NELSON MANDELA UNIVERSITY

CONSUMERS' PERCEPTIONS OF ECO-LABELS IN SOUTH AFRICA

BY

TOBEKA MSIKINYA
STUDENT NUMBER: 215165152
DATE OF REGISTRATION: 29/01/2022

SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

BACHELOR OF COMMERCE HONOURS

IN THE

FACULTY OF BUSINESS AND ECONOMIC SCIENCES

AT THE

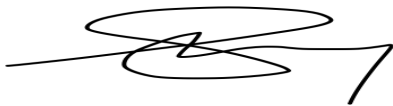**NELSON MANDELA UNIVERSITY**

STUDY LEADER: PROF Miemie Struwig

SUBMISSION DATE: 04/10/2022

DECLARATION BY CANDIDATE

NAME: TOBEKA MSIKINYA

STUDENT NUMBER: 215165152

QUALIFICATION: BACHELOR OF COMMERCE HONOURS

TITLE OF PROJECT: **PERCEPTIONS OF ECO-LABELS IN SOUTH AFRICA**

DECLARATION:

In accordance with Rule G5.6.3, I hereby declare that the above-mentioned treatise/dissertation/thesis is my own work and that I have not previously been submitted to another University or for another qualification

…………………………………………
SIGNATURE

…………03/05/2022………………
DATE

DEDICATION

My parents are the inspiration for my study, I dedicate this research to Lorna and Mzwandile Msikinya, as well as my siblings, for their constant support and encouragement. Thank you, God Almighty, for your power and strength in competing this research.

ABSTRACT

In sustainable economy, "eco-labelling" has become a prominent subject. For years, the usage of eco-labelling in various forms has grown significantly. Concerns have been raised about how effectively consumers monitor and understand these eco-labels. Eco-labels are a type of social sustainability aimed at consumers to make it easier for them to consider environmental issues while purchasing. Some labels estimate energy consumption using units of measurement, while others claim compliance with environmental sustainability and preventative measures. The primary purpose of the research is to discover how South African consumers feel about eco-labels. This research showed the results of investigation the perception of consumers on eco-labels. It showed that the are variety of factors that impact the perception of eco-labels.

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1.1   BACKGROUND OF THE STUDY

Concerns regarding the environment have become a difficult matter as well as a major area in academic research (Christ, & Burritt, 2019). Because of the increased use of eco-labels, there has been a significant increase in environmental consciousness. Nguyen, Nguyen, & Hoang (2019) mentioned that the application demonstrates a significant shift in social attitudes toward the environment and is part of a more significant trend toward using market-based tools. Eco-labels are intended to have a significant environmental impact by positively influencing consumer purchasing decisions (Waris & Hameed, 2020).

Bălan (2020) mentions that with the rise of green issues, the study of promotional tools (such as eco-labels and eco-brands) that can connect environmental products to customers in the marketplace has become a priority. Since the economy is diverse, there is a need to divide the massive market into smaller and more manageable segments. Marketers now use a variety of strategies to categorize potential audiences (Gielens, Ma, Namin, Sethuraman, Smith, Bachtel, & Jervis 2021). According to Maziriri (2020), nations and global ecological marketers would fail in their efforts to gain the upper hand and implement business strategies if they did not have enough market intelligence.

As previously said, eco-labelling is a critical marketing strategy for assisting customers in recognizing green items in the marketplace (Sharma, 2021). Product labels give consumers the information necessary to make an accurate judgment (Aitken, Watkins, Williams, & Kean 2020). Existing research has indicated many factors impacting consumer decisions. Concari, Kok, & Martens (2020) states that ethnicity and culture are significant aspects that might influence consumer behaviour and perception. Individuals from various ethnic backgrounds view environmental challenges differently and act differently to tackle the problem. Consumers may see eco-labelling methods, data, and various green marketing initiatives as distinct, so their impression, moral choices, and behaviour toward each might differ.

Given the numerous challenges to sustainable consumption, such as availability, cost, convenience, product performance, competing priorities, doubt, and force of habit, customer willingness may not simply convert into consumer behaviour. Consumer behaviour might be impacted solely by empirical impressions of environmental information on the label. According to Maniatis (2016), an emotional component in customers' decision-making and an understanding of eco-labels might impact their purchase of sustainable products Maniatis, (2016).

It is believed that one of the significant determinants' consumers' "green sourcing" attitude, or choosing and using ecologically friendly items, is their pro-environmental concern. Consumers may lessen their influence on the environment and contribute to making a difference in their purchases. Businesses that use phrases like "eco-friendly" or "environmentally friendly" as components of their offerings are finding chances due to the massive increased number of consumers who prefer and are prepared to purchase eco-friendly items (Kim, Joo & Hwang 2022).

Understanding the significance of eco-labels has frequently proven challenging for customers; therefore, the interest in understanding consumers' perceptions of eco-labels surfaced. While consumers' preferences differ, an eco-label alone may not be enough to interest a buyer. It appears to be fewer studies study that has analysed customers' perceptions of eco-label items to date. As a result, the major purpose of this study is to evaluate South African customers' perceptions of eco-labels. Several solutions will be studied for increasing consumer perception and environmental links to eco-labels.

1.2   PROBLEM STATEMENT

With several different eco-labels on the market, it is natural to wonder how effective they are comprehended by customers (Hendricks, 2021). Do the rising number of eco-labels instil trust or customers' thoughts are distorted with uncertainty? As a direct consequence, the successful implementation of the expanding number of eco-labels must be assessed on a variety of fronts, including consumer comprehension and perception of such labels (Munro, 2020). While eco-label's purpose is to eliminate imperfect information between the producer and the customer regarding a product's environmental qualities, a lack of knowledge of some eco-labels may result in unfavorable reactions to eco-labels. Gutierrez, Chiu, & Seva (2020) state that customers have concerns about how successfully these eco-labels are recognized and comprehended.

Even though there is considerable research on various elements of eco-labels, there are gaps in addressing an encompassing subset of features for evaluating consumer perceptions of eco-labels. With hundreds of eco-labels currently accessible in various nations, new eco-labelling systems are being established annually through organizations ranging from non-profit to commerce (Czarnezki, Pollans, & Main, 2018). However, with so many alternative eco-labels

on the market today, problems concerning how effectively they are comprehended by consumers emerge.

Using eco-labels is an essential technique to educate customers about environmentally friendly items. The growing popularity of these labels must be viewed considering the benefits they purportedly provide to businesses and consumers. The labels are meant to legitimize the company's business operations, insulate it from public oversight, and assist it in obtaining competitive advantages from the consumer's perspective. Labelling minimizes ambiguity regarding product environmental performance and allows customers to pick items that cause less environmental damage.

As a result, the growing number of eco-labels must be evaluated on various fronts, including consumer comprehension and perception of such labels. The research identifies a comprehensive set of criteria to investigate consumer perception of eco-labels. With the relevant literature and data collection methods, this study will explore the phenomenon of consumers' perception of eco-labels in South Africa.

1.3   RESEARCH OBJECTIVES

The study's purpose and goals will be covered within this chapter. The major and secondary objectives are formulated in the study's topic.

1.3.1   Primary objective

The primary objective of this study is to explore the perceptions of consumers in South Africa regarding eco-labels.

1.3.2   Secondary objectives

From the primary objective, several secondary objectives are emanated; the following secondary objectives emanating from the primary objective are:

SO1:   To identify the eco-labels currently present in the South African market

SO2 : To determine recognition of and response to the present eco-labels by consumers in South Africa

SO3:   To assess the impact of various consumer characteristics, e.g., age, sex, and education, on consumer recognition of eco-labels.

SO4:   To establish a connection between environmental considerations while purchasing and the awareness of eco-labels.

1.3.3   Methodological objectives

The methodological research objectives of this study are:

MO$_1$ To execute an evaluation of the literature on the perception of eco-labelling.

MO$_2$ To establish the most acceptable research approach for the project.

MO$_3$ Primary data collection and analysis.

MO$_4$ To aid researchers in determining focal areas for study by providing relevant findings-based conclusions and suggestions.

1.3.4   Research Questions

As a result, the following questions are addressed in this study:

a) What is the importance of the environment as a criterion in purchasing decisions?

b) What are the differences in consumer recognition of eco-labels within different geographical locations?

c) What eco-labels are currently present within the South African market?

d) Do consumers in South Africa recognize the present eco-labels, and what is the response to eco-labels by consumers in South Africa?

e) What are the impacts of various consumer characteristics e g age, sex, and education, on the consumers' recognition of eco-labels?

f) What is the relationship between environmental consideration when buying and recognition of eco-labels?

