used boxes, plastics, bottles and paper to their distribution centre for recycling (reuse). Self-employed people often came to the store to collect these materials for free. These people would separate the materials and sell them to a recycling company as a source of income. Store A’s Manager 1 added that the store had a deal with NOVA Company for recycling used electric bulbs.

“Most of our products are made of recycled materials. So we are living in the store daily. In the food market, we also have recycling bins where we put papers, batteries, plastics to be collected” [Store B, Manager 2].

The manager said that there were separate dustbins for paper, bottles, light bulbs and plastics for the use of customers in front of the store. Store B’s Manager 2 remarked that most of their products’ packaging was made of recycled materials. It was indicated on the packaging materials on how to dispose of the recycled materials safely. His company was committed to sourcing its packaging materials from certified sustainable sources in line with its policy against deforestation.

Moreover, the stores focused on motivating customers to buy reusable fabric bags rather than plastic bags. And the fat from their grilled chickens was collected and given to biofuel companies for free.

Likewise, in Stores E, F and G, there were box-folding machines at the back of the stores that folded and bound boxes into 20kg stacks. The store sold the boxes to recycling companies. In-Store G, Manager 1 said that they also gave away waste vegetables and fruit for animal feed. Moreover, Manager 2 mentioned that the store sold used cooking oil to companies producing bio-fuel. In-Store H, they just gave the packaging material to self-employed people for free. Packaging materials which were still not disposed of were left for the municipality to collect and take for recycling.

“We recycle the boxes and reuse most of our waste. People come and collect waste vegetables and foods for animal feed” [Store G, Manager 1].

“We do have a folding machine and there are recycling companies who buy and recycle the boxes”
[Store E, Manager 2].

4.2.7 Organizational challenges

The researcher interpreted the organizational challenges as either management challenges or knowledge-based challenges. The term “management challenges” describes the limitations of management to adopt green practices. “Skill-based challenges” indicates difficulties to understand and have different attitudes and perceptions due to lack of education and training regarding green practices.

4.2.7.1 Management challenges

The food retail stores in the study faced certain difficulties in their quest to adopt and implement green practices. In the case of Stores E, F, G and H, the auditors for hygiene and food safety were the ones to measure and evaluate performance and give feedback to the stores. Apart from this, they did not have a separate unit to measure and evaluate their green performance. Regarding electricity and water, the measurements were done at the head office, who provided feedback.

Lack of separate performance measurement: In the case of Stores E, F G and H, there was no separate green practice performance measurement and evaluation in the stores. Accomplishment in saving water and electricity was measured and evaluated at the head office, who informed the stores if their performance was in line, below the line or over the expected standard. In the case of waste disposal, the stores had the figures in the store since they scanned every bit of waste before removing it from the store.

“We know where we spend too much in which department, but there is no separate mechanism for green performance measurement. It is all under store performance management” [Store H, Manager 2].

A lack of human resources: As was explained by most managers, the customers’ demand for green products was growing. Store D’s manager1 suggested that more staff members were needed to assist those customers. Therefore, the company should invest in people to accommodate the needs of the customers for the company to reach its full capacity.

“For this store to reach its (max) full capacity, they need to invest in people. We need human resources to serve the customer. The customers are expanding” [Store D, Manager 1].

Poor relationship with suppliers: In Stores E, F, G and H, the study found that managers had limited information on the core sources of their products, procurement standards and if their suppliers abided by the international environmental protection rules or not. They simply received stocks from their distribution centres and sometimes purchased products from suppliers already selected by the head office.

“When purchasing especially the flour, we buy from a specific place. The owner of DC is the owner of the company and they regulate everything in a way that benefits them” [Store D, Manager 1].

Cost: Most of the managers mentioned cost as a challenge to the implementation of green practices. Store A's Manager 1 stated that the initial cost to adopt green practices was too high. For instance, changing the electric system to solar energy was an expensive process. However, in the long term, in his opinion, the benefits would justify the investment. Likewise, removing unhealthy sweets from the shop would result in the loss of too much money.

“Removing sweets from the shelves, means a loss of R40, 000 per week” [Store A, Manager 1].

Moreover, planting, growing and harvesting healthy plants and breeding animals naturally was also expensive in terms of time and money. Also, it cost money to do follow-ups and inspect suppliers to bring the quality of the green products to the required standard (Store B, Manager 1).

“Costs are involved in naturally harvesting the product; working with farmers or suppliers, following up how they harvest and grow the plants and animals. It means protection of the planet, however, which adds extra cost but it is a worthy cause” [Store B, Manager 1].

Store H's, Manager 1, and Store G's, Manager 1, explained that hiring someone to separate packaging materials would be too expensive. As a result, they could not be fully committed to recycling. Thus, they preferred to allow self-employed people to separate and take those materials for recycling.

“Cost is a challenge. We need to pay someone to separate boxes, plastics, and bottles” [Store G, Manager 1].

4.2.7.2 Skills-based challenges

Differences in attitude and the perception of green concepts amongst the employees of the stores were described as a challenge. For instance, in Stores A, B, C and D, though there was regular training in the store, the degree of implementation depended on the perception and attitude of the staff members (Store D, Manager 1). These people were from different backgrounds which, according to Store C's Manager 1, was creating misunderstanding amongst them. He suggested that the situation should be researched and gaps in understanding are identified, that various views should be openly discussed and solutions found and employees be brought to the same line of thought.

“There is information and training given at the departmental level. However, employees have different attitudes and backgrounds. As a result, there are different interests to serve when implementing it right or not” [Store D, Manager 5].

Moreover, persuading customers to buy reusable fabric bags was another challenge (Store B, Manager 2). Some customers were not concerned about green products so that they did not want to be told what to buy. This attitude impacted on the initiatives of the stores to adopt green products.

“If you impose green concepts and tell them about green, they leave the store and go to other stores”
[Store G, Manager 1].

“It is hard to make customers more open-minded about fabric bags/green. So, as a result, we push and motivate the employees to sell the products” [Store B, Manager 2].

Lack of training and education: Training and education mean to change the attitudes and perceptions of employees and persuade them to put their trust in the benefits of green practices. Training is also a basic tool to upgrade existing activities into advanced ones. In Stores E, F, G and H, the findings indicate limited education and training regarding green practices. When we consider the definitions of green practices given by the managers in Stores E and F, it is clear that there were difficulties in defining and understanding the concept – revealing the managers’ limited concern for green practices.

“I don’t have a good understanding about it” [Store F, Manager 2].

“Green means ‘Colour green or an abbreviation” [Store E, Manager 3].

One manager suggested that the company should take the initiative to provide employees with enough education and training to foster understanding and a positive perception of the environment.

“There is no training” [Store F, Manager 1].

As was suggested by Store E’s Manager 1, Store F’s Manager 2, Store G’s Manager 3 and Store H’s Manager 2, employees lacked the know-how to implement green practices. Thus, it was suggested that every staff member should be provided with training and education as an important instrument to promote green practices. Moreover, posting notes regarding green would also raise awareness of the need to implement environmentally friendly practices in the store.

“There was no training regarding environmentally friendly practices” [Store E, Manager 2].

“If there is staff training regarding environmentally friendly practices, every employee regardless of the position should take the training. Training is important. So enough time has to be given for training”
[Store E, Manager 1].

4.2.8 Suppliers’ Involvement

The findings reveal that the involvement of suppliers in terms of initiatives to adopt green practices in some cases created challenges and hindered the food retail sector from adopting such practices.

4.2.8.1 Suppliers’ initiatives

Regarding the contribution of suppliers to adopt or improve green practices in the food retail sector, the study found the following:

Suppliers meet quality standards: In Stores A, B, C and D, there was a close working relationship between managers and suppliers. The sector focused on “sourcing the farmers, building a relationship and working with the farmers and having exclusive suppliers” (Store A, Manager 1). There were procurement standards for each type of product set by the sector. When companies in the food retail sector selected their suppliers, they asked questions: How do the suppliers treat people? What is the product about? Where do they obtain the product – what is its source? How is it produced? They became involved in the production process by sending experts and technologists to teach suppliers as well as manpower to follow up and work with the suppliers to ensure that they meet the quality standards required. There was strict inspection and follow up on the whole process of production. Therefore, the suppliers mostly met the standards set by the industry.

“We do have standards and also send people and technologists to suppliers to monitor the process. Our concern is that for each product, every step of production or farming is as our company requires” [Store A, Manager 2].

Suppliers comply with quality control rules: The managers in Stores A, B, C and D assured the researcher that their suppliers abided by international environmental protection quality control. Store G Manager 1 added that their suppliers were accredited by the SABS.

“We have policies in the company that before buying from the supplier they have to comply with certain rules and regulations of the country. We check before we start any business interaction with them” [Store G, Manager 1].

Suppliers provide training: Managers in Stores A, B, C and D remarked that suppliers offered support by enhancing staff members’ knowledge. The suppliers provided training and arranged meetings or seminars. As explained by Store A’s Manager 1, the suppliers invited persons in high management positions in head office to seminars to train store managers, who, in turn, arranged meetings to share the knowledge with their respective employees. The management in the head office also arranged for store managers to visit suppliers to learn how the food was produced in that area.

“They give training [at] the store manager meeting and they share [with] us the necessary information” [Store C, Manager 2].

Suppliers improve packaging materials: Store C’s Manager 2 said that they received support from their suppliers in the shape of improved packaging materials. The manager added that from time to time the packaging materials became more recyclable or easily degradable without harming the environment.

“You can see that the containers of some products change from time to time. In the containers of some products, there is a change in the quality of packaging. They are using a very thin plastic that is more easily degradable than the thick plastic” [Store C, Manager 2].

4.2.8.2 Supplier-related challenges

Lack of suppliers' involvement: In Stores E, F, G and H, there was a lack of suppliers' involvement in promoting green practices in the stores. Store G's Manager 2 stated there were limited initiatives from suppliers to give training or teach managers or employees regarding green practices. The suppliers would sometimes visit the store to check if their shelf-space was adequate and to teach employees about their new products.

“There are some suppliers who come and introduce their products. But, they don't come and teach (to) the staff regarding environmental things. No-one comes and gives training regarding environmental production to the managers” [Store G, Manager 2].

“No training from the suppliers.” There is no independent body from outside for giving us or staff members training” [Store H, Manager 2].

Shortage of supplies: Another challenge faced by the food retail sector was a shortage of green product suppliers as a result of external factors. These were airborne diseases, weather and suppliers' failure to meet quality standards. The airborne disease was identified by most managers as an external hindrance factor to their green practices. Shortage of supplies of green animal products was a consequence of this disease. This had an impact on relationships with customers and suppliers. Store G's Manager 2 reported that because of bird flu, they could not get enough supplies of chicken on the local market and were forced to import chickens from South America, which made it hard to control the quality or inspect products.

Adverse weather conditions were also identified as a hindrance to farmers producing those nutritional food products, making it difficult to supply sufficient quantities of those products. This had an impact on keeping permanent customers. As Store B's Manager 1 explained, they preferred to inform customers that the product was temporarily out of stock rather than breaking the trust they had with their suppliers and filling the shelves with low-quality supplies.

“The weather, sometimes there is a shortage of products because of low standards of the products” [Store B, Manager 2].

Additionally, the managers of Stores A, B, C and D faced shortages of stocks as a result of suppliers being unable to meet the quality standards of the products. This could be as a result of an error in production or negligence. When the problem was widespread, the management at the head office could decide to return defective goods – classified as RTV (return to vendor) - at the suppliers' expense.

4.2.9 Socio-economic influences

4.2.9.1 Social concern initiatives

Increasing customer awareness of fresh and healthy products motivates retailers to clear shelves for these products. Store G's Manager 2 mentioned that because of social concerns, the store sold fresh vegetables and fruit as well as fresh foods prepared in the store.

“Most people are health conscious. So it is more of veggies. Nowadays, we are focusing on healthy stuff that people need” [Store G, Manager 1].

The stores also made an effort to reach children at rural schools to teach them how to plant and harvest their food, and how to make healthy lunch packs. They donated stationery to disadvantaged schools and food to the hungry. On Mandela Day, they visited charitable organizations like old age homes, childcare centres and others to provide food and entertainment.

“We are dealing with schools. The aim is to teach the students about our products, how we source it, healthy eating, how to pack healthy lunch packs and we teach the mums too. They do gardening/ how to take care of the garden and harvesting. They teach them the circle” [Store B, Manager 1].

4.2.9.2 Customer preferences

The initiative factor, as explained by Store E's Manager 1 was customer demand for fresh green food products. The food was freshly prepared when they received an order from a customer.

“Those environmentally friendly food products are made based on the customers' demand and collection is the next day” [Store E, Manager 1].

4.2.9.3 Customer-related challenges

Managers in Stores E, F, G and H, explained that to retain the loyalty of all their customers, they could not be sustainable food retailers only. Store G's Manager 1 explained that though many people were health-conscious, they had to consider those who were not, and also keep the products they wanted on the shelves.

“Most people are health conscious. So it is more of veggies. But, it doesn't mean we don't sell other products” [Store G, Manager 1].

Some food retail stores that are considered to be healthy product retailers also have a reputation for being expensive. Store C's Manager 2 stated that his store was thought to be expensive. This image discouraged some customers from visiting the store and the retailer from selling green products.

Store A's Manager 2 stated that the store planned to upgrade their electronic shopping system to make it more convenient for customers. The aim was to adopt a “digital platform shopping system” to go

hand in hand with sustainability and technology and to be the leader or best brand at a national and continental level.

Store A's Manager 2 said that sharing the market with other food retailers created the challenge to become a leader in the market. Sharing customers and ideas inspired the stores to work hard and always make an effort to come up with new ideas to become a role model in the market.

"The market share is a challenge. We share the same customers with other food retailers. So we always need to be way ahead (off). We always are fighting for the same customers. "Virtual shopping"; it is screen touch selection and shopping. It is the same as online shopping. We need to keep up with it to win large numbers of customers" [Store A, Manager 2].

Store H's Manager 1 made it clear that the store was struggling to recover lost business and could not afford to adopt green practices. The management's priority at the time of data collection was to maximize their profit and save the business.

"We first think about what to do to make money and be on the standard. We can't think about other things at the moment. We are making sure everybody is paid to save the families. The store was down, so we are working to save the store, the staff and family" [Store H, Manager 1].

4.2.10 Conclusion to the qualitative findings

The findings reveal that there were an organizational, business model and supplier's initiatives to adopt green practices in the food retail sector. Organizational initiatives were apparent in management support, recruitment strategy, education and training, rewards, measuring green performance, and availability of a responsible unit. A business strategy, suppliers' motivation in terms of achieving product quality and information feed, and socio-economic influences were also part of the initiatives. Awareness of social demands and participation in societal wellbeing motivated stores to initiate green practices. Furthermore, regulatory interventions like environmental protection rules and regulations compelled food retailers and suppliers to abide by the rules and achieve the standards set to measure their green performance.

Resource management in terms of efficient utilization and saving of resources as well as waste management were identified as main green practices in the sector. However, organizational barriers, supplier-related challenges and business models hindered the sector in their efforts to adopt green practices. Also, a lack of education and training, managerial attributes, different attitudes and perceptions, shortages of green product supplies, costs, as well as customer choices and customer loyalty, high prices and customer demand were challenges.

4.3 Quantitative findings

This section presents the quantitative data extrapolated from the questionnaire in the form of descriptive statistics. Initially, an overall assessment of the variables based on the questionnaire was made without comparing response variation amongst the stores. This was expected to provide an overall assessment and indication of the respondent's response. This followed with similar descriptive statistics on the same variables for each store independently. This enabled to identify variation in response amongst stores. Based on this result, a decision will be made on the types of further analysis including but not limited to regression analysis to determine any possible interdependence amongst the variables considered. The descriptive statistics results presented below are generated by using SPSS statistical software. Table 4.3 indicates the sample size of respondents, selected from eight different food retail stores, to answer the questionnaire.

Table 4.3 Determining respondent sample size for the questionnaire

Food Retail Store	Total No. of employees	Purposively selected employees
Store A	34	9
Store B	30	8
Store C	34	9
Store D	28	7
Store E	28	7
Store F	29	7
Store G	197	49
Store H	35	9
Total number of participants		105

4.3.1 Descriptive statistics of the sector

4.3.1.1 Informants' information of the sector

Figures 4.1 to 4.4 below are summary of the combined analysis depicting the overall outlook of the informant's gender, age, their work experience, the position they occupy in the food retail stores and sample size of the respective stores. It should be noted that the sample size is calculated from those employees who are dedicated to the food sections of the various stores studied. The effect of this subset of variables on the objectives of the study is discussed below. The descriptive tables of statistics, as analysed by SPSS are presented in Appendix 6.

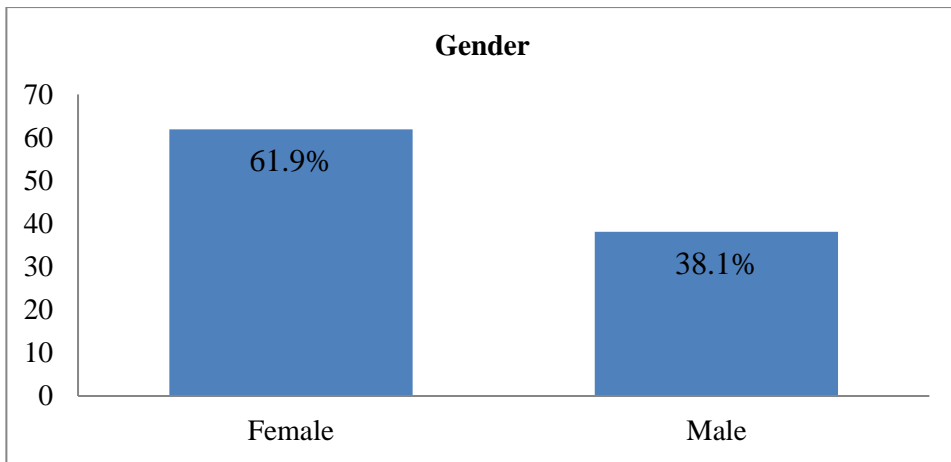


Figure 4.1 Gender composition of participants in the study

Figure 4.1 shows the overall gender distribution of the participant in the study where the majority of the respondents were female (61.1%).

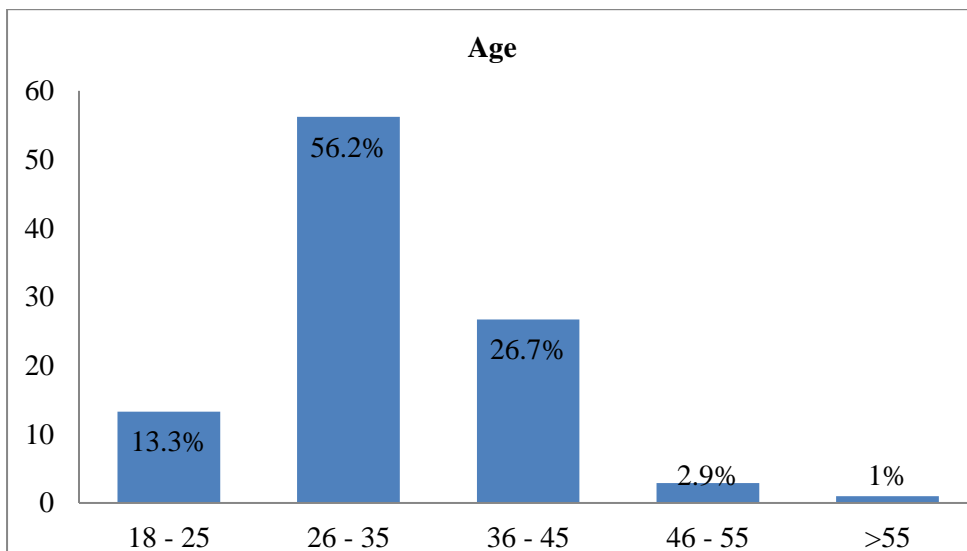


Figure 4.2 Age categories of participants in the study

Figure 4.2 shows the age distribution of participants of the eight food retail stores; the majority respondents' (56.2%) ages were between 26-35.

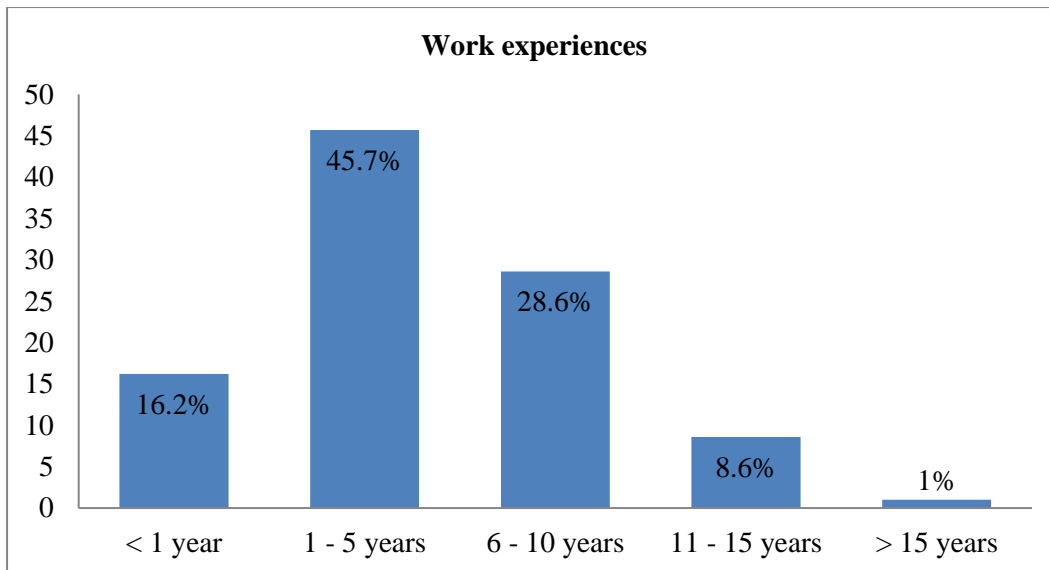


Figure 4.3 Work experiences of participants in the study

Figure 4.3 indicates the majority of respondents (45.7%) had 1-5 years of work experience.

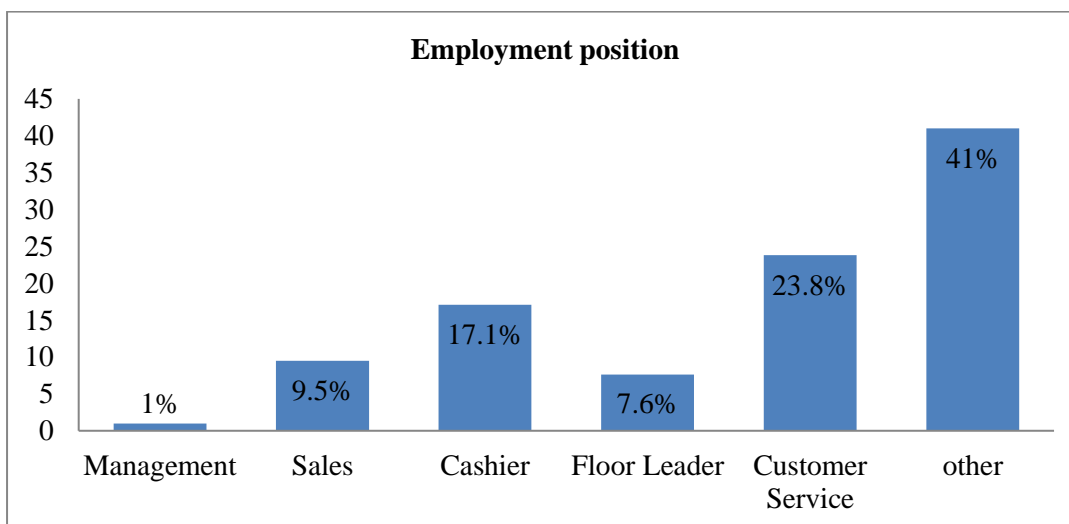


Figure 4.4 Employment positions of participants in the study

Figure 4.4 demonstrates the majority of participants (41.0%) employment position was on other categories, which includes all general workers in the various sections of the store.

4.3.1.2 General understanding of informants

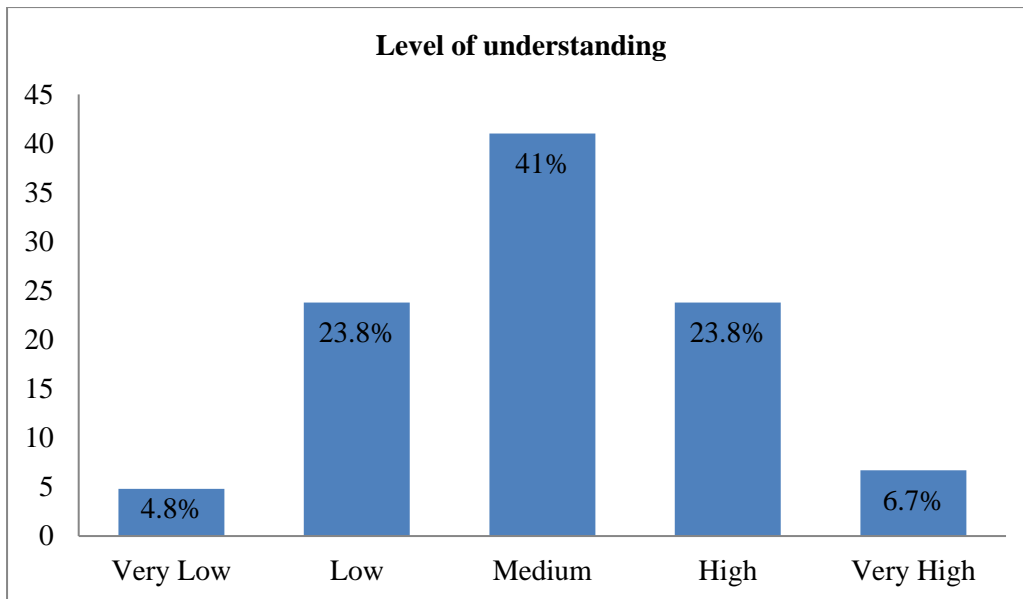


Figure 4.5 Participants' level of understanding about green and green practices of the sector

Figure 4.5 shows that the majority of the participants (41%) have a moderate (average) understanding of green and green practices. There is a certain level of understanding of the green practice.

