EFFECT OF GREEN MARKETING PRACTICES ON PURCHASE INTENTION:

MODERATION ROLE OF ENVIRONMENTAL KNOWLEDGE

KNUST

BY

KAFANDO SANDRINE LAETITIA

PROFESSIONAL DEGREE CERTIFICATE
(MARKETING COMMUNICATION OPTION)

A thesis submitted to the Department of Marketing and Corporate Strategy, Kwame

Nkrumah University of Science and Technology, in partial fulfillment of the requirements

for the degree of

MASTER OF BUSINESS ADMINISTRATION

(MARKETING)

School of Business, KNUST

College of Humanities and Social Science

MARCH, 2023

KNUST

DECLARATION

I hereby declare that this submission is my own work towards the Master of Science (Marketing) and that, to the best of my knowledge, it contains no materials previously published by another person nor material which has been accepted for the award of any other degree of the university, except where due acknowledgement has been made in the text.

Kafando Sandrine Laetitia   ……………………   …………………

(PG3965920)   Signature   Date

(Student's Name and ID)

Certified by:

Rev. (Prof.) Bylon Abeeku Bamfo……………………   ………………………

(Supervisor)   Signature   Date

Certified by:

Prof. Ahmed Agyapong   ……………………   ………………………

(Head of Department)   Signature   Date

DEDICATION

This thesis is dedicated to my daughter and mother for their support throughout my academic years.
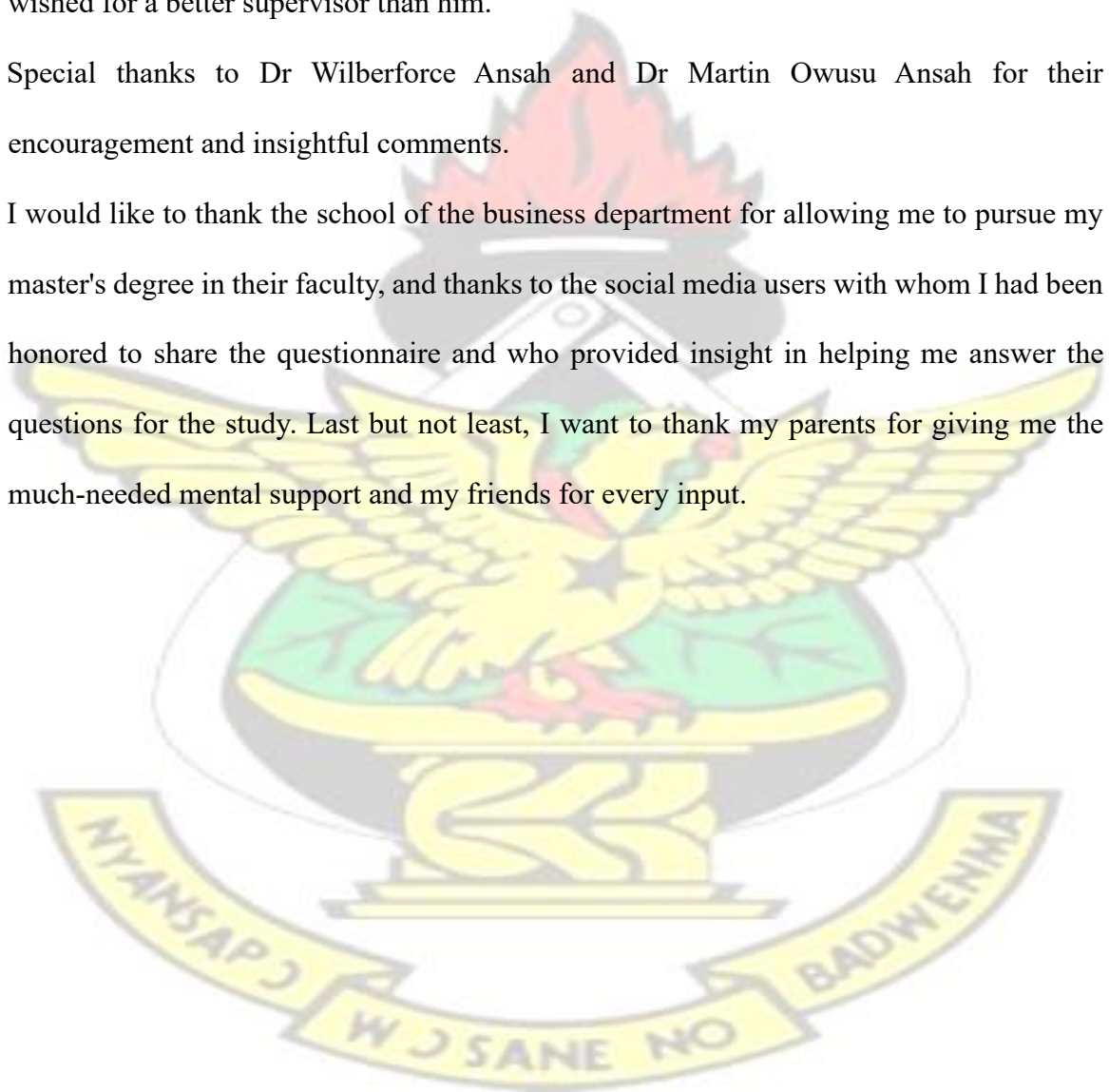
ACKNOWLEDGEMENT

ABSTRACT

The primary goal of this study is to investigate the connection between environmentally conscious marketing strategies, consumer environmental awareness, and consumer purchase intentions. Descriptive research, used in this study, tries to precisely and methodically describe a population, circumstance, or phenomena. There are 85,000 people in the study, including students at Kwame Nkrumah University of Science and Technology (KNUST) in Kumasi. Simple random sampling uses 398 randomly generated integers, which are used to select a sample for this investigation. The primary sources are where the study's data will come from. Primary sources provide raw information and first-hand evidence. Using the use of closed-ended questionnaires with a five-Likert scale, the study's data has been gathered. Statistical techniques from the Statistical Package for the Social Sciences are being used by the researcher to produce the data analysis based on the objectives and questions from the study (SPSS). The study revealed that green promotion and products positively and significantly influence the purchase intention of customers of water bottling companies. It was also revealed that environmental knowledge significantly moderation the relationship between green products, promotion and the purchase intention of customers of bottled water. Therefore, the study concludes that green products and promotion have a significant relationship between the purchase intention of customers of bottled water and environmental information moderates the relationship among green products, promotion and purchase intention of customers. Thus, customers pay attention to environmental knowledge, and green products and promotion are more important. Consequently, the continuous improvement in product quality and promotion concentrating on the green mix can bring high yields for the company. It is recommended that companies improve their products and develop them to be friendly products to the environment.

TABLE OF CONTENT

CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

GENERAL INTRODUCTION

1.1 Introduction

The introduction section is to draw the reader in with a strong beginning of the study and it is setting the stage for research with a clear focus, purpose, and direction. This section emphases on the study's background, problem statement, research goals, importance of the research, the study scope, methodology overview, and organization of the research.

1.2 Background of the Study

Green marketing arose as a result of organizations' concern for the environment. According to Razzak and Jassem (2019) organizations knew that their survival and continuity depended on balancing the organization's objectives with the benefits of consumers and society. The discovery of this coherence between these three goals suggests that firms recognize the need of using green marketing to help them survive and thrive in the long run. Because a successful corporation requires an unwavering environment, the organization's societal responsibility tends to generate an improved social environs, which aids the institution in the long run. Maltais & Nykvist (2020) asserted that almost every firm focuses on producing green products and adhering to Green Marketing principles.

The study of green marketing is not particularly new. The term "green marketing" initially appeared in the late 1980s to describe the promotion of environmentally friendly products. According to Agustini et al. (2021) green marketing refers to actions that aim to reduce negative environmental repercussions. These approaches have not been extensively adopted and are used by only a few businesses worldwide. According to

Nekmahmud and Fekete-Farkas (2020), the primary purpose of green marketing is to modify customer habits. Eco-centric marketing, in particular, should play an instructional role before reforming clients' consumption conditioning. As a result, they may be more responsible for the environment in decision-making. Furthermore, green marketing aims to provide clients with critical information regarding product quality, consumption, maintenance, and disposal. According to Dangelico and Vocalelli (2017), green marketing practices include a mix of green products, green prices, green places, and Green Promotion.

Green products, according to FuiYeng and Yazdanifard (2015), are those that adhere to environmental standards and requirements. Customers' needs for a harmless and better environment are just as vital as their needs for improved and developed products, and both should be taken into account. In the past ten years, marketers have routinely used terms like "green products," "sustainable," "environmentally friendly," "proenvironmental," "ecological," and "ecological marketing" interchangeably to inform and entice clients (Maltais & Nykvist, 2020).

Green pricing, according to Mahmoud (2018), is the price set in consideration of the business' environmental policies as enacted by regulations and directives from the organization or as a result of its actions in this area. A product's price is the sum paid for it. It plays a significant role in the marketing mix. According to Agustini et al. (2021), the majority of clients will only pay extra if they think the product is value more. Its value could be improved functionality, design, aesthetic appeal, or taste.

Logistics management in the green space aims to decrease transportation emissions and resulting to carbon output (Trivellas et al., 2020). Moreover, it relates to secure cycling operations that take place in accordance with environmental conditions and standards as

well as delivery gates that transaction with green products that are suited for clients, in terms of enabling their distribution (Maltais & Nykvist, 2020). Location refers to the place where something can be purchased. It can be applied to both physical and online retailers.