1.4   CHAPTER SUMMARY

This chapter introduced the study, followed by the development of the research's background. The introduction and background to the study thoroughly examined the South African consumer perception of eco-label. The study is classified into five chapters. The first chapter will outline the problem statement. The second chapter investigates a literature review on consumer perceptions of eco-labels. The chapter will begin with definitions of key concepts of eco-labels, followed by a discussion of how the environment impacts the consumers' understanding of Eco-label.

The third chapter will concentrate on the study's study technique and design, as well as the rational explanation for the approach chosen, by discussing and elaborating on the research sampling methods, data collecting, design of the measurement instrument to be utilized, and data processing. The fourth chapter will focus on the study's underlying conclusions. The empirical results will be results of actual statistics that has been acquired. This part will include interpretations of the surveys and indicators of themes explored in chapter two. Chapter five will conclude with recommendations and a summary.

2.1   INTRODUCTION

The first chapter of the study investigates the background of South African consumers' views of eco-labels. The chapter comprises the introduction and context, the issue statement, the research aims, the methodological objectives, the hypothesis, and the significance of the study. As a result, Chapter One outlined the scope of the research. The examination of the literature will be the primary emphasis of Chapter two, which will describe the study's independent components that impact the dependent variable. The literature review will offer information about the study's subject and the components being researched. The chapter includes a brief introduction, definitions of key study topics, previous research, and a theoretical framework detailing the variables of the study

According to Taufique *et al.* (2016), one needs to consider how labels are understood, utilised and acknowledged to evaluate the growing usage of eco-labels in business. In this regard, introducing eco-labels for the public or mandating them are policy choices that can supplement or replace taxes and norms (Yokessa & Marette, 2019). When consumers are aware of environmental concerns, an eco-label may be beneficial motivator. The presentation of information has a greater impact on a consumer's impressions of a product than the sight of an eco-friendly product solely. Consumers believe that such items are more animal-friendly, as well as better for nature and the environment. A variety of variables influences consumer views of eco-labels. This study will concentrate on customers' perceptions of eco-labels, their capacity to grasp label content, and their level of environmental care. Due to the limited efficiency of environmental labels in addressing the risks, researchers have attempted to enhance consumer comprehension of ecological labeling (Vlaeminck et al., 2014).

Consumers should be supplied with comprehensive knowledge to understand their products better (Grolleau et al., 2016). Chapter Two's purpose is to review the literature regarding consumers' perceptions of eco-labels. The aspects in chapter two will provide definitions of critical topics related to the study, past research, and a theoretical framework will act as a guideline for to the variables employed in the study to give insights on how they influence consumer attitudes concerning eco-labels.

2.2   DEFINITIONS

This section of the literature study will emphasise significant ideas related to Eco-labels, Environmental awareness, and Recycling. The emphasis will be on identifying the essential concepts associated with this study.

2.2.1   Eco labels

Czarnezki *et al.* (2018) mentioned that Eco-labels are certifications, and seals of approval serve various purposes, including informing companies and customers about the environmental features of a particular product or the risks that the product may represent. Eco-labels can significantly enhance environmental results in a variety of ways. Eco-labels educate customers on environmental qualities and promote product greening by raising consumer demand for environmentally beneficial attributes while decreasing demand for detrimental attributes (Czarnezki *et al.*, 2018). Despite their popularity, successful eco-labels confront several challenges and should not be noted as an independent regulatory instrument in most circumstances.

2.2.2   Environmental awareness

According to N Choisdealbha and Lunn (2020), a varied variety of eco-labels suggests distinct environmental considerations (e.g., carbon footprint, greenhouse gas emissions, forest impact, pesticide usage, water consumption, biodiversity, and energy use). It is challenging to prioritize consumer decisions for environmental advantage in the face of a growing number of environmental factors, such as air pollution, water pollution, and climate change, are causing concern., and renewable energy development. This confusion is amplified by many items available for purchase, each with a unique environmental impact.

Acharya (2020) observes that adopting eco-labels promotes environmental sustainability. As a marketing indicator, an eco-label recognises products or services that have been ecologically preferred within a particular category. Created on environmental standards, it assists consumers in making ethical and transparent decisions. Eco-labels are a globally accepted voluntary environmental assurance method that are qualified by a third party to recognise products based on their environmental effect (Królikowska, Ervenka, Pietrzyk, Fortuna, & Khachatryan, (2019).

2.2.3   Recycling

At the end of life, the remaining value of goods and components can be recaptured through recycling and recovering operations. Recycling is advantageous since it reduces the expenditure on virgin material (Gaines, Dai, Vaughey, & Gillard, (2021). To various individuals, the phrase sustainability implies different ways of thinking. However, in essence, it is the belief that systems (economic, environmental, and societal), including ecosystem functioning, must be renewed, and balanced to survive. Environmental behaviors encompass activities such as recycling and purchasing eco-friendly and local items.

2.3   ENVIRONMENTAL SUSTAINABILITY

Eco-labels intend to identify and promote environmentally friendly products and industrial processes (Hendricks, 2021). Eco-labels might thus be valuable tools that assist environmentally conscious consumers in finding items with confirmed environmental features (Musova, Musa, & Matiova, 2021). Consumers may assist reduce the environmental impact of production and employment by using "sustainable and environmentally friendly" goods and services. Consumers prefer green products and services and want businesses to pay more attention to environmental issues (Sharma & Kushwaha, 2019). The primary barrier consumers confront in the market is the selection of green products, among other items.

The information consumers see on eco-label is minimal and owing to a lack of awareness, they cannot make any conclusions (Delmas & Gergaud, 2021). It has been discovered that consumers are confused, ranging from moderate to extreme, about the eco-labelling procedures utilised by various businesses (Sharma, & Kushwaha, 2019). Confusion can only be eliminated if consumers are given accurate information about the greening degree of a product through adequate communication and the use of eco-labels (Sharma & Kushwaha, (2019). Knowledge is essential in communicating eco-labels and generating confidence, which allows the customer to make more informed purchasing decisions (Taufique, Polonsky, Vocino, & Siwar, (2019). Taufique & Islam (2021) stated that a consumer's broader environmental awareness and knowledge of eco-labels both play an essential role in influencing the consumer's attitude toward green purchases.

There are three strategies that businesses can employ to be more eco-friendly, namely reduce, reuse, and recycle.

2.3.1   Reduce

In designing management strategies, a primary emphasis is a reduction approach (Huang et al., 2018). If garbage is created, it is vital to reduce the amount of rubbish produced. It is necessary to establish strategies for reusing materials; eventually, if materials cannot be reused, it is critical to collect and recycle them, which is the final stage in management. Pickin, Randell, Trinh, and Grant (2018) identified various advantages of minimizing trash, such as earning money from collecting certain items and lowering CO_2 emissions. It is critical to conclude that reducing the quantity of trash created in environmental operations is the most environmentally friendly and cost-effective option. "Eco-labelling" is an intentional system of sustainability certification.

2.3.2   Reuse

Reusable items have a lower environmental effect than recycling; however, makers must focus on lightweight, recyclability, and eco-labelling strategies. Enough distinctive reusable goods and business concepts are available for replication. Purchases and low-involvement products are primarily restricted (Kunamaneni, Jassi, & Hoang, 2019). Reusable or durable materials are primarily found in niche zero-waste businesses, maybe because they provide a functional barrier in terms of consumption and ease. Consumers often believe appealing qualities to be more functional than unspeakable ones, hence are more likely to utilise them (Hosey, 2012).

Even if the materials are tough to use, they prefer to utilise those that seem more straightforward. Consumers are more inclined to continue using a product if it is more likely to be used. If a product is practical, attractive, and valuable all at the same time, consumers will not want to throw it away but will make the best use of it. Visuals and capabilities must find common ground, and the capacity to adjust to consumer needs is critical to successful green manufacturing. A product that delivers aesthetic information to the customer will have attributes that allow the consumer to feel continual pleasure by analysing it, feeling it, and using it (Harper, 2018).

2.3.3   Re-cycle

The world may be better if most manufactured things could be recycled and reused when their functional life has come to an end. Environmental waste disposal, such as direct environmental pollution, burning, or use as fillers, is inefficient and increases the environmental impact (Ferronato, Ragazzi, Gorritty Portillo, Guisbert Lizarazu, Viotti, Torretta, 2019). The goal of Green Recycling is to stimulate the green design of goods to ease the recycling process further, lowering the costs of recycling operations and, as a result, lowering the environmental costs associated with recycling (Okan, Aydin, Barsbay, 2019). Eco-labels help customers understand the processes of product consumption and recycling (Reike, Vermeulen, Witjes, 2018). The positive impact of kindness suggests that individuals are willing to contribute to improving the environment and human well-being.