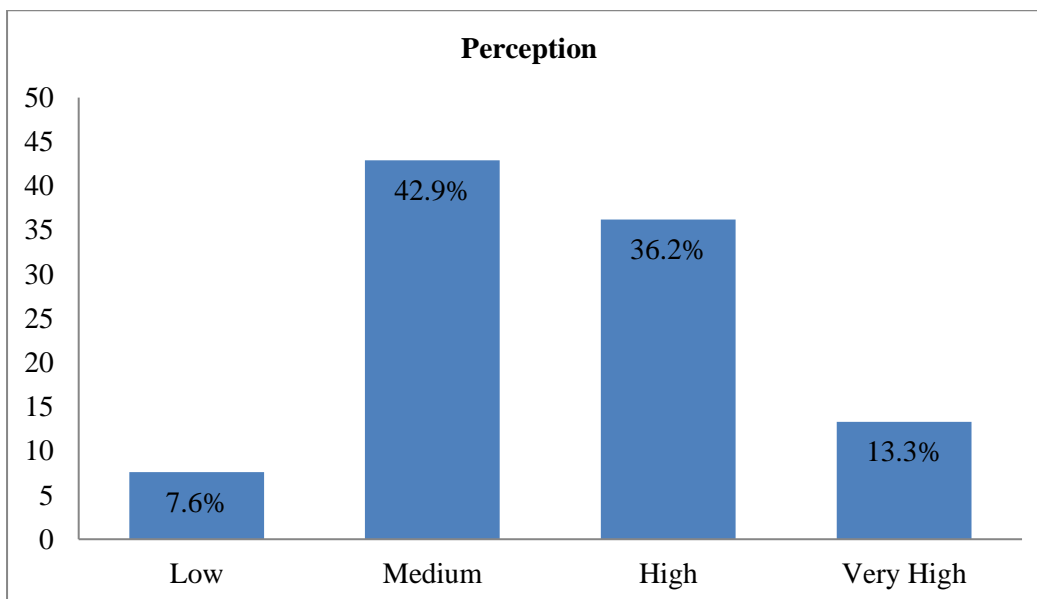


Figure 4.6 Participants' perception about green practices

Figure 4.6 demonstrates that the majority (42.9%) of the participants have a moderate perception of green practices.

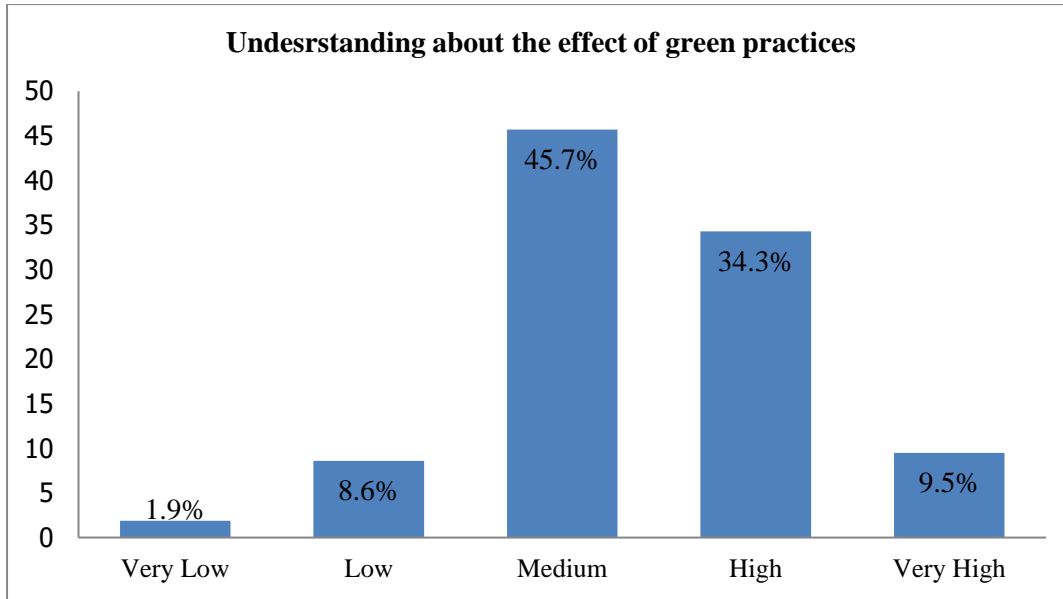


Figure 4.7 Participants' understanding of the effects of green practises

The majority of the participants (80%) have suggested they have a moderate understanding of the effects of green practices, as indicated in Figure 4.7.

4.3.1.3 Management motivation

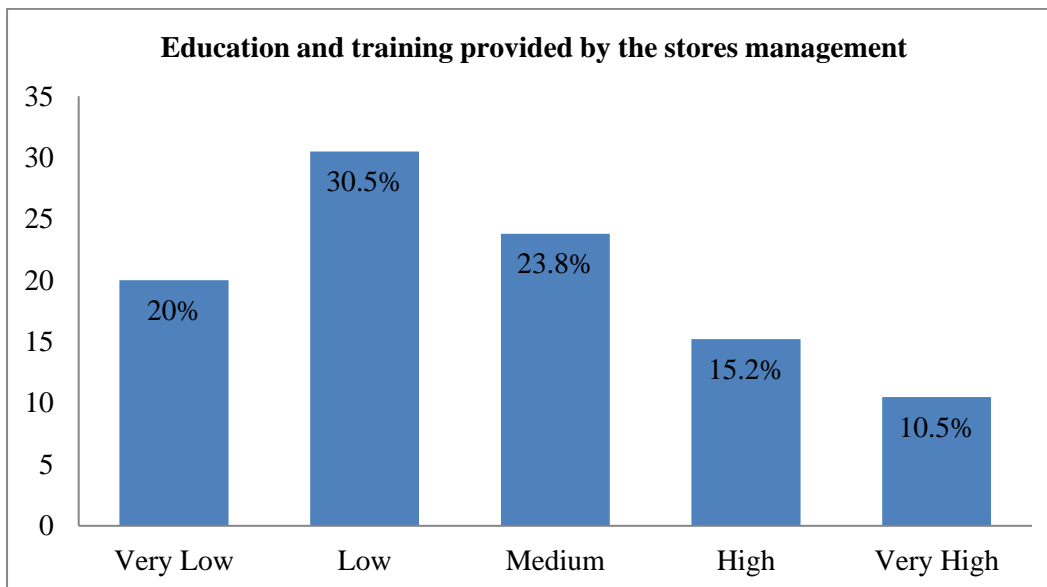


Figure 4.8 Education and training provided by the sector

Figure 4.8 illustrates that the majority of the respondents (30.5%) indicated that the provision of education and training regarding green and green practices by store management is low.

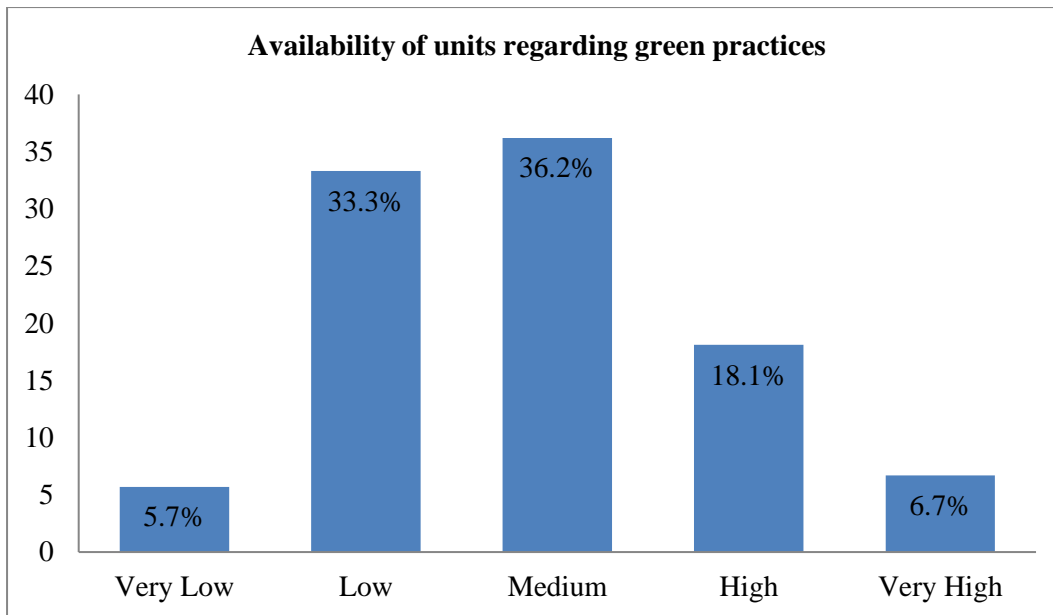


Figure 4.9 Percentage responses on the availability of the responsible body in the sector

According to Figure 4.9 above, the majority of the respondents (36.2%) noted that the availability of responsible body was moderate; it exists but not as much as it should.

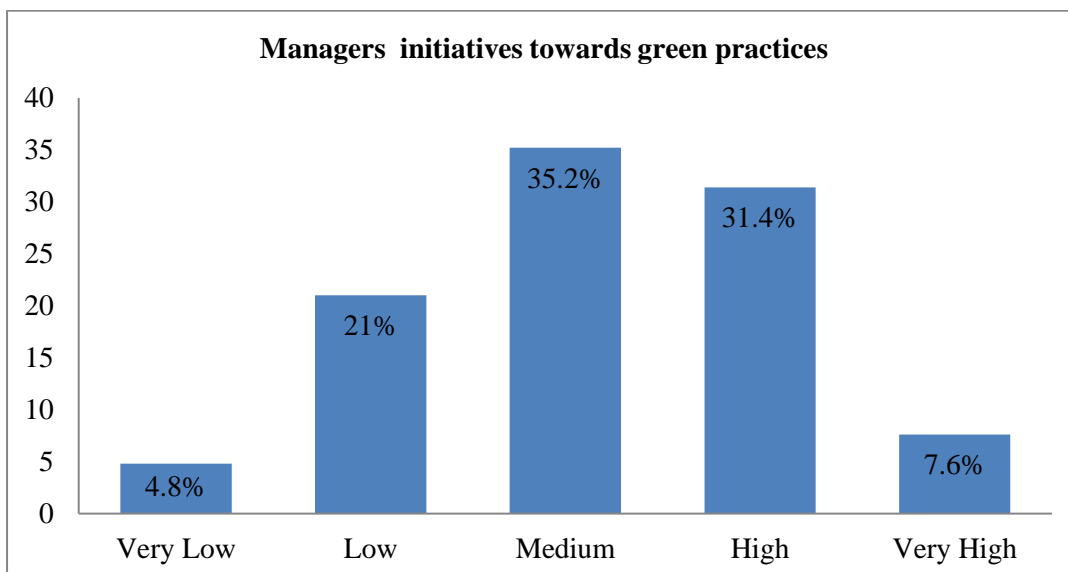


Figure 4.10 Managerial initiatives to perform green practices in the sector

In Figure 4.10, the majority of respondents (35.2%) commented that managers have moderate initiatives to perform green practices in the stores.

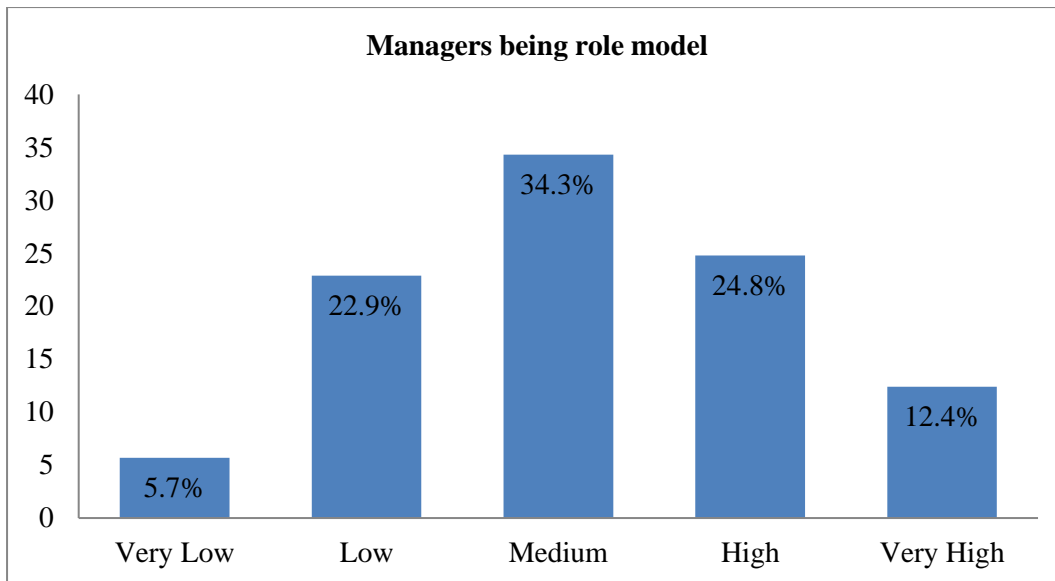


Figure 4.11 Participants response about managers and leaders being a role model in the sector

Figure 4.11 shows the majority of respondents (34.3%) suggested managers play a moderate role in implementing green practices. Their ability to be role models is not as much as required.

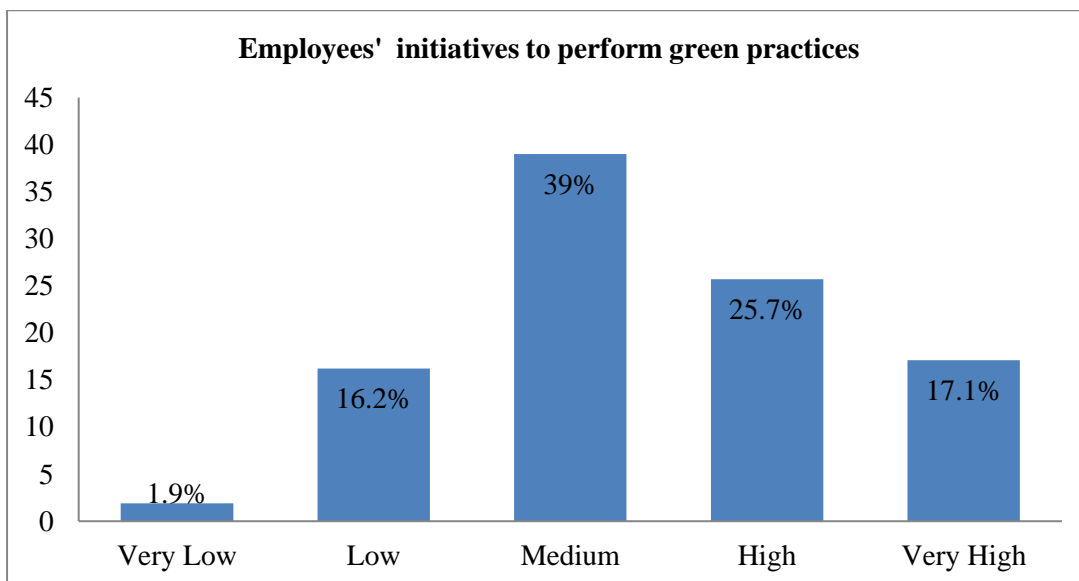


Figure 4.12 Degree of employees' initiatives in performing green practices in the sector

Figure 4.12 indicates a majority of respondents (39%) indicated that employees' initiatives to perform green practices were average.

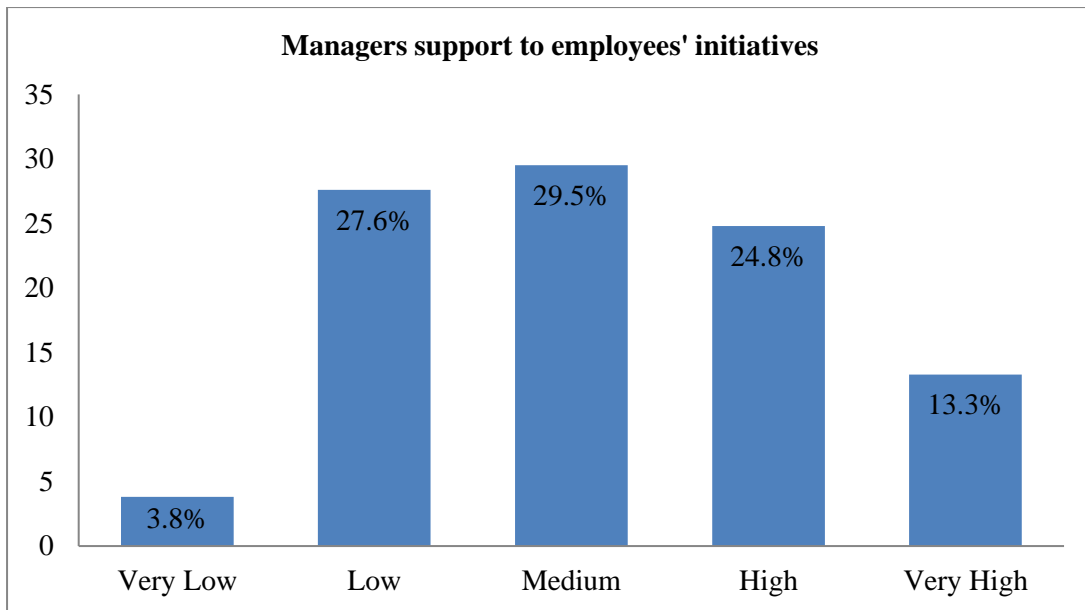


Figure 4.13 Managers' support to employees' initiatives to perform green practices in the sector

The study revealed that the majority (31%) managers provided medium support to employee initiatives, as indicated in Figure 4.13 above.

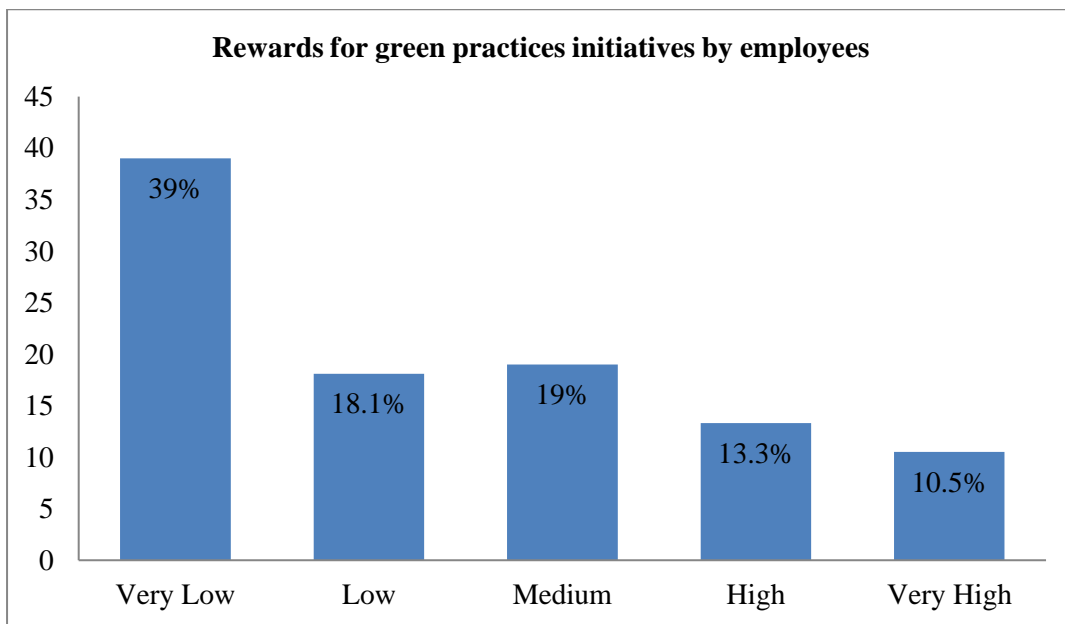


Figure 4.14 Rewards for employees' green practice initiatives in the sector

Figure 4.14 shows, the majority of respondents (39%) believed that the reward systems for employees' green practice initiatives were very low.

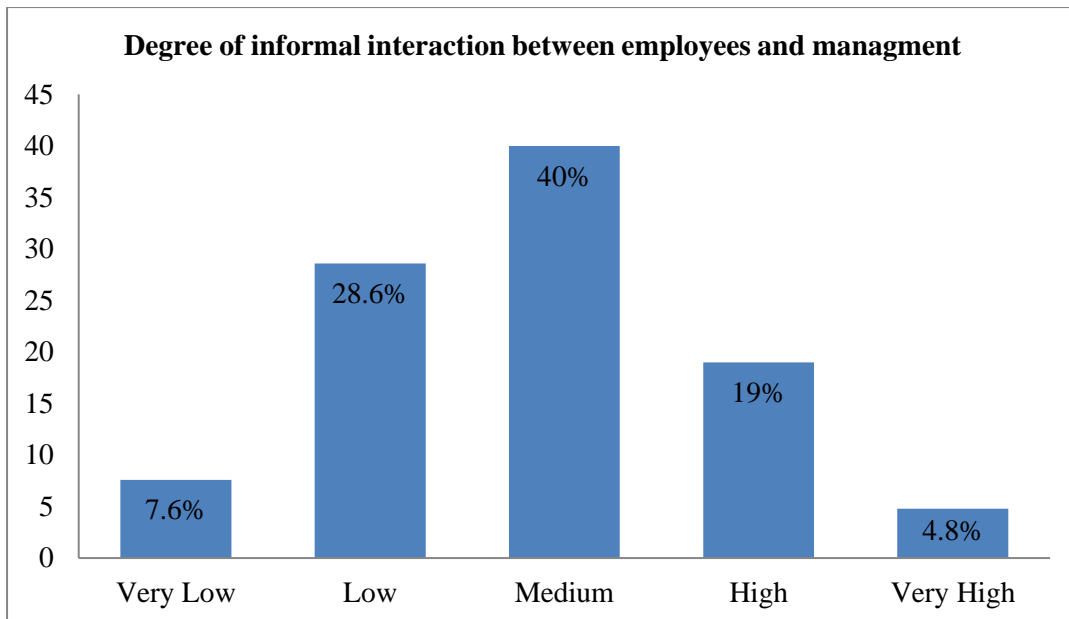


Figure 4.15 Degree of informal interaction between managers and employees in the sector

Figure 4.15 shows that according to the study the majority of respondents (40%) suggested that the managers have an average informal interaction with their employees regarding green and green practices.

4.3.1.4 Implementation challenges

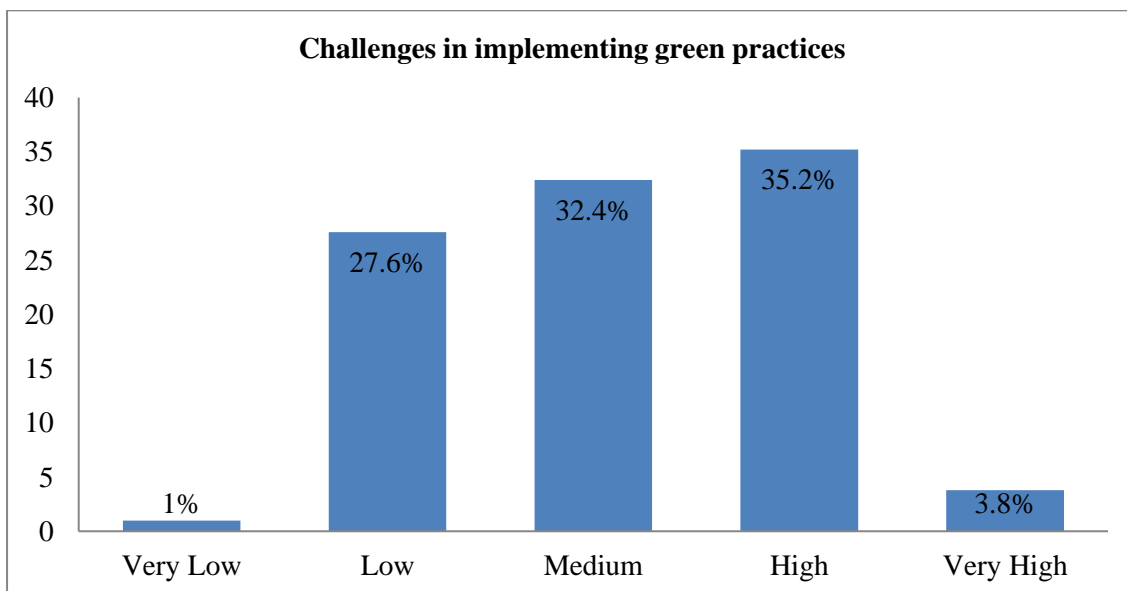


Figure 4.16 Challenges in implementing green practices in the sector

In Figure 4.16, the study reveals that the majority of respondents (35.2%) believed there were serious challenges in implementing green practices in the store.

4.3.1.5 Customers demand for green products

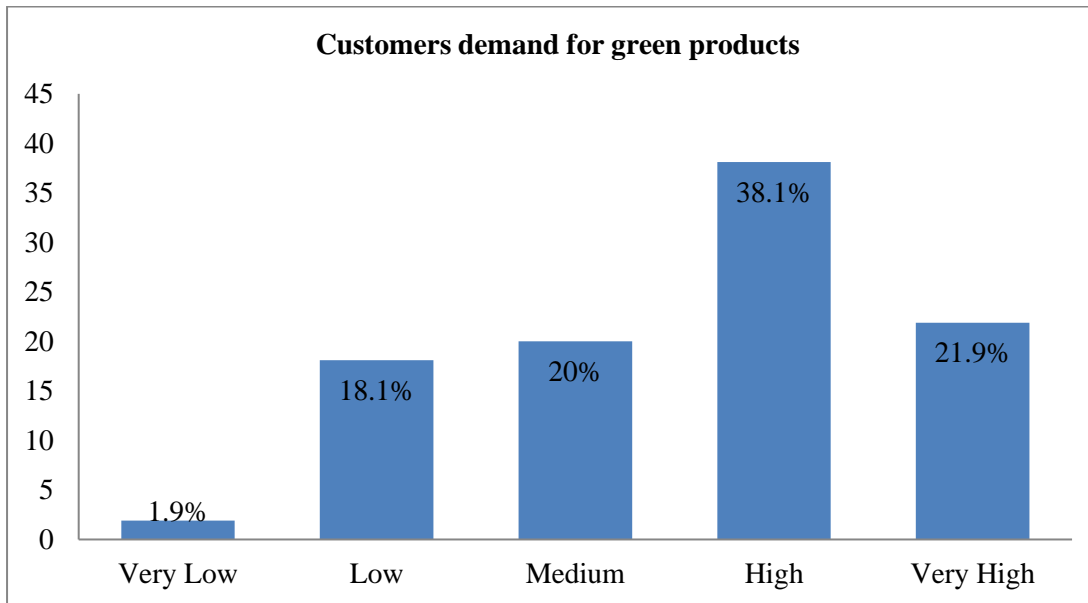


Figure 4.17 Respondents indication of customers' demand for green products

Figure 4.17 shows, the majority of respondents (38.1%) indicated that the customer demand for greener products was high.