Presenting truthful information about products in a manner that protects consumers' moral and money-oriented interests is signified to as "green promotion" (Mahmoud, 2018). Green marketing involves creating promotional tools such advertisements, marketing collateral, signs, white papers, websites, PR campaigns, sales incentives, direct mail, inperson promotions, films, and presentations while keeping in mind people, the environment, and financial success.

Khandelwal and Bajpai (2011) assert that the elements of green marketing shape consumers' purchase intentions. Purchase intent is the prospect that a customer will make a purchase of a good or service (Ottman, 2017). Marketers use predictive modeling to examine purchase intent by predicting potential future outcomes based on previous data. It should be emphasized that the degree of consumer environmental responsibility divides the green market into several categories in addition to reflecting client opinions and buying habits. The desire for eco-friendly products has served as a conduit for consumers' growing environmental concern, and the "going green" movement has gained global momentum as people have become more conscious of how to live healthily. Water bottling industries are not exempt from some businesses' sincere efforts to protect the environment. Cooney (2010) estimates that $300 billion was expended on eco-friendly goods in 2008 by eight out of ten participants of the Lifestyles of Health and Sustainability (LOHAS) Club.

Mahmoud (2018) stated that purchasing green products necessitates certain additional consumer concessions, such as paying a green premium, which results in higher prices for these products because some states say that green products have higher production costs. Yet, some businesses take use of this to position their goods in eco-friendly market niches and charge premium prices, regardless of the cost of production, simply for positioning and brand considerations. Additional compromises include consumers understanding that the performance of their products may be affected because they are environmentally friendly and finding green products in unexpected locations. Moreover, Baker (2003) thinks that some traits must be ingrained in clients. Consumers are aware that environmental problems constitute serious challenges for society and that their actions have an impact on the environment, which may have consequences for subsequent generations.

1.2 Problem Statement

Green concerns were required to protect our natural resources because Mother Nature had been destroyed. Conserving the environment through initiatives like CSR is one way to use the green marketing strategy (CRS). Consumers are growing increasingly aware about environmental concerns that have an impact on their daily lives and more ecologically savvy (Suki, 2013). Because fewer businesses use green marketing techniques, there is still a lack of awareness of green practices in Ghana, a developing nation. Only a few businesses use this green marketing strategy, but consumers were forced to become conscious of green and environmental issues (Rajput et al., 2022).

Green marketing has become a hot topic in the consumer-packaged products industry over the last few decades. The bottled water industry faces great problems in developing a unique product to compete in a highly competitive market.

Academics in Ghana are interested in green marketing, but little attention has been given to how it affects consumer behavior, especially that of tertiary students. Braimah and Tweneboah-Kodua (2011), for instance, investigated how Ghanaian consumers perceived green marketing and if it affected their purchasing behavior. Adinyra and Gligui (2012) examine Ghana's potential for green marketing based on consumer behavior. Once more, Braimah (2015) looked into the factors that affect how consumers perceive concerns with green brands and how likely they are to make repeat purchases. Because consumer knowledge of environmental issues influences consumer spending behavior (Maltais and Nykvist, 2020), Ghana is a potential market for environmentally beneficial items. It is unclear what kind of relationship there is between education and environmental knowledge or how it affects pro-environmental behavior, despite the fact that they appear to be significantly and directly related (Zsóka et al., 2012).

In the meantime, Ghanaian hotels specifically looked at environmental issues, although the impact on customer pleasure was little. Mensah (2006) also looked into the degree to which hotel environmental management principles were adopted and put into practice in the Greater Accra Region, as well as environmental management policies and processes. Amegbe et al. (2017) looked into the performance of Ghanaian SMEs in terms of their commitment to green marketing (2017). Similar research was conducted by Owusu, Badu, and Muhammad (2016) to determine how green marketing in Ghana affected consumer happiness and environmental security. Bosompemah (2017) investigated the influence of green branding on customers in the Ghanaian cosmetic industry. This indicates the interest Ghanaian consumers have in green marketing.

According to Owusu et al. (2016), the common green marketing practices among bottled water companies are green products and green promotion. For instance, Amegbe et al.

(2017) asserted that bottled water companies have always been good stewards of the environment, continuously developing innovative and efficient ways to use and conserve resources, whether it be water, packaging materials, or recycling. Also, Maltais and Nykvist (2020) asserted that the bottled water industry has a vested interest in promoting recycling efforts because bottled water companies need post-consumer plastic polyethene terephthalate bottles in order to make new bottles using recycled polyethene terephthalate bottles.

It should be emphasized that green marketing has grown in favor of industrialized countries (Khare, 2014). However, when it comes to green marketing in Ghana, it is worth noting that the green market mark remains ambiguous (Adinyira, 2012). Previous study in Ghana did not take into account situational elements such as green product, green price, green place, and green promotion when considering the influence of green marketing on customer purchasing behavior. The study seeks to observe the effect of green marketing on purchase intent among clients of bottled water.

1.3 The Objective of the Study

The major aim of this research is to explore the relationship between green marketing techniques, environmental understanding and the purchase intention of customers of water bottling companies. The study specifically aims to accomplish the following goals:

1. To examine the effect of a green product on the purchase intention of customers of bottled water.

2. To examine the effect of green promotion on the purchase intention of customers of bottled water.

3. To examine the moderation effect of environmental knowledge on the relationship between green products and the purchase intention of customers of bottled water.

6

4. To examine the moderation effect of environmental knowledge on the relationship between green promotion and the purchase intention of customers of bottled water.

1.4 Research Questions

The following research issues will be addressed by the project:

1. What is the effect of the green product on the purchase intention of customers of bottled water?

2. What is the effect of green promotion on the purchase intention of customers of bottled water?

3. What is the moderation effect of environmental knowledge on the relationship between green products and the purchase intention of customers of bottled water?

4. What is the moderation effect of environmental knowledge on the relationship between green promotion and the purchase intention of customers of bottled water?

1.5 Significance of the Study

The research would aid in the creation of a green marketing pattern and the selection of green marketing projects for the production of green goods. This study could have a large and important impact on educating readers about the role that customers play in the marketing of green bottled water and the preservation of the planet's resources. Also, it would show business strategies for selling green products that would better serve consumer demands.

Furthermore, the study aims to provide insights into the possibility of a green consumer market by analyzing consumer perceptions and attitudes toward green items, particularly

bottled water. The information gained will be useful to local and foreign producers of green bottled water looking to get into the Ghanaian market. It will also provide intuitions to enable future research on the function of mediators in green marketing for businesses, particularly cosmetic enterprises. This is due to the fact that, as far as the researcher is aware, no prior research has been conducted on the mediator influence of situational elements in green marketing on the consumer purchase behavior of students in the Ghanaian bottled water sector.

1.6 Scope of the Study

The scope of the research is organized into context and geography. The survey would only include Kwame Nkrumah University of Science and Technology students in terms of geography. Contextually, the study would be restricted to figuring out how green marketing strategies affect consumers' propensity to buy bottled water.

1.7 Overview of Research Methods

The research employed a quantitative descriptive research design. With this layout, the study will gather numerical data for the population sample's statistical analysis. The study technique is cross-sectional survey, and the research specifically used a descriptive research design. The validity assessment is based on the Cronbach's Alpha value, and the researcher examined the reliability of the first 20 participants.

Students from Kwame Nkrumah University of Science and Technology made up the study's population (KNUST). The study's sample size is 398 because a major portion of the student population was selected using the Slovin formula. The cluster sampling technique, a probability sampling methodology, is being used in this investigation. For research reasons, the population was separated into a number of groups (departments),

and using the cluster sampling technique, respondents were chosen at random from these categories for the purposes of data gathering and analysis.

A set of questions-based surveys were used to attain primary data. All of the questions on the surveys will be closed-ended. Descriptive statistics will make up a large portion of the data analysis. Included were recurrence rates, percentages, averages, and standard deviations. Regression and correction were also used by the researcher for its analysis and discussion.

To make sure that proper ethical conduct was followed during the trial, the researcher took a number of precautions. Before starting the research project, the researcher is aware of the roots and traditions of research ethics. In order to protect both human and nonhuman subjects, the researcher adhered to the practices and procedures.

1.8 Limitation of the Study

Like any other scientific study, the present study is restricted in terms of study design that study used a descriptive design which means data is obtained once in the lifetime of the research. The type of sample used in this research, which involved KNUST students, was thought appropriate given the makeup of the population. The results cannot be extended or compared to the other schools inside because a random sample was employed, hence they would have limited external validity. All ranks of the organization's personnel were represented in the sample.

The sample frame for this study was limited to university students at Kwame Nkrumah University of Science and Technology at the time the survey was administered due to limited accessibility and time restrictions. While recruiting college students for experimental studies is standard procedure in academic research, care must be taken when extrapolating findings to a group that isn't made up of students (Peterson 2001).

1.9 Organisation of the Study

Five chapters are used to organize and present the research work. The research backdrop, problem statement, research objectives and questions, the research justification, a description of the methodology, and the study's scope are all included in the introduction, which is presented in Chapter 1.

The literature review is included in Chapter 2 and analyzes pertinent research that backs up the work. The research's methodology is described in Chapter 3. The study design, population, sampling method, data collecting, and analytic method are all critically discussed in this section. The study's results are covered in Chapter 4 of the book. This clarifies the study more. The study's findings, conclusions, and suggestions are compiled in Chapter 5.