2.4   PREVIOUS RESEARCH ON CONSUMERS' PERCEPTION

Previous research has not provided detailed environmental behaviour indicator measurements for recycling, eco-products, and green travel. As a voluntary device, Eco-label indicates environmentally valuable items (Struwig & Adendorff, 2018). Eco-label can help to shape consumer perceptions of a product's environmental effect. Eco-label has firmly established consumer decision-making because customers are informed about ecologically friendly products. Consumer awareness and eco-label perception are encouraged by consumer knowledge, environmental quality credibility, information clarity, motivation, and personal rewards (Taufique, Siwar, Chamhuri, 2016).

Environmental concerns influence consumers' green buying habits. Green buying practices is influenced heavily by environmental concerns (Joshi & Rahman, 2015). The atmosphere created by products labelled "environmentally friendly" regularly influences customer behavior (Haga, 2018). Consumer attitudes regarding the environment are motivated by eco-label knowledge, which forces environmentally conscious consumer behavior (Taufique *et al.,* 2016).

Eco-labels encourage consumers to buy eco-friendly items and publicise green product declarations (Iraldo, Griesshammer, & Kahlenborn, 2020). Unfortunately, most studies do not provide a detailed basis for accurate eco-label measures assessment. Customers are moderate to extremely puzzled about the eco-labelling processes employed by various firms. Uncertainty may be avoided if purchasers are given accurate information about a product's greening degree via excellent communication and eco-labels.

2.5   THEORETICAL FRAMEWORK

According to this study, customers' perceptions of eco-labels predict environmental behavior. Recycling, reusing, and reducing encourage environmentally friendly behavior (Alcock, White, Pahl, Davidson, & Fleming, 2020). Ecologically informative tools, environmentally friendly labelling, and environmental protection can be utilised to define an eco-label (Safitri, Umasih, Ibrahim, Sujarwo, Marini, & Wahyudi, 2019). Consumer attitudes on the environment are influenced by eco-label knowledge, which drives environmentally conscious consumer behavior.

The term "eco-labelling" refers to a way of voluntary sustainability certification. Certification of achievement and labeling are widely utilized across the world. An "eco-label" is a certification that acknowledges the overall proficient environmental fondness of a product within a product category.

The relationship summary hypothesised is explained in a prototype displayed in Figure 1.

FIGURE: 1   THE THEORETICAL FRAMEWORK OF THE STUDY
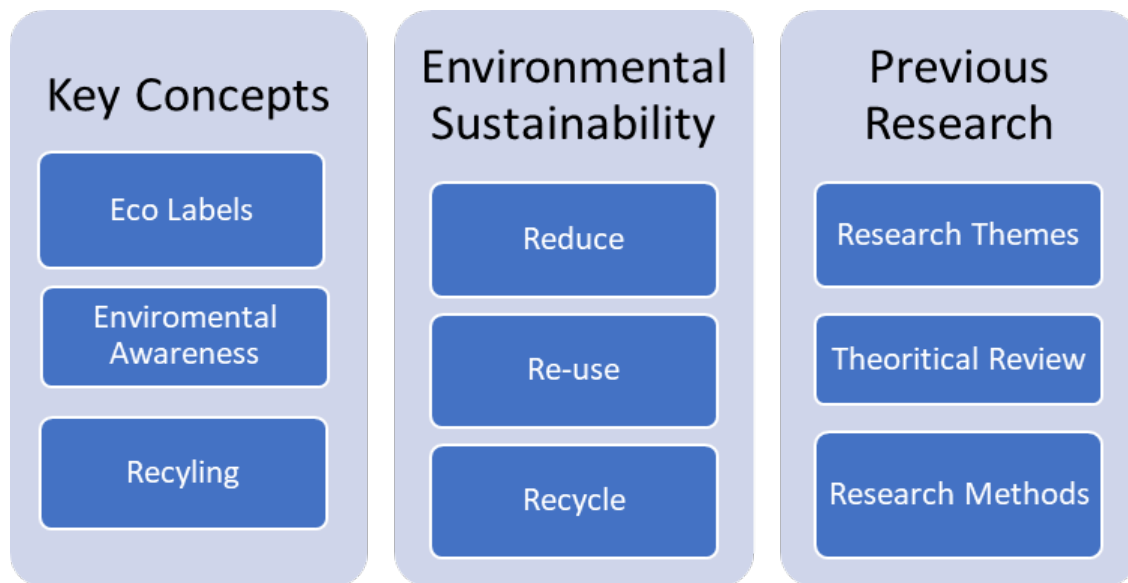
2.6 SUMMARY

This chapter examines the literature on consumer perception of eco-labels. It gives context for interpreting eco-labels among consumers. It delves deeper into environmental elements that may influence the adoption of eco-labels. According to the literature, environmental awareness has become increasingly crucial for customers to build their awareness of eco-labels. Therefore, consumers' perception of eco-labels is significantly impacted by environmental awareness.

To address the proposed study's goals and the research topic. A research approach must be undertaken and assessed in the third and fourth chapters of the study. As a result, the third chapter will deliver information on the data collecting techniques and analysis. Chapter four will focus on the data obtained from the respondents.

3.1   INTRODUCTION

The study's primary objective in chapter one was to explore consumers' perceptions of eco-labels in South Africa. The second chapter's literature review presented an in-depth examination of eco-labels and the conceptualization of eco-labels, as well as their benefits and limitations. As a result, the principal function of this chapter is to discuss the study strategy and methods used to accomplish the main and secondary goals.

This chapter covers the research strategy and methodology, which are supported by an overview of secondary research and a comprehensive examination of primary research, as well as a presentation of the research demographic and sample size. Before concluding the chapter, the data collection, measuring instrument layout, and data analysis will be examined, with an emphasis on the study's ethical components.

3.2   SECONDARY RESEARCH

Secondary research, according to Johnston (2017), is the act of obtaining, analysing, and translating existing data to establish findings in each area of interest. A thorough literature review will be examined to discover as many aspects as possible that may impact the effectiveness of understanding the customers' viewpoint on eco-label. Global and national digital information investigations will be conducted by the Nelson Mandela University Library, which will include Sabinet databases; ISAP (South African National Library); and SAE Publications; EBSCO: MasterFile Premier, Business Source Premier, Academic Source Premier; FS Articles First; Kovsidex; SA Cat and FS WorldCat; ScienceDirect; UPECAT; Google searches; Dialog; Dissertation Abstracts database and Science Direct database. Other international and national libraries will be consulted for data using Nelson Mandela University's inter-library lending services. Secondary research questions will be used in the development of a complete theoretical model defining consumers' perceptions of eco-labels.

3.3   RESEARCH DESIGN

Research design is a study-structured method that is designed to be suitable. The study's approach might be exploratory, interpretative, or observational. A method for exploratory research, according to Van Wyk (2012), is generally fluid and unstructured, and it is employed

when the objective of the study is to explore new ideas utilising quantitative methodologies. When conducting exploratory research, it is preferable to study a diverse range of variables and interactions; large samples are not necessary since exploratory research is not conclusive (Struwig & Stead, 2013).

According to Van Wyk (2012), a descriptive study seeks to find causal linkages between the components or variables relevant to the research topic. Descriptive research's major aim is to offer a precise and reliable picture of attributes that apply to the research topic (Van Wyk, 2012). The quantitative research strategy uses statistical data to save time and money (Eyisi, 2016). In data collection and analysis, this research method emphasises statistics and graphs. As a practical matter, a descriptive quantitative conceptual framework will be used in this study, relying on self-administered questionnaires.

3.4   Data collection

Data collection is acquiring observations or data that will be examined using Statistica 14.0. The study's data will be gathered from a sample of 15 randomly carefully chosen respondents. The data acquired will be reviewed and analyzed to answer the study question. This study's measuring method will be a self-administered questionnaire that respondents will fill out. There are three sections to the questionnaire: A, B, and C. Section A focus on consumers' perceptions of the environment's effect on their viewpoints. The respondents will reply to the questionnaire items using a five-point Likert scale, thus (1) strongly disagree, (2) disagree, (3) neutral, (4) agree (5) strongly agree.