4.3.1.6 Resource consumption efficiency

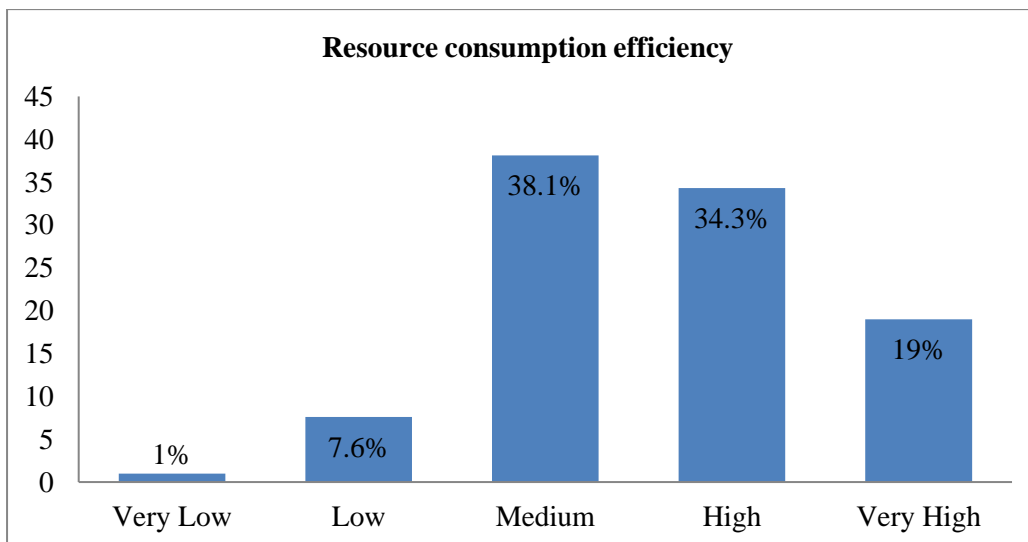


Figure 4.18 Respondents indication of resource consumption efficiency

Figure 4.18 shows that the majority of the respondents (38.1%) suggested there was average resource consumption efficiency in the stores.

4.3.2 Descriptive statistics of the individual store

The rationale for undertaking two approaches to analyse the data, namely combined analysis and individual store analysis is the combined analysis would help determine the overall outlook within the food retail stores; the store-by-store analysis, on the other hand, provided clear differentiation or comparison between the stores in the level of understanding and implementation protocols. Section 4.3.1 looked at the various variables combined and general trends within the food retail stores. This section will look at the various findings and presentation of results for the individual stores. Detailed statistical indicators as analysed by SPSS are presented in Appendix 7.

4.3.2.1 Informants' information of the individual retail store



Figure 4.19 Gender compositions of informants of the retail stores

Figure 4.19 describes the gender composition of informants of the various stores. Six of the eight stores studied have more female than male employees.

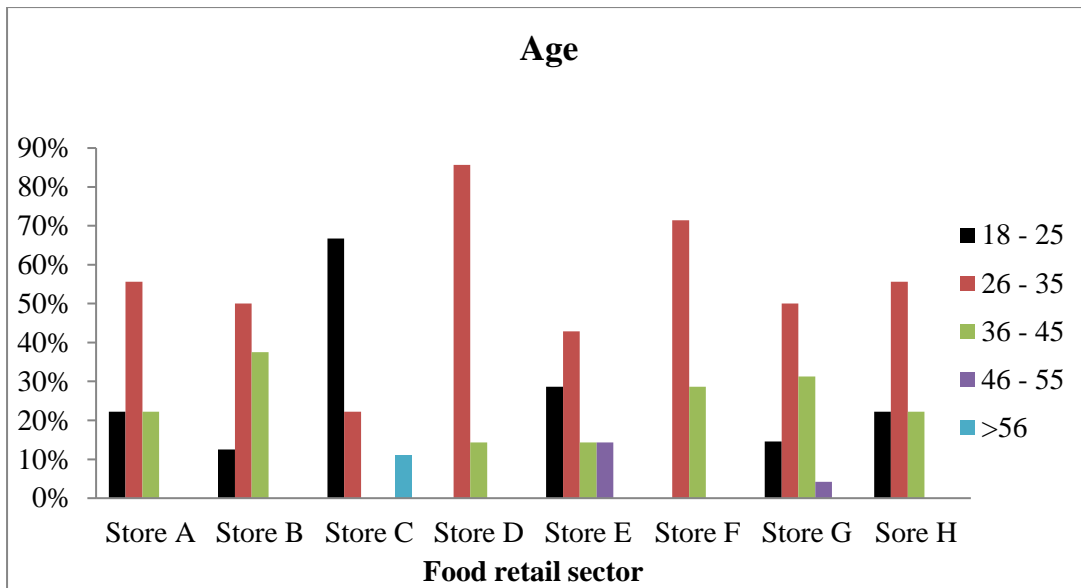


Figure 4.20 Age distribution of informants of the retail stores

Figure 4.20 shows that the majority of employees were within the 26-35 years of age category.



Figure 4.21 Number of informants in the retail stores and their job description. The category 'others' refers to general workers across the various divisions of the store

Figure 4.21 shows that there were higher numbers of participants in Store B (37.5%), Store G (58.3%) and Store H (55.6%) from the 'other' work position category. In-Store A (44.4%) and Store D (42.9%) the majority are cashiers. In-Store E (71.4%) the highest percentage is on customer services. In-Store C there were equal percentage participant is a cashier (44.4%) and customer service (44.4%). In-Store F there was an equal percentage of participants from other service categories (general workers) and customer service position (42.9%).



Figure 4.22 Work experiences of informants in the retail stores

Figure 4.22 shows that the majority of respondents in Store B (50%), C (66.7%), E (71.4%), G (45.8%) and H (44.4%) had 1-5 years of work experience. In-Store D and F (42.9%), the majority had 6-10 years of work experience. In-Store A, an equal percentage of participants had <1 (33.3%) and 1-5 (33.3%) years of working experiences.

4.3.2.2 General understanding of informants in the retail stores

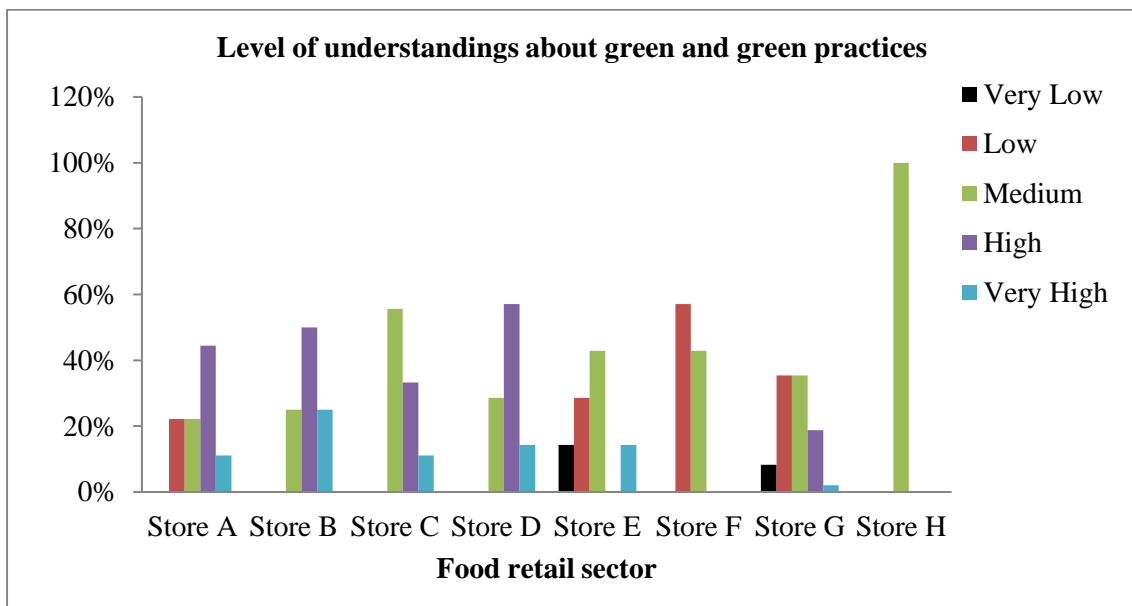


Figure 4.23 Level of understanding of informants in the retail stores

Figure 4.23 indicates that in Store A (44.4%), B (50%) and D (57.1%) there is a high level of understanding in the majority the participants about green and green practices. In-Store C (55.6%), Store E (42.9%) and Store H (100%), the majority shows a medium level of understanding about green and green practices. In-Store F (57.1%) the majority participants' understanding shows low level whereas, in Store G, there were equal percentages of lower and medium level understanding about green and green practices.

Figure 4.24 shows participants' moderate to a higher perception of green practices. The participants' positive perception about green and green practices is high in Store A (66.7%), B (50%), C (44.4%) and H (55.6%) whereas in Store D (42.9%), E (57.1%), F (100%) and G (43.8%) perception about green and green practices illustrates medium

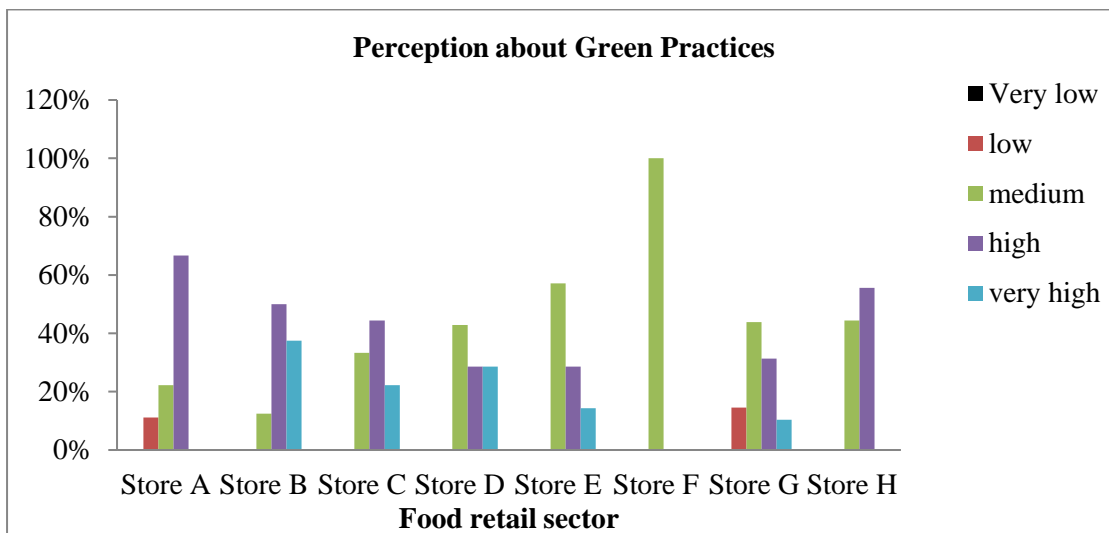


Figure 4.24 Informants perception of green practices in the retail stores

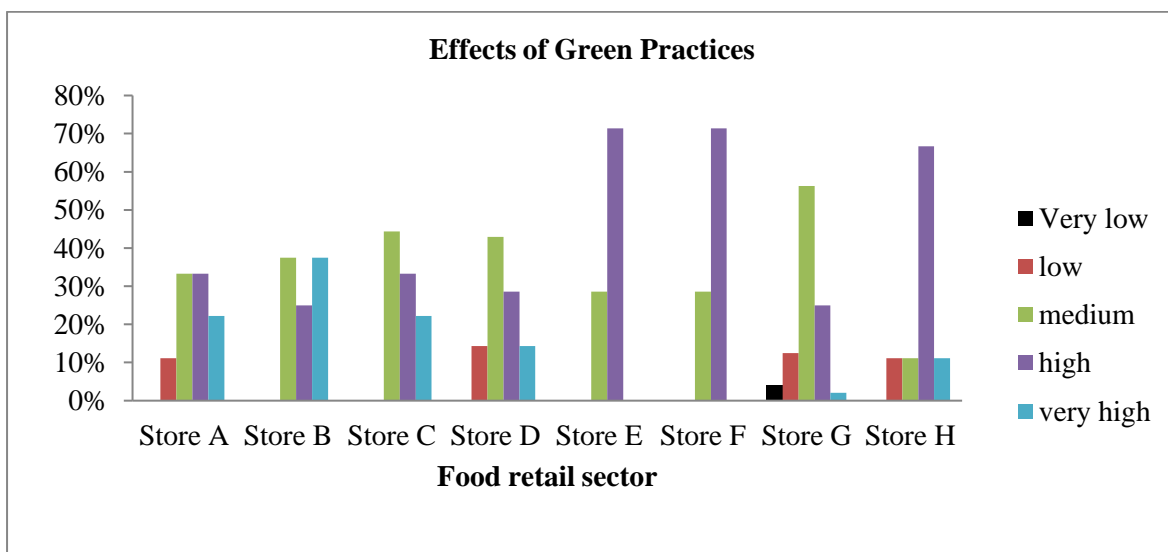


Figure 4.25 Informants' understanding of the effects of green practice in the retail stores

Figure 4.25 shows the majority of informants in Store E (71.4%), F (71.4%) and H (66.7%), had a high understanding about the effects of green practices on their business. In-Store C (44.4%), D (42.9%) and G (56.3%), the level of understanding was medium. In-Store A, an equal percentage (33.3%) of participants had a medium and high understanding of the effects of green practices. Likewise, in Store B equal percentage (37.5%) of participants had a very high and medium level of understanding about the effects of green practices on their business.

4.3.2.3 Management motivation in retail stores

Results of the management motivation of the food retail stores towards green practices are presented in Figures 4.26 to 4.33.

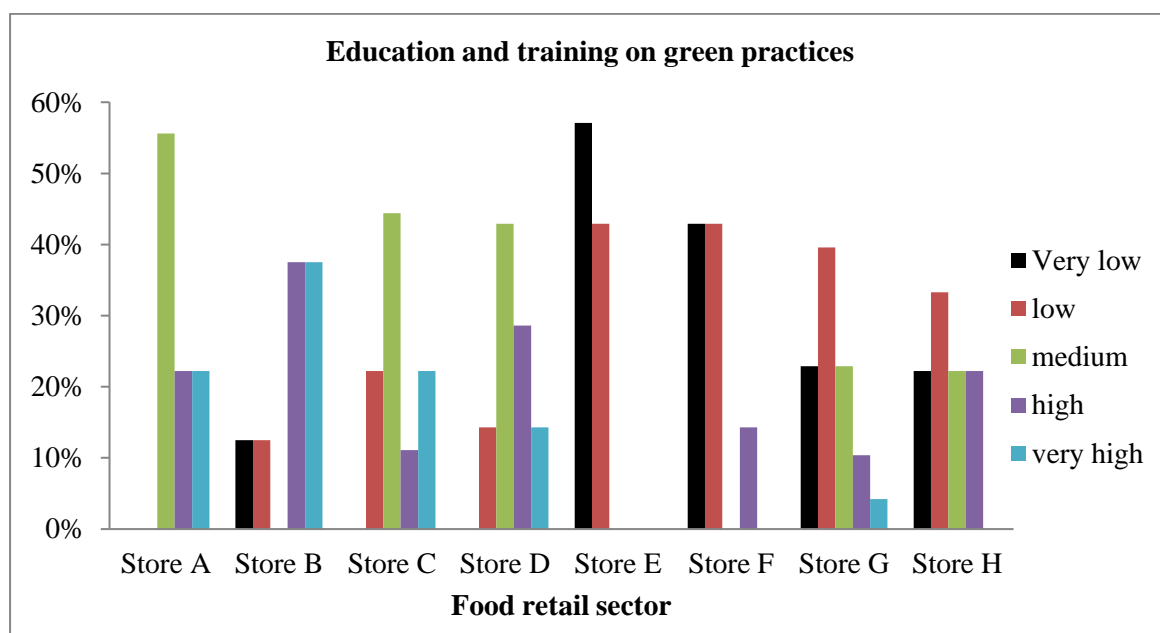


Figure 4.26 Level of education and training on green practices in the retail stores

Figure 4.26 shows the differences between the informants' response to the presence of training in green practice. Respondents indicated moderate training in stores A (55.6%), C (44.4%) and D (42.9%). In-Store B, the majority (equal percentage), (37.5%) scored the presence of training as high and very high. In stores E, the response was dominated by a very low score (57.1%) and low (42.9%). Similarly, in Store G (39.6%) and H (33.3%) of the scores were predominantly low. In-Store F equal percentage (42.9%) of the participant scored low and very low.

Figure 4.27 shows the presence or absence of a responsible body for green practice in the organizational structure of food retail stores. In Stores A (33.3%) and C (55.6%), the availability of a responsible body was scored medium. In-Store B the majority (37.5%) scored this very high and in Store D, an equal percentage (42.9%) of the participant scored this as high and medium. In-Store E (57.1%), F (71.4%),

G (39.6%) and H (33.3%) the majority scored the availability of responsible body regarding green practices in their perspective retail stores as low.

Figure 4.28 shows that respondents felt that various store managers displayed moderate to high levels of initiatives to promote the green practice. In-Store A (55.6%), D (57.1%) and H (55.6%), the majority ranked the management initiative to perform green practices as high. In-Store B (37.5%), E (42.9%), F (42.9%) and G (35.4%), the majority of the participants ranked management initiative as a medium. In-Store B, the result shows equal percentages (33.3%) of the participants ranking management initiatives as a medium, high and very high in performing green practices in their store.

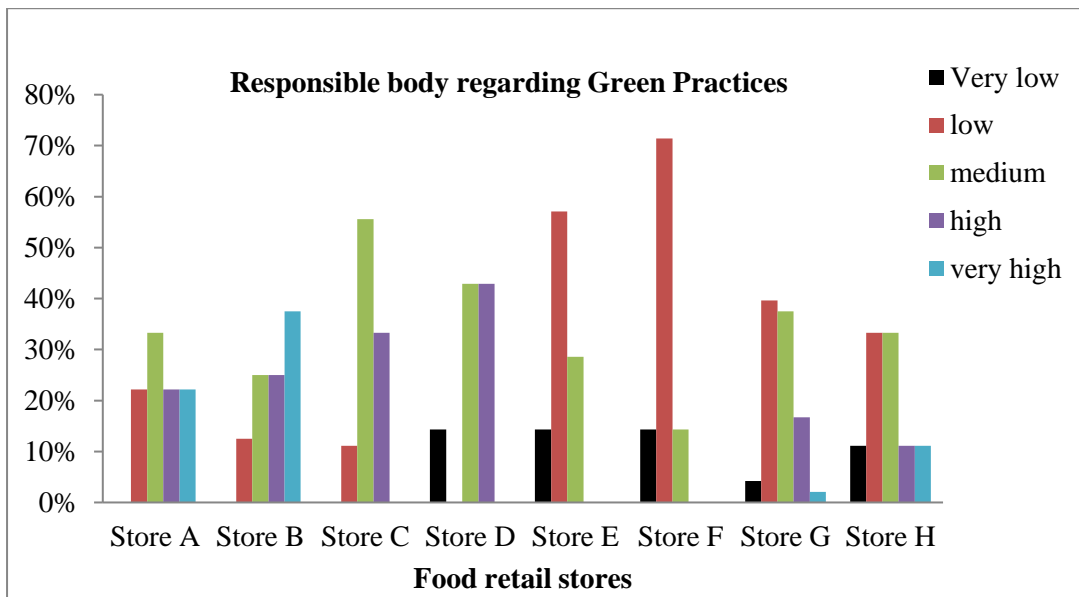


Figure 4.27 Availability of responsible body regarding green practices in the retail stores

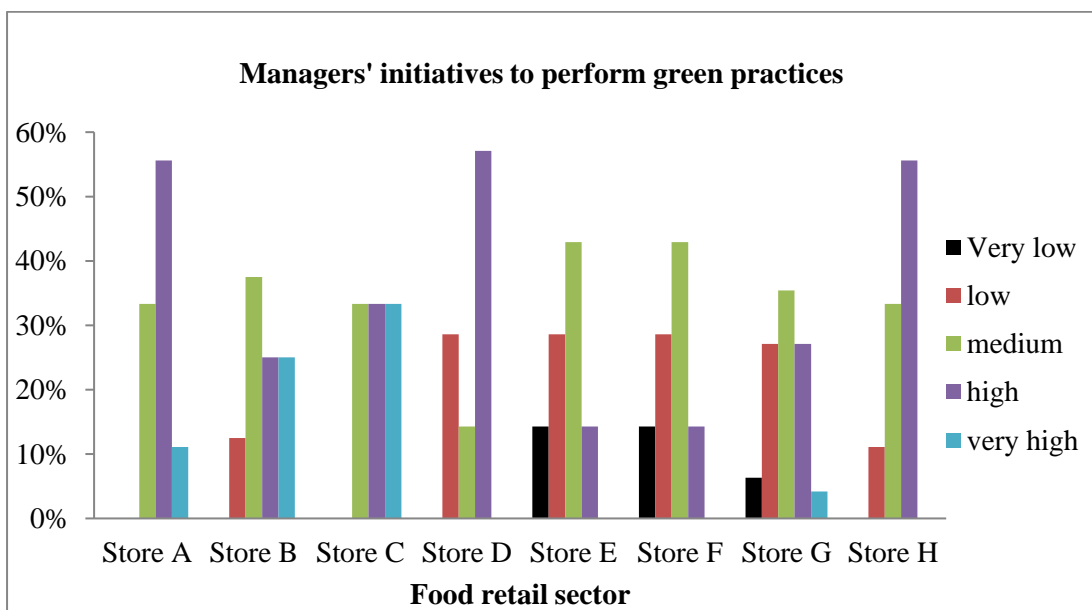


Figure 4.28 Managers' initiatives to perform green practices in the stores

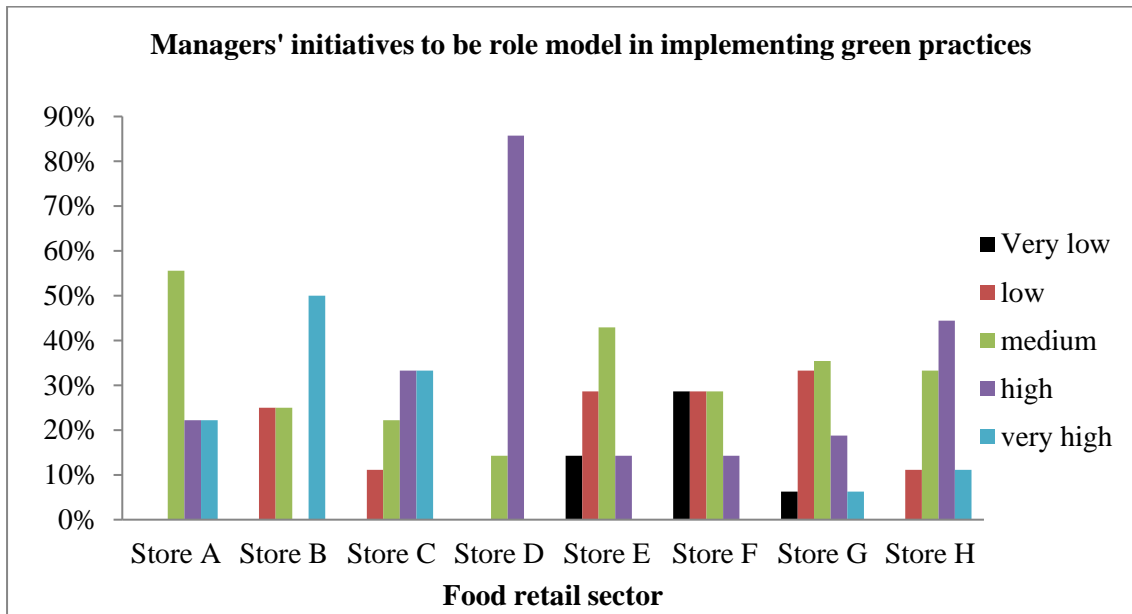


Figure 4.29 Managers' initiatives to be role model in implementing green practices in the retail stores

Figure 4.29 indicates that in Stores D (85.7%) and H (44.4%), the highest percentage of participants believed managers' initiatives, being models for implementing green practices in the store, was high. On the contrary, respondents in Store A (55.6%), E (42.9%) and G (35.4%) noted medium level initiatives, while there were equal percentages (28.6%) in Store F, indicating that the level of initiatives was very low, low and medium. In-Store B (50%) and C (33.3%), informants indicated that the initiatives of managers to be role models in undertaking green practices were very high and high, respectively.

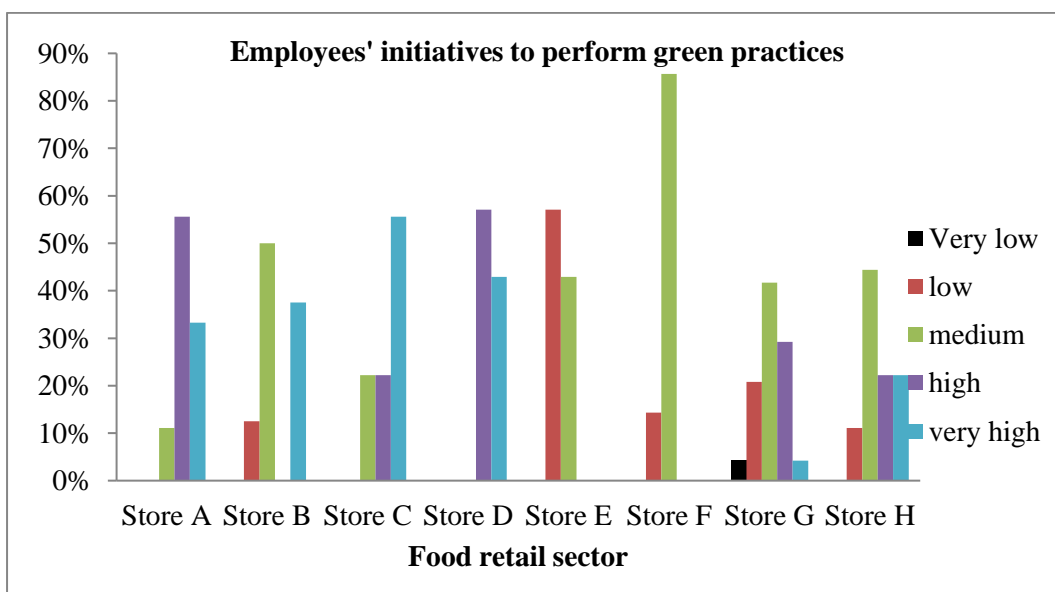


Figure 4.30 Employees' initiatives to perform green practices in the retail stores

Figure 4.30 demonstrates that there was variation in responses of participants ranging from very high, high and medium. The majority respondents in Store A (55.56%) and D (57.1%) showed employees' initiatives were high, whereas in Store B (50%), G (41.7%) and H (44.4%) the highest percentage of the participants said they had moderate initiatives to perform Green practices. In the case of Store C (55.6%), the majority said that they have a very high level of initiatives to perform green practices. In-Store E (57.1%), most participants have low levels of initiatives to perform green practices.