1.10 Summary of the Chapter

The chapter starts by providing an introduction to the study variables, which include green products, green promotion, environmental knowledge, and the purchase intention of customers. Marketers analyse purchase intent using predictive modeling to determine the likelihood of potential outcomes based on past data. It should be highlighted that the level of environmental responsibility of clients not only reflects their perceptions and purchasing patterns but also separates the green market into various segments. Consumers are growing increasingly aware about environmental concerns that have an impact on their daily lives and more ecologically savvy (Suki, 2013).

The problem is in Ghana, a developing country, where knowledge of green practices is still low because green marketing stratagems are adopted by less corporations. Consumers were compelled to become aware of green issues and environmental issues, and only a few firms partake in this green marketing technique.

The study seeks to achieve four objectives. The review of the methodology was done, and there was a section that provided information on the organization of the research.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

The study's literature review is presented in this chapter. It reviews the theoretical and the empirical literature of the study. The theoretical literature review focused largely on the

description and discussion of relevant theories or concepts that have been tested and proven to be relevant. The empirical review discussed similar studies on the topic. It concentrates on the concept of green marketing, and the concept of purchase intention.

2.2 Conceptual Review

The concepts underpinning the study are discussed in this section of the study. A concept review is a procedure for weighing many and occasionally opposing concepts to determine which ones an organization should fund and develop to completion (Schleicher et al., 2019).The concepts reviewed included green marketing, purchase intention, and purchase intention.

2.2.1 Green Marketing

Green marketing encompasses environmental-related activities and is described as marketing and movements aimed at the development of ecologically responsible and safe products (Agustini et al., 2021), as well as marketing methods that make use of ecological issues (Ottman, 2017). In this case, a company's marketing operations are connected to the environment through product adaptation or variation, manufacturing process, packaging, promotion methods, and an increased awareness of compliance marketing among industries (Mukonza & Swarts, 2020).

According to Banerjee (2017) the promotion of goods and services that are ecologically friendly is known as "green marketing." As more people become concerned about environmental issues and choose to spend their money in an environmentally friendly way, green marketing is becoming more and more popular. According to Prakash and Pathak (2017), this can involve creating an environmentally friendly product, adopting environmentally friendly packaging, applying sustainable business practices, or concentrating marketing efforts on messages that emphasize a product's green

advantages. This type of marketing can be more costly because to the increased demand, but it can also be successful (Kapferer & Bastien, 2017).

Green marketing, according to Dangelico and Vocalelli (2017), is the process of developing and marketing goods depending on how environmentally sustainable they are, in reality or in the consumer's mind. By giving a portion of the money they make from sales to environmental projects like planting trees, some companies can also project an image of being environmentally conscious (Ottman, 2017). Green marketing is a component of a bigger movement toward more environmentally and socially responsible business operations. Customers are expecting businesses to show that they are dedicated to enhancing their operations in addition to adhering to various environmental, social, and governance (ESG) criteria. In order to achieve this, a lot of businesses frequently publish social impact statements in which they track their own development.

Investors may view these green marketing strategies as essential to building and sustaining a strong brand, especially for businesses that cater to consumers, like Starbucks. Yet, some detractors contend that green marketing can exacerbate the advantages already enjoyed by larger firms at the expense of their smaller or mid-sized rivals. According to Conick (2019), some marketers try to capitalize on the rising number of eco-conscious consumers by merely using green marketing on products that wouldn't normally bear the label. When their products are not, marketers attempt to promote them as being environmentally friendly. An illustration would be when a company uses the word "green" or the color "green" anywhere in their marketing even when their product isn't very eco-friendly or isn't more eco-friendly than similar products.

According to Szabo and Webster (2021), greenwashing is a marketing and communication strategy utilized by companies and other organizations. To promote a

perception of ecological responsibility among the general population, it includes conveying ecological reasons. In addition to being dishonest, "green washing" can be detrimental to a company's reputation (Agustini et al., 2021). But, the reality of the events differs, or only slightly differs, from the communications' communicated substance. This phrase, which combines the words "green" with "brainwashing," was created by nongovernmental organizations (NGOs) in the early 1990s to draw attention to the actions of large corporations that were harming the environment (Darwall, 2019).

As clients pay extra consideration to the expansion of acts that protect the environment and the effects of pollution, consumer environmentalism is growing in popularity throughout the globe (Banerjee, 2017). People are more willing to purchase environmentally friendly green goods as a result (Liobikien et al., 2017). Because of the ubiquity of environmentalism and the advent of rigorous environmental restrictions, businesses must modify their business strategies in order to capitalize on green prospects (Chopra & Chaudhary, 2021).

A current development in the marketing commerce is the field of "green marketing," which has grown meaningfully in response to consumer demand. Any marketing creativities intended to elicit and uphold consumers' environmental attitudes and behaviors are included in the process known as "green marketing" (Biswas, 2020). In order to satisfy their customers' environmental needs or ambitions, firms might employ the notion of green marketing to create green differentiation strategies.

2.2.3 Purchase Intention

According to Pea-Garca et al. (2020), purchase intent reflects the likelihood that consumers will intend to purchase or are willing to make a future purchase of a specific commodity or service. One of the most important pieces of information that marketing

14

managers use to forecast future sales and assess how their actions will effect consumer behavior is the expression of consumers' purchase intentions. An increase in buying intention is associated with an increase in the likelihood of making a purchase, according to prior research. Between 70 and 90% of market research clients regularly track and use purchase intentions, according to a survey (Kytö et al., 2019). Positive brand engagement will persuade customers to make the purchase if they have a favorable intention to do so.

Purchase decisions made by customers are difficult. Purchase intent is often linked to consumer behavior, beliefs, and attitudes, according to Pea-Garca et al. (2020). Buying behavior plays a crucial role in a consumer's capacity to access and assess a certain product. Purchase intention is a good tool for anticipating the purchasing process, claim Nam et al. (2017). Price, as well as perceived value and quality, can affect a buyer's intent to buy. Furthermore, during the purchasing process, buyers are affected by both internal and external variables (Mirabi et al., 2015).

Prior to making a purchase, researchers advised following these six steps: awareness, knowledge, interest, preference, persuasion, and purchase (Nugraha & Setyanto, 2018: Bhatia & Jain, 2013). Consumers frequently think that investing in low-priced, unbranded products comes with a significant risk because they can never be sure of their quality (Gogoi, 2013). In their most recent study, Zubcsek et al. (2017) offer several arguments in support of the notion that consumers' movement patterns frequently reflect their product preferences, which marketers should take advantage of to better promote their commercial offers.

Consumers are becoming more worried about the reliability of information obtained online, the sustainability of packaging, and the quality of sources for bottled water, according to Sogari et al. (2017). First off, there are many places where you can find

15

bottled water that have good water quality, and there are also numerous water springs in ecologically sheltered areas. The use of various chemical fertilizers, industrial wastewater discharge, and tourist rubbish will cause water pollution as nearby agriculture, industry, and tourism grow, negatively affecting the ecological environment and the health of nearby residents.

If the plastic packaging used for bottled water is not reprocessed and managed in a timely manner, it will pollute the environment. Furthermore, dangerous compounds, such as micro plastic particles, will precipitate out of bottles that have been used regularly for an extended period of time, causing negative impacts on human health. To conclude, organizations' online bottled water advertising frequently incorporates incorrect material, misrepresenting the purpose of bottled water and creating online word-of-mouth assessments.

2.2.4 Environmental Knowledge

According to Hosen et al. (2020), environmental awareness is the knowledge of the fragility of our environment and the importance of its preservation. A straightforward strategy for protecting the environment and helping to create a brighter future for our children is to promote environmental awareness. The definition of environmental literacy that is most frequently used includes an understanding of the environment, a concern for its problems, as well as the knowledge, abilities, and drive to work toward resolving current issues and preventing future ones (Liobikienė & Poškus, 2019). Understanding the environment is crucial because it can help minimize pollution and global warming.

Encouraging renewable resources like solar, wind, and water energy can help create a world that is more sustainable.

It is essential to have a good grasp of our natural surrounds in order to comprehend how our actions impact the health of our local and global settings. According to Liobikien and Pokus (2019), the term "environment" refers to both living and nonliving components of nature.

The physical environment is harmed by a range of human activities, including deforestation, pollution, population growth, and the combustion of fossil fuels. Changes like this have worsened climate change, land erosion, poor air quality, and unusable water. Mahmoud et al. (2020) defined "green buying intention" as a consumer's potential or desire to select a product that is more ecologically friendly than conventional items if they are engaged in environmental and conscientious concerns. This is so because the effects on the environment generally outweigh the bulk of the producing process.

Elements in the existing and predicted economic environment, such as the level of prime request, the projection for the economy, and the cost of financing, have a considerable impact on business buyers. Business buyers typically utilise their inventory rather than making new investments when the economy is uncertain.

2.3 Green Marketing Practices

Green marketing necessitates a holistic strategy, it implies that a firm cannot just tout the environmental friendliness of a particular component. To avoid being labeled as a greenwasher, the company must, nevertheless, consistently show true concern and attention for the environment, such as through production operations or involvement. As a result, each entity is described below and how these activities change the marketing mix factors of green product, pricing, promotion, and place:

2.3.1 Green Products

According to Prakash and Pathak (2017) green products are those that are beneficial to the environment, and the concept implies that ecological goals should be the foundation of design. More realistically, these items are made using safe components and environmentally friendly techniques. Furthermore, eco-labels verify that items are environmentally friendly (Das et al., 2020). According to Nguyen et al. (2022), greening a product should include all aspects of its lifespan, including design, material sourcing, manufacturing, storage, distribution, usage, and even post-use activities.