3.4.1   Sample

A sample is a group of persons or objects picked from a broad population to gather data from and thoroughly study (Bhandari, 2020). The demographic for this study is Gqeberha area customers, and the sample is persons between the ages of 18 and 65 who shop. A sample is collected from a population representing all the different categories of target responders, according to Shukla (2020).

3.4.2   Data collection instrument

A questionnaire will be sent to respondents via email. The questionnaire will request demographic characteristics from respondents, which including gender, age, income, and educational level, to be able to understand their perceptions. It will father ask about buying behavior and what influence consumers in deciding on a purchase. Questionnaires will then be analysed using Statistic 14.0 to get a general overview of how consumers perceive eco-labels. As Goertzen (2017) mentions, quantitative research methods include collecting and analysing data that might have been interpreted numerically and evaluated using statistical analysis. According to Goertzen (2017), quantitative research evaluates attitudes and behavior and is the best research approach for completing the study.

3.4.3   Collection method.

Collection methods will be emails as they make the process of reaching more responses easy. Emails enable the respondents to receive the questionnaire in their comfort zone, allowing them to respond to the email in their own time. A questionnaire will be sent to respondents via email, and email addresses will be collected for the sample size of 15 respondents.

3.4.4   Data analysis

The researcher will extract meaningful information from the many selected publications from the data collecting phase to create a thorough literature review table that will offer an overview of consumers' perceptions of eco-labels. Since the data is quantitative, descriptive analysis is employed using tables, pie charts, and the mean to describe the participants' responses; this will aid in getting a greater insight into customers' perceptions of eco-labels. After collecting primary data, it will be analysed utilising analytical and statistical methods. (Sridhar, 2018) states that obtaining useful materials to aid in the development of results and additional recommendations is important. The main statistics from the provided questionnaires will be recorded in Microsoft Excel and analysed in statistica 14.0.

Statistica 14.0 a statistical and analytical computer application, will then be used to analyse the data. In addition, the data methodologies employed in this investigation will be descriptive, analysing the data collected are mean, median, mode, and standard deviation. T-tests and Chi

squares will also be employed to analyse correlations between variables. The precision of a measuring tool is to assess what it is created to assessed to verify the data's accuracy.

3.5   ETHICAL CONSIDERATIONS

In an investigation, ethics is concerned with appropriate conduct and rules while interacting with participants or responders. During the data collection and processing activities, recipients shouldn't be injured (Daniel, 2016). Due to the significance of ethics in research, this study will follow Nelson Mandela University's ethical standards and procedures and acquire ethical approval from Nelson Mandela University. To ensure that the study adheres to university ethical norms, a Full Ethical clearance form will be acquired. Precautions will ensure that respondents' information is kept entirely private, involvement is optional, and that respondents can opt out of the research at any moment, as specified in the measuring instrument's cover letter.

Furthermore, by deleting any identifiers, the respondents to this research will remain anonymous and safe. According to Caruth (2015), the fundamental ethical considerations in research must be knowledgeable permission, beneficence - do not hurt, anonymity and secrecy, and respect for privacy. The investigation will be carried out in agreement with ethical regulations of Nelson Mandela University's. Respect for privacy refers to the amount and conditions under which personal information is or is not shared with others (Caruth, 2015). This survey will solely provide information gathered from respondents on their attitudes about eco-labels. When gathering data from participants, these ethical aspects will be properly explored.

3.6   SIGNIFICANCE OF THE STUDY

There is a widespread belief that consumers do not read the labels on items they purchase; hence, it must be monitored and researched. The study aims to investigate consumers' view of eco-labels in South Africa. This knowledge will benefit organizations that sell products with eco-label to help them understand consumers' perceptions when it comes to eco-labels understanding. The higher the perceived value of eco-labels on items, the more favorable the influence on promoting customers' eco-friendly behavior.

3.7   CHAPTER SUMMARY

Chapter three discussed the research definitions of terms related to research design and procedure, together with the method the researcher obtains to conclude the research. Chapter two details the literature, which acted as a roadmap for the research process. Some literature on research designs and methods was obtained to select the relevant ones for the investigation. The popular research theories, methods, strategies, techniques, and procedures uncovered, as well as those directly linked to the study, were documented in the research design and methodology. The preceding sections also discuss the representative sample, procedures and data analysis, system components, gathering procedure, information processing, and moral implications.

4.1   INTRODUCTION

The earlier section covered the research strategy and technique utilized to gather evidence on notional and empirical aspects of this study. This chapter will summarize the findings of an empirical study conducted to assess respondents' attitudes toward eco-labels. The first section of the chapter will discuss demographic and sample descriptions; the descriptive statistics of sections B (Environmental awareness and Consumer response to Eco-labels) and C (Purchasing decisions) will highlight respondents' recognition of labels. The reliability of the questionnaire and validity will be put to the test. So, the correlations will display the understanding of the environment's relation to consumers' perception. To conclude, some T-tests will show the differences between demographics, Environmental awareness, consumer response to eco-labels, and purchasing decisions. Customers are more likely to be intrigued by the meaning of phrases since various producers use them according to different standards.

4.2   DEMOGRAPHIC AND SAMPLE DESCRIPTION

The demographic and sample structure are described in terms of:
· Gender
· Age
· Education
· Employment status
· Frequency of shopping
· Place of residence

Figure 4.1 illustrates the gender composition of the sample used in this survey.

FIGURE 4.1   GENDER COMPOSITION OF THE RESPONDENTS
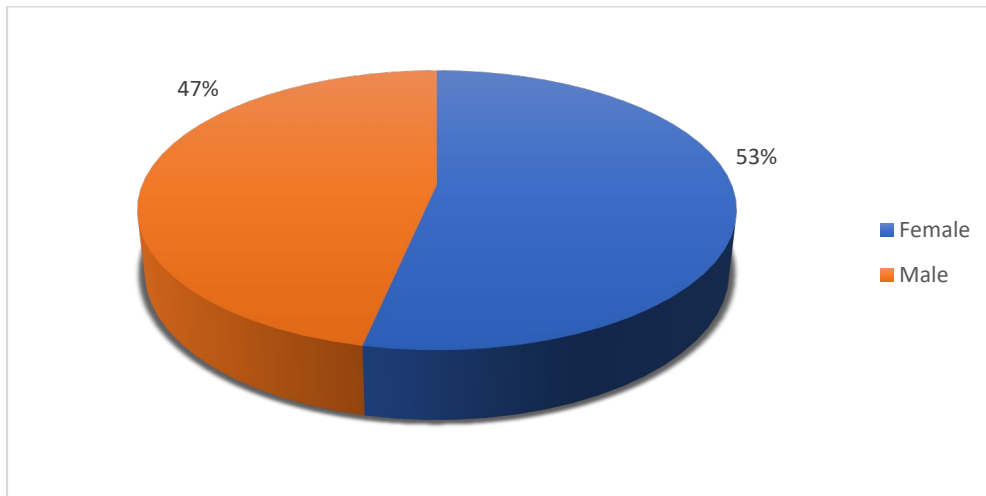
(n=15)

As indicated in Figure 4.1, 46.7% of the respondents were male, whereas 53.3% were female.

Figure 4.2 illustrates the age distribution of the sample used in this survey.

FIGURE 4.2   AGE DISTRIBUTION OF SAMPLE USED IN THE SURVEY
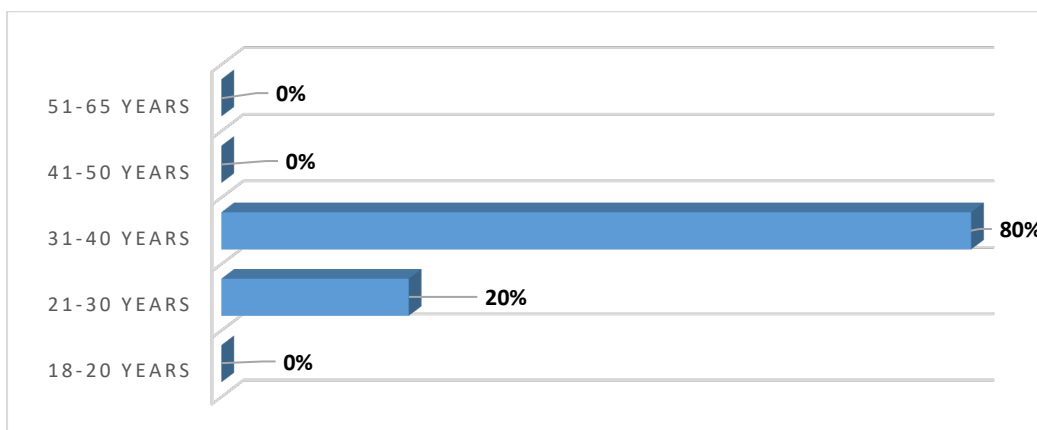
(n=15)

Figure 4.2 illustrates majority of study participants, 80%, comprised individuals between the ages of 31 and 40, and 20% were between the ages of 21-30. It is expected as most of the respondents were household owners.