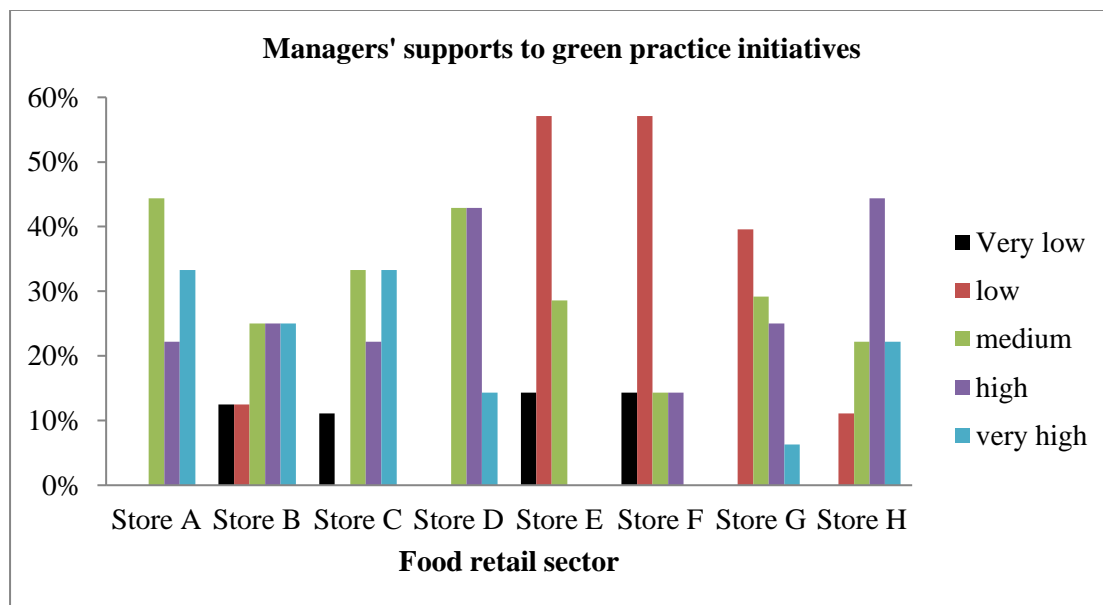


Figure 4.31 Managers' supports to green practice initiatives in the retail stores

Figure 4.31 shows that the managers' support for green practice initiatives in Stores A, B, C, D and H, were highly dominated by high, medium and very high responses. In the case of Store E (57.1%), F (57.1%) and G (39.6%), the majority of participants' responded that managers' supports to green practice initiatives were low.

Figure 4.32 shows there are medium, high and very high percentages of responses regarding rewards given to the initiative employees in store A, B, C and D. Specifically, in Store A (44.4%), B (37.5%) and C (33.3%) the majority indicated that there was a moderate reward. In-Store C the same percentage (33.3%) of the respondent replied that there was a very highly rewarding system in the store. In-Store E (71.4%), F (85.7%), G (45.8%) and H (55.6%) the majority answered that there were very low rewarding systems in the retail stores.

Figure 4.33 shows that there was a medium degree of informal interaction between managers and employees regarding green practices according to the participants. In-Store A (44.4%), B (37.5%), C

(44.4%), D (71.4%), F (42.9%) and H (55.6%), majority marked medium were as in Store E (71.4%) and G (39.6%), the highest percentage replied there was a low degree of informal interaction regarding green practices.



Figure 4.32 Rewards to green initiatives by employees in the retail stores

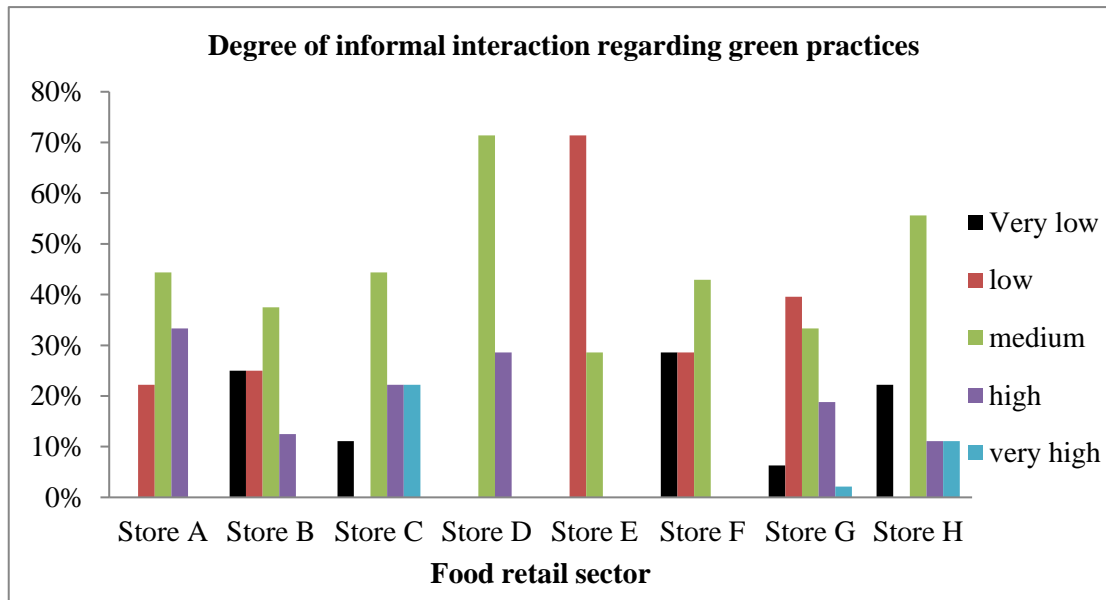


Figure 4.33 Degree of informal interaction between managers and employees in the retail stores

4.3.2.4 Implementation challenges

The results of the implementation challenges in Figure 4.34 indicate that all the stores have challenges ranging from medium to high. In-Store A (66.7%), E (57.1%) and F (57.1%) the majority noted a high degree of challenges in implementing green practices in the store. In-Store B (62.5%), C (44.4%), D

(44.4%), G (35.4%) and H (44.4%), the result shows that there were medium challenges in implementing green practices.

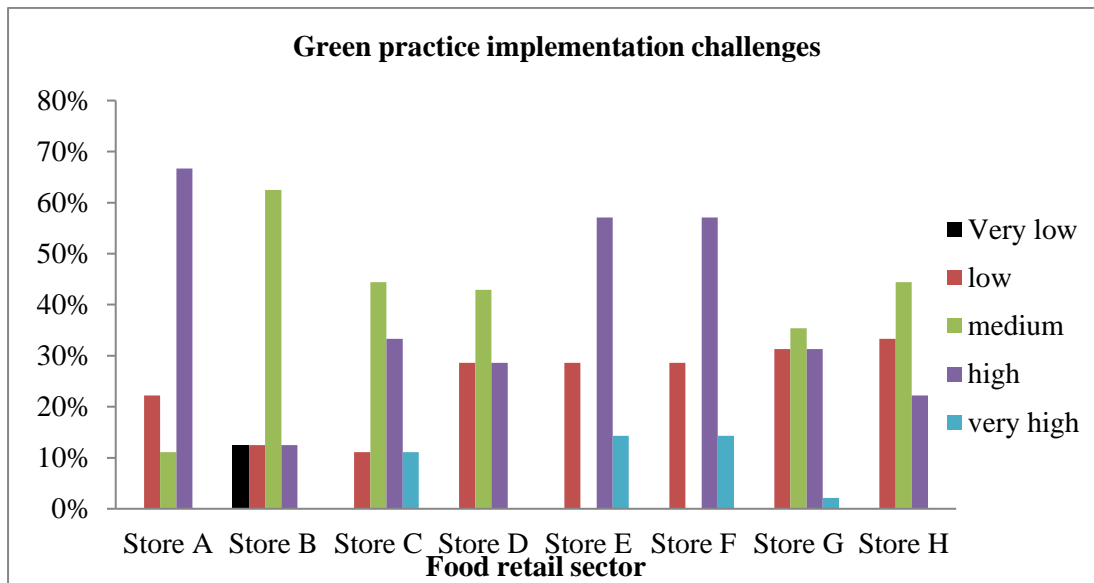


Figure 4.34 Green practice implementation challenges in the retail stores

4.3.2.5 Customers' demand for green products

The result of customer demand for green products is presented in Figure 4.35. The result shows that in Store A (44.4%), Store G (45.8%) and Store H (44.4%) there were moderate demands for green products. According to the highest percentage of respondents of Store E (42.9%) and F (42.9%), there were low demands for green products in these stores. Moreover, the result shows in Store B (62.5%), C (44.4%) and D (42.9%), the majority respondents noted that there was very high customers' demand for green products.

Figure 4.36 shows a high and very high level of resource consumption efficiency in Store A (44.4%), B (62.5%), C (44.4%) and D (42.9%), E (42.9%) and F (42.9%). It also shows, in Store G (45.8%) and H (44.4%) there was medium levels of resource consumption efficiency.

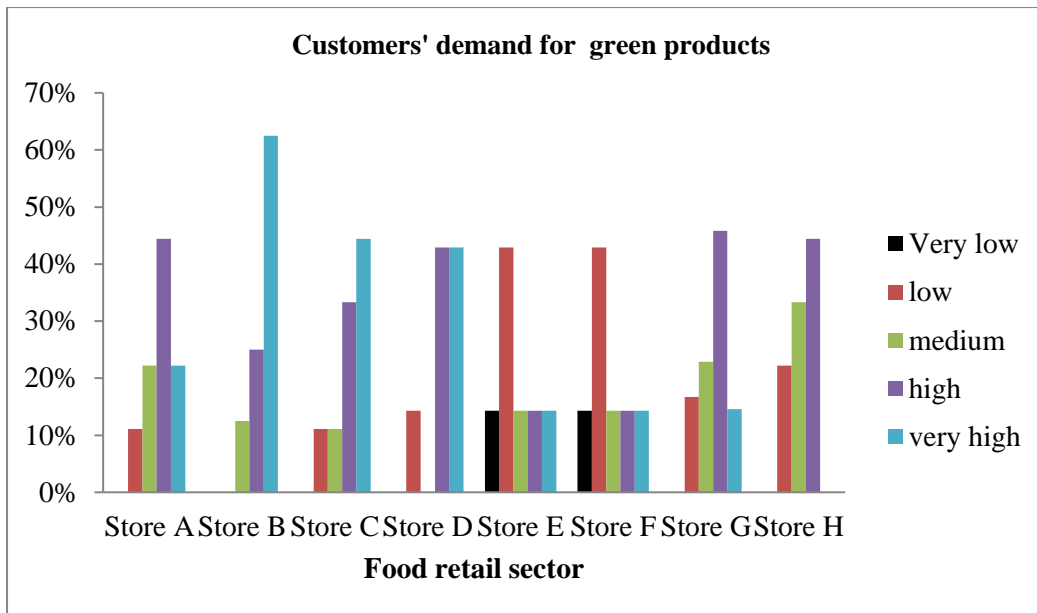


Figure 4.35 Customers' demand for green products

4.3.2.6 Resource consumption efficiency in retail stores

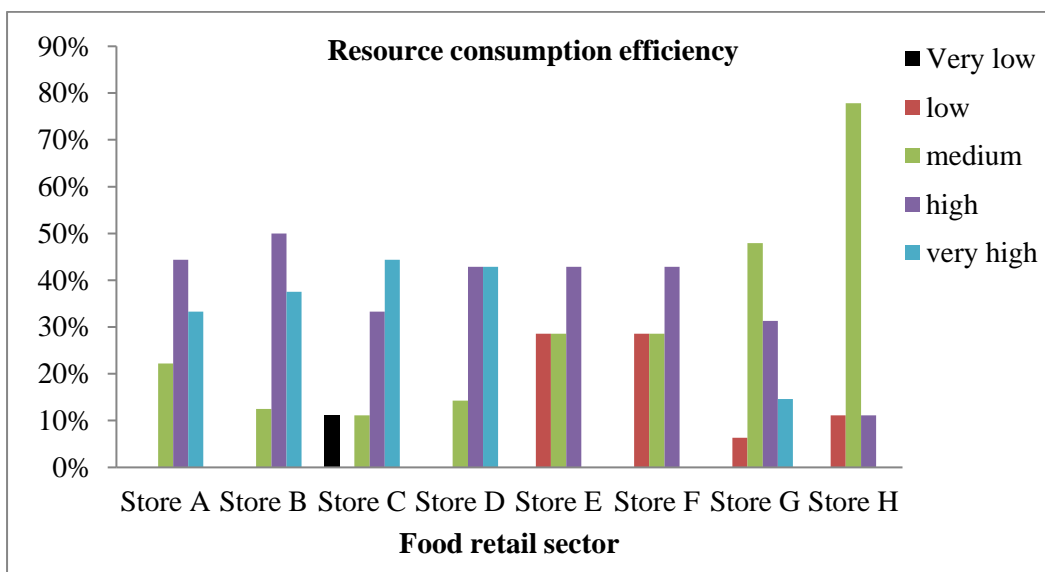


Figure 4.36 Resource consumption efficiency in the retail stores

4.3.3 Relationship analysis of the variables tested in the study

4.3.3.1 Univariate regression analysis

Univariate regression analysis using SPSS was used to determine the presence of relationship amongst the various variables tested. The Odds Ratio (OR) was used to determine the statistical significance of the association between the dependent variable and the independent variables. The dependent variable is the employee initiative to perform the green practice. The independent variables are a reward for green practice initiatives, availability of responsible body for green practices, managers being role

models, managerial support for green practice initiatives, education and training on green practice, implementation challenges and customer demand for green products. The rationale behind the analysis was that while univariate regression compares the dependent variable against each independent variable separately, multivariate regression undertakes collective comparison. An OR value of one or higher indicates a strong association and vice-versa.

Table 4.4 Summary of results of the univariate regression analysis as described by the Odds Ratio (OR)

Independent variable	Highest OR value	Interpretation
The reward for green practice initiatives	1	There is a statistically significant association between employee initiative to perform green practices and reward system
Availability of responsible body for green practices	0.997	There is a strong association between employee initiative to perform green practices and availability of responsible body although the association is not significant statistically
Managers being role models	0.991	There is a strong association between employee initiative to perform green practices and managers being role models although the association is not significant statistically
Managerial support for green practice initiatives	1	There is a statistically significant association employee initiative to perform green practices and managerial support
Education and training on green practice	0.998	There is a strong association between employee initiative to perform green practices and availability of education and training on green practice although the association is not significant statistically
Implementation challenges	1	There is a statistically significant association employee initiative to perform green practices and implementation challenges
Customer demand for green products	1	There is a statistically significant association between employee initiative to perform green practices and customer demand for green products

The details of the results of the univariate regression analysis are presented in Appendix 8. The results are summarised in Table 4.4. Table 4.4 shows the dependent variable, employees initiative to embrace the green practice, has signed to a strong association with all of the dependent variables tested. This result illustrates that for a food retail store to successfully adopt and practice green culture it requires to take into account all of the variables analysed and discussed above. For instance, addressing implementation challenges is as important as having a reward system, dedicated body to deal with green practice, have managers capable of playing a lead role, invest in staff education and training, aspire to meet customer demand for green products and motivate managers to provide leadership and support continuously.

4.3.3.2 Comparative remarks on the qualitative and quantitative analysis

The results of the study clearly demonstrated that the qualitative evidence derived from the interview process supported the quantitative results derived from the descriptive statistics and the univariate regression analysis. The comprehensive information provided by the interview process is similar, in coherence with the empirical data. This enabled the consistent explanation of outcomes and development of clear intervention recommendations.

4.3.4 Conclusion

The combined qualitative and quantitative data analysis of the study addressed the objectives set out. The variables related to the implementation challenge identified gaps that require addressing. The clear difference in the level of green practice implementation amongst retail stores shows that there is no consistent and universal application of green practice in the food retail sector. Although it is acknowledged that managers may have a better understanding about green practices when compared to the majority of lower-level employees, the questionnaire's design provided a suitable condition that enabled the compilation and analysis of sizable information, which led to a better understanding of this important but understudied research question. The in-depth analysis and narrative of the interviews provided first-hand information on the status of green practice application and the challenges it faces in the food retail sector in South Africa. The qualitative data also played a key role in providing the thematic areas around which the subject of this research was discussed.

CHAPTER FIVE: DISCUSSION OF RESULTS

5.1 Introduction

This chapter discusses the findings presented in the previous chapter. This chapter aims to provide detailed discussions of the finding concepts as per the objectives of the study. The first objective will discuss the factors influencing green practices in the food retail sector, and objective two identifies the level of green practices in the food retail sector.

OBJECTIVE ONE: TO ANALYSE FACTORS INFLUENCING GREEN PRACTICES AMONGST SOUTH AFRICAN FOOD RETAILERS

5.2 Internal factors

5.2.1 Business strategy

The model with which the business is established has an impact on what practices are implemented in the business. In-Store A, B, C and D, the initiative factor is a sustainable business strategy. Bhattacharya et al. (2011:8) describe that many business organizations use greening principle as a differentiation strategy to increase the market share of their product and achieve competitive advantage. Implementing green practises in these Stores' was the main strategic business activity. Shifting traditional business strategy into sustainable business model means to transfer into innovation business planning and operation (Annabeth, 2018:6). Performing sustainability as a differentiation strategy requires manipulating marketing techniques to increase awareness of the environment and teach customers about the benefits of green practices (Gupta and Kumar, 2013:312). That means, clearly explaining the retailer's shift to green products and practices and their importance to the environment and society (customers). As a result, customers develop trust and remain loyal, which allows the retailer to build a strong brand image. Thus, to meet customers' preferences as well as maintain sustainability differentiation strategies, the retail store's aims and objectives remain focused on green policies. This study revealed that not all food retail stores use sustainability and green practice as part of their business model.

5.2.2 Organizational initiatives

Organizational initiatives are strategies and planning that motivate green practices in the sector. These include the managers' values and attributes towards initiating employees to practice green and organizational human resource development through education and training.

In this study, the variables management motivation and promotion of green practices in the sector describe important aspects. Education and training; availability of units responsible for green practice; managerial initiatives; managers' ability to be role models; employees' initiatives; managers' support

to employees' initiatives; a reward for green practice initiative by employees and degree of informal interaction between managers and employees were considered. The interrelationship between these variables drives one another to achieve green practices.

Managers' values influence the food retail stores reaction to the environment indirectly. Personal value guides them to identify what is important or unimportant when deciding whether to adopt green practices. The value may encourage retail store members to win ecological responses, and managers like to modify working habits according to their values. On the other hand, managers' behaviour influences environmental behaviour indirectly by shaping environmental attitudes (Papagiannakis and Lioukas, 2012:43). Therefore, one of the key factors for the successful implementation of green practice is the role of managers' play. In light of this, it should be noted that the medium to high response on managers' initiatives towards green practice is a positive start for the food retail stores to move towards green practice.

Senior management is a role model can initiate medium and bottom level human resources to apply green practices in the daily activities of the food retail sector (Lozano et al., 2015: 207). The moderate to a high level of the initiative by the various managers of the stores to promote green practice likely resulted in the effective outcomes observed. Managers can influence employee perception since employees tend to look up to their managers when it comes to set certain standards.

Moderate to very high score on managers' initiatives as perceived by the informants indicate that the various managers of the retail stores are playing their part although the results suggest better overall outlook for stores A, B, C and D than E, F, G and H. According to Ramirez et.al (2014:18), those in the leadership positions of the food retail sector have to have knowledge and understanding about green practices and its benefits on the success of their business performance. They will be able to initiate and transfer their knowledge to the employees to develop a positive attitude and perception and to realize the strategic goals of the retail. Equally important is the role employees play in taking initiatives towards promoting and implementing the green practice. A good buy-in from employees can go a long way in helping the company achieve its sustainability targets. This is in addition to various other contributing factors such as favourable policy, training and reward system to mention a few. Managers' positions can be a supportive structure to the employees towards sustainable decisions making at the workplace by giving chance to exercise green practices in the food retail sector (Margaretha and Saragih, 2013:5).

Moderate to a very high initiative by employees to perform green practice indicates stronger initiative in stores A, B, C and D than E, F, G and H. The best possible explanation for this is the results of managers' support and the presence and absence of reward system. Reward systems are essential to encourage green activities (Linnenluecke and Griffiths, 2010:358). The result shows better managerial support to green initiatives in stores A, B, C and D than E, F, G and H and also relatively better reward

system in stores A, B, C and D compared to the other stores. These could have triggered proactive behaviour by employees in those stores relative to stores E, F, G and H.

There were no major differences amongst the stores when it came to informal interaction between managers and employees. Employee and managers informal communication is an opportunity for the transmission of environmental knowledge or attitude throughout the store's members. That means informal communication is one of the means in improving sustainability at the workplace as well as create and strengthen the relationship and understanding of the role players. Thus, it generates intangible benefit on employees' satisfaction and motivation, which have huge effects on the success of the stores' environmental policy implementations (Martin-Pena et al., 2014:222). From the results, it is apparent that all but one of the subset variables of management motivation plays an important role in the implementation of the green practice. Further analysis of the individual stores, however, provides a more detailed insight into this variable on a store-by-store basis; since there were differences in a manner the individual stores manage this important variable. There is a lot of evidence in the literature that shows the value of motivation and reward system for sustainable practice (Arulrajah, Opatha and Nawaratne, 2015; Uddin and Islam, 2015).

The results indicate that, although there are a fairly good response and initiative from the side of the employees, the food retail stores have a lot to do in terms of training and motivating their staff. Increasing employees' sustainability awareness using education and environmental sustainability and social responsibility training, increases members' understanding about social concerns, resource utilization and the sustainable use of natural resources with minimum waste (Margaretha and Saragih, 2013:3). Hence, the moderate to high response on employees' initiative can be capitalised upon by stores by introducing training and reward system, which is ranked very low according to the results of the study. A small investment in a reward system could help the stores achieve significantly in their endeavour to implement green practices. Such an investment could ultimately lead to Green Human Resource Management. Therefore, the employees' initiative towards sustainable practice needs recognition and support from store management since the results show medium to low support.

The role and presence of a responsible body for green practice can indicate a difference in the attention of green practices in the sector. In stores A, B, C and D the response was predominantly medium to high whereas in stores E, F, G and H the response was predominantly from very low to low. Based on the qualitative data, in stores A, B, C and D there was a responsible body at the divisional level where the information on green practice flows from up - down and bottom-up. This adds value on measuring, evaluating and feedbacks on green performances. This has positive effects in identifying the significant importance of green practices in the success of the stores.

5.2.3 Profitability

The food retail stores implement those sustainable practices not only because it is regulatory, but also it is cost-effective (adds value) for their business. Gupta and Kumar (2013:316) suggested that green practice initiates the efficient use of resources that results in wise managerial cost and waste administration. This has a positive effect on the financial capacity of the food retail sector (Naidoo and Gasparatos,2018:129). If we see Store H, it is under new owner and management, as per the store manager's response, at the moment the business is working to recover from previous owner losses. Though, their main focus is on making profit and survival of the business; they still implement sustainable activities like energy and water saving, waste minimization, boxes given to self-employed people so that they can maintain a clean environment. At last, but not least, there is training regarding hygiene and food safety to the employees. Therefore, by doing these sustainable activities, there is good customer service, low cost and clean environment.

5.3 External factors

5.3.1 Institutional involvement

The study identified different means of initiative factors to implement green practices in the food retail sector. The factors are categorised as common/collective and individual initiatives. The common factors that influence green practices implementation were the environmental rules and regulations. As suggested in the literature, government regulation on the operation of business entities influences the implementation by the entities. Environmental rules and regulations are external factors that abide by the food retail sector to implement environmentally friendly activities in their stores. That is to achieve their environmental performance at least to the minimum standard set by the government (Schaltegger and Synnestvedt, 2002:340; Linnenluecke and Griffiths, 2010:358). The government can impose penalties and fines in case they fail to meet the minimum standard expected by the regulation (Papagiannakis and Lioukas, 2012:44). Environmental regulations are rules that food retail stores fulfil to stand as a business and enter into food market competitions (Claro et al., 2013). Thus, to achieve that, food retail sectors took initiatives to practice sustainable activities like reducing pollutions, waste minimization, energy-saving, recycling and hygiene and food safety (Reddy, 2016:32); all of these elements were evident in this study. There were common environmental activities practised in Store A, B, C, D, E, F, G and H. Regular hygiene and food safety training, implementation and auditing, collection of boxes for recycling, saving resources (water and electricity and waste minimization) as well as corporate social investments were considered as common activities in the sector. Moreover, each store had hygiene and food safety policies and auditing. Therefore, as a result, training is given to the employees and managers who are especially working in service areas (chef, baker and butchery).

5.3.2 Suppliers initiatives

Suppliers, as part of the business chain, play a role in the adoption of green practices in the food retail sector. The initiatives are taken by suppliers therefore, play an important role. As suggested by Claro et al. (2013:365), well-developed supplier relationship through communication, inter-organization process and environmental policy can lead retailers to invest in sustainability. Sustainability is a business strategy in stores A, B, C and D; they set clear procurement policies and standards of their product qualities. The companies source their products from sustainable suppliers. Suppliers are selected based on their ability in protecting the environment, good to the people and social corporate activities. The companies send people to work with the suppliers and follow up by sending auditors for further checking of their production process. The relationship between supplier and retailers is always based on trust. Suppliers' reliability and trustworthiness are necessary to build a long-term relationship with the retailers (Ramirez et al., 2014:18). The companies also train farmers to produce specific products according to the quality needed. Moreover, there is an inspection of the quality and size of the products. If there are limitations on the quality and size of the products, they are considered as defect products and be returned to the suppliers.

Suppliers have a role in adopting green practices. The study indicates in stores A, B, C and D, the relationship they created with their suppliers benefits them in different measures. The close working relationship in designing, processing and producing of their products shapes the suppliers' performance as per the standards required. The suppliers being cognisant of the retailers' standards, triggers the success of green practices in the store. Some of the suppliers come to the stores and check their product on the shelf and ask the staff if there is any complaint or things that need to be changed. Other suppliers, given training by store managers (and vice-versa) and the store manager, diffuse the knowledge to their respective staff. It is also possible to say that because of the initiative of suppliers on performing sustainable farming and production, the company can be performing sustainability. Suppliers' transparency and efforts to the customers strengthens the bond and satisfaction as well as encourage them to take the initiatives to practice green (Monczka et al., 2015:174). Furthermore, some of these stores are making efforts in establishing sustainable farmers by providing education and training by sending professional experts. Developing a good relationship with suppliers means there is a clear understanding of the desires of both parties.