While developing and commercializing these items, environmental sustainability must be prioritized before profit. For example, because excessive packaging is a foremost source of environmental waste, a corporation should be concerned about decreasing it by using recyclable materials. Though, the widely held of firms specializing in green products were found to be financially unsuccessful (Bennett & James, 2017). Because many of these items fall short of customer expectations, market shares are unlikely to grow significantly (Nguyen et al., 2022).

2.3.2 Green Promotion

Green promotion is defined as it is intended to provide accurate environmental information with connections to the business's operations in order to inform and change consumers' attitudes of green products (Sarmiento & El Hanandeh, 2018). (Wang et al., 2019). Although this may result in devoted customers, the company must exercise caution to avoid coming across as greenwashers, which could cause consumers to disregard the promotion, boycott the items, or file a complaint with the authorities.

There are no notable differences between green and other forms of promotion because their methodology and foundations are comparable (Sarmiento & El Hanandeh, 2018).

Because of this, the objectives of green advertising are comparable to those of traditional advertising, including informing consumers about the company and product, convincing them to adjust to a green brand, and prompting them of where and how to buy the goods.

2.4 Marketing of Bottled Water

Many writers and researchers have criticized bottled water advertising. Many of them believe it is overstated in terms of the benefits it provides. For example, the Natural Resources Defense Council (NRDC) of the United States stated in 1999 that bottled water dealers' advertisements depict "clean" and "protected" bottled water that is "better" than tap water. They promote the idea that water is "clean and good" for consumers. Similarly, the preference for bottled water over other soft drinks is attributed to the effect of media, marketing, and advertising.

Bottled water is frequently marketed as a luxury item (Brei, 2018). Water bottlers are continually trying to persuade their customers about their products. Bottled water becomes a viable commercial product as a result of significant advertising investment when items are advertised about their quality and benefits in conjunction with the investment of cash in advertising (Deepak & Jeyakumar, 2019). One of the primary ways that customers form positive relationships with bottled water is through advertising (Quansah et al., 2015).

The advertising business has turned bottled water into a costly social commodity. It elevated bottled water to the status of a product that promotes health and pleasure in ways that tap water cannot. However, the success and appeal of bottled water has sparked a pushback from opposing cultural forces. These forces occasionally call into doubt its superiority, as well as the rationality and morality of bottled water usage (Hawkins, 2011).

The demand for bottled water in Ghana is strong, reflecting the country's high temperatures over the years. Despite the fact that there are few statistics to support this claim, the number of bottled water firms in Ghana has expanded over the years, indicating that consumption and sales volume have increased. This, without a doubt, represents the global trend. The Food and Drug Administration has registered twenty (20) companies to manufacture bottled water. In short, the global and local bottled water markets are becoming critical components of the beverage industry.

2.5 Theoretical Review

This section of the study presents the theoretical review. The identification of current theories, their relationships, the depth to which they have been explored, and the development of new testable hypotheses are all aided by theoretical literature studies. (Quansah et al., 2015). The theory used in the study is planned behavior.

2.5.1 Theory of Planned Behaviour

Individual behavior is influenced by three variables, attitude, subjective norm, and perceptual behavior control are in accordance with Ajzen's theory of planned behavior (TPB) (Ajzen, 2006). An individual's level of approval or disapproval of an action might be characterized as their attitude. A person's perception of the social surroundings, other people's expectations of them, and desire to fit in with these social circumstances are all reflected in a subjective norm (SN). The idea that one has some control over how their actions will turn out is known as perceptual behavior control (PBC)

TPB's value has been shown in a number of behavioral research. For instance, the TPB variable characterized the three environmental behavior goals in terms of workplace behavior (Wesselink et al., 2017). Farmers' willingness and behavior to read and use risk

information on pesticide labels were examined using TPB, with the three main TPB factors accounting for variations in farmers' willingness to do so (Sarma, 2022).

The TPB variable provided an explanation for the voluntary blood donation behavior of higher education students (Aschale et al., 2021). The desire of community members to conserve water was studied by Trumbo and O'Keefe (2001), Lam (2006), and Clark and Finley (2007), who found that the TPB variables had a high predictive influence on the intention of green behavior.

Finally, the TPB offers a strong outline for investigating the variables that affect consumers' online behavior regarding purchase intentions for bottled water. To fully reveal the influencing elements on individual behavior, research on the pre-influencing variables of TPB needs to be combined with other ideas. This study provided a model of the effect link of bottled water purchasing intention from environmental protection based on the risk perception theory and TPB theory, offering a more full explanation of the impact mechanism of online bottled water usage behavior. Additionally, it supports and adds to research on sustainable and ecologically friendly consumption.

2.6 Empirical Review

2.6.1 Green Product and Purchase Intention

The study of Suki (2016) has three goals: to evaluate the impact of consumer approaches towards green brands, green brand knowledge, and green brand positioning on the desire to buy green products. The impact of consumer attitudes toward green brands on brand knowledge. The relationship between green brand positioning and purchase intent for green products and the moderating impact of green brand understanding. The data (n=300) for the study were gathered via a questionnaire. The deliberate sampling included respondents who have purchased green products and lead environmentally friendly

21

lifestyles. The data was examined using the partial least squares (PLS) technique, a variance-based approach for structural equation modeling analysis, with the use of the SmartPLS computer application version 2.0.

Using the structural model's standardized path coefficients from the PLS data, it was determined that green brand information was the most important factor in determining the intention to purchase green products. Customers' awareness of green businesses has boosted their enthusiasm for green marketing and sparked their interest in preserving the environment rather than causing it harm. Also, consumers' perceptions of green companies had an impact on their views toward them. This component, to a limited extent, affected the relationship between green brand posture and green product purchase objective.

The study by Wang et al. (2019), based on 236 samples, examines how customers' green purchasing intentions are impacted by their awareness of green products. The results show that green trust and perceived customer efficacy have an impact on the link between green product understanding and green purchase intention. Professed price modifies the rapport amid green trust and green purchase intent.

Green trust has a greater impact on green purchasing intention than low perceived price when the perceived price is high. Perceived pricing, however, had little impact on the relationship between perceived customer efficacy and intention to make green purchases. The findings will help governments and businesses build ways to boost customers' green purchasing intentions. This study advances our understanding of green product knowledge and how to drive green buy intention.

Fazal (2019) study sought to investigate a model that depicts the effects of consumer behavior control, subjective norm, attitude toward a green product, and man-nature

orientation on customer intent to buy green products. A questionnaire that was designed utilizing an exploration study based on planned behavior theory served as the data collection method for this investigation. The sample for this study was made up of housewives, who were the last consumers. Additionally, Yogyakarta, Indonesia, was the location of this investigation.

The results showed that a healthy consuming lifestyle and a human-nature orientation are predictors of the propensity to buy green products. The objective to buy green products is favorably motivated by elements such as consumer lifestyle, man-nature orientation, subjective norm, attitude concerning green products, and behavioral control over purchases. This study's hypotheses were all fully supported.

The purpose of Amin et al. (2015) research is to look at the consequence of green positioning techniques on product opinions and customer purchase intentions. By delivering questionnaires to 500 clienteles of Giant and Econ Save supermarkets, data was obtained. According to the findings of this research, emotional benefits and purposeful qualities have a substantial association with product characteristics, and product attributes have a significant relationship with purchase intents.

According to the outcomes of this research, in order to encourage consumers to purchase green products, functional characteristics and emotional benefits have emerged as crucial components of green product positioning.

2.6.2 Green Promotion and Purchase Intention

Nur et al (2021), study looked at green consumers' intentions to buy green products to succeed in green marketing promotion. It looked into the connections between the motivations behind and indicators of the value of green purchasing. The relationship between the endogenous elements that influence the value of green purchasing intention

23

and the exogenous variables and their indicators was examined in this study using two different approaches. Using the application of structural equation modeling, the identification is performed.

While a dynamic system simulation was used to measure the values of green buying intentions. 400 sample sizes were used in the survey procedure to gather the data. The findings showed a strong correlation between the endogenous variable and four exogenous variables, as well as some prediction value per unit of time.

A conceptual model will be developed in the research by Rizwan et al. (2013) to examine the effects of three preceding components (green perceived value, green professed risk, and trust) on purchase intention-based green marketing. The aim of the research is to look at the variables that affect consumers' intent to buy. The information from 150 respondents was gathered via self-administered questionnaires. Regression analysis was performed using SPSS on the useable questionnaires.

The study's findings demonstrate a significant association between professed value and supposed risk, as well as trust and buy intention. Green professed value and green supposed risk, on the other hand, have a substantial impact on green purchasing intention. The study found no correlation between value and risk. The findings reveal the relative relevance of three preceding aspects in green marketing: professed value, perceived risk, and trust. These elements have an influence on green purchase intent.

The study of Zhu (2012) investigates how green advertising influences customers' purchase intentions for green items. The information was gathered from 313 consumers in Shanghai, China. According to the findings of the study, the credibility of the claim ($\beta=0.847$, p0.001) and consumer attitude toward green advertising ($\beta =0.65$, p0.05) have a substantial influence on customer purchase intent of green products.