Figure 4.3 illustrates the education level of the sample used in this survey.

FIGURE 4.3   EDUCATION OF THE SAMPLE USED IN THE SURVEY
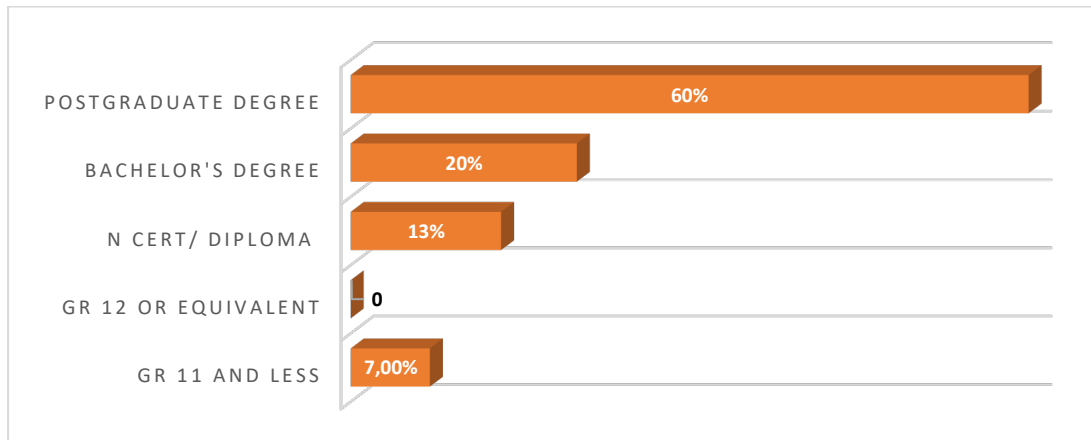
(n=15)

Figure 4.3 illustrates that most of the respondents had a Postgraduate Degree or diploma (60%), and 20% had a bachelor's degree, while a 13% had a National Certificate / Diploma.

Figure 4.4 illustrates the education level of the sample used in this survey

FIGURE 4.4   EMPLOYMENT STATUS OF SAMPLE USED IN THE SURVEY
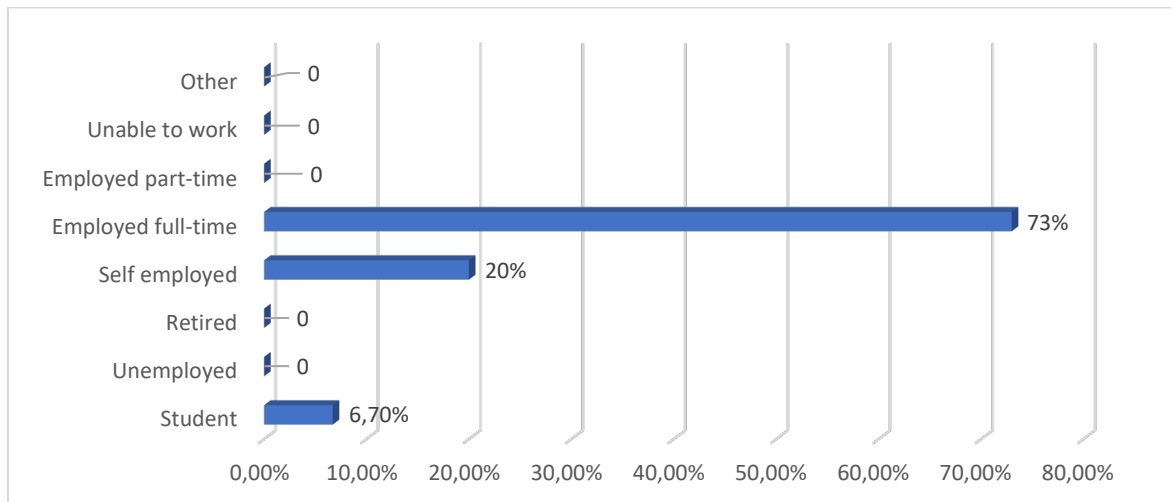
(n=15)

Figure 4.4 reveals that a higher number of respondents, 73%, worked full-time and 20% were self-employed, while 6,7% of respondents were students.

Figure 4.5 illustrates the frequency level of shopping in the sample used in this survey

FIGURE 4.5   FREQUENCY OF SHOPPING OF SAMPLE USED IN THE SURVEY
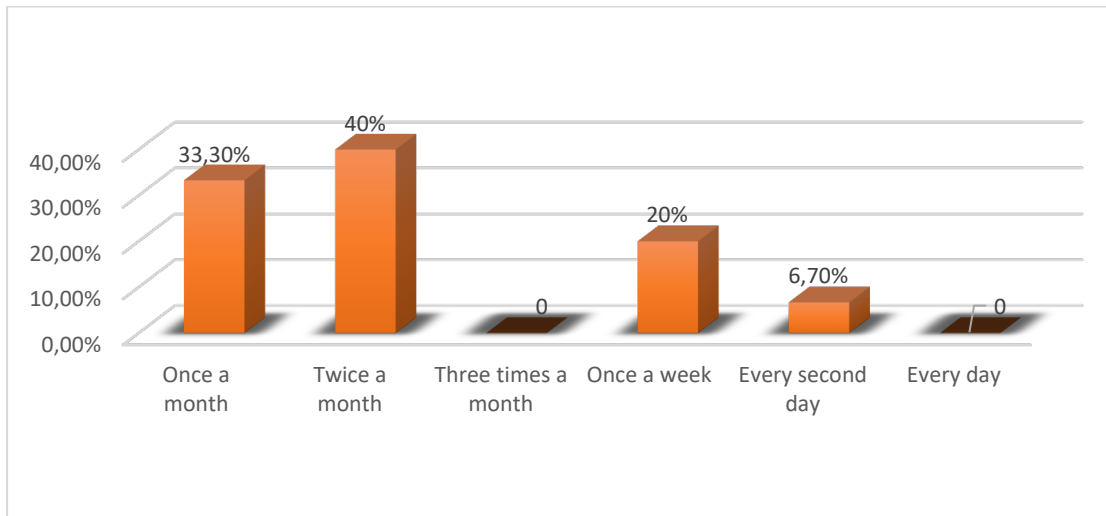
(n=15)

Figure 4.5 indicates that the greater proportion of responders, 40% shopped twice a month, and 33,3% shopped once a month, while 20% shopped once a week. The greater the frequency, the more chance one comes across eco-labels.

Figure 4.6 illustrates the residential of the sample used in this survey

4.6   PLACE OF RESIDENCE OF SAMPLE USED IN THE SURVEY

(n=15)

Figure 4.6 reveals that the greater proportion of responders (53,4 %) resided in houses, and (20%) resided in flats or apartments, while (13.3%) resided in townhouses and farms, estates, or plots.

4.3   DESCRIPTIVE STATISTICS OF SECTION B AND SECTION C OF THE QUESTIONNAIRE

Descriptive statistics provide summaries of the measures. Since the summary describing the sample was provided in section 4.2, this section outlines the descriptive results of the main variables of Section B of the questionnaire.

Table 4.1 provides the questionnaire's mean and standard deviation of section B.

Variable	Mean Value	Standard Deviation σ
I actively try to manage the amount of waste that I produce.	4.33	0.72
I strive to limit my impact on the environment as far as possible.	4.46	0.63
I have a significant concern for protecting the environment.	4.46	0.63
I consider the environment by purchasing environmentally friendly products.	4.26	0.79
I strive to only purchase energy efficient household appliances.	4.20	0.86
I have replaced light bulbs in my house with those of smaller wattage so that I will conserve on electricity use.	4.66	0.81
If I understand the potential danger to the environment that some products cause, I then do not purchase those products.	4.33	0.89
I strive to purchase products that have less packaging	4.13	0.91
I purchase toilet paper that is made from recycled paper	3.60	1.12
I read the labels of products to understand more about the product	4.06	1.09

Variable	Mean Value	Standard Deviation σ
I consider the environmental friendliness of a product in my purchasing decisions.	4.13	0.91
I read the consumer packaging information on products.	4.06	0.88
The label information on products influences my purchasing decision.	4.00	0.92
I trust the environmental labelling on products.	4.00	1.06
I have a good awareness of which products are environmentally friendly.	3.80	1.08
I perceive the quality of eco-friendly products to be better than other products	3.86	1.24
I often buy eco-friendly products	3.93	1.09
Eco-labelled products are my first choice	3.73	1.38
If a product has an eco-label, it has a positive impact on society	4.33	0.89
If a product has an eco-label, it is durable (last a long time)	3.80	1.14

The variables in Table 4.1 were graded using five-point Likert-type scales, with 1 and 2 reflecting that respondent clearly disagreed with the statement, 3 reflecting neutral, and 4 and 5 implying respondents strongly agreed with the statement.