Good communication with environmentally sustainable suppliers creates positive relationships. Lee and Klasse (2008: 574) suggest that suppliers are an asset, providing technologies and skills that enables the food retail sector to respond to environmental requirements in a timely and decisive manner to satisfy their customers. Suppliers can also provide education and training to the managers and employees to help them gain environmental knowledge and information. This knowledge will enable them to know what sustainability means and its positive effects on the performance of the retail store.

Having an environmentally oriented relationship with stakeholders like “employees, customers, consumers, supply chain partners, competitors, investors, lenders, insurers, nongovernmental organizations, media, the government and society” (Berns et al., 2009:25), also helps to overcome barriers.

5.3.3 Socio-economic influences

This describes the influences of social and customers’ preferences on the adoption of green practices in the food retail sector.

5.3.3.1 Social concern initiatives

Growing social awareness regarding green practices and health foods, made food retailers to consider it in their planning decision (Naidoo and Gasparatos, 2018:127). Managers need to adapt their environmental sustainability position to stakeholders’ environmental expectations. Stakeholders have the power to pressure retail store managers concerning environmental responses (Menichini and Rosati, 2013:551; Schaltegger and Synnestvedt, 2002:340). Stakeholders could be suppliers or customers. This describes that the food retail stores should work to give attention to green practice and prioritize it on their business objectives to get the attention of and create a good image by society.

It was evident from the results of the study that social perception influences the implementation and adoption of green practices at both the consumer and employee level. In stores A, B, C and D, for example, there is healthy competition amongst the employees on who implements green practices more, which in turn is rewarded (spot reward) by the store management. Social pressure is an external factor influencing the adoption of green practices in the food retail sector (Linnenluecke and Griffiths, 2010:358; Du Plessis and Grobler, 2014:270; Reddy, 2016:23). People’s concern and awareness about environmental risks (global warming, floods, earthquake, unpredictable weather) caused by the exploitation of natural resources and unsustainable environmental activities, have forced societies to change their perception and attitude. They now focus on conservation and the effective use of natural resources and finding possibilities to minimize environmental risks (Llbery and Maye, 2005:331; Mwanza and Mbohwa, 2017:654). The peoples’ new environmental zeal dictates their day to day activities, starting from the food they purchase from the food retail sector. They are concerned about the types of food products they choose to consume and choose to buy from stores that sell healthy foodstuffs and maintain a good environmental image. This has led retailers to enhance competition and boost green practices. In other ways, the proximity of the food retail sector to the consumers also increases the influence of societal needs on retailers’ attitude towards the protection of the environment (Martin-Pena et al., 2014:222; Claro et al., 2013:365; Hwang and Chung, 2019:293).

5.3.3.2 Customers' preferences

Customer preferences are initiative factors to implement green practices in the food retail sector. Customers' purchasing power has a significant impact on the decision managers make on whether to go green (Schaltegger and Synnestevedt, 2002:340; Dabija et al., 2018:174).

The study shows that there is high, very high and medium demand for green products by customers. These days, the demand for green and healthy products is on the rise due to health consciousness and the increasing risk of consuming processed (non-green) products containing a variety of preservatives, colourants and additives. Moreover, the customer's awareness of social and environmental issues often causes them to shift their preferences to green products. This drives the retailers to adjust managerial decisions towards sustainability (Linnenluecke and Griffiths, 2010:358). The results of this study showed that there is a market for green products if the right investments are made. Environmental sustainability practices, such as displaying healthy stuffs, using recyclable and reusable materials, applying electrical efficient and effective cooling and cooking systems, accompanied with good customer services (that have influential power in creating green customers and consumers) are practices where most food retail sectors use to attract numerous customers in the competitive market (Berns, et al., 2009: 25). As the study result shows, most of the food retail stores have specialised shelves for green and healthy food products. Furthermore, adopting green practices in the food retail sector requires an in-depth knowledge of customers' requirements in order so that management amends the strategies and structures of the retails' principles while achieving business goals (Gupta and Kumar, 2013:316).

OBJECTIVE TWO: TO IDENTIFY THE LEVEL OF GREEN PRACTICE IN THE FOOD RETAIL SECTOR

5.4 Resource management

Resource management focuses on resource utilization and waste control of the sector.

5.4.1 Resource unitization

One important aspect of green practice is the implementation of policies towards resources (especially electricity, water, recycling and waste minimization) utilization efficiency, which is called process capability. The process capability can be improved through middle management policy entrepreneurs' and cost reduction policy like minimizing wastage, energy-saving, using less transportation cost mechanisms, improving cooling systems for perishable products, efficient use of electricity, promotion and incentive system, and so on (Claro et al., 2013:366). The results on respondents' perception of the food retail stores' resource use efficiency showed that the majority of the respondents feel that the stores do use resources such as water and electricity efficiently. The majority response of 'medium' however, shows there is room for improvement in the retail stores' resource consumption efficiency. Increasing employees' sustainability awareness using education and environmental sustainability and social

responsibility training can increase members' understanding about social concerns, resources utilization and sustainable use of natural resources with minimum waste (Margaretha and Saragih, 2013:3). In addition, adding sustainability policies to the retail store's strategy like health and safety policies, ethical policies, and climate change policies, implementing sustainability codes of conduct and create supplier sustainability performance policies or procurement policies can improve working habits of retail store members and enables them to abide by the sustainable policies and regulations (Bertels et al., 2010:9). Therefore, considering and working on these points can help retail stores increase their efficiency in resource consumptions.

5.4.2 Waste control

Waste minimization includes efforts such as reducing the disposal of foods in landfills, minimizing costs, and reusing and recycling of boxes (Naidoo and Gasparatos, 2018:130). Each store gathers all the boxes, flatten and line them up into manageable sizes and send them to their respective Distribution Centres or give them for free to self-employed people or sell them to a recycling company. This shows they are playing a part in the recycling of those boxes. In the case of waste minimization, the stores give their product after sell-by-date to the charity or needy people or for animal feed unless those products are dangerous to consume. Likewise, all the stores have the same procedure in destroying their expired and damaged products.

5.5 Organizational challenges

5.5.1 Management challenges

Respondents ranked implementation challenges for green practice from high to medium. One of the aims of the study was to enquire, from the respondents, the presence of implementation challenges of green practices. A significant number (>65%) of the respondents noted the presence of implementation challenges in the retail stores. Several factors have been reported to contribute to the implementation challenges of green practices (Saadatian, Tahir and Dola, 2010). Some of these challenges include managers' mindset and initiatives, sustainability investment cost, customers' loyalty, organizational structure, lack of reward and low human resources capability. Therefore, there is a need for an effort to develop a formal and informal strategy and tactics, both at the top-down and bottom-up levels of the business (Bertels et al., 2010:7). As described by the managers, the cost is the main challenge in adopting green practices. Cost consideration in investing in green practices (Ramirez et al., 2014:18) are other challenges in introducing green practices in the food retail sector. Being sustainable means changing the set-ups from ordinary to advanced ways of the system. The set-up cost, admin cost, environmental training cost (Ramirez et al., 2014:18), auditing fees, time is taken to documentation and the efforts in complying with the specifications (Martin-Pena et al., 2014:222) are considered as investing costs which may discourage managers

The results of the implementation challenges indicate that all the stores have challenges ranging from medium to high. Various factors could have contributed to these implementation challenges. Based on the qualitative data for instance, in Stores E, F, G and H, the challenges were lack of information and knowledge about green and green practices. Moreover, the study also identified there was a very low reward system, low level of managerial motivation on the employees' initiatives, limited know-how about the source of their products and the absence of responsible bodies in the store or at the divisional level.

In-Store A, B, C and D, the challenges were on ways of implementing sustainable activities. As per the responses from interviewed managers in Store A, B, C and D, there is competition amongst staff in selling fabric bags so that the highest seller get rewards, which motivates others to perform. As suggested by Reddy (2016:32), competition is one of powerful means in strengthening business performances of many food retail sector. However, Store B, Manager 2, also described that staff are encouraged to change the perception of the customer and encourage them to buy those reusable bags.

The result on the presence of a responsible body for green practice in the stores showed that in stores E, F, G and H, the response was predominantly from very low to low. This indicates that there is no separate unit in the structure of the store to monitor, measures and evaluate green performances. As suggested by Martin-Pena et al. (2014:227) inadequate design of the organizational structure and lack of responsible human resource are barriers in considering environmental sustainability as a crucial strategy in the food retail sector' business objectives. Successful implementation of green practice requires it to be embedded in the stores' operational system with a dedicated responsibility assigned. The predominantly medium to the low response shown in the results, therefore, indicate there is no responsible unit assigned to green practice by most retail stores that have effects on separate measuring of green performances in the store.

In-Store A, B, C and D, the green performance measurement is done based on the scorecard. The online metering system measures the daily consumption of electricity and water. Based on the online meter, the scorecard measures the score achieved on saving electricity and water as well as selling fabric reusable bags. The responsible body for sustainability at the divisional level and regional level makes an assessment based on the scorecard achievement and provides feedback related to the standard set by the company. In the case of store E, F, G and H, the performance measurement and evaluation is done cumulatively. In the case of electricity and water, it is controlled by the head office. In the case of waste, they have a figure in the store. Therefore, they know how much they waste. This indicates that a lack of a responsible body for measuring and controlling green performance makes it difficult to identify the importance of green practices in the store. As suggested by Bernes (2009:27), lack of a mechanism to measure, track and report sustainability performances, prevents managers from recognizing the intangible benefits and costs of sustainability.

Leading by example is an important criterion in management. Managers being role models have significance in influencing employees' to implement green practices. The overall moderate response is shown by the respondents, therefore, requires marked improvement for the store managers to play a role model in implementing the green practice. As literary explained, senior position managers and middle managers should practise what they preach instead of just giving orders. They should demonstrate sustainability leadership by 'walking the walk' and 'talking the talk', participate in on-going discussions about sustainability expectations, prioritise sustainability in decision-making and give attention to the work of sustainability committees (Margaretha and Saragih, 2013:5).

The score "very low" reward for employees taking initiatives towards green practice indicates there is a needed to ascertain the reasons for the low reward system and predominantly moderate response across all subsets of this variable. Reward systems are also essential to encourage green activities (Linnenluecke and Griffiths, 2010:358). Introducing incentive systems by including sustainability measurements in employees' performance evaluations and assessments programmes and using them as criteria for promotions, bonuses and benefits, contributes towards sustainable practice. Performance measurement mechanisms should ensure that the targets are within the employees' control so that they can be rewarded for initiatives taken (Margaretha and Saragih, 2013:6).

5.5.2 Skills-based challenges

Results for each store show a marked difference in the informants' response to the presence of training about green practice. In stores A, B, C and D the response was predominantly medium to high whereas in stores E, F, G and H the response was predominantly from very low to low. This also explains the distinct variation in the general understanding of the stores regarding green practices, which was scored medium to low. Non-flexible organizational culture and high resistance to changing leaders' and employees' mindsets, is negatively associated with the adoption of environmentally sustainable measures. Habits and routines in adopting environmentally friendly goods and services will always affect the flexibility of retailers' operations (Ramirez et al., 2014:20). As a consequence, employees and employers could not commit to the environment since there is no opportunity to provide environmentally sustainable education and training to the members of the store. Thus, a lack of knowledge, training and qualifications does not encourage people at the workplace to think about green practices. Increasing employees' sustainability awareness using education, environmental sustainability and social responsibility training also increases members' understanding about social concerns, resources utilization and the sustainable use of natural resources with minimum waste (Margaretha and Saragih, 2013:3).

Changing managers' perceptions and attitudes towards environmentally sustainable practices can benefit the food retail sector by improving information systems on reputation, incentives and human resource training and adequate skills (Martin-Pena et al., 2014:221). Green business practices can motivate employees of the food retail sector not only to adopt green practices at the workplace but also to develop them as a norm to be practised in their daily activities. This will, in turn, directly or indirectly influence their families and communities. Moreover, retailers' proximity to the end consumers and the economic impact of policy on them, can play a leading role in promoting green practices in societies and influence other businesses to develop similar policies (Bertels et al., 2010:6).

5.6 Supplier-related challenges

Developing good relationships with suppliers' means there is a clear understanding of the desires of both parties. The relationship can be maintained through transparent communication, clear environmental policies and clear process. The relationship can also help the food retail sector to overcome barriers and solve challenges in promoting green practices. However, lack of relationship, lack of suppliers' innovation, minimum product life diversification, low production capacity and poor reliability hinders environmentally-sustainable offering adoption (Ramirez et al., 2014:18).

In the case of Stores E, F, G and H, the managers have limited information about the procurement policies of their products. Majority of the products are delivered from the respective head offices of the stores (commonly called distribution centres). As per the demand planner, the managers put requests to the head office and receive the required quantity of each product from the distribution centre. The rest of the products are purchased from already selected suppliers by the centralised purchasing department at the head office. The contribution of the suppliers to the store staff is to teach staff about the new products, how to operate and its importance. Therefore, as remarked by the researchers, suppliers' should be abiding by environmental policies and procurement policies to supply the right product (Monczka et al., 2015:142; Reddy, 2016:31) as well as to be transparent to their customers about the food they supply since it is connected with food safety issue, sustainability and significances on increasing customer loyalty (FoodLogiQ, 2017).

There were also external challenges that hinder food retail stores from implementing green practices. Llbery and Maye (2005:331) suggested that due to environmental risks, it has been hard to experience normal weather predictions. These unpredictable weather changes cause complications on the growth of food crops which risks farmers and the food retail sector on substantial price fluctuations. This has effects on the unbalanced supply of food products concerning the demands. Therefore, as a result, retailers are becoming serious about taking measures in minimizing the causes of environmental risks (Martin-Pena et al., 2014:222). The qualitative data indicated that the food retail stores experienced in shortage of green product suppliers as a result of airborne diseases, bird flu and weather fluctuations affecting animal and plant products to get enough supplies. Chkanikova and Lehner (2015:5) also

agreed that challenges in getting access to environmentally sustainable products and implementation are an additional barrier for food retailers.

Moreover, retail managers calculate their profit based on the time, cost and availability of the product. Availability of environmentally sustainable products is affected by unexpectedly long time required to secure supply, high production and certification costs that affect the availability of enough quantities (supply) concerning the demand. This does not motivate managers to make planning on displaying the green product.

5.7 Customer-related challenges

The managers in the food retail sector described that there were cost challenges in transferring their ordinal business model into a sustainable business model. Which they stated that it is worthy in saving the environment and people and sustain their business in the future. Costs are negatively associated with the introduction of environmentally sustainable measures. It is feared that the cost involved with introducing environmentally friendly inputs and expensive green products will push up the selling price of those products (Ramirez et al., 2014:18). This might dissatisfy customers who are unwilling to pay higher prices. In other words, many retail store managers will prefer to devote most of their shelf space to affordable products to keep/respect their customers' loyalty. Often, however, green products are associated with a high price (though not always true), which forces low-income consumers to buy from affordable sources irrespective of the source/nature of the food. Therefore, customers' purchasing power of green products has a significant role in the decision making of managers to go green (Schaltegger and Synnestvedt, 2002:340; Dabija et al., 2018:175). This is indicated by the no less than 20% of the respondents who indicated the presence of customers who are indifferent when it comes to food choice so long as the price is right.

Furthermore, expanding the knowledge of the customers has a significant impact on changing the perception to pay extra money for green products. As suggested by Malik (2013:19), customers can be willing to pay the purchasing cost of green products once they perceive the product has value to their life. Additional, clear labelling of green products with national green certification can able customers to differentiate the quality and trustworthiness of the product. The certification can be declared by the government policy in association with regarding stakeholders (Mkhize, 2014:110).

Competitiveness is a challenge by retailers. Competition is linked to satisfying the current demand of most consumers, focusing on environmentally sustainable practices like displaying healthy foodstuffs, using recyclable and reusable materials, applying electrically efficient and effective cooling and cooking systems, accompanied with good customer services which, in turn, create new green customers and consumers (Dabija et al., 2018:174). These are the techniques most food retail sectors use to attract customers and which enable them to survive in the market (Berns et al., 2009: 25).

5.8 Study model

Thematic representation of the study model and interdependence of the various components of the study are presented in Figure 5.1. The study model is presented with colour boundaries; themes are labelled in black, the initiative factors in blue, the challenges in red and the remedies in orange. These themes and sub-themes are extensively discussed in the above sections as well as in the results chapter.

5.9 Conclusion

This chapter discussed the results of the study concerning the literature, thereby assessing if the objectives were achieved. The study model presented in Figure 5.1 demonstrates the components of the study and summarises the various themes. The study concludes that a multi-dimensional strategy addressing the various thematic components of the study is needed for the food retail sector to successfully implement the green practice.

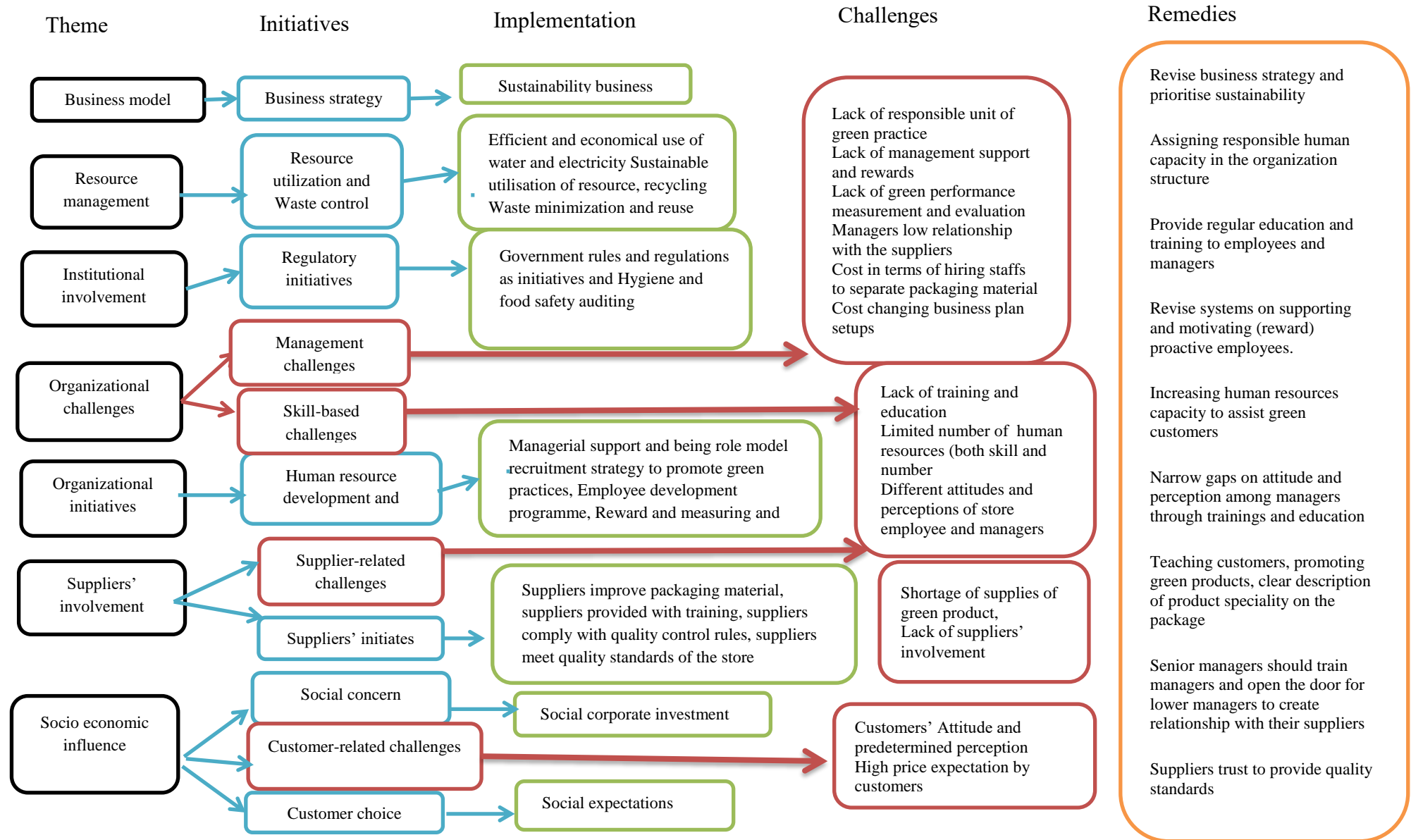


Figure 5.1 Thematic representation of the study model and interdependence of the various components of the study. Source: Own compilation

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter presents the conclusions and recommendations of the study. The conclusions section will provide conclusive summary notes based on each objective. The recommendation will illustrate possible interventions based on the findings.

6.2 Conclusions

The main objectives of the study were to analyse factors influencing green practices in the food retail sector and to identify the level of green practice in the food retail sector. The literature review explored the theoretical aspects of the topic of the study to address the research objectives. It provided the basic understanding and knowledge required to explain and discuss the findings in line with the international literature.

OBJECTIVE ONE: TO ANALYSE FACTORS INFLUENCING GREEN PRACTICES IN THE FOOD RETAIL SECTOR

The study identified different initiative factors that affect food retail sectors' implementation of green practices. The business model, organizational initiatives, suppliers' initiatives, socio-economy initiatives and institutional involvement were identified as initiative factors. These factors are also part of the themes of the study and constitute the key components in understanding the modes of operation of the various retail stores. Socio-economic initiatives like social consciousness; competition; customer demands and Institutional involvement; government environmental regulation; hygiene and food safety auditing, as well as cost-saving, were identified as a common driving factor of the food retail sector in implementing the green practice.

OBJECTIVE TWO: TO IDENTIFY THE LEVEL OF GREEN PRACTICE IN THE FOOD RETAIL SECTOR

Green practices implementation in the food retail sector is categorized as resource management and socio-economic considerations.

The green practices initiatives identified motivate the management of the food retail sector to adopt and implement green activities. All the stores did cost saving through resource utilization and waste control. The stores also participated in social corporate investment to develop awareness in the society.

The study identified organizational challenges, supplier-related challenges and socio-economic challenges (customer-related challenges) that hinder the adoption of green practices in the stores. The cost was identified as a challenge in building basic sustainability initiatives or to change setups of the ordinary business activities into green activities. Lack of education and training were the main drawback

in some of the stores. Lack of suppliers involvement; like shortage in green product supplies, no providing training and lack of taking initiatives in adopting green practices. The food retailers also kept their ordinary (non-selective) customers' loyalty to prioritize profit maximization; this forced them to focus on keeping the existing customers and increase sales so that their profit will be maximized. This hindered the retailers from investing in environmental issues in their business systems.

The study revealed that managers and employees have enough understanding of green and green practices, and they had largely positive perceptions. In some of the stores, there were separate green performance measurements and evaluations by the responsible unit at division and regional level. The scorecard measures performances the efficient implementation of the green practice. The managers had a clear working relationship with the suppliers. There were procurement standards set by the sector. In some of the stores, however, there were limited education and training regarding green and green practices. As a result, there were lower levels of understanding about green practices by the managers and employees. There were no separate performance measurement and evaluation on the sustainable performance and low rewarding system in the stores. The managers had limited information on the sources of their products and low relationship with their suppliers.

6.3 Recommendations

The recommendations will outline important considerations to alleviate the challenges that the food retail stores faced. Providing education and training by the management of the sector were suggested as basic needs to change the perception and understanding of the employees. Lack of education and training about green practices was one of the main challenges faced by the sector especially in-store E, F, G and H. To educate and train the staff and managers of the sector, the management should have a plan. These could be done with third-party environmental management training companies. Alternatively, the sector should hire experts to give regular training and education to a member of the stores.

Rewarding or incentive systems also recommended as an encouragement tool to increase the initiatives of the employees and managers towards green practices. The very low rewards in Stores E, F, G and H showed negative effects on motivation and implementation of green practices in the retail store. Therefore, the head management planning centre should consider introducing an incentive in the system to encourage staff.

Though customers' awareness or social consciousness was one of the initiatives of green practices in the food retail sector, teaching customers about the speciality of green products can elevate the numbers of customers. The food retailer should promote the products and clearly describe its differentiation on the label of the product. Teaching the importance of green products to health and the environment through mass media, community group, school, workplace and common areas could increase understanding and perception of societies.

Based on the findings, it was understood that the food retailers (E, F, G and H) managers had limited information on the procurement and relationship with their suppliers. Therefore, the upper management position should open the door for the lower managers to know who their suppliers are, the standards of their products to purchase and send them to visit how the process is done to produce their products. Relationship with supplier creates opportunities to identify differences amongst the suppliers, the quality of the products if the suppliers are abided by the environmental protection protocols or not and their concern about the wellbeing of the society and environment. Based on that, the relationship enables managers to select environmentally concerned suppliers, become more confident to explain the types of products they have in store and its benefits to the customers, and they may get sustainability training from suppliers.

Management supports employees initiatives can prioritise the focus of the employees on the particular aims. The food retailers' management involvement in the green performance of proactive employees has influential power on other staff. Therefore, the managers should consider positive initiatives they get from employees.

Lack of unit responsible for green practices hinders the adoption of green practices in food retail stores. Assigning responsible human capacity in the organization structure of the sector or having a separate unit in the stores has advantages to monitor, measure and evaluate green practices performances separately and identify the benefit on the success of the stores. Like any other units or departments, the unit provides reports to the higher management bodies for planning and budgeting. Therefore, the strategy and planning of the food retail sector should consider assigning responsible unit on the green practice implementation. Creating the structure helps to create a commitment to control and implement green practices through up and down the flow of information.

Additionally, the government should play a role in adopting green practices in the food retail sector. The government involvement is essential to promote environmentally friendly practices by subsidizing food retails to perform green practices, sending environmental management experts to teach and train key managers, and minimizing tax rate to motivated food retailers. These contributions should be accompanied by monitoring and assessing of the performances. Therefore, by considering the above recommendations, the food retail sector could overcome their challenges and improve their green practices' performance.

6.4 Limitations of the study

Although the results of the study provide insights on the subject investigated, the relatively small sample size and the sampling technique used was dependent on the availability and willingness of employees and managers. The data may, therefore, not be generalizable to the food retail sector at large. The study also focussed on a limited geographic area.