24

In their study, Tih et al. looked at how different green messaging (self-benefit and otherbenefit appeals) affected Malaysian and Iranian consumers' inclinations to make green purchases (2016). The tenacity of this study is to ascertain whether a certain appeal style affects consumers' purchase intentions differently and whether the consumer's country of origin can mitigate this effect. 117 postgraduate students were divided into two groups and randomly assigned to one of two hypothetical printed green texts that promoted selfbenefit or other-benefit arguments.

The results show that self-benefit appeal does not improve purchase intentions as much as other-benefit appeal. Moreover, Malaysian postgraduate participants have a stronger intention to acquire green products than Iranians. Home country, on the other hand, has no effect on the link between appeal type and purchase intentions. There includes discussion of both theoretical and practical contributions.

The purpose of Kusuma and Handayani (2018), the purpose of the study is to look at the variables that affect consumers' intent to buy. the effects of environmental awareness and green advertising on these factors, as well as the environmental attitudes and green purchasing intentions of Starbucks patrons in Mataram City. The quantitative research approach was combined with a causal associative technique. Using the convenience sampling method, 170 Starbucks customers in the Lombok Epicentrum Mall were given questionnaires. The technique for analysis was utilized to examine the path.

The study's conclusions indicate that green advertising and environmental approaches both completely and ominously affect consumers' intentions to buy green products, and that environmental attitudes positively and significantly affect those intentions. Starbucks' possibilities of creating environmentally friendly products are increased by the public's growing environmental understanding and positive attitudes.

25

2.6.3 Moderation Role of Environmental Knowledge

The purpose of Karunarathna et al. (2020) research is to look at the influence of green positioning techniques on product opinions and customer purchase intentions. 500 consumers of Giant and Econ Save supermarkets were given questionnaires to complete in order to collect data. The results of this study show that both product traits and purchase intents are significantly correlated with emotional benefits, functional features, and product attributes. The outcomes of this research specify that in order to convince consumers to purchase green products, functional characteristics and emotional benefits have emerged as a major component of green product positioning.

The study includes a mediation analysis to assess the role of customers' environmental approaches in mediating the association among green marketing blend and green purchase intention. Because of buyers' environmental sentiments, green goods and green price have been presented to have a considerable impact on green purchase intention. The academic and practical ramifications of these discoveries are examined in depth throughout the paper.

The study Kartawinata et al. (2020) examined people's attitudes toward green marketing combination and green product purchase intents on Love, Beauty, and Planet, with consumer approach serving as a moderating variable. The descriptive quantitative method is used in this investigation. With the purposive sampling method, questionnaires were delivered to 150 respondents in West Indonesia, namely Love, Beauty, and Planet customers. Path Analysis and the Sobel Test were utilized as data analysis tools.

The findings suggested that the green marketing mix, as well as consumer attitudes, required a favourable impact on West Indonesian consumers' intentions to buy environmentally friendly goods. For the product Love, Beauty, and Planet in West

Indonesia, it was discovered that the variable of customer attitude was important in mediating the effects of the green marketing mix on green product purchase intent.

The main objective of the Mahmoud et al. (2017) study is to examine how environmental knowledge functions as a moderator in the relationship between green marketing mix components (product, pricing, distribution, and promotion) and purchase intention in Sudan. The descriptive and quantitative aspect of the research design. The population of MBA students from Sudanese universities was picked as the sample. 417 surveys were circulated for the empirical analysis, however only 341 were returned.

Multiple regressions demonstrated that green marketing mix features have a substantial effect on customer purchase intent. The relationship amid green marketing mix and purchase intention is moderated by environmental understanding. However, the current study's findings are based on the pilot study and are preliminary in nature. Further study can look into the correlations discovered in this work and try to figure out who is mediating them.

The Bahl and Chandra (2018) study aims to evaluate the influence of green product marketing mix variables (product, price, site, and promotion) on customer purchase intentions and attitudes toward green behaviour. This study's design is both descriptive and quantitative. Respondents from four retail stores providing green items in Dehradun, Uttarakhand, were polled. 364 questionnaires were circulated for the empirical analysis, however only 300 were completed. The factor analysis technique was also employed, resulting in the extraction of all variables' largest common variance. To better comprehend the relationships between independent (marketing mix) and dependent variables, multiple regression analysis was utilized (Purchase intention and Attitude towards green behaviour).

The results showed that components of the green marketing mix have a significant impact on purchase intention and attitude toward green behavior. It's also interesting to note how the Marketing Mix Factors and Attitude toward Green Behavior Interact to Influence Purchase Intention. The crucial importance of the components of the green marketing mix, their influence on customer attitude and buy intention, as well as the theoretical and practical ramifications, are discussed in the last section.

The purpose of Weisstein et al. (2014) article is to investigate the impact of price promotion presentation forms on customers' green purchasing intentions at varying levels of greenness. Notwithstanding growing consumer there is a gap between people's awareness of environmental problems and their intents to buy green products. Previous research has found that customers' levels of greenness vary and that pricing influences their green buying decisions.

The study hypothesis and conceptual model were tested using two between-subject studies with 236 participants. The findings reveal that different formats of price promotion presentations have different effects on consumers' purchase insights. Highlevel green-aware consumers gravitate toward promotions that emphasize gain, whereas low-level green-aware consumers favor marketing that highlight reduced loss. Consumers with a medium level of greenness also respond equally to both trends. Our data further demonstrate that perceived value by consumers moderates the impact of perceived quality and reported savings on intentions to make green purchases.

The research by Hsu et al. (2017) aims to evaluate whether COO and price thoughtfulness moderate the relationships amid buy intent and its antecedents as well as to describe the impact (i.e., attitude, subjective norm, and professed behavioral control) on green

skincare product purchase intention. Data gathered from 300 Taiwanese respondents is compared to the research model using structural equation modeling.

The findings show that country of origin and price sensitivity can strengthen the positive relationships between the intention to buy and its antecedents. They also show that attitude, subjective norm, and perceived behavioral control all have a significant impact on the intention to buy green skincare products. The study's findings have significant theoretical and practical implications for how consumers choose to spend their money on environmentally friendly products.

Using the application of the signaling theory method to green marketing, Liao et al. (2020) research aims to combine the theoretical underpinnings of green purchasing. This study aims to analyze the effects of green customer value and attitude toward green products on green buy intention because prior research has not combined relevant components for green purchasing from the viewpoints of signaling theory and AttitudeBehavior-Context (ABC) Theory. Additionally, it aims to ascertain how customer value, attitude, and desire to make green purchases are related and how green marketing and psychological benefits affect those relationships. 319 Cambodian consumers who have bought eco-friendly products for at least a year participated in a survey for this study.

The results showed that views about green products are significantly and favorably influenced by green customer value. Moreover, attitudes toward green products as well as green customer value have a favorable impact on green purchasing intention. Consumer value, green product attitude, and green purchase intention are correlated. Environmental marketing, green word-of-mouth advertising, and psychological advantages (warm glow, self-expression benefits, and natural experience) have an impact on these correlations.

Indriani et al (2019), research aims to examine the increase interest in purchasing environmentally friendly body care and cosmetic products, there is a relationship between environmental awareness, green brand perception, attitude toward green products, and green purchase intention. Quantitative analysis is the method of analysis used. Students at Indonesian state universities in Manado who planned to purchase.

Smart PLS is the analysis program used. The study's conclusions show that consumer intentions to make environmentally friendly purchases are not greatly influenced by their environmental awareness. More importantly, it is found that the relationship between environmental awareness and intention to make green purchases is totally mediated by attitude.