As a result, the mean ratings of the variables in section B Knowledge of Table 4.1 reveal that majority of the concerns are relevant and consistently strong. Nevertheless, the mean scores of the variables given in Section B of Table 4.1 indicate that most of the questions had (mean values > 3.5) overall. Respondents were also asked about how their purchasing decisions influence their buying decisions.

Table 4.2 provides the mean and standard deviation of section c of the questionnaire.

TABLE 4.2: THE MEAN AND STANDARD DEVIATION OF VARIABLES MEASURING THE PURCHASING DECISIONS OF THE RESPONDENTS

Variable	Mean Value	Standard Deviation σ
The price of the product	3.46	1.3
The brand of the product.	4.2	1.14
The environmental impact of the content.	4.2	1.14
The environmental impact of the packaging.	3.8	1.32
Whether it has an eco-label	3.86	1.12
The quality of the product	4.8	0.41
The durability of the product	4.73	0.59
The impact of the product on society	4.26	0.88
Whether I understand the meaning of its label	3.86	0.91
Whether a social media influencer uses the product	3.00	1.69

The variables in Table 4.2 were measured with five-point Likert-type scales, whereby 1 and 2 represented that respondent did not find the statement meaningful, three stood for Neutral and 4, and 5 meant that respondents found the statement necessary.

The mean scores of the variables of section C Table 4.2, therefore, indicate that most of the questions are necessary overall. Only three out of Ten questions were (mean values < 3.5). On seven questions, mean values > 3.5.

4.4   RELIABILITY OF THE QUESTIONNAIRE

The reliability was examined to see whether mistakes were there and whether variables were nonexistent or minimal. Reliability tests guarantee that a questionnaire can be understood consistently across samples and settings. According to Saunders, Lewis, and Thornhill (2007), research dependability may be determined by answering the following questions:

1. Will the questionnaire yield similar results in different instances?
2. Will different researchers make similar observations?
3. Is the process of data analysis precise and objectively performed?

Statistica 14 was used to examine the internal reliability of the questionnaire to establish how accurate and consistent the test scores were. The internal consistency of the test results was determined using Cronbach's alpha. Tables 4.3 and 4.4 reflect the findings of the reliability tests performed on the research instrument.

Table 4.3 outlines the Cronbach alphas for Section B of the questionnaire.

TABLE 4.3: CRONBACH ALPHA FOR SECTION B OF THE QUESTIONNAIRE

Variable	Item-Total Correlation	Alpha if deleted
B1	0.11	0.96
B2	0.68	0.96
B3	0.59	0.96
B4	0.80	0.96
B5	0.55	0.96
B6	0.45	0.96
B7	0.74	0.96
B8	0.60	0.96
B9	0.78	0.96
B10	0.83	0.96
B11	0.86	0.96
B12	0.83	0.96
B13	0.70	0.96
B14	0.90	0.96
B15	0.85	0.96
B16	0.84	0.96
B17	0.86	0.96
B18	0.90	0.96
B19	0.64	0.96
B20	0.85	0.96
Cronbach alpha: 0.96		

From Table 4.3, it is stated that the Cronbach alpha is 0.96, indicating that the variables/measures were extremely dependable (Cronbach Alpha > 0.7).

Table 4.4 shows the Cronbach alphas for Section C of the questionnaire.

TABLE 4.4: CRONBACH ALPHA FOR SECTION C OF THE QUESTIONNAIRE

Variable	Item-Total Correlation	Alpha if deleted
C1	0.53	0.81
C2	0.33	0.83
C3	0.79	0.78
C4	0.70	0.79
C5	0.78	0.78
C6	0.16	0.83
C7	0.21	0.83
C8	0.52	0.81
C9	0.43	0.82
C10	0.63	0.80
Cronbach alpha: 0.83		

Table 4.4 demonstrates that the interdependence of the variables was adequate and exceeded the threshold (0.70). Cronbach's Alpha was applied to compute both the overall and structural reliability coefficients of Likert scale questions for a group of variables. All reliability and performance ratings exceeding the acceptable standard indicate a high level of consistency.

4.5   VALIDITY OF THE QUESTIONNAIRE

A questionnaire's scores are valid if the instrument measures what it purports to measure (Struwig & Stead, 2001).

4.6   CORRELATION ANALYSIS

Correlation is designed to assess the level of interaction between two variables (Senthilnathan, 2019). With values ranging between -1.0 and 1.0, the larger the distance of the correlation value and center' 0,' the more significant the relationship. The direction of the connection is indicated by a negative or positive symbol. The higher the linear relationship is to 1.0, the stronger the link between variables. Favorable correlation coefficients signify that higher independent variable one corresponds with higher values of variable two. Negative correlation coefficients, on the other hand, suggest that higher variable one values correlate with higher variable two

values, whilst positive reliability coefficients indicate that greater values of variable one is likely to correspond with lower values of variable two.

Table 4.5 exhibits the coefficients of relationship among the variables in Section B and the variables in Section C of the questionnaire. A negative or positive indication.

TABLE 4.5: CORRELATION COEFFICIENTS OF SECTION B AND SECTION C OF THE QUESTIONNAIRE
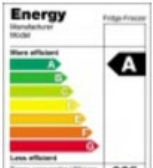
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
B1	0.35	0.09	0.17	0.22	0.23	0.00	-0.28	-0.04	-0.04	0.29
B2	0.32	0.06	0.74	0.71	0.69	0.11	-0.21	0.27	0.48	0.40
B3	0.15	0.25	0.55	0.54	0.39	0.38	0.16	0.65	0.24	0.53
B4	0.42	0.09	0.80	0.66	0.76	0.17	0.01	0.50	0.44	0.48
B5	0.29	0.39	0.61	0.73	0.54	0.12	0.39	0.30	0.40	0.20
B6	0.16	0.15	0.61	0.46	0.57	-0.21	-0.20	0.33	0.32	0.36
B7	-0.02	-0.14	0.83	0.72	0.75	0.00	-0.22	0.69	0.58	0.28
B8	0.66	0.18	0.45	0.56	0.57	0.45	0.07	0.13	0.45	0.65
B9	0.68	0.01	0.68	0.47	0.80	0.12	-0.06	0.33	0.36	0.72
B10	0.33	-0.07	0.78	0.75	0.82	0.35	-0.19	0.49	0.79	0.46
B11	0.60	0.38	0.86	0.73	0.85	0.08	0.20	0.57	0.36	0.74
B12	0.28	0.06	0.69	0.75	0.73	0.43	0.04	0.71	0.72	0.57
B13	0.24	0.07	0.67	0.64	0.62	0.19	0.26	0.52	0.42	0.23
B14	0.51	0.29	0.82	0.76	0.77	0.48	0.23	0.60	0.58	0.59
B15	0.32	0.32	0.84	0.62	0.74	0.22	0.02	0.81	0.55	0.51
B16	0.39	0.12	0.87	0.63	0.85	-0.06	0.05	0.62	0.61	0.44
B17	0.37	0.24	0.80	0.58	0.74	0.13	0.08	0.68	0.63	0.46
B18	0.43	-0.01	0.84	0.63	0.89	0.27	-0.18	0.64	0.65	0.64
B19	0.04	0.07	0.62	0.42	0.61	0.19	-0.09	0.78	0.66	0.19
B20	0.50	0.14	0.79	0.68	0.81	0.06	0.23	0.62	0.59	0.66
Red indicates statistically significance correlations (P <0.05)										

From Table 4.5, 09 of the 20 variables have statistically significant associations. However, most relationships are (below 0.5). Because respondents differ in their perceptions of eco-labels, the individual correlations are not that strong.

4.7 RESULTS OF THE RECOGNITION OF LABELS

Section D of the questionnaire contained 10 Eco labels where respondents had to indicate whether they recognised it or not. Table 4.6 indicates the results of the consumer recognition of ecolabels.