6.5 Recommendations for future research

Customer demand for green products is increasing. Therefore, the food retail sector should prepare to shift their business practices to sustainable business activities geared towards the production of green products, thereby embracing green practices. Thus, future studies should identify other detailed factors regarding green practices in food retail, as well as ways in which these factors may influence food retailers to implement green practices. Furthermore, this study identified and discussed the various challenges in the adoption and implementation of green practices amongst South African food retailers. Since the importance of green practices has a national imperative, it is necessary to study this subject in various non-food sectors simultaneously. This should enable the documentation of current knowledge and the identification of other challenges so that a national strategy that covers all sectors can be developed.

REFERENCES

- Acock, A. C. (2009). *A Gentle Introduction to Stata, Second Edition*. Retrieved from <https://books.google.co.za/books?id=YZIQO0acuWwC&pg=PA271&dq=odd+ratio&hl=en&sa=X&ved=0ahUKEwj0IM7ClbteAhXRa8AKHYcjAYYQ6AEIPzAD#v=onepage&q=odd%20ratio&f=false>.
- Albareda, L., Lozano, J. M., Tencati, A., Midttun, A. & Perrinin, F. (2008). The changing role of governments in corporate social responsibility: drivers and responses. *Business Ethics: A European Review*, (17)4, 347-63.
- Annabeth, A. (2019). *Sustainable Business Models Innovation, Implementation and Success*. Retrieval from <https://books.google.co.za/books?id=VE1tDwAAQBAJ&pg=PA33&dq=business+model+meaning&hl=en&sa=X&ved=0ahUKEwjFzp7K4MfeAhXKBcAKHaRBArMQ6AEIKTAA#v=onepage&q=business%20model%20meaning&f=false>.
- Arkkelin, D. (2014). "Using SPSS to Understand Research and Data Analysis". *Psychology Curricular Materials. Book 1*. Retrieved from http://scholar.valpo.edu/psych_oer/1.
- Arulrajah, A. A., Opatha, H.H.D.N.P. & Nawaratne, N.N.J. (2015). Green Human Resource Management Practices: A Review. Sri Lankan. *Journal of Human Resource Management*, 5(1), 1-16.
- Ayoub, N. & Yuji, N. (2012). Governmental intervention approaches to promote renewable energies—Special emphasis on Japanese feed-in tariff. *Energy Policy*, (43), 191-201.
- Azevedo, S. G., Carvalho, H. & Machado, V. C. (2011). The influence of green practices on supply chain performance: A case study approach. *Transportation Research*, (47), 850-871.
- Bandura, A. (1994). Self-efficacy. *Encyclopedia of human behaviour*, 4, 71-81.
- Berns, M., Townend, A., Khayat, Z., Balagopal, B., Reeves, M., Hopkins, M.S., *et al.* (2009). The Business of Sustainability, *MIT Sloan Management Review*, Fall.
- Bertels, S., Papania, L. & Papania, D. (2010). Embedding sustainability in organizational culture. A systematic review of the body of knowledge, Simon Fraser University.

Bhattacharya, A., Jain, B. & Choudhary, A. (2011). Green Manufacturing Energy, Products and Processes. *The Boston consulting group*, 1-24.

Brief, AI. (2012). *Qualitative and quantitative research techniques for humanitarian*. Retrieved from www.parkdatabase.org/.../qualitative_and_quantitative_research_techniques.pdf.

Chekima, B., Oswald, A. I., Wafa, S. A. W. S. K. & Chekima, K. (2017). Narrowing the gap: Factors driving organic food consumption. *Journal of Cleaner Production*, 166, 1438-1447.

Chkanikova, O. & Lehner, M. (2014). Private eco-brands and green market development towards new forms of sustainability governance in the food retailing. *Journal of cleaner production*, 1-11.

Chkanikova, O. & Lehner, M. 2015. Private eco-brands and green market development: towards new forms of sustainability governance in the food retailing. *Journal of Cleaner Production*, 107, 74-84.

Christelis, T. A. (2013). *An analysis of the state of green business in the South African retail sector. Environmental science* (Unpublished Master's thesis). The University of Cape Town.

Claro, D. P., Neto, S. A. L. & Claro, P. B. O. (2013). Sustainable drivers in food retail. *Journal of retailing and consumer services*, (20), 365-371.

Collins, D. (2003). Pretesting Survey Instruments: An Overview of Cognitive Methods. *Quality of Life Research*, 12(3), 229-238.

Commonwealth of learning. (2004). *Commonwealth Educational Media Centre for Asia, Teleconferencing a training kit* Retrieved from <http://cemca.org.in/ckfinder/userfiles/files/teleconf6.pdf>.

Coyne, I. T. (1997). Sampling in qualitative. Purposeful and theoretical sampling; merging or clear boundaries?. *Journal of advanced nursing*, 26, 623-630.

Dabija, D., Bejan, B. M. & Grant, D. B. (2018). The impact of consumer green behaviour on green loyalty among retail formats: A Romanian case study. *Moravian geographical reports*, 26(3), 173-185.

Dawson, C. (2009). *Introduction to research methods*. (4th ed.). Glasgow, Bell and Bain Ltd.

[Dawson, C. \(2009\). *Introduction to Research Methods: A practical guide for anyone undertaking a research project*. Retrieved from https://books.google.co.za/books?hl=en&lr=&id=6jKfBAAQBAJ&oi=fnd&pg=PT10&dq=dawson+2009+research+methods&ots=dVDTNOFrtq&sig=uK627XQa5mVVwtt2PieLcHDtMy0&redir_esc=y#v=onepage&q=dawson%202009%20research%20methods&f=false.](https://books.google.co.za/books?hl=en&lr=&id=6jKfBAAQBAJ&oi=fnd&pg=PT10&dq=dawson+2009+research+methods&ots=dVDTNOFrtq&sig=uK627XQa5mVVwtt2PieLcHDtMy0&redir_esc=y#v=onepage&q=dawson%202009%20research%20methods&f=false)

Dhull, S. & Narwal, M. S. (2016). Drivers and barriers in green supply chain management adaptation: A state-of-art review. *Uncertain Supply Chain Management*, 4, 61-76.

Du Plessis, N. D. & Grobler, A. F. (2014) Achieving sustainability through strategically driven CSR in the South African retail sector, Communication Management Division, Department of Business Management, University of Pretoria, Gauteng, South Africa 1-26.

Elo, S., Kääriäinen, M., Kanste, O., *et al.* (2014). *Qualitative Content Analysis: A Focus on Trustworthiness*. SAGE DOI: 10.1177/2158244014522633.

Etikan, I., Musa, S. A. & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.

Farquhar, J. D. (2012). *Case study research for business*, Croydon: CPI Group (UK) Ltd.

Field, C. B., Barros, V. R., Mastrandrea, M. D., *et al.* (2014). Climate Change 2014: Impacts, Adaptation, and Vulnerability summary for policymakers. *WGII AR5 Phase I Report*. IPCC WGII AR5 Launch on 31 March 2014, 1-44.

Fortes, J. (2009). Green Supply Chain Management: A Literature Review. *Otago Management Graduate Review*, 7, 51-62.

Freedman, B. (1987). Scientific value and validity as ethical requirements for research: A proposed explication IRB. *Ethics and Human Research*, 9 (6), 7-10.

Friend, G. (2009). *The truth about Green Business*, (1st ed.). New Jersey: Pearson Education.

Garcia-Romeu, A. (2010). Self-transcendence as a measurable transpersonal construct. *The Journal of Transpersonal Psychology*, 42(1), 26-47.

Gilbert, A. J. (2007). The Value of Green Marketing Education at the University of Wisconsin-La Crosse. *Journal of Undergraduate Research*. Retrieved from <http://www.uwlax.edu/urc/jur-online/PDF/2007/gilbert.pdf>.

Gleim M. R., Smith, J. S., Andrews, D. & Cronin Jr. J. J. (2013). Against the Green: A Multi-method Examination of the Barriers to Green Consumption. *Journal of Retailing*, (89), 44-61.

Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), 597-607.

Gonzalez-Benito, J. & Gonzale-Benito, O. (2005). Environmental proactivity and business performance: an empirical analysis. *International journal of management science*, 33, 1-15.

Govindan K., Diabat A. & Shankar M. (2015). Analyzing the drivers of green manufacturing with the fuzzy approach. *Journal of Cleaner Production*, 96, 182-193.

Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries, *Educational Communication and Technology. A Journal of Theory, Research, and Development*, 29(2), 75-91.

Gupta, S. & Kumar, V. (2013). Sustainability as a corporate culture of a brand for superior performance. *Journal of world business*, (48), 311-320.

Hair, J. F., Money, A. H., Samouel, P. & Page, M. (2007) *Research methods for business*. The Atrium: John Wiley and Sons Ltd.

Harris, L. C. & Crane, A. (2002). The greening of organisational culture management views on the depth, degree and diffusion of change. *Journal of organisational change management*, (15)3, 214-234.

Hwang, J. & Chung, J. (2019). What drives consumers to certain retailers for organic food purchase: The role of fit for consumers' retail store preference. *Journal of Retailing and Consumer Services*, 47, 293-306.

Ibrahim, M. A. (2012). Thematic analysis: a critical review of its Process and evaluation. *West East Journal of Social Sciences*, 1(1), 39-47.

Jugder, N. (Ed). (2016). *The thematic analysis of interview data: an approach used to examine the influence of the market on a curricular provision in Mongolian higher education institutions* (3rd ed.). Hillary Place Papers.

Kaur, P. (2015). E-recruitment: A Conceptual Study. *International Journal of Applied Research*, 1 (8), 78-82.

Kothari, C. R. (2009). *Research methodology: methods and techniques*. Retrieved from <http://books.google.co.za/books?id=8c6gkbKi-F4C&pg=PA95&lpg=PA95&dq=data+collection+method+in+research+methodology&source=bl&ots=iGICqZO4jN&sig=qHPkRyJkXGmLzBw2zhkkQCIRM&hl=en&sa=X&ei=cAIWUerLHoic0AXez4GIBg&sqi=2&ved=0CDwQ6AEwAQ#v=onepage&q=data%20collection%20method%20in%20research%20methodology&f=false>.

Lang, T. A., Secic, M. & Lang, T. (2006). *How to Report Statistics in Medicine: Annotated Guidelines for Authors*. Retrieved from <https://books.google.co.za/books?id=kBUBRh1AWG4C&pg=PA27&dq=odd+ratio&hl=en&sa=X&ved=0ahUKEwj0IM7ClbEAhXRa8AKHYcjAYYQ6AEILDAA#v=onepage&q=odd%20ratio&f=false>

Lavorata, L. (2014). Influence of retailers' commitment to sustainable development on store image, consumer loyalty, and consumer boycotts'. *Journal of retailing and consumer services*, 1-7.

Lee, S. & Klassen, R. D. (2008) Drivers and Enablers That Foster Environmental Management Capabilities in Small- and Medium-Sized Suppliers in Supply Chains. *Production and Operations Management Society*, 17(6), 573-586.

Llbery, B. & Maye, D. (2005). Food supply chains and sustainability: evidence from specialist food producers in the Scottish/English borders. *Land use Policy*, 22(4), 331-344.

Linnenluecke, M. K. & Griffiths, A. (2010). Corporate sustainability and organisational culture. *Journal of World Business*, (45), 357-366.

LoBiondo-Wood, G. & Haber, J. (2017). [*Nursing Research-E-Book: Methods and Critical Appraisal for Evidence-Based Practice*](#). Retrieved from https://books.google.co.za/books?hl=en&lr=&id=3tTsAwAAQBAJ&oi=fnd&pg=PA289&dq=types+of+validity+and+reliability&ots=JFd_wfKj_Y&sig=AvuGo3FAhfgvcFY9s4ws9okxpo0#v=onepage&q=%20INTERNAL%20validity&f=false.

Lozano, R., Ceulemans, K. & Seatter C. S. (2015). Teaching organisational change management for sustainability designing and delivering a course at the University of Leeds to better prepare future sustainability change agents. *Journal of Cleaner Production*, 106, 205-215.

Maguire, M. & Delahunt, B. (2017). Doing a Thematic Analysis: A Practical, Step-by-Step Guide for Learning and Teaching Scholars. *AISHE-J*, 3, 3351-33514.

Malik, D. M. (2013). A study of increasing awareness among organizations and consumers towards-green marketing. *International Journal of Marketing, Financial Services & Management Research*, 2(5), 17-25.

Mandip, G. (2012). Green HRM: People Management Commitment to Environmental Sustainability. *Research Journal of Recent Sciences*, (1), 244-252.

Margaretha, M. & Saragih, S. (2013). *Developing New Corporate Culture through Green Human Resource Practice*. The 2013 IBEA, International Conference on Business, Economics, and Accounting, Bangkok.

Martin-Pena, M. L., Diaz-Garrido, E. & Sanchez-Lopez, J. M. (2014). Analysis of benefits and difficulties associated with firms' Environmental Management Systems: the case of the Spanish automotive industry. *Journal of cleaner production*, 70, 220-230.

Mason, J. (2017). *Qualitative researching*. Retrieved March 11, 2018, from online.

<https://books.google.co.za/books?hl=en&lr=&id=8JM4DwAAQBAJ&oi=fnd&pg=PP1&dq=reliability+and+validity+in+qualitative+research&ots=nd29ANsGZm&sig=9OLExIf313Neb2j31w7Bo94KM#v=onepage&q=reliability%20and%20validity%20in%20qualitative%20research&f=false>

Menichini, T. & Rosati, F. (2013). A managerial Tool for Environmental Sustainability. *APCBEE Procardia*, 5, 551-556.

Mengue, B. & Ozanne, L. K. (2005). Challenges of "green imperative": a natural resource-based approach to the environmental orientation-business performance relationship. *Journal of business research*, 58, 430-438.

Miles, M. B., Huberman, A. M. & Saldana J. (2014). *Qualitative data analysis: A method sourcebook* (3rded.). Retrieved from

https://books.google.co.za/books?hl=en&lr=&id=3CNrUbTu6CsC&oi=fnd&pg=PR1&dq=qualitative+data+analysis+methods&ots=Lh1_ojUQ69&sig=ZmgN7RMQUnEZdsPbicq6vxDoO2E#v=onepage&q=qualitative%20data%20analysis%20methods&f=false.

Mkhize, N. H. B. (2014). *Pietermaritzburg consumers' awareness, attitudes and purchase decisions with regard to green products* (Unpublished Master's thesis). University of KwaZulu-Natal: Pietermaritzburg.

Mohamad, M. M., Sulaiman N. L., Sern L. C. & Salleh, K. M. (2015). Measuring the Validity and Reliability of Research Instruments; *Procedia - Social and Behavioral Sciences* (204), 164-171.

Monczka, R. M., Handfield, R. B., Giunipero, L. C. & Patterson, L. J. (2015). *Purchasing and Supply Chain Management* (6th ed.) Cengage Learning Publishers.

Morrow, S. L. (2005). Quality and Trustworthiness in Qualitative Research in Counselling Psychology. *Journal of Counselling Psychology*, 52 (2), 250-260.

Mtshali, N. N. (2017). *Demand chain planning operations within capacity constraints: Nestlé ZAR* (Unpublished Master's thesis). University of KwaZulu-Natal: Durban.

Mchunu, N. A. (2012). *The link between poor public participation and protest: the case of Khayelitsha* (unpublished Master's thesis). Stellenbosch University.

Mwanza, B. & Mbohwa, C. (2017, October). *Major Obstacles to Sustainability in the Plastic Industry*. 14th Global Conference on Sustainable Manufacturing, Stellenbosch, South Africa.

Myers, M. D. (2009). *Qualitative research in business and management*. CPI Antony Rowe: Chuppenham, Wiltshire.

Naidoo, M. & Gasparatos, A. (2018). Corporate environmental sustainability in the retail sector: Drivers, strategies and performance measurement. *Journal of Cleaner Production*, 203, 125-142.

Olivia (2016). What is Trustworthiness in Qualitative Research? Retrieval from <http://www.statisticssolutions.com/what-is-trustworthiness-in-qualitative-research/>.

Papagiannakis, G. & Lioukas, S. (2012). Values, attitudes and perceptions of managers as predictors of corporate environmental responsiveness. *Journal of Environmental Management*, (100), 41-51.

Parumasur, S. B. 2014. *Questionnaire design and Quantitative data analysis*. [44 slides]. University of KwaZulu-Natal. 44 slides.

Peersman, G. (2014). *Overview: Data Collection and Analysis Methods in Impact Evaluation, Methodological Briefs: Impact Evaluation 10*, UNICEF Office of Research, Florence. Retrieved from <http://www.unicef-irc.org/KM/IE/>.

Pellissier, R. (2007). *Business research made easy*. Cape Town: Juta.

Petljak, K., Zulauf, K., Štulec, I., Seuring, S. & Wagner, R. (2018). "Green supply chain management in food retailing: survey-based evidence in Croatia". *Supply Chain Management: An International Journal*, <https://doi.org/10.1108/SCM-04-2017-0133>.

Punch, K. F. & Oancea, A. (2014). *Introduction to research methods in education* (2nd ed.) Retrieved from <https://books.google.co.za/books?hl=en&lr=&id=sPSICwAAQBAJ&oi=fnd&pg=PP1&dq=Scientific+value+and+validity+as+ethical+requirements+for+research:&ots=9wZod3sokh&sig=WY-IsCyNqoRQyAtRmqR09NIp0yM#v=onepage&q&f=false>.

Punchee, V. A. (2011). *The effect of climate change on Durban consumers' buying behaviour* (Unpublished Master's thesis). University of KwaZulu-Natal, Durban.

Rambaran, S. (2016). *The Effect of Omni-Distribution Systems in Managing Demand Order Fulfilment Frequencies: An Apparel Retailer* (Unpublished Master's thesis). University of KwaZulu-Natal: Durban.

Ramirez, E., Gonzalez, R. J. & Moreira, G. J. (2014). Barriers and bridges to the adoption of environmentally sustainable offerings. *Industrial Marketing Management*, 43, 16-24.

Reddy, A. (2016). *Factors affecting green supply chain management (GSCM) initiatives: a case study at Cipla Medpro manufacturing* (Unpublished Master's thesis). University of KwaZulu-Natal, Durban.

Remenyi, D., Williams, B., Money, A. & Swartz, E. (2005). *Doing Business Research in Business and Management*. London: Sage Publications.

Ryan, G. & Bernard, R. (2000). *Data management and analysis methods. Handbook of Qualitative Research*. Thousand Oaks: California, Sage.

Saadatian, O., Tahir, O. M. & Dola, K. 2010. Identifying Challenges in Implementing Sustainable Practices in a Developing Nation. *Journal of Sustainable Development*, 3(2), 107-116.

SABS (2018) Integrated Annual Report Giving you the quality edge, 1-173.

Sanelowski, M. (2000). Focus on research methods combining qualitative and quantitative sampling, data collection, and analysis techniques in mixed-method studies. *Research in Nursing and Health*, 23, 246-255.

Schaltegger, S & Synnestvedt, T. (2002). The link between 'Green' and economic success: environmental management as the crucial trigger between environmental and economic performance. *Journal of Environmental Management*, 65, 339-346.

Schein, E. H. (1993). How can organizations learn faster? The challenge of entering the green room. *Sloan management review*. Retrieved from <https://sloanreview.mit.edu/article/how-can-organizations-learn-faster-the-challenge-of-entering-the-green-room/>.

Schmidt, F. L. & Hunter, J. E. (2014). *Methods of Meta-Analysis: Correcting Error and Bias in Research Findings*. Retrieved from https://books.google.co.za/books?hl=en&lr=&id=sU8XBAAAQBAJ&oi=fnd&pg=PR1&dq=validity+and+reliability+errors+in+research&ots=hUiMX_KnAA&sig=euM7NZZNZ7BsZgZzU7RW8WFm2k#v=onepage&q=validity%20and%20reliability%20errors%20in%20research&f=false.

Schmidt, F. L. & Hunter, J. E. (2015). *Methods of Meta-Analysis: Correcting Error and Bias in Research Findings*. Retrieved from <https://books.google.co.za/books?hl=en&lr=&id=sU8XBAAAQBAJ&oi=fnd&pg=PR1&dq=Schmidt+and+Hunter,+2014&ots=hUjMW2EuCz&sig=8VBktwiMhUsKdJshikjuEkVdQl0#v=onepage&q=Schmidt%20and%20Hunter%2C%202014&f=false>

Sedikides, C. & Gregg, A. P. (2008). Self-Enhancement food for Thought. *Perspectives on psychological science*, 3(2), 102-116.

Sekaran, U. & Bougie, R. (2016). *Research Methods For Business: A Skill Building Approach*.

Retrieved from

<https://books.google.co.za/books?hl=en&lr=&id=Ko6bCgAAQBAJ&oi=fnd&pg=PA19&dq=advantages+and+disadvantages+of+exploratory+research+design&ots=2BZUV5LXjM&sig=h5GJgEvKOfZEZKaAuDKjKLuDKFI#v=onepage&q&f=false>.

Sekaran, U. & Bougie, R. (2009). *Research methods for business: a skill building approach* (5th ed.).

Padstow: Cornwall, TJ international Ltd.

Singh, N. (2010). *Creating a 'Green University'* (Unpublished Master's thesis). University of

KwaZulu-Natal, Durban.

Smith, E.E. & Perks, S. (2010). A perceptual study of the impact of green practice implementation on the business functions. *Southern African Business Review*, 14 (3), 1-29.

Smith, S.E. (2003). *What is green business?* Retrieved from <http://www.wisegeek.com/what-is-green-business.htm>.

Stott, W. (n.d.). *What's "Green" Manufacturing? How to cut through the hype and keep the hope*.

Editorial: Retrieved from <http://www.greenmfngnews.com/magazine/summer09/editorial.pdf>.

Tanner, C. & Kast, S. W. (2003). Promoting sustainable consumption: determinants of green purchases by Swiss consumers. *Wiley periodicals*, 20(10), 883-902.

Taylor, S. J, Bogdan, R. & DeVault, M. (2015). *Introduction to Qualitative Research Methods: A Guidebook and Resource 4th ed*. Retrieved April 5, 2018, from online.

<https://books.google.co.za/books?hl=en&lr=&id=pONoCgAAQBAJ&oi=fnd&pg=PR11&dq=research+methodology+chapter+4&ots=QgBhg4z N&sig=1oMXR2Anm0xR2V2t67dimjuFyrs#v=onepage&q=%20measurements&f=false>.

Tongco, D. C. (2007). Purposive sampling as a tool for informant selection. *Journal of plants, people, and applied research*, (5)12, 147-158.

Thomas, P.Y. (2010). *Research methodology and design*. Retrieved from http://uir.unisa.ac.za/bitstream/handle/10500/4245/05Chap%204_Research%20methodology%20and%20design.pdf.

Tseng, M-L., Chiu, S. F., Tan, R. R. & Siriban-Manalang, A. B. (2013). Sustainable consumption and production for Asia: sustainability through green design and practice, *Journal of cleaner production*, 40, 1-5.

Uddin, M. M. & Islam, R. (2015). Green HRM: Goal Attainment through Environmental Sustainability. *The Journal of Nepalese Business Studies*, IX (1), 13-19.

UNWCED (1987) UN Report of the World Commission on Environment and Development Our Common Future, the *NGO Committee on Education of the Conference of NGOs* from United Nations web sites with the invaluable help of information & communications technology.

Walker, H., Di Sisto, L. & McBain, D. (2008). Drivers and barriers to environmental supply chain management practices: Lessons from the public and private sector. *Journal of Purchasing and Supply Management*, 14(1), 69-85.

APPENDIX 1: ETHICAL CLEARANCE APPROVAL



05 March 2019

Mrs Yodit Fisseha Ghebrehiwet (211539692)
School of Management, IT & Governance
Pietermaritzburg Campus

Dear Mrs Ghebrehiwet,

Protocol reference number: HSS/2232/017M

New project title: Factors influencing Green Practices amongst South African Food Retailers

Approval Notification – Amendment Application

This letter serves to notify you that your application and request for an amendment and Recertification received on 05 March 2019 has now been approved as follows:

- Change in Title

Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form; Title of the Project, Location of the Study must be reviewed and approved through an amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for period of 3 years from the date of original issue. Thereafter Recertification must be applied for on an annual basis.

Best wishes for the successful completion of your research protocol.

Yours faithfully

Dr Rosemary Sibanda (Chair)

/ms

Cc Supervisor: Mr Nigel Chiweshe
Cc Academic Leader Research: Professor Isabel Martins
Cc School Administrator: Ms Debbie Cuyngame

Humanities & Social Sciences Research Ethics Committee

Dr Rosemary Sibanda (Chair)






Westville Campus, Govan Mbeki Building

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APPENDIX 2: EDITOR'S LETTER

Certificate of Language Editing

This is to certify that I have conducted the language editing of

Chapters 2, 3 and 4

Of the thesis

FACTORS INFLUENCING GREEN PRACTICES IN THE FOOD RETAIL SECTOR

by

YODIT FISSEHA GHEBREHIWET

Submitted in accordance with the requirements for the Degree of

MASTER OF COMMERCE

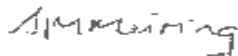
in the subject

Management

at the

University of KwaZulu Natal

Student number: 211539692



Sannie Meiring

25 November 2018

Sannie Marie Meiring

ID 400201004089

0766509182

Retired English teacher

Co-writer of English Second Language textbooks (English in Action) for secondary schools

I have edited numerous dissertations and theses (law, theology, nursing, physics) for UNISA and the University of Pretoria.

Ms AM Schultz

PO Box 15855

Sinoville

0129

14 May 2019

University of KwaZulu-Natal

Dear Sir/Madam

Dissertation: Factors influencing green practices amongst South African food retailers –

Yodit Fisseha Ghebrehiwet

This letter serves to confirm that I have language-edited the dissertation, up to and including Chapter Two and also Chapter Six, as per prior arrangement.

Yours sincerely

A handwritten signature in black ink, appearing to read 'AS', with a small horizontal line to the right of the final stroke.

Aretha Schultz Language Editor

APPENDIX 3: RESEARCH INSTRUMENTS

UNIVERSITY OF KWAZULU-NATAL School of Management, IT and Governance

Dear Respondent,

Research Project

Researcher: Yodit F. Ghebrehwet, Telephone number: 0027844367612/0742960908, Email: yoditf2002@yahoo.com

Supervisor: Nigel Chiweshe Telephone number: 033 260 5355, Email: Chiweshen@ukzn.ac.za

Research Office: Humanities & Social Sciences Research Ethics Administration, Govan Mbeki Building, Westville Campus, Tel: + 27 (0)31 260 8350, Email: hssreclms@ukzn.ac.za

I, Yodit F. Ghebrehwet, am a Masters in commerce Management student in the School of Management, IT and Governance at the University of KwaZulu-Natal. You are invited to participate in a research project entitled **FACTORS INFLUENCING GREEN PRACTICES AMONG SOUTH AFRICAN FOOD RETAILERS**

The aim of this study is to: to study the driving factors of green practices and the extent of green practices in the food retail store.