2.7 Conceptual Framework

A conceptual framework is a written or visual description of how variables are supposed to interact (Rahaman, 2018). A review of existing research and theory on the topic was used to develop the conceptual framework and is show in Figure 2.1.
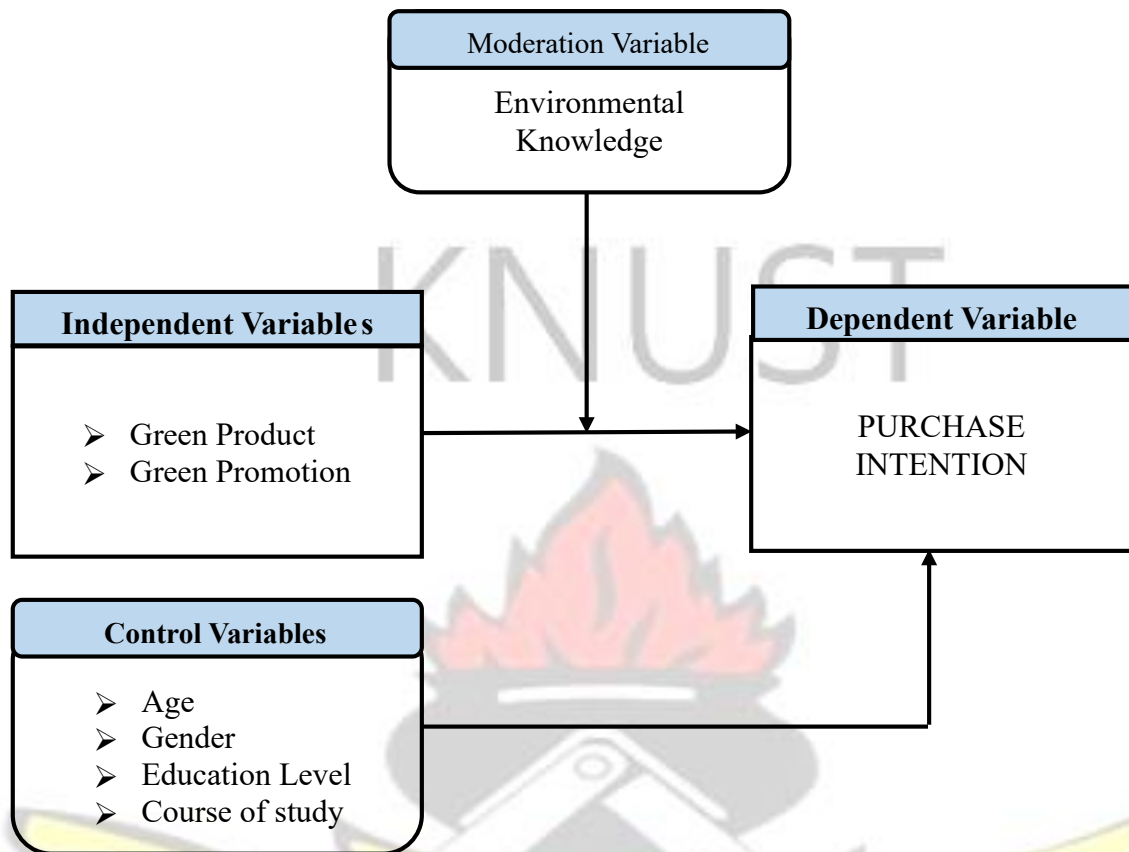
Figure 2.1: Conceptual Framework

Source: Author's construction (2023).

Figure 2.1 shows the relationship amid the independent, control and dependent variables. The study independent variable includes Green Product, and Green Promotion which are representing the marketing practise, the control variable also includes the age, gender, education level and course of study of the respondents with the dependent variable been Purchase intent and the moderation variable is environmental knowledge.

As Ajzen (2006) argued that individual behaviour is influenced by three variables, according to Ajzen's theory of planned behaviour (TPB): attitude, subjective norm, and

perceptual behaviour control. The variables both the control and independent variable can influence behaviour of an individual like a student whiles environmental knowledge can also moderate the relationship. Therefore, this research sought to examine the relationship amid green marketing practices, environmental knowledge and the purchase intent of customers of water bottling companies.

2.8 Summary of the Chapter

Chapter 2 of the study took a look at the relevant literature to this study. The review was done on the concept of green marketing, purchase intention, and purchase intention. Also, the literature on green marketing practices was reviewed. The study used the theory of planned behavior which offers a solid framework for researching the elements that influence customers' online bottled water purchase intention behavior.

Also, the studies conducted in line with the aims of the research were reviewed under the empirical review section. Finally, the visual description of how variables are supposed to interact was also presented in Figure 1 (conceptual framework).
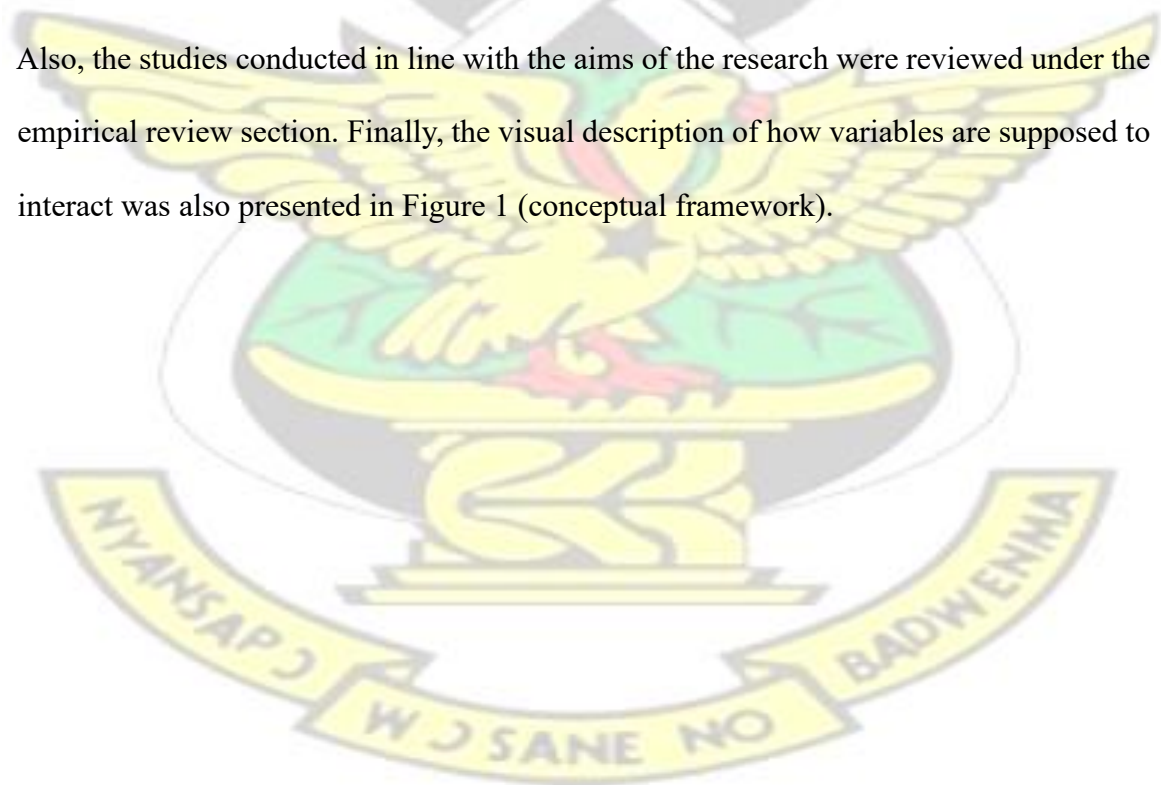
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The term "methodology" refers to a rigorous analytical evaluation of a research process. The methodologies and ideas described in the information section are the subject of this systematic investigation. Such examples include topologies, patterns, theoretical ideals, and quantitative or qualitative systems.

3.2 Business Research Defined

Gathering in-depth knowledge about every facet of a firm and using it to boost sales and profits is the process of conducting business research (Hair et al., 2019). Such a study helps companies determine which products and services are the most profitable or in demand. According to Cullen and Noonan (2021), the objective of performing business research is to gather information that will aid in company decision-making. Business research, according to Cullen and Noonan's definition from 2021, is the methodical and objective process of acquiring, documenting, assessing, and interpreting data to help managers overcome difficulties.

In business, research is useful for identifying opportunities and risks (Wilson, 2014). It assists in identifying problems, and with this knowledge, wise decisions may be made to successfully handle the issue. Effective customer or stakeholder communication is made possible by improved customer comprehension. When doing research on your interests, you can pick up new knowledge, hone your problem-solving abilities, and present yourself with fresh problems. You will have the opportunity to collaborate closely with a mentor, a faculty member, or another seasoned researcher by working on a research topic that the faculty initiated.

3.3 Research Design

The study's primary research paradigm is positivism. According to the positive research technique, it is possible to grasp social reality objectively (Ormston et al., 2014). According to this research ethic, a scientist does research by behaving as an impartial observer and separating oneself from personal convictions in order to work independently. The positivist school places a strong emphasis on doing quantitative research, such as in-depth surveys, to present a comprehensive picture of society and identify social trends, such as the link between social class and educational attainment. According to sociological positivism, much like the physical universe, society operates in accordance with a set of universal rules. The basis of positivism is the notion that through monitoring social behavior, scientists may gather accurate and reliable knowledge about how society functions. Positivism-based theories begin with the "world as it is" and base their presumptions on tangible, explainable, and valuable entities like nations and international organizations. As a result, the foundation of positivism is factual research and the collection of empirical data.

This is being done using a quantitative research design. Quantitative research, according to Antwi and Hamza (2015), is the process of obtaining and examining numerical data. It is possible to identify trends and averages, make predictions, examine causality, and generalize findings to broader populations.

Quantitative research use techniques like questionnaires, planned observations, or experiments in contrast to qualitative research. According to Nardi (2018), the goals of quantitative research are to increase our understanding of society. Researchers examine situations or events that have an impact on people using quantitative methods. Quantitative research generates unbiased data that can be fully explained with statistics and graphs.

3.4 Purpose of the Study

According to Asenahabi (2019), exploratory research is often conducted when a researcher has just begun a study and wants to get a broad overview of the topic. Descriptive research strives to define or characterize the topic at hand, whereas explanatory research aims to explain why particular occurrences behave in a particular way (Groenland, and Dana, 2020). This investigation used Research that is descriptive tries to precisely and methodically describe a population, circumstance, or phenomena. What, where, when, and how inquiries can be answered, but why questions cannot. Descriptive studies, according to Groenland and Dana (2020), have three main objectives that can be summed up as summarizing, explaining, and validating study findings. A favorite subject for this style of research is one that cannot be quantified. Asenahabi (2019) says that a descriptive research design can use a variety of research methods to look at one or more variables. The best approach to take when looking for traits, frequencies, trends, and classifications is descriptive research. When little is known about the subject or problem, it is helpful. Understanding how, when, and where something occurs is necessary before attempting to determine why it occurs (Antwi & Hamza, 2015).