TABLE4.6: THE FREQUENCIES OF CONSUMER RECOGNITION OF ECO-LABLES

NAME OF LABEL	LABEL	%
1. ENERGY STAR: USA		80%
2. EU ENERGY LABEL		93%
3. ALU ALUMINIUM RECYCLING ECO-LABEL		66.7%
4. FOREST STEWARDSHIP COUNCIL (FSC) CHAIN OF CUSTODY CERTIFICATION		80%
5. AFRISCO CERTIFIED ORGANIC		40%

NAME OF LABEL	LABEL	%
6. CERTIFIED WILDLIFE FRIENDLY ®		26.7%
7. CFC BANNED ECO-LABEL		26.7%
8. NATRUE-LABEL		33.3%
9. GREEN BUILDING COUNCIL SOUTH AFRICA		53.3%
10. ISO APPROVED ECO-LABEL		66.7%

It should be observed that Eco-labels 3, 7, and 10 in Table 4.3 are all fictitious labels. According to table 4.6, majority of respondents recognize eco-labels. Number one (80%) of respondents recognized it, number two (93%) recognized the eco-label, number three (66.7%) recognized the eco-label even though it is a fictitious label, and number four (80%) recognized it. Number five (40%) recognized it. Number 6 rated (26.7%), number 7 (26.7%) of respondents recognized the fictitious label, even though it is fictitious, respondents recognized number 8 (33.3%), number 9 (53.3%), and number 10 (66.7%). The reason could be the respondents did not really know all the eco-labels.

4.8 CONCLUSION

The primary goal of this study was to explore consumers' perceptions of eco-labels. This component of the study reported on the empirical findings. Earlier, the demographic data obtained from respondents were combined and displayed. The researcher used Statistica 14.0 to conduct factor exploration and frequency analysis to establish the accuracy instrument's validity and reliability in this study. Statistica's basic statistics and table tools were also used to display the descriptive statistics from the study. In Chapter 5, an overview of research's findings will be discussed and based on the empirical analysis, suggestions will be made. The study's contributions and limitations will also be highlighted, followed by the study's findings.

5.1   INTRODUCTION

This study's primary objective is to explore consumers' perceptions of South Africa regarding eco-labels. Chapter 1 provided an overview reason for conducting the study.

The study's suggestions and findings are presented in the last chapter, Chapter 5. The second chapter reviewed the literature on consumer perceptions of eco-labels. The research technique for the study is described in Chapter 3. Then Chapter 4 featured data and assessments on customer attitudes toward eco-friendly living. The chapter describes how the research objectives are satisfied and research questions are addressed. The most significant results and suggestions are discussed, along with ideas, derived from the literature and experimental evidence. The study's significance is explored, boundaries are acknowledged, and suggestions for future research are proposed. Finally, the last reflections about the subject are offered to conclude the chapter and study.

5.2   SUMMARY OF RESEARCH

The summary of the research chapters is discussed in the sections below.

5.2.1   Summary of Chapter 1

Chapter 1 provides a thorough understanding of the research and its context. The research issue statements, study purpose, and objectives were all briefly stated. A literature survey on the main concepts essential to the study, namely, eco-label perception, was provided.

5.2.2   Summary of Chapter 2

Chapter 2 offered a general description of literature on consumer perceptions of eco-labels. The chapter began with definitions of critical ideas and the notion of eco-labels, followed by an examination of the several types of eco-labels found in businesses, as well as the significance of sustainable development. After that, there was a discussion about the value of eco-labels and the importance of environmental sustainability. The chapter concluded with an explanation of how consumers perceive eco-labels.

5.2.3   Summary of Chapter 3

Chapter 3 explains the proposed strategy and technique used to achieve this study's main and secondary objectives (as stated in Chapter 1). The study's research techniques were given careful consideration. The data collecting technique was covered, comprising population, sample size, and selection, as well as measurement device administration. As a measuring tool, a questionnaire was employed. Respondents were emailed the questionnaire and were expected to complete it online. The measuring instrument was divided into four parts. The statistical approaches used to analyse the data are also emphasised in each part. The chapter proceeded with a description of the information analysis method. The measuring instrument's correctness was addressed.

5.2.4   Summary of Chapter 4

The study's data evaluation and empirical findings were presented in Chapter 4. Following a statistical assessment of the respondents' demographic information, an explanation of the descriptive statistics was presented. Cronbach's coefficient alpha was obtained, and the results indicated that the measuring scales employed in the study were descriptive.

5.3   ACHIEVEMENT OF RESEARCH OBJECTIVES

The Sections below detail the attainment of the study objectives and the findings that answer the research questions.

5.3.1   Achievement of Primary and Secondary Objectives

TABLE 5.1: Achievement of Objectives

Objectives	Chapters
Primary objective	
To explore the perceptions of consumers in South Africa regarding eco-labels.	**All**
Secondary objectives	
To identify the eco-labels currently present in the South African market	Chapter 2
To determine recognition of and response to the present eco-labels by consumers in South Africa	Chapter 4
To assess the impact of various consumer characteristics, e.g., age, sex, and education, on consumer recognition of eco-label	Chapter 4
To establish the relationship between environmental consideration when buying and recognition of eco-labels.	Chapter 4
Methodological objectives	
To conduct an evaluation of the literature on the perception of eco-labelling.	Chapter 2
To establish the most acceptable research approach for the project	Chapter 3
Primary data collection and analysis.	Chapter 4
To aid researchers in determining focal areas for study by providing relevant conclusions and recommendations based on findings.	Chapter 5

(Source: Researcher's construction)

5.2.3   Addressing the Research Questions

Chapter 1 supplied the research questions based on the purpose and primary objective of the study.

Among the findings that answer the study questions are:

- Consumer understanding, environmental quality credibility, and eco-label perception contribute to increased consumer awareness.
- The environment has a greater impact on consumer attitudes toward a product than the presence of an organic label.
- Consumer perceptions are essential to the success of any eco-labelling strategy.
- Several factors impact how customers perceive eco-labels.
- The ambiguity of eco-label explanations affects consumer interest in understanding eco-labels.

5.4   MAJOR FINDINGS AND RECOMMENDATIONS BASED ON EMPIRICAL RESULTS

This section presents the key findings concerning the demographic profile of the respondents, as well as the statistical tests used to meet the study objectives specified in Chapter 1.

5.4.1 Demographic Profile of Respondents

The analysis of the demographic findings of the empirical survey yielded the following results:
- Females made up most responses (53%).
- Most responders (80%) were aged 31 to 40.
- Most responders (60%) obtained a postgraduate degree.73% of respondents were full-time employees, followed by (20%) who were self-employed and 6.7% who were students.
- Majority of respondents (40%) frequently visited the shopping Centre twice a month, while (33.3%) shopped once a month, (20%) shopped once a week and (6.7%) shopped every second day.
- 53.4% of respondents resided in Houses, (20%) resided in flats or apartments and (13.3%) resided on farms, estates or plots and Townhouses.

5.5   LIMITATIONS OF THE STUDY AND FUTURE RESEARCH AREAS

Several limitations were discovered during the study and that affected the study's effectiveness. The first limitation encountered in this study occurred during the analysis process when the researcher could not download Statistica 14.0. That influenced the time it took the researcher to conduct the empirical data analysis. The duration taken to conduct the data analysis was influenced by navigating Statistica 14.0. The second limitation is the study's sample size, which consisted of only 15 respondents required to complete the questionnaire. While this is insufficient to produce a result worth understanding, a greater number of participants in the future would allow the researcher to make more educated assumptions and analyses of the response.

Another limitation encountered was the collection of data from responders which was a challenge. Several respondents answered specific questions without honesty, which skewed the reporting on eco-labels recognition and made it difficult to understand their awareness of eco-labels as many recognized fictitious labels. Extending the responding size would allow a greater chance of quality reading as more respondents would have reached. A diverse sample of respondents could provide different perspectives on things. Respondents who frequently shop are also recommended for the study since they can be exposed to different types of eco-labels and may bring a new perspective to the investigated topic. Future research might focus on improving the abovementioned constraints.

5.6   CONCLUDING REMARKS

The current study achieved its primary goal of conducting a statical analysis by examining South African consumers' perceptions of eco-labels. However, as discussed in the previous section on the current study's limitations, the correctness of the current study's findings is not solid. The present study is expected to ignite academic interest, discussion, and accelerate new studies to ensure that the discipline of environmental sustainability in business research is appropriately represented. Allowing future researchers in the field to come up with creative concepts rather than only validate old concepts.