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this research project. Confidentiality and anonymity of records will be maintained by the researcher and School of Management, IT and Governance, UKZN. All collected data will be used solely for research purposes and will be destroyed after 5 years.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number HSS/2232/017M).

The interview should take about one hour and fifteen minutes to complete. Thank you for your time.

Sincerely

Researcher's signature _____ Date _____
Yodit F. Ghebrehwet

UNIVERSITY OF KWAZULU-NATAL
School of Management, IT and Governance

Research Project

Researcher: Yodit F. Ghebrehiwet, Telephone number: 0027844367612, Email: yoditf2002@yahoo.com

Supervisor: Nigel Chiweshe, Telephone number: 033 260 5355, Email: Chiweshen@ukzn.ac.za

Research Office: Humanities & Social Sciences Research Ethics Administration, Govan Mbeki Building, Westville Campus, Tel: + 27 (0)31 260 8350, Email: hssreclms@ukzn.ac.za

CONSENT

I _____ (full names of participant)

hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project. I understand that I am at liberty to withdraw from the project at any time, should I so desire.

Additional consent, where applicable

I hereby provide consent to:

Signature of Participant

Date

INTERVIEW QUESTIONS

General understanding

1. What is your general understanding of green and green practices?
2. What is your perception of green and green practice?
3. What are some of the green practices you implement in the sector?
4. What are the initiating factors of green practices in the sector?

Human resource development

5. What is your recruitment strategy to promote green thinking in your sector? For instance the type of employee you hire? Are they environmentally-oriented?
6. How do you enhance your employees' understanding of green practices?
7. What are your initiatives to create informal communication regarding green practices with the employees?
8. What are your initiatives to be a role model in performing green practices?
9. How do you reward employees undertaking green practice?
10. Is there a responsible body in the organizational structure for green practices?

Green practice Performance Evaluation

11. How do you measure your green performance?
12. Do you have a green practice performance evaluation system?
13. What are the challenges do you face to imbed or implement green practices in your sector? For instance, perception and attitude, know-how, cost, customers demand.
14. How do you accommodate/cater to customers demand on green products in your business strategy?

Relationship with suppliers

15. What is your procurement policy regarding green products purchasing?
16. What is your principle/policy with your suppliers regarding green practices?
17. Are your suppliers abiding by the international environmental protection quality control? Like ISO14001
18. Do your suppliers cater for your green practice initiatives? Do they provide support systems to promote green practices in the store, eg? Edu/training, meeting

Future

1. What is your future plan regarding green practices? Is there any plan in future regarding green practices?
2. Have you ever thought of going green in the future? (what is the next step)

Thank you very much for your participation.

QUESTIONNAIRE

Section A

Personal information

Please mark "X" on your answers

1. What is your gender?

Female	Male

2. How old are you?

18-25	26-35	36-45	46-55	55 and above

3. What is your position?

Management	Sales	Cashier	Floor leader	Customer service	Others

4. How long have you been working in the sector?

Less than a year	1-5years	6-10years	11-15years	Greater than 15 years

Section B

Please rank from 5 to 1;

5= Very High 4= High 3= Medium 2= Low 1- Very Low

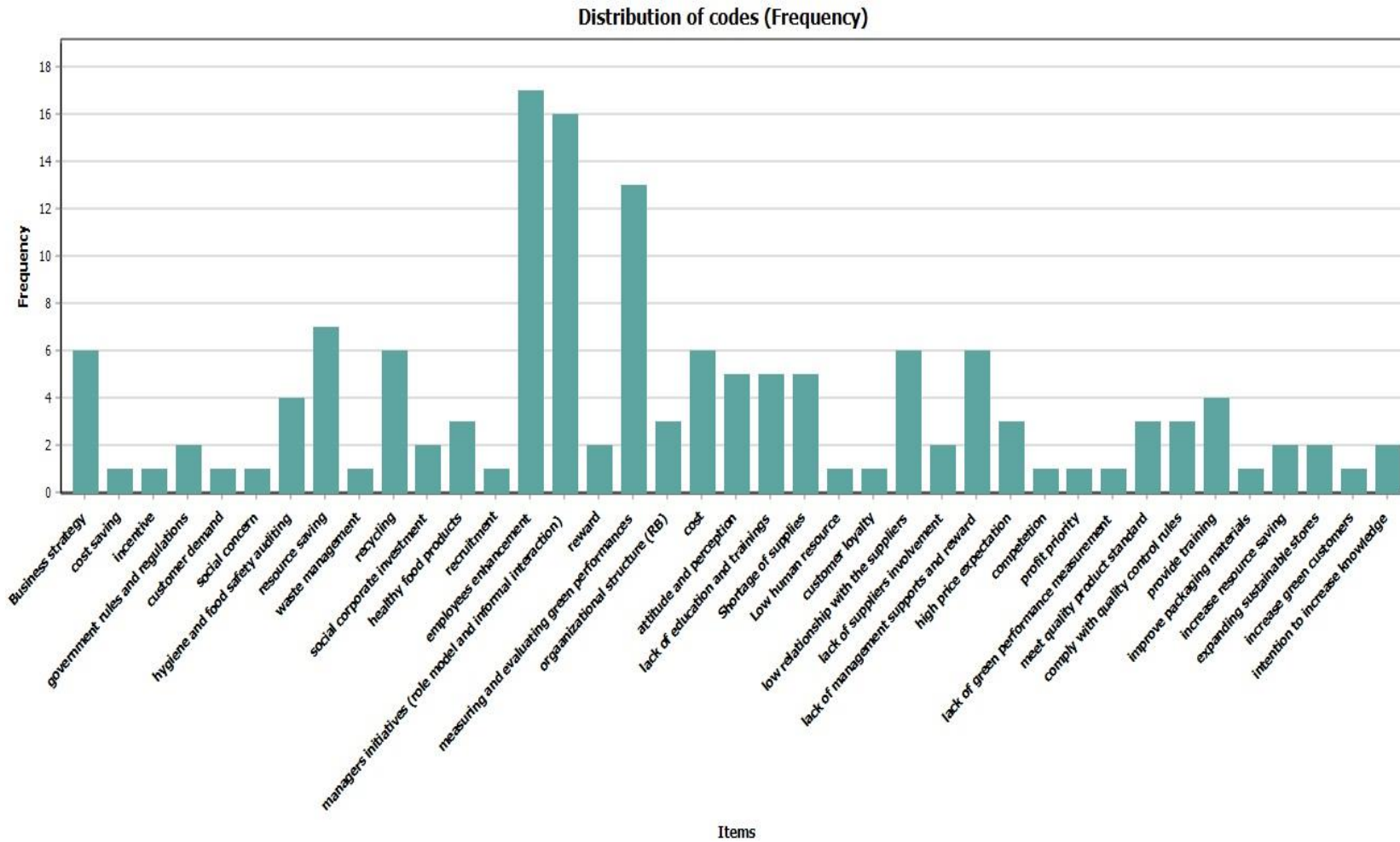
Please mark X on your answers

General understanding		5 Very High	4 High	3 Medium	2 Low	1 Very Low
1	Your level of understanding about "green" (environmentally friendly) and Green practices (environmental friendly practices)					
2	Your perception about green (environmentally friendly) and green practices (environmental friendly practices) in the sector					
3	Your understanding of the effects of green practices (environmental friendly practices) in the sector					
Management Motivation						
4	Education/training about environmentally friendly practices provided by the sector management					

5	Availability of responsible body (unit) to report about green practices (environmental friendly practices)					
6	Initiatives of managers and leaders to perform green practices in the sector					
7	Managers and leaders being role model implementing green practices (environmental friendly practices) in the sector					
8	Your initiatives to perform green practices (environmental friendly practices) in the sector. Example: Saving water, electricity or resources					
9	Managers and leaders support your initiatives to perform green (environmentally friendly) performance					
10	Rewards for your green practices (environmental friendly practices) initiatives by the sector management					
11	Degree of informal interaction regarding green practices (environmental friendly practices) with the management of the sector					
Challenges						
12	Challenges you face implementing green practices (environmental friendly practices) in the sector					
Customers demand for green products						
13	Level of customers demand on green products of the sector example organic products or environmentally friendly items					
Resource consumption efficiency						
14	Resources usage capacity of the sector example water, electricity, and recycling materials					

Thank you for your participation

APPENDIX 4: QUALITATIVE DATA FREQUENCY DISTRIBUTION CODES



APPENDIX 5: DESCRIPTIVE STATISTICS OF THE QUANTITATIVE RESULTS

a. Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	65	61.9	61.9	61.9
	Male	40	38.1	38.1	100.0
	Total	105	100.0	100.0	

b. Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 - 25	14	13.3	13.3	13.3
	26 - 35	59	56.2	56.2	69.5
	36 - 45	28	26.7	26.7	96.2
	46 - 55	3	2.9	2.9	99.0
	>55	1	1.0	1.0	100.0
	Total	105	100.0	100.0	

c. Employment position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Management	1	1.0	1.0	1.0
	Sales	10	9.5	9.5	10.5
	Cashier	18	17.1	17.1	27.6
	Floor Leader	8	7.6	7.6	35.2
	Customer Service	25	23.8	23.8	59.0
	Other	43	41.0	41.0	100.0
	Total	105	100.0	100.0	

d. Work experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 1 year	17	16.2	16.2	16.2
	1 - 5 years	48	45.7	45.7	61.9
	6 - 10 years	30	28.6	28.6	90.5
	11 - 15 years	9	8.6	8.6	99.0
	> 15 years	1	1.0	1.0	100.0
	Total	105	100.0	100.0	

e. Food Retail Sector Visited and Sample Size

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Store A	9	8.6	8.6	8.6
	Store B	8	7.6	7.6	16.2
	Store C	9	8.6	8.6	24.8
	Store D	7	6.7	6.7	31.4
	Store E	7	6.7	6.7	38.1
	Store F	7	6.7	6.7	44.8
	Store G	49	46.7	46.7	91.4
	Store H	9	8.6	8.6	100.0
	Total	105	100.0	100.0	

f. General understanding

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	5	4.8	4.8	4.8
	Low	25	23.8	23.8	28.6
	Medium	43	41.0	41.0	69.5
	High	25	23.8	23.8	93.3
	Very High	7	6.7	6.7	100.0
	Total	105	100.0	100.0	

g. Perception

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low	8	7.6	7.6	7.6
	Medium	45	42.9	42.9	50.5
	High	38	36.2	36.2	86.7
	Very High	14	13.3	13.3	100.0
	Total	105	100.0	100.0	

h. Understanding the effect of green practice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	2	1.9	1.9	1.9
	Low	9	8.6	8.6	10.5
	Medium	48	45.7	45.7	56.2
	High	36	34.3	34.3	90.5
	Very High	10	9.5	9.5	100.0
	Total	105	100.0	100.0	

Management Motivation

- i. Education/training in environmentally friendly practices provides by sector management.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	21	20.0	20.0	20.0
	Low	32	30.5	30.5	50.5
	Medium	25	23.8	23.8	74.3
	High	16	15.2	15.2	89.5
	Very High	11	10.5	10.5	100.0
	Total	105	100.0	100.0	

- j. Availability of responsible body (unit) to report about green practices (environmental friendly practices).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	6	5.7	5.7	5.7
	Low	35	33.3	33.3	39.0
	Medium	38	36.2	36.2	75.2
	High	19	18.1	18.1	93.3
	Very High	7	6.7	6.7	100.0
	Total	105	100.0	100.0	

- k. Initiatives of managers and leaders to perform green practices in the sector.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	5	4.8	4.8	4.8
	Low	22	21.0	21.0	25.7
	Medium	37	35.2	35.2	61.0
	High	33	31.4	31.4	92.4
	Very High	8	7.6	7.6	100.0
	Total	105	100.0	100.0	

- l. Managers and leaders being role model implementing green practices (environmental friendly practices) in the sector.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	6	5.7	5.7	5.7
	Low	24	22.9	22.9	28.6
	Medium	36	34.3	34.3	62.9
	High	26	24.8	24.8	87.6
	Very High	13	12.4	12.4	100.0
	Total	105	100.0	100.0	

- m. Your initiatives to perform green practices (environmental friendly practices) in the sector.

Example: Saving water, electricity or resources

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	2	1.9	1.9	1.9

Low	17	16.2	16.2	18.1
Medium	41	39.0	39.0	57.1
High	27	25.7	25.7	82.9
Very High	18	17.1	17.1	100.0
Total	105	100.0	100.0	

n. Managers support to your initiatives to perform green (environmental friendly) performance.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	4	3.8	3.8	3.8
	Low	29	27.6	27.9	31.7
	Medium	31	29.5	29.8	61.5
	High	26	24.8	25.0	86.5
	Very High	14	13.3	13.5	100.0
	Total	104	99.0	100.0	
Missing	System	1	1.0		
Total		105	100.0		

o. Rewards for green practices (environmental friendly practices) initiatives by the sector management.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	41	39.0	39.0	39.0
	Low	19	18.1	18.1	57.1
	Medium	20	19.0	19.0	76.2
	High	14	13.3	13.3	89.5
	Very High	11	10.5	10.5	100.0
	Total	105	100.0	100.0	

p. Degree of informal interaction regarding green practices (environmental friendly practices) with the management of the sector.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	8	7.6	7.6	7.6
	Low	30	28.6	28.6	36.2
	Medium	42	40.0	40.0	76.2
	High	20	19.0	19.0	95.2
	Very High	5	4.8	4.8	100.0
	Total	105	100.0	100.0	

q. Challenges faced implementing green practices in the sector.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	1	1.0	1.0	1.0
	Low	29	27.6	27.6	28.6

Medium	34	32.4	32.4	61.0
High	37	35.2	35.2	96.2
Very High	4	3.8	3.8	100.0
Total	105	100.0	100.0	

r. Customers demand for green products

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	2	1.9	1.9	1.9
	Low	19	18.1	18.1	20.0
	Medium	21	20.0	20.0	40.0
	High	40	38.1	38.1	78.1
	Very High	23	21.9	21.9	100.0
	Total	105	100.0	100.0	

s. Resource consumption

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Low	1	1.0	1.0	1.0
	Low	8	7.6	7.6	8.6
	Medium	40	38.1	38.1	46.7
	High	36	34.3	34.3	81.0
	Very High	20	19.0	19.0	100.0
	Total	105	100.0	100.0	

APPENDIX 6: DESCRIPTIVE STATISTICS FOR THE INDIVIDUAL STORE

2a: Store A

Case Processing Summary		N	Marginal Percentage
Store A	Store A	9	100.0%
Gender	Female	5	55.6%
	Male	4	44.4%
Age Categories	18 - 25	2	22.2%
	26 - 35	5	55.6%
	36 - 45	2	22.2%
Position	Sales	3	33.3%
	Cashier	4	44.4%
	Floor Leader	1	11.1%
	Customer Service	1	11.1%
Working Experience	< 1 year	3	33.3%
	1 - 5 years	3	33.3%
	6 - 10 years	1	11.1%
	11 - 15 years	1	11.1%
	> 15 years	1	11.1%
Level of Understanding Regarding Environmental Friendly Practices	Low	2	22.2%
	Medium	2	22.2%
Perception Regarding Environmental Friendly Practices	High	4	44.4%
	Very High	1	11.1%
Effects of Environmental Friendly Practices	Low	1	11.1%
	Medium	2	22.2%
	High	6	66.7%
Education & Training about Environmental Friendly Practices	Low	1	11.1%
	Medium	3	33.3%
	High	3	33.3%
	Very High	2	22.2%
Responsible body to report about Environmental Friendly Practices	Medium	5	55.6%
	High	2	22.2%
	Very High	2	22.2%
Initiative of managers to perform Green Practices	Low	2	22.2%
	Medium	3	33.3%
	High	2	22.2%
	Very High	2	22.2%

	Very High	1	11.1%
Managers being role models in implementing Green Practices	Medium	5	55.6%
	High	2	22.2%
	Very High	2	22.2%
Your initiatives to perform Green Practices	Medium	1	11.1%
	High	5	55.6%
	Very High	3	33.3%
Managers support to your Green Support	Medium	4	44.4%
	High	2	22.2%
	Very High	3	33.3%
Rewards to your Green Initiatives	Medium	4	44.4%
	High	3	33.3%
	Very High	2	22.2%
Degree of informal interaction regarding Green Practices	Low	2	22.2%
	Medium	4	44.4%
	High	3	33.3%
Challenges Faced	Low	2	22.2%
	Medium	1	11.1%
	High	6	66.7%
Customer Demand	Low	1	11.1%
	Medium	2	22.2%
	High	4	44.4%
	Very High	2	22.2%
Resource Consumption	Medium	2	22.2%
	High	4	44.4%
	Very High	3	33.3%
Valid		9	100.0%
Missing		96	
Total		105	

2b: Store B

Case Processing Summary

		N	Marginal Percentage
Store B	Store B	8	100.0%
Gender	Female	4	50.0%
	Male	4	50.0%
Age Categories	18 - 25	1	12.5%
	26 - 35	4	50.0%
	36 - 45	3	37.5%

Position	Sales	1	12.5%
	Cashier	1	12.5%
	Floor Leader	2	25.0%
	Customer Service	1	12.5%
	Other	3	37.5%
Working Experience	< 1 year	2	25.0%
	1 - 5 years	4	50.0%
	6 - 10 years	2	25.0%
Level of Understanding	Medium	2	25.0%
Regarding Environmental Friendly Practices	High	4	50.0%
	Very High	2	25.0%
Perception Regarding Environmental Friendly Practices	Medium	1	12.5%
	High	4	50.0%
	Very High	3	37.5%
Effects of Environmental Friendly Practices	Medium	3	37.5%
	High	2	25.0%
	Very High	3	37.5%
Education & Training about Environmental Friendly Practices	Very Low	1	12.5%
	Low	1	12.5%
	High	3	37.5%
	Very High	3	37.5%
Responsible body to report about Environmental Friendly Practices	Low	1	12.5%
	Medium	2	25.0%
	High	2	25.0%
	Very High	3	37.5%
Initiative of managers to perform Green Practices	Low	1	12.5%
	Medium	3	37.5%
	High	2	25.0%
	Very High	2	25.0%
Managers being role models in implementing Green Practices	Low	2	25.0%
	Medium	2	25.0%
	Very High	4	50.0%
Your initiatives to perform Green Practices	Low	1	12.5%
	Medium	4	50.0%
	Very High	3	37.5%
Managers support to your Green Support	Very Low	1	12.5%
	Low	1	12.5%
	Medium	2	25.0%
	High	2	25.0%
	Very High	2	25.0%

Rewards to your Green Initiatives	Very Low	1	12.5%
	Low	1	12.5%
	Medium	3	37.5%
	High	1	12.5%
	Very High	2	25.0%
Degree of informal interaction regarding Green Practices	Low	2	25.0%
	Medium	2	25.0%
	High	3	37.5%
	Very High	1	12.5%
Challenges Faced	Very Low	1	12.5%
	Low	1	12.5%
	Medium	5	62.5%
	High	1	12.5%
Customer Demand	Medium	1	12.5%
	High	2	25.0%
	Very High	5	62.5%
Resource Consumption	Medium	1	12.5%
	High	4	50.0%
	Very High	3	37.5%
Valid		8	100.0%
Missing		97	
Total		105	

2c: Store C

Case Processing Summary

		N	Marginal Percentage
Store C	Store C	9	100.0%
Gender	Female	6	66.7%
	Male	3	33.3%
Age Categories	26 - 35	6	66.7%
	36 - 45	2	22.2%
	>55	1	11.1%
Position	Cashier	4	44.4%
	Floor Leader	1	11.1%
	Customer Service	4	44.4%
Working Experience	< 1 year	1	11.1%
	1 - 5 years	6	66.7%
	6 - 10 years	2	22.2%

Level of Understanding	Medium	5	55.6%
Regarding Environmental	High	3	33.3%
Friendly Practices	Very High	1	11.1%
Perception Regarding	Medium	3	33.3%
Environmental Friendly	High	4	44.4%
Practices	Very High	2	22.2%
Effects of Environmental	Medium	4	44.4%
Friendly Practices	High	3	33.3%
	Very High	2	22.2%
Education & Training	Low	2	22.2%
about Environmental	Medium	4	44.4%
Friendly Practices	High	1	11.1%
	Very High	2	22.2%
Responsible body to	Low	1	11.1%
report about	Medium	5	55.6%
Environmental Friendly	High	3	33.3%
Practices			
Initiative of managers to	Medium	3	33.3%
perform Green Practices	High	3	33.3%
	Very High	3	33.3%
Managers being role	Low	1	11.1%
models in implementing	Medium	2	22.2%
Green Practices	High	3	33.3%
	Very High	3	33.3%
Your initiatives to	Medium	2	22.2%
perform Green Practices	High	2	22.2%
	Very High	5	55.6%
Managers support to your	Very Low	1	11.1%
Green Support	Medium	3	33.3%
	High	2	22.2%
	Very High	3	33.3%
Rewards to your Green	Very Low	1	11.1%
Initiatives	Low	1	11.1%
	Medium	3	33.3%
	High	1	11.1%
	Very High	3	33.3%
Degree of informal	Very Low	1	11.1%
interaction regarding	Medium	4	44.4%
Green Practices	High	2	22.2%
	Very High	2	22.2%
Challenges Faced	Low	1	11.1%

	Medium	4	44.4%
	High	3	33.3%
	Very High	1	11.1%
Customer Demand	Low	1	11.1%
	Medium	1	11.1%
	High	3	33.3%
	Very High	4	44.4%
Resource Consumption	Very Low	1	11.1%
	Medium	1	11.1%
	High	3	33.3%
	Very High	4	44.4%
Valid		9	100.0%
Missing		96	
Total		105	

2d: Store D

Case Processing Summary

		N	Marginal Percentage
Store D	Store D	7	100.0%
Gender	Female	6	85.7%
	Male	1	14.3%
Age Categories	26 - 35	6	85.7%
	36 - 45	1	14.3%
Position	Sales	1	14.3%
	Cashier	3	42.9%
	Floor Leader	2	28.6%
	Other	1	14.3%
Working Experience	< 1 year	1	14.3%
	1 - 5 years	2	28.6%
	6 - 10 years	3	42.9%
	11 - 15 years	1	14.3%
Level of Understanding Regarding Environmental Friendly Practices	Medium	2	28.6%
	High	4	57.1%
	Very High	1	14.3%
Perception Regarding Environmental Friendly Practices	Medium	3	42.9%
	High	2	28.6%
	Very High	2	28.6%
Effects of Environmental Friendly Practices	Low	1	14.3%
	Medium	3	42.9%
	High	2	28.6%

	Very High	1	14.3%
Education & Training about Environmental Friendly Practices	Low	1	14.3%
	Medium	3	42.9%
	High	2	28.6%
	Very High	1	14.3%
Responsible body to report about Environmental Friendly Practices	Very Low	1	14.3%
	Medium	3	42.9%
	High	3	42.9%
Initiative of managers to perform Green Practices	Low	2	28.6%
	Medium	1	14.3%
	High	4	57.1%
Managers being role models in implementing Green Practices	Medium	1	14.3%
	High	6	85.7%
Your initiatives to perform Green Practices	High	4	57.1%
	Very High	3	42.9%
Managers support to your Green Support	Medium	3	42.9%
	High	3	42.9%
	Very High	1	14.3%
Rewards to your Green Initiatives	Low	1	14.3%
	Medium	2	28.6%
	High	3	42.9%
	Very High	1	14.3%
Degree of informal interaction regarding Green Practices	Medium	5	71.4%
	High	2	28.6%
Challenges Faced	Low	2	28.6%
	Medium	3	42.9%
	High	2	28.6%
Customer Demand	Low	1	14.3%
	High	3	42.9%
	Very High	3	42.9%
Resource Consumption	Medium	1	14.3%
	High	3	42.9%
	Very High	3	42.9%
Valid		7	100.0%
Missing		98	
Total		105	

2e: Store E

Case Processing Summary

		N	Marginal Percentage	
Store E	Store E	7	100.0%	
Gender	Female	3	42.9%	
	Male	4	57.1%	
Age Categories	18 - 25	2	28.6%	
	26 - 35	3	42.9%	
	36 - 45	1	14.3%	
	46 - 55	1	14.3%	
Position	Customer Service	5	71.4%	
	Other	2	28.6%	
Working Experience	1 - 5 years	5	71.4%	
	6 - 10 years	1	14.3%	
	11 - 15 years	1	14.3%	
Level of Understanding	Very Low	1	14.3%	
Regarding Environmental Friendly Practices	Low	2	28.6%	
	Medium	3	42.9%	
	Very High	1	14.3%	
	Perception Regarding Environmental Friendly Practices	Medium	4	57.1%
Effects of Environmental Friendly Practices	High	2	28.6%	
	Very High	1	14.3%	
	Education & Training about Environmental Friendly Practices	Medium	2	28.6%
Responsible body to report about Environmental Friendly Practices	High	5	71.4%	
	Very Low	4	57.1%	
Initiative of managers to perform Green Practices	Low	3	42.9%	
	High	1	14.3%	
	Managers being role models in implementing Green Practices	Very Low	1	14.3%
	Managers being role models in implementing Green Practices	Low	2	28.6%
Medium		3	42.9%	
High		1	14.3%	
		High	1	14.3%

Your initiatives to perform Green Practices	Low	4	57.1%
	Medium	3	42.9%
Managers support to your Green Support	Very Low	1	14.3%
	Low	4	57.1%
Rewards to your Green Initiatives	Medium	2	28.6%
	Very Low	5	71.4%
	Low	1	14.3%
Degree of informal interaction regarding Green Practices	Very High	1	14.3%
	Low	5	71.4%
	Medium	2	28.6%
Challenges Faced	Low	2	28.6%
	High	4	57.1%
	Very High	1	14.3%
Customer Demand	Very Low	1	14.3%
	Low	3	42.9%
	Medium	1	14.3%
	High	1	14.3%
	Very High	1	14.3%
Resource Consumption	Low	2	28.6%
	Medium	2	28.6%
	High	3	42.9%
Valid		7	100.0%
Missing		98	
Total		105	

2f: Store F

Case Processing Summary

		N	Marginal Percentage
Store F	Store F	7	100.0%
Gender	Female	5	71.4%
	Male	2	28.6%
Age Categories	26 - 35	5	71.4%
	36 - 45	2	28.6%
Position	Sales	1	14.3%
	Customer Service	3	42.9%
	Other	3	42.9%
Working Experience	< 1 year	2	28.6%