3.4.1 Sampling Procedures

The sampling technique involves choosing a population's subgroup to examine a population-wide theory. Utilized to calculate the number of survey respondents, interviewees, or work samples that would be included in the evaluation process. According to reports, because sampling uses a smaller number of people with representative qualities to represent the entire community, large-scale research can be conducted within more reasonable price and time constraints. The two basic types of sampling procedures are probability sampling and non-probability sampling.

Randomization is used to select samples instead of deliberate choice in probability sampling, also known as random sampling.

3.5.2. The Population and Sample

The entire group about whom you want to make conclusions is referred to as a population (Duncan et al., 2019). The particular group from which you will gather data is known as a sample. The sample size is always smaller than the total population. In research, the word "population" is rarely used to refer to people.

Students from Kumasi's Kwame Nkrumah University of Science and Technology (KNUST) make up the study's population. Dickson (2022) estimates that there are currently roughly 85,000 undergraduate and graduate students enrolled at the university. Thus, 85,000 people make up the study's population.

The sample size of a study is the number of participants or observations that are used (Becker et al., 2012). In research, the appropriateness of sample size is a critical concern. However, there is no definitive solution to the question of how big a sample should be (Vasileiou et al., 2018). According to Becker et al. (2012), a decent sample size should not be judged in terms of its relative size to the population size; what matters is the sample's absolute size, not its relative size.

Since the population is large some of the students are being sampled based on the Slovin formula. Tejada and Punzalan (2012) state that the sample size (n), given the population size (N) and an error margin, is calculated (e).

$$\text{It is computed as} \quad \frac{N}{1+N(e)^2}$$

Whereas: n = no. of samples

N = total population which is 85,000 for this study

36

e = error margin/margin of error which is also 0.05 (confidence level of 95 per cent)

$$\frac{85,000}{1 + 85,000(0.05)^2}$$

$$= 398$$

Therefore, the sample size for the study is 398.

3.5.3 Sampling Technique

A sampling methodology is a term used to describe or otherwise identify the particular method used to pick the sample's constituents. A In this investigation, a straightforward random sample technique is applied. Simple random sampling uses 398 randomly generated integers, which are used to select a sample for this investigation. For the study, a random selection of pupils was made. All of the students are a population for the study because they all have an equal probability of getting chosen for it.

A simple random sample is a portion of a statistical population where each participant has an equal chance of being chosen. A simple random sample is meant to provide a neutral representation of a group (Sileyew, 2019).

3.6 Sources of Data

All information that has been gathered, seen, produced, or otherwise made with the intention of bolstering initial study findings is referred to as research data (Schildkamp, 2019). Research data can be found in non-digital formats like journals and lab notebooks, despite being mostly digital. While anecdotal evidence, assumptions, or abstract observation may waste resources if action is taken based on incorrect results, good data provides unquestionable evidence. Data Sources can be used to describe different data collection methods and/or tools. According to Emanuelson and Egenvall (2014), data

sources can include data that are already collected (secondary sources) and data that will be collected during the study (Primary Sources).

The study data is being sought from Primary Sources. Primary sources offer unfiltered data and first-hand proof. A researcher has direct access to the subject of your research while employing a primary source, such as interview transcripts, numerical data, and artistic creations, to name a few examples (Merriam & Grenier, 2019). First-hand experience is used to gather primary data, which has never been used before. The information gathered through primary data-gathering techniques is very precise and catered to the goal of the study.

3.7 Data Collection Methods

The data of the research were collected by means of questionnaires placed on a fiveLikert scale and these questions are closed-ended. In order to collect information from respondents, a questionnaire is a series of questions or items. (Alvarez et al., 2019). Questionnaires were self-administered be administered individually including a series of items reflecting the research aims.

A questionnaire's objective is to gather data from respondents regarding their attitudes, experiences, and opinions. Use questionnaires to collect data, either quantitative or qualitative. Nardi (2018) indicated that a questionnaire is a list of questions used to learn more about someone or something. It is not used for statistical analysis or for identifying trends and patterns.

According to Guthrie (2010), it is vital to develop the questionnaire using a conceptual framework, assess each question for clarity and relevance, and plan out the analysis you will do at the end of the process. An effective survey should be accurate, reliable, succinct, and interesting.

The questionnaire is made up of four units A and B. Unit A of the questionnaire entails questions on the features of the respondents. Section B also has four parts, part one covers questions adapted from Karunarathna et al. (2020) on environmental knowledge which is made up of 7 items, part two also cover questions on green product is made up of 5 items adapted from Suki (2016), part three also cover questions are on green promotion also adapted from Kamble et al. (2020) which also made up of 4 items and part four also deals with purchase intention adapted from Kamble et al. (2020). All questions from section B are placed on a five Likert.

3.8 Data Analysis

Data analysis is the process of working with data to extract pertinent information that can be used to make decisions (Lycett, 2013). The gathered data will be sorted, categorised, and tabulated for ease of analysis. Statistical techniques from the Statistical Package for the Social Sciences are being used by the researcher to produce the data analysis based on the objectives and questions from the study (SPSS). Descriptive statistics make up a significant portion of the data analysis.

Included are recurrence rates, percentages, averages, and standard deviations. The results of the data processing are then examined, conclusions drawn, and submissions made. The importance of the factors to the dependent variable is tested in the study using regression and correlation analysis at a 95% confidence level.

3.9 Quality of the Research

According to Polit and Beck (2010), the phrase "quality research" most often refers to studies that follow the scientific process and consider all aspects of study design, including subject selection, outcome measurement, and bias reduction as well as the evaluation of how well the procedures suit the research objectives.

The researcher looked at the validity and dependability of the research instrument to make sure the study was of high quality. Taherdoost (2016) defines validity as a reliability measure of an instrument's capacity to accurately measure what it was designed to measure produces the same results across repeated trials.

Exploratory Factor Analysis (EFA) and Cronbach alpha test are used for the validity and reliability analysis respectively. EFA is commonly used, according to Watson (2017), to determine a measure's factor structure and evaluate its internal consistency. When researchers don't have any theories regarding the nature of the underlying factor structure of their measure, EFA is frequently advised (Watson, 2017). Cronbach's alpha, according to Taber (2018), is most useful for establishing scale reliability in terms of item equivalence within single-construct scales, but the statistic does not provide any evidence that scales are genuinely unidimensional (which should be tested by other means).

3.10 Research Ethical Consideration and Limitations

The rule of conduct controlling the researcher's actions is a part of business research ethics. The researcher took many measures to make sure that the report reflects appropriate ethical behavior. Before starting the research project, the researcher was aware of the roots and traditions of research ethics. In order to protect both human and non-human subjects, the researcher tried to adhere to the standards and procedures in place.

First, the researcher made sure that informed consent and willing engagement. The worried students and the respondents who offered accurate information requested confirmation. A letter asking for permission to do research was forwarded.

Second, the researcher made sure that participants respected their identity, secrecy, and right to privacy. All responders have been informed that the data they have been given will be kept private and used only for academic purposes. No student names can be found

in this report because the study's conclusions were released in secret. Large sample sizes are frequently required by quantitative research techniques. Yet carrying out this exhaustive investigation is impossible due to a lack of resources. Interested parties (such as government or non-government organizations, public service providers, educational institutions, etc.) may not have the skills and resources necessary to carry out comprehensive quantitative research in many developing nations (Science 2001). It could be difficult for researchers to manage the setting in which respondents react to survey questions (Baxter 2008). Responses frequently depend on a specific instant, which in turn depends on the circumstances present at that precise moment.