This research has provided value to organizations by understanding how consumers interpret eco-labels on the items they supply. Consumers' perceptions about eco-labels have shifted. Based on the empirical data, the recommendations clearly show that firms must provide their consumers with clear and legible eco-labels for a safe shopping experience. Consumer attitudes regarding eco-labels were positively related to all environmental awareness parameters. Eco-labels indicate the presence of quality, safety, and health advantages. Eco-labels, in many circumstances, enhance environmental quality and indirectly influence human health. Awareness of these indirect health advantages of a clean environment may be eco-label awareness.

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APPENDIX 1

Msikinya-MINI TREATISE-Draft

ORIGINALITY REPORT

15%	16%	1%	11%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

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Exclude bibliography	On		

APPENDIX 2

REF: [H22-BES-BMA-019]

NELSON MANDELA

UNIVERSITY

Faculty of Business and Economics

Nelson Mandela University

Tel: +27 (0)41 504-2692

E-mail: Miemie.Struwig@mandela.ac.za

Date: June 2022

Ref: H22-BES-BMA-019

CONSUMERS' PERCEPTIONS OF ECO-LABELS IN SOUTH AFRICA

Dear Respondent

The researcher will conduct a study that explore the perceptions of consumers in South Africa regarding eco-labels. Furthermore, the study will be conducted to identify eco-labels currently present in South Africa, to determine recognition of and response to the present ecolabels by consumers in South Africa, to assess the impact of various consumers characteristics, and to establish the relationship between environmental consideration when buying and recognition of eco-labels. The study will contribute to the lack of literature available on the implications of consumers perceptions of eco-labels in emerging countries. The results of this study will contribute to the treatises of the honours students and be used for a journal article

Your consent is needed before the questionnaire is completed to ensure that no conflicts arise from you taking part in this questionnaire. The questionnaire will include two sections. Section A will consist of data relating to the biographical information of the respondent while the second section, Section B will relate to perceptions of the respondents relating to eco-labels in South Africa. All data sources will be treated as confidential and will be used solely for research purposes. The collected data will exclusively be used for statistical analysis and no individual respondents will be identified in the research report. The collected data may also be utilised in future research.

You have the right to query concerns regarding the study at any time. Immediately report any new problems during the study, to the researcher. Telephone numbers of the researcher are provided. Please feel free to call these numbers. You have the right to withdraw from the study at any point in time and you can request that all information received from you be removed from the study. Please note that all necessary steps will be taken to protect your anonymity in the study.

Furthermore, it is important that you are aware of the fact that the ethical integrity of the study has been approved by the Research Ethics Committee (Human) of the university. The REC-H consists of a group of independent experts that has the responsibility to ensure that the rights

and welfare of participants in research are protected and that studies are conducted in an ethical manner. Studies cannot be conducted without REC-H's approval. Queries with regard to your rights as a research subject can be directed to the Research Ethics Committee (Human), Department of Research Capacity Development, PO Box 77000, Nelson Mandela University, Port Elizabeth, 6031.

Participation in research is completely voluntary. You are not obliged to take part in any research. If you do partake, you have the right to withdraw at any given time, during the study. If you withdraw from the study your results up to such a time will not be used.

Although your identity will at all times remain confidential, the results of the research study may be presented at scientific conferences or in specialist publications.

This informed consent statement has been prepared in compliance with current statutory guidelines.

Yours sincerely

Prof M Struwig

Research coordinator and researcher

Declaration/statement of consent: Please 'tick' (x) the box if you hereby understand the purpose of the study, you participate voluntarily, you understand that the study is anonymous as well as that all information is kept confidential.

☐   I consent to participate   ☐   I dissent to participate

Should you wish to receive a summary of this study's result, kindly supply your email address:

_____

Your email address will be kept in a password-protected file and not in the same file as the captured data. It will not be possible to link any response to any individual respondent or email address. Your email address and responses will be kept confidential.

QUESTIONNAIRE

Please indicate by means of a cross (X) your answer to the statements in the following sections.

SECTION A

BIOGRAPHICAL DATA

Please indicate with a cross (X) in the appropriate block.

1.   **Gender**

Female	1
Male	2

2.   **Ethnicity (not compulsory)**

Group	African	Coloured	Indian	White	Other
Response	1	2	3	4	5

3.   **Age in years**

16 – 20 years	1
21 – 30 years	2
31 – 40 years	3
41 – 50 years	4
51 – 60 years	5
60 years and above	6

4.   **Highest qualification**

Grade 11 and lower	1
Grade 12	2
National diploma or certificate	3
Bachelor's degree	4
Postgraduate degree or diploma	5
Other	6

5.　　　**Employment status**

Student	1	Employed full-time	5
Unemployed	2	Employed part-time	6
Retired	3	Unable to work	7
Self-employed	4	Other	8

6.　　　**Frequency of shopping**

Once a month	1
Twice a month	2
Three times a month	3
Once a week	4
Every second day	5
Every day	6

7.　　　**Place of residence**

House	1
Townhouse	2
Flat or apartment	3
Farm, estate or plot	4
Informal settlement	5
Other	6

SECTION B

ENVIRONMENTAL AWARENESS AND ENVIRONMENTAL PRODUCT DECLARATIONS/ ECOLABELS

	AS A CONSUMER…	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	I actively make an effort to manage the amount of waste that I produce.	1	2	3	4	5
2	I strive to limit my impact on the environment as far as possible.	1	2	3	4	5
3	I have a significant concern for protecting the environment.	1	2	3	4	5
4	I consider the environment by purchasing environmentally friendly products.	1	2	3	4	5
5	I strive to only purchase energy efficient household appliances.	1	2	3	4	5
6	I have replaced light bulbs in my house with those of smaller wattage so that I will conserve on electricity use.	1	2	3	4	5
7	If I understand the potential danger to the environment that some products cause, I then do not purchase those products.	1	2	3	4	5
8	I strive to purchase products that have less packaging	1	2	3	4	5
9	I purchase toilet paper that is made from recycled paper	1	2	3	4	5
10	I read the labels of products to understand more about the product	1	2	3	4	5

CONSUMER RESPONSE TO ECOLABELS ON PRODUCTS

	AS A CONSUMER…	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	I consider the environmental friendliness of a product in my purchasing decisions.	1	2	3	4	5
2	I read the consumer packaging information on products.	1	2	3	4	5
3	The label information on products influences my purchasing decision.	1	2	3	4	5
4	I trust the environmental labelling on products.	1	2	3	4	5
5	I have a good awareness of which products are environmentally friendly.	1	2	3	4	5
6	I perceive the quality of eco friendly products to be better than other products	1	2	3	4	5
7	I often buy eco-friendly products	1	2	3	4	5
8	Eco-labelled products are my first choice	1	2	3	4	5
9	If a product has an eco-label it has a positive impact on society	1	2	3	4	5
10	If a product has an eco-label it is durable (last a long time)	1	2	3	4	5

SECTION C

PURCHASING DECISIONS
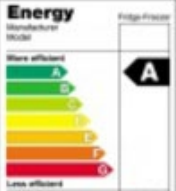
	What influence me in buying products	Not Important	Somewhat Important	Neutral	Important	Very Important
1	The price of the product	1	2	3	4	5
2	The brand of the product.	1	2	3	4	5
3	The environmental impact of the content.	1	2	3	4	5
4	The environmental impact of the packaging.	1	2	3	4	5
5	Whether it has an eco-label	1	2	3	4	5
6	The quality of the product	1	2	3	4	5
7	The durability of the product	1	2	3	4	5
8	The impact of the product on society	1	2	3	4	5
9	Whether I understand the meaning of its label	1	2	3	4	5
10	Whether a social media influencer uses the product	1	2	3	4	5

SECTION D

CONSUMER RECOGNITION OF LABELS

Please tick the boxes (x) to indicate if you recognise the labels. Do not tick it if you do not recognise the label

NAME OF LABEL	LABEL	TICK
1. ENERGY STAR: USA		
2. EU ENERGY LABEL		
3. ALU ALUMINIUM RECYCLING ECO-LABEL		
4. FOREST STEWARDSHIP COUNCIL (FSC) CHAIN OF CUSTODY CERTIFICATION		
5. AFRISCO CERTIFIED ORGANIC		
6. CERTIFIED WILDLIFE FRIENDLY ®		
7. CFC BANNED ECO-LABEL		

NAME OF LABEL	LABEL	TICK
8. NATRUE-LABEL		
9. GREEN BUILDING COUNCIL SOUTH AFRICA		
10. ISO APPROVED ECO-LABEL		

Thank you for completing this questionnaire