	1 - 5 years	2	28.6%
	6 - 10 years	3	42.9%
Level of Understanding	Low	4	57.1%
Regarding Environmental Friendly Practices	Medium	3	42.9%
Perception Regarding Environmental Friendly Practices	Medium	7	100.0%
Effects of Environmental Friendly Practices	Medium	5	71.4%
	High	2	28.6%
Education & Training about Environmental Friendly Practices	Very Low	3	42.9%
	Low	3	42.9%
	High	1	14.3%
Responsible body to report about Environmental Friendly Practices	Very Low	1	14.3%
	Low	5	71.4%
	Medium	1	14.3%
Initiative of managers to perform Green Practices	Very Low	1	14.3%
	Low	3	42.9%
	Medium	3	42.9%
Managers being role models in implementing Green Practices	Very Low	2	28.6%
	Low	2	28.6%
	Medium	2	28.6%
	High	1	14.3%
Your initiatives to perform Green Practices	Low	1	14.3%
	Medium	6	85.7%
Managers support to your Green Support	Very Low	1	14.3%
	Low	4	57.1%
	Medium	1	14.3%
	High	1	14.3%
Rewards to your Green Initiatives	Very Low	6	85.7%
	Low	1	14.3%
Degree of informal interaction regarding Green Practices	Very Low	2	28.6%
	Low	2	28.6%
	Medium	3	42.9%
Challenges Faced	Low	2	28.6%
	High	4	57.1%
	Very High	1	14.3%
Customer Demand	Very Low	1	14.3%
	Low	3	42.9%
	Medium	1	14.3%

	High	1	14.3%
	Very High	1	14.3%
Resource Consumption	Low	2	28.6%
	Medium	2	28.6%
	High	3	42.9%
Valid		7	100.0%
Missing		98	
Total		105	

2g: Store G

Case Processing Summary

		N	Marginal Percentage
Store G	Store G	48	100.0%
Gender	Female	30	62.5%
	Male	18	37.5%
Age Categories	18 - 25	7	14.6%
	26 - 35	24	50.0%
	36 - 45	15	31.3%
	46 - 55	2	4.2%
Position	Management	1	2.1%
	Sales	4	8.3%
	Cashier	5	10.4%
	Floor Leader	2	4.2%
	Customer Service	8	16.7%
	Other	28	58.3%
Working Experience	< 1 year	6	12.5%
	1 - 5 years	22	45.8%
	6 - 10 years	15	31.3%
	11 - 15 years	5	10.4%
Level of Understanding Regarding Environmental Friendly Practices	Very Low	4	8.3%
Perception Regarding Environmental Friendly Practices	Low	17	35.4%
	Medium	17	35.4%
	High	9	18.8%
	Very High	1	2.1%
Perception Regarding Environmental Friendly Practices	Low	7	14.6%
	Medium	21	43.8%
	High	15	31.3%
	Very High	5	10.4%

Effects of Environmental Friendly Practices	Very Low	2	4.2%
	Low	6	12.5%
	Medium	27	56.3%
	High	12	25.0%
	Very High	1	2.1%
Education & Training about Environmental Friendly Practices	Very Low	11	22.9%
	Low	19	39.6%
	Medium	11	22.9%
	High	5	10.4%
	Very High	2	4.2%
Responsible body to report about Environmental Friendly Practices	Very Low	2	4.2%
	Low	19	39.6%
	Medium	18	37.5%
	High	8	16.7%
	Very High	1	2.1%
Initiative of managers to perform Green Practices	Very Low	3	6.3%
	Low	13	27.1%
	Medium	17	35.4%
	High	13	27.1%
	Very High	2	4.2%
Managers being role models in implementing Green Practices	Very Low	3	6.3%
	Low	16	33.3%
	Medium	17	35.4%
	High	9	18.8%
	Very High	3	6.3%
Your initiatives to perform Green Practices	Very Low	2	4.2%
	Low	10	20.8%
	Medium	20	41.7%
	High	14	29.2%
	Very High	2	4.2%
Managers support to your Green Support	Low	19	39.6%
	Medium	14	29.2%
	High	12	25.0%
	Very High	3	6.3%
	Rewards to your Green Initiatives	Very Low	22	45.8%
Low		14	29.2%
Medium		6	12.5%
High		4	8.3%
Very High		2	4.2%
	Very Low	3	6.3%

Degree of informal interaction regarding Green Practices	Low	19	39.6%
	Medium	16	33.3%
	High	9	18.8%
	Very High	1	2.1%
Challenges Faced	Low	15	31.3%
	Medium	17	35.4%
	High	15	31.3%
	Very High	1	2.1%
Customer Demand	Low	8	16.7%
	Medium	11	22.9%
	High	22	45.8%
	Very High	7	14.6%
Resource Consumption	Low	3	6.3%
	Medium	23	47.9%
	High	15	31.3%
	Very High	7	14.6%
Valid		48	100.0%
Missing		57	
Total		105	

2h: Store H

Case Processing Summary

		N	Marginal Percentage
Store H	Store H	9	100.0%
Gender	Female	5	55.6%
	Male	4	44.4%
Age Categories	18 - 25	2	22.2%
	26 - 35	5	55.6%
	36 - 45	2	22.2%
Position	Cashier	1	11.1%
	Customer Service	3	33.3%
	Other	5	55.6%
Working Experience	< 1 year	1	11.1%
	1 - 5 years	4	44.4%
	6 - 10 years	3	33.3%
	11 - 15 years	1	11.1%

Level of Understanding Regarding Environmental Friendly Practices	Medium	9	100.0%
Perception Regarding Environmental Friendly Practices	Medium	4	44.4%
	High	5	55.6%
Effects of Environmental Friendly Practices	Low	1	11.1%
	Medium	1	11.1%
	High	6	66.7%
	Very High	1	11.1%
Education & Training about Environmental Friendly Practices	Very Low	2	22.2%
	Low	3	33.3%
	Medium	2	22.2%
	High	2	22.2%
Responsible body to report about Environmental Friendly Practices	Very Low	1	11.1%
	Low	3	33.3%
	Medium	3	33.3%
	High	1	11.1%
	Very High	1	11.1%
Initiative of managers to perform Green Practices	Low	1	11.1%
	Medium	3	33.3%
	High	5	55.6%
Managers being role models in implementing Green Practices	Low	1	11.1%
	Medium	3	33.3%
	High	4	44.4%
	Very High	1	11.1%
Your initiatives to perform Green Practices	Low	1	11.1%
	Medium	4	44.4%
	High	2	22.2%
	Very High	2	22.2%
Managers support to your Green Support	Low	1	11.1%
	Medium	2	22.2%
	High	4	44.4%
	Very High	2	22.2%
Rewards to your Green Initiatives	Very Low	5	55.6%
	Medium	2	22.2%
	High	2	22.2%
Degree of informal interaction regarding Green Practices	Very Low	2	22.2%
	Medium	5	55.6%
	High	1	11.1%
	Very High	1	11.1%

Challenges Faced	Low	3	33.3%
	Medium	4	44.4%
	High	2	22.2%
Customer Demand	Low	2	22.2%
	Medium	3	33.3%
	High	4	44.4%
Resource Consumption	Low	1	11.1%
	Medium	7	77.8%
	High	1	11.1%
Valid		9	100.0%
Missing		96	
Total		105	

APPENDIX 7: UNIVARIATE REGRESSION ANALYSIS

Your initiatives to perform Green Practices ^a		Parameter Estimates					95% Confidence Interval for Exp(B)		
		B	Std. Error	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
Very	Intercept	-21.202	8922.064	.000	1	.998			
Low	[Rewards to your Green Initiatives=1]	20.509	8922.064	.000	1	.998	806990940 .200	.000	. ^b
	[Rewards to your Green Initiatives=2]	20.509	8922.064	.000	1	.998	806990940 .200	.000	. ^b
	[Rewards to your Green Initiatives=3]	1.887	12692.304	.000	1	1.000	6.602	.000	. ^b
	[Rewards to your Green Initiatives=4]	1.049	.000	.	1	.	2.855	2.855	2.855
	[Rewards to your Green Initiatives=5]	0 ^c	.	.	0	.	.	.	.
Low	Intercept	-1.792	1.080	2.752	1	.097			
	[Rewards to your Green Initiatives=1]	3.738	1.318	8.038	1	.005	42.000	3.170	556.476
	[Rewards to your Green Initiatives=2]	1.099	1.633	.453	1	.501	3.000	.122	73.642
	[Rewards to your Green Initiatives=3]	-15.383	3096.324	.000	1	.996	2.086E-7	.000	. ^b
	[Rewards to your Green Initiatives=4]	.182	1.538	.014	1	.906	1.200	.059	24.472

	[Rewards to your Green Initiatives=5]	0 ^c	.	.	0	.	.	.	.
Medium	Intercept	-1.099	.816	1.810	1	.178			
	[Rewards to your Green Initiatives=1]	3.350	1.104	9.204	1	.002	28.500	3.273	248.175
	[Rewards to your Green Initiatives=2]	2.708	1.125	5.790	1	.016	15.000	1.652	136.172
	[Rewards to your Green Initiatives=3]	1.946	1.069	3.313	1	.069	7.000	.861	56.895
	[Rewards to your Green Initiatives=4]	.588	1.095	.288	1	.592	1.800	.210	15.407
	[Rewards to your Green Initiatives=5]	0 ^c	.	.	0	.	.	.	.
High	Intercept	-1.099	.816	1.810	1	.178			
	[Rewards to your Green Initiatives=1]	2.015	1.169	2.971	1	.085	7.500	.759	74.157
	[Rewards to your Green Initiatives=2]	2.015	1.169	2.971	1	.085	7.500	.759	74.157
	[Rewards to your Green Initiatives=3]	2.303	1.049	4.820	1	.028	10.000	1.280	78.117
	[Rewards to your Green Initiatives=4]	1.099	1.033	1.132	1	.287	3.000	.396	22.711
	[Rewards to your Green Initiatives=5]	0 ^c	.	.	0	.	.	.	.

a. The reference category is: Very High.

b. Floating point overflow occurred while computing this statistic. Its value is therefore set to system missing.

c. This parameter is set to zero because it is redundant.

Parameter Estimates

Your initiatives to perform Green Practices ^a		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Very	Intercept	-6.761	13.165	.264	1	.608			
Low	[Responsible body to report about Environmental Friendly Practices=1]	13.399	3123.916	.000	1	.997	659101.508	.000	. ^b
	[Responsible body to report about Environmental Friendly Practices=2]	3.839	13.487	.081	1	.776	46.484	1.538E-10	14047456720000.000
	[Responsible body to report about Environmental Friendly Practices=3]	4.996	13.210	.143	1	.705	147.777	8.418E-10	25943132820000.000
	[Responsible body to report about Environmental Friendly Practices=4]	2.513	13.702	.034	1	.854	12.343	2.681E-11	56818163330000.000
	[Responsible body to report about Environmental Friendly Practices=5]	0 ^c	.	.	0	.	.	.	.
Low	Intercept	-1.495	1.046	2.042	1	.153			
	[Responsible body to report about Environmental Friendly Practices=1]	25.032	4.070	37.818	1	.000	74330594720.000	25491648.690	216739112500000.000

	[Responsible body to report about Environmental Friendly Practices=2]	3.248	1.268	6.559	1	.010	25.748	2.143	309.330
	[Responsible body to report about Environmental Friendly Practices=3]	.349	1.344	.068	1	.795	1.418	.102	19.773
	[Responsible body to report about Environmental Friendly Practices=4]	.566	1.346	.177	1	.674	1.762	.126	24.655
	[Responsible body to report about Environmental Friendly Practices=5]	0 ^c	.	.	0	.	.	.	.
Medium	Intercept	-1.815	1.197	2.301	1	.129			
	[Responsible body to report about Environmental Friendly Practices=1]	25.755	4.094	39.582	1	.000	15319567280 0.000	50201670.540	467492693300000.00 0
	[Responsible body to report about Environmental Friendly Practices=2]	3.612	1.394	6.711	1	.010	37.022	2.409	568.969
	[Responsible body to report about Environmental Friendly Practices=3]	2.922	1.289	5.139	1	.023	18.578	1.485	232.351
	[Responsible body to report about Environmental Friendly Practices=4]	1.617	1.372	1.389	1	.239	5.040	.342	74.234

	[Responsible body to report about Environmental Friendly Practices=5]	0 ^c	.	.	0	.	.	.	.
High	Intercept	-4.158	3.609	1.327	1	.249			
	[Responsible body to report about Environmental Friendly Practices=1]	26.013	.000	.	1	.	19828748530 0.000	19828748530 0.000	198287485300.000
	[Responsible body to report about Environmental Friendly Practices=2]	5.066	3.693	1.882	1	.170	158.580	.114	220747.558
	[Responsible body to report about Environmental Friendly Practices=3]	4.860	3.644	1.779	1	.182	129.079	.102	163308.546
	[Responsible body to report about Environmental Friendly Practices=4]	4.647	3.654	1.617	1	.203	104.248	.081	134421.807
	[Responsible body to report about Environmental Friendly Practices=5]	0 ^c	.	.	0	.	.	.	.

- a. The reference category is: Very High.
- b. Floating point overflow occurred while computing this statistic. Its value is therefore set to system missing.
- c. This parameter is set to zero because it is redundant.

Parameter Estimates

Your initiatives to perform Green Practices ^a		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Very Low	Intercept	-13.610	272.072	.003	1	.960			
	[Managers being role models in implementing Green Practices=1]	32.773	272.076	.015	1	.904	171089375700000.000	4.383E-218	6.679E+245
	[Managers being role models in implementing Green Practices=2]	19.975	273.139	.005	1	.942	473124323.500	1.507E-224	1.485E+241
	[Managers being role models in implementing Green Practices=3]	11.413	278.481	.002	1	.967	90471.645	8.181E-233	1.001E+242
	[Managers being role models in implementing Green Practices=4]	3.288	279.940	.000	1	.991	26.784	1.389E-237	5.164E+239
	[Managers being role models in implementing Green Practices=5]	0 ^b	.	.	0	.	.	.	.
Low	Intercept	-11.470	93.320	.015	1	.902			

	[Managers being role models in implementing Green Practices=1]	31.326	93.330	.113	1	.737	402563236 90000.000	1.454E-66	1.115E+93
	[Managers being role models in implementing Green Practices=2]	19.781	96.384	.042	1	.837	389631795 .800	3.534E-74	4.296E+90
	[Managers being role models in implementing Green Practices=3]	19.128	95.193	.040	1	.841	202801526 .600	1.899E-73	2.165E+89
	[Managers being role models in implementing Green Practices=4]	10.217	93.324	.012	1	.913	27369.573	9.999E-76	7.492E+83
	[Managers being role models in implementing Green Practices=5]	0 ^b	.	.	0	.	.	.	.
Medium	Intercept	-2.398	1.044	5.271	1	.022			
	[Managers being role models in implementing Green Practices=1]	22.660	.000	.	1	.	693397043 6.000	6933970436.000	6933970436.0 00

	[Managers being role models in implementing Green Practices=2]	11.328	24.130	.220	1	.639	83091.446	2.398E-16	2879092019000000000000.000
	[Managers being role models in implementing Green Practices=3]	11.097	18.816	.348	1	.555	65982.005	6.362E-12	68432920900000000000.000
	[Managers being role models in implementing Green Practices=4]	2.398	1.173	4.177	1	.041	11.000	1.103	109.675
	[Managers being role models in implementing Green Practices=5]	0 ^b	.	.	0	.	.	.	.
High	Intercept	-2.398	1.044	5.271	1	.022			
	[Managers being role models in implementing Green Practices=1]	2.803	.000	.	1	.	16.500	16.500	16.500
	[Managers being role models in implementing Green Practices=2]	9.861	24.136	.167	1	.683	19174.949	5.477E-17	67136044340000000000.000

[Managers being role models in implementing Green Practices=3]	10.829	18.816	.331	1	.565	50456.827	4.860E-12	52380416040000000000.00
[Managers being role models in implementing Green Practices=4]	2.755	1.155	5.689	1	.017	15.714	1.634	151.127
[Managers being role models in implementing Green Practices=5]	0 ^b	.	.	0	.	.	.	.

a. The reference category is: Very High.

b. This parameter is set to zero because it is redundant.



		Parameter Estimates					95% Confidence Interval for Exp(B)		
Your initiatives to perform Green Practices ^a		B	Std. Error	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
Very Low	Intercept	-22.307	19359.099	.000	1	.999			
	[Managers support to your Green Support=1]	4.043	21453.387	.000	1	1.000	57.001	.000	. ^b
	[Managers support to your Green Support=2]	36.892	19414.782	.000	1	.998	10518969370000000.000	.000	. ^b

	[Managers support to your Green Support=3]	21.614	19359.099	.000	1	.999	2436035440.000	.000	. ^b
	[Managers support to your Green Support=4]	5.119	19731.895	.000	1	1.000	167.161	.000	. ^b
	[Managers support to your Green Support=5]	0 ^c	.	.	0	.	.	.	.
Low	Intercept	-20.167	6640.116	.000	1	.998			
	[Managers support to your Green Support=1]	20.167	6640.116	.000	1	.998	573184804.900	.000	. ^b
	[Managers support to your Green Support=2]	37.391	6800.748	.000	1	.996	1732536118000000.000	.000	. ^b
	[Managers support to your Green Support=3]	20.167	6640.116	.000	1	.998	573184804.900	.000	. ^b
	[Managers support to your Green Support=4]	5.119	6767.984	.000	1	.999	167.161	.000	. ^b
	[Managers support to your Green Support=5]	0 ^c	.	.	0	.	.	.	.
Medium	Intercept	-19.311	.775	621.528	1	.000			

	[Managers support to your Green Support=1]	20.004	1.449	190.556	1	.000	487207086.90 0	28458064.1 80	8341071410 .000
	[Managers support to your Green Support=2]	36.535	1469.366	.001	1	.980	73632785430 00000.000	.000	. ^b
	[Managers support to your Green Support=3]	21.257	1.082	385.733	1	.000	1705224804.0 00	204411099. 500	1422521399 0.000
	[Managers support to your Green Support=4]	20.920	.000	.	1	.	1218017717.0 00	1218017717 .000	1218017717 .000
	[Managers support to your Green Support=5]	0 ^c	.	.	0	.	.	.	.
High	Intercept	-2.565	1.038	6.109	1	.013			
	[Managers support to your Green Support=1]	-13.096	2516.216	.000	1	.996	2.053E-6	.000	. ^b
	[Managers support to your Green Support=2]	2.970	1896.943	.000	1	.999	19.500	.000	. ^b
	[Managers support to your Green Support=3]	4.357	1.289	11.433	1	.001	78.000	6.242	974.711

[Managers support to your Green Support=4]	4.511	1.284	12.344	1	.000	91.000	7.349	1126.895
[Managers support to your Green Support=5]	0 ^c	.	.	0	.	.	.	.

- a. The reference category is: Very High.
- b. Floating point overflow occurred while computing this statistic. Its value is therefore set to system missing.
- c. This parameter is set to zero because it is redundant.

		Parameter Estimates					95% Confidence Interval for Exp(B)		
Your initiatives to perform Green Practices ^a		B	Std. Error	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
Very Low	Intercept	-22.905	1.000	524.621	1	.000			
	[Education & Training about Environmental Friendly Practices=1]	3.526	.000	.	1	.	33.990	33.990	33.990
	[Education & Training about Environmental Friendly Practices=2]	22.905	.000	.	1	.	8858183422.000	8858183422.000	8858183422.000
	[Education & Training about Environmental Friendly Practices=3]	2.881	.000	.	1	.	17.832	17.832	17.832

	[Education & Training about Environmental Friendly Practices=4]	1.926	.000	.	1	.	6.861	6.861	6.861
	[Education & Training about Environmental Friendly Practices=5]	0 ^b	.	.	0	.	.	.	.
Low	Intercept	-1.946	1.069	3.313	1	.069			
	[Education & Training about Environmental Friendly Practices=1]	4.143	1.501	7.616	1	.006	63.000	3.322	1194.726
	[Education & Training about Environmental Friendly Practices=2]	3.045	1.345	5.122	1	.024	21.000	1.504	293.253
	[Education & Training about Environmental Friendly Practices=3]	.847	1.574	.290	1	.590	2.333	.107	50.982
	[Education & Training about Environmental Friendly Practices=4]	-16.893	5511.733	.000	1	.998	4.608E-8	.000	. ^c
	[Education & Training about Environmental Friendly Practices=5]	0 ^b	.	.	0	.	.	.	.
	Medium	Intercept	-1.253	.802	2.441	1	.118		
[Education & Training about Environmental Friendly Practices=1]		3.450	1.324	6.786	1	.009	31.500	2.350	422.299

	[Education & Training about Environmental Friendly Practices=2]	3.268	1.100	8.828	1	.003	26.250	3.041	226.604
	[Education & Training about Environmental Friendly Practices=3]	2.351	1.043	5.085	1	.024	10.500	1.360	81.053
	[Education & Training about Environmental Friendly Practices=4]	1.435	1.005	2.040	1	.153	4.200	.586	30.095
	[Education & Training about Environmental Friendly Practices=5]	0 ^b	.	.	0	.	.	.	.
High	Intercept	-1.946	1.069	3.313	1	.069			
	[Education & Training about Environmental Friendly Practices=1]	2.639	1.626	2.635	1	.105	14.000	.579	338.778
	[Education & Training about Environmental Friendly Practices=2]	3.199	1.336	5.730	1	.017	24.500	1.785	336.227
	[Education & Training about Environmental Friendly Practices=3]	3.332	1.249	7.120	1	.008	28.000	2.422	323.703
	[Education & Training about Environmental Friendly Practices=4]	1.946	1.242	2.454	1	.117	7.000	.613	79.871

[Education & Training about Environmental Friendly Practices=5]	0 ^b	.	.	0
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- a. The reference category is: Very High.
- b. This parameter is set to zero because it is redundant.
- c. The floating-point overflow occurred while computing this statistic. Its value is therefore set to system missing.

Your initiatives to perform Green Practices		Parameter Estimates					95% Confidence Interval for Exp(B)		
		B	Std. Error	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
Very Low	Intercept	-14.997	1789.630	.000	1	.993			
	[Challenges Faced=1]	-4.056	.000	.	1	.	.017	.017	.017
	[Challenges Faced=2]	14.997	1789.630	.000	1	.993	3258228.545	.000	. ^b
	[Challenges Faced=3]	.453	1860.592	.000	1	1.000	1.572	.000	. ^b
	[Challenges Faced=4]	.792	1857.090	.000	1	1.000	2.207	.000	. ^b
	[Challenges Faced=5]	0 ^c	.	.	0	.	.	.	.
Low	Intercept	-12.857	619.131	.000	1	.983			
	[Challenges Faced=1]	-4.056	4745.529	.000	1	.999	.017	.000	. ^b
	[Challenges Faced=2]	13.262	619.131	.000	1	.983	574981.508	.000	. ^b
	[Challenges Faced=3]	12.163	619.131	.000	1	.984	191660.503	.000	. ^b
	[Challenges Faced=4]	13.367	619.131	.000	1	.983	638868.342	.000	. ^b
	[Challenges Faced=5]	0 ^c	.	.	0	.	.	.	.
Medium	Intercept	1.099	1.155	.905	1	.341			

	[Challenges Faced=1]	-17.131	3029.628	.000	1	.995	3.632E-8	.000	. ^b
	[Challenges Faced=2]	.773	1.382	.313	1	.576	2.167	.144	32.528
	[Challenges Faced=3]	-.613	1.239	.245	1	.621	.542	.048	6.144
	[Challenges Faced=4]	-.405	1.258	.104	1	.747	.667	.057	7.852
	[Challenges Faced=5]	0 ^c	.	.	0	.	.	.	.
High	Intercept	-12.394	491.276	.001	1	.980			
	[Challenges Faced=1]	-4.056	3765.540	.000	1	.999	.017	.000	. ^b
	[Challenges Faced=2]	13.898	491.276	.001	1	.977	1086076.18 1	.000	. ^b
	[Challenges Faced=3]	12.512	491.276	.001	1	.980	271519.045	.000	. ^b
	[Challenges Faced=4]	12.799	491.276	.001	1	.979	362025.394	.000	. ^b
	[Challenges Faced=5]	0 ^c	.	.	0	.	.	.	.

a. The reference category is: Very High.

b. Floating-point overflow occurred while computing this statistic. Its value is therefore set to system missing.

c. This parameter is set to zero because it is redundant.

		Parameter Estimates					95% Confidence Interval for Exp(B)		
Your initiatives to perform Green Practices ^a		B	Std. Error	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
Very Low	Intercept	-18.303	3077.705	.000	1	.995			
	[Customer Demand=1]	16.105	.000	.	1	.	9873554.450	9873554.450	9873554.450
	[Customer Demand=2]	16.105	5072.970	.000	1	.997	9873554.419	.000	. ^b
	[Customer Demand=3]	16.916	3077.705	.000	1	.996	22215497.480	.000	. ^b
	[Customer Demand=4]	16.693	3077.705	.000	1	.996	17772397.980	.000	. ^b
	[Customer Demand=5]	0 ^c	.	.	0	.	.	.	.
Low	Intercept	-1.099	.667	2.716	1	.099			

	[Customer Demand=1]	18.063	4590.246	.000	1	.997	69918775.060	.000	.	^b
	[Customer Demand=2]	17.480	1275.255	.000	1	.989	39030612.280	.000	.	^b
	[Customer Demand=3]	.811	1.014	.640	1	.424	2.250	.308	16.411	
	[Customer Demand=4]	.182	1.070	.029	1	.865	1.200	.147	9.768	
	[Customer Demand=5]	0 ^c	.	.	0	.	.	.	.
Medium	Intercept	-.811	.601	1.821	1	.177				
	[Customer Demand=1]	17.775	4590.246	.000	1	.997	52439081.290	.000	.	^b
	[Customer Demand=2]	17.310	1275.255	.000	1	.989	32932079.110	.000	.	^b
	[Customer Demand=3]	1.216	.882	1.902	1	.168	3.375	.599	19.009	
	[Customer Demand=4]	2.246	.780	8.287	1	.004	9.450	2.048	43.606	
	[Customer Demand=5]	0 ^c	.	.	0	.	.	.	.
High	Intercept	-.251	.504	.249	1	.618				
	[Customer Demand=1]	.657	6050.443	.000	1	1.000	1.929	.000	.	^b
	[Customer Demand=2]	15.246	1275.255	.000	1	.990	4181851.315	.000	.	^b
	[Customer Demand=3]	.811	.804	1.017	1	.313	2.250	.465	10.883	
	[Customer Demand=4]	1.040	.738	1.984	1	.159	2.829	.666	12.020	
	[Customer Demand=5]	0 ^c	.	.	0	.	.	.	.

a. The reference category is: Very High.

b. Floating point overflow occurred while computing this statistic. Its value is therefore set to system missing.

c. This parameter is set to zero because it is redundant.