The structured questionnaire used in quantitative research has closed-ended questions. The results are the restricted findings listed in the research proposal. As a result, the results may not always accurately reflect what actually happened. Also, the researcher's choice of responses restricts the respondents' alternatives.
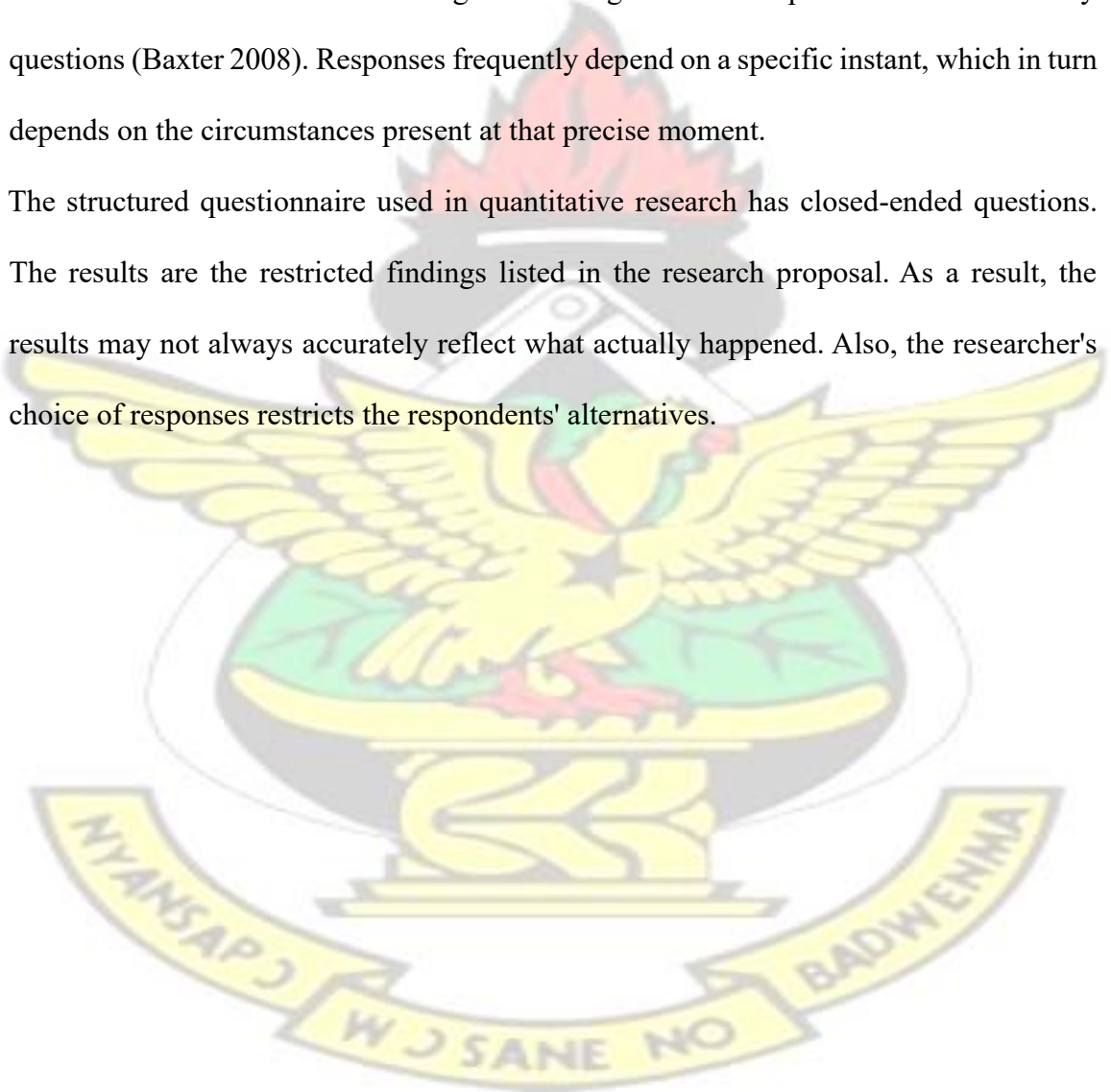
CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

Data are presented and analyzed in this chapter. The study of the respondents' demographic information comes first. The chapter concludes with a review of the findings that connects them to related literature.

4.2 Demographic Information

The respondents' demographic data is gathered in order to comprehend the background features of the respondents. The demographic information inquired about are gender, level of education of the respondents, number of years in business, economic sector and size of business the responses are presented in Table 4.1 using frequency and percentage.

4.2.1 Age of Respondent

The study revealed that the respondent below the age of 20 years were 16 (4.0%), those between 21 and 25 years were 86 (21.6%), those between 26 and 30 years were 162 (40.7%) and those above 30 years were 134 (33.7%). This implies that the majority of the respondents are 26 and 30 years.

4.2.2 Gender of Respondent

It is revealed that the majority of the respondents 201 representing 50.5% are females and the rest of 197 representing 49.50 are male. This result is shown in Table 4.1.

4.2.3 Education Level

The respondents which were studied were inquired to show their level of education. It was revealed that the 1st year undergraduate students were 41 (10.3%), those in 2nd year undergraduate were 65 (16.3%), those in their 3rd year at undergraduate were 72 (18.1%), those in 4th year and above in their undergraduate program were 91 (22.9%) and the

postgraduate students were 129 (32.4%). This implies the majority of the respondents are

postgraduate students.

Table 4.1 Demographic Information

Variable	Particulars	Freq.	Percent
Age	Below 20 years	16	4.0
	21 – 25 years	86	21.6
	26 – 30 years	162	40.7
	Above 30 years	134	33.7
	Total	**398**	**100.0**
Gender	Male	197	49.5
	Female	201	50.5
	Total	**398**	**100.0**
Education Level	1st Year Undergraduate (Level 100)	41	10.3
	2ndYear Undergraduate (Level 200)	65	16.3
	3rdYear Undergraduate (Level 300)	72	18.1
	4th year and above Undergraduate	91	22.9
	Postgraduate	129	32.4
	Total	**398**	**100.0**
Field of study	Business	163	41.0
	Economics	16	4.0
	Sciences or Engineering	39	9.8
	Humanities	101	25.4
	Others	79	19.8
	Total	**398**	**100.0**

Source: Field Work (2023)

4.2.4 Field of Study

The respondents were asked to indicate their course of study at the school, the respondent included students pursuing business 163 (41.0%), those into economics studies 16 (4.0%), Sciences or Engineering 39 (9.8%), those in the humanities 101 (25.4%), and in other courses were 79 (19.8%). This infers that the majority of the respondents were business students.

4.3 Validity and Reliability

The validity and reliability analysis, which includes exploratory factor analysis and the Cronbach alpha test, is presented in this part.

4.3.1 Reliability Test

The reliability test is carried out in SPSS using Cronbach Alpha as suggested, and the results are shown in Table 4.2. Cronbach's alpha is most normally used to evaluate the internal consistency of a questionnaire (or survey) that has several Likert-type scales and items (Ekolu & Quainoo, 2019).

Table 4.2: Reliability Test

S/N	Variable	N of Items	Cronbach's Alpha
1	Environmental Knowledge	7	0.795
2	Green Product	5	0.841
3	Green Promotion	4	0.875
4	Purchase Intention	5	0.709

Source: Field Work (2023).

As shown in Table 4.2 the dependent variable is the Intention which has a total of 5 items recorded with Cronbach's Alpha value of 07909, which is considered a high value.

According to Ekolu and Quainoo (2019), a variable is reliable when the P-value is more than 0.8 and unreliable when the P is less than 0.6. The two independent variables promotion and product with 4 and 5 items recorded Cronbach's Alpha values of 0.875 and 0.841 respectively and the moderation variable, environmental recorded 0.795. The average covariance between pairs of items, the mean of the overall variance, and the number of items in a test are all significant for the study.

4.3.2 Exploratory Factor Analysis

Exploratory element analysis is a statistical method for reducing the number of summary variables from the original set of data and examining the theoretical underpinnings of a phenomenon. It is employed to ascertain the framework of the relationship between the variable and the respondent.

The study uses 21 items from four variables, which are Environmental which is 7 items, the product has 5 items, the promotion which is 4 and the Intention also contains 5 items. The confirmatory factor analysis is done in order to determine whether the items reflect these underlying constructs properly. This involves assessing the extent to which the data meets the expected structure (Ekolu & Quainoo, 2019).

By performing a factor analysis, the study provides empirical data to check whether the constructs are indeed properly represented by the items. With the confirmatory factor analysis, four results items are expected which include Bartlett's test of sphericity, the Kaiser-Meyer-Olkin (KMO), Communalities (C) of each item, and the Total Variance Explained (TVE) of each variable, the outcomes are shown in Table 4.3. To ascertain whether a dataset is suitable for a data reduction technique, Bartlett's Test of Sphericity is used. According to Ekolu and Quainoo (2019), the dataset is suitable for a data reduction strategy if the p-value from the Bartlett's Test of Sphericity is lower than the selected

significance threshold (0.05 in this case). According to the study's conclusions, a dataset

is appropriate for a data reduction strategy if the p-value is less than 0.05.

Table 4.3: Confirmatory Factor Analysis

S/N	Construct/Measure	C	TVE

Environmental [KMO= 0.666, X2 (df)= 1272.361 (21), P= 0.000]   70%

1	Environmental issues are an emergency issue	0.73
2	Environmental issues are consumers' responsibility	0.60
3	I wish to see less packaging waste generated by processed food products	0.74
4	I am worried about how all of my activities affect the environment I	0.63
5	know that I buy products that are environmentally safe.	0.66
6	I am very knowledgeable about environmental issues.	0.70
7	I know a lot of information about friendly products.	0.84

Product [KMO= 0.782, X2 (df)= 994.934 (10), P= 0.000]   67%

1	Bottle Water Companies develop and make available some environmentally friendly products.	0.45
2	By buying a green product, I indirectly influence environmental protection.	0.68
3	If consumers keep purchasing green products, the production of green products will eventually increase.	0.81
4	A green product like bottled water usually comes smaller in portions but at higher prices.	0.65
5	I'm more likely to buy bottled water that is packaged in an eco-friendly manner and made easy for recycling or compost.	0.74

Promotion [KMO= 0.797, X2 (df)= 834.01 (6), P= 0.000]   73%

| 1 | The water bottle company devotes a special day to the environment | 0.66 |

2	Water bottle company support holding. Seminars and conferences related to the environment	0.76
3	Employees of the Water bottle company direct the customers to the hour they can use the products in a way that does not harm the environment	0.72
4	Water bottle Companies contribute to supporting the environmental centres	0.78
	Intention [KMO=0.773 , X2 (df)= 1539.091 (10), P= 0.000]	74%
1	For future purchases, I plan to seek out environmental products.	0.691
2	For future purchases, I will take more time to search for environmentally friendly alternatives to products that I typically buy.	0.646
3	I plan to spend time searching company websites to learn more about environmentally friendly options.	0.731
4	For future purchases, I will take more time to search for environmentally friendly alternatives to products that I typically buy	0.842
5	I plan to continue to purchase friendly products in the future.	0.772

Source: Field Work (2023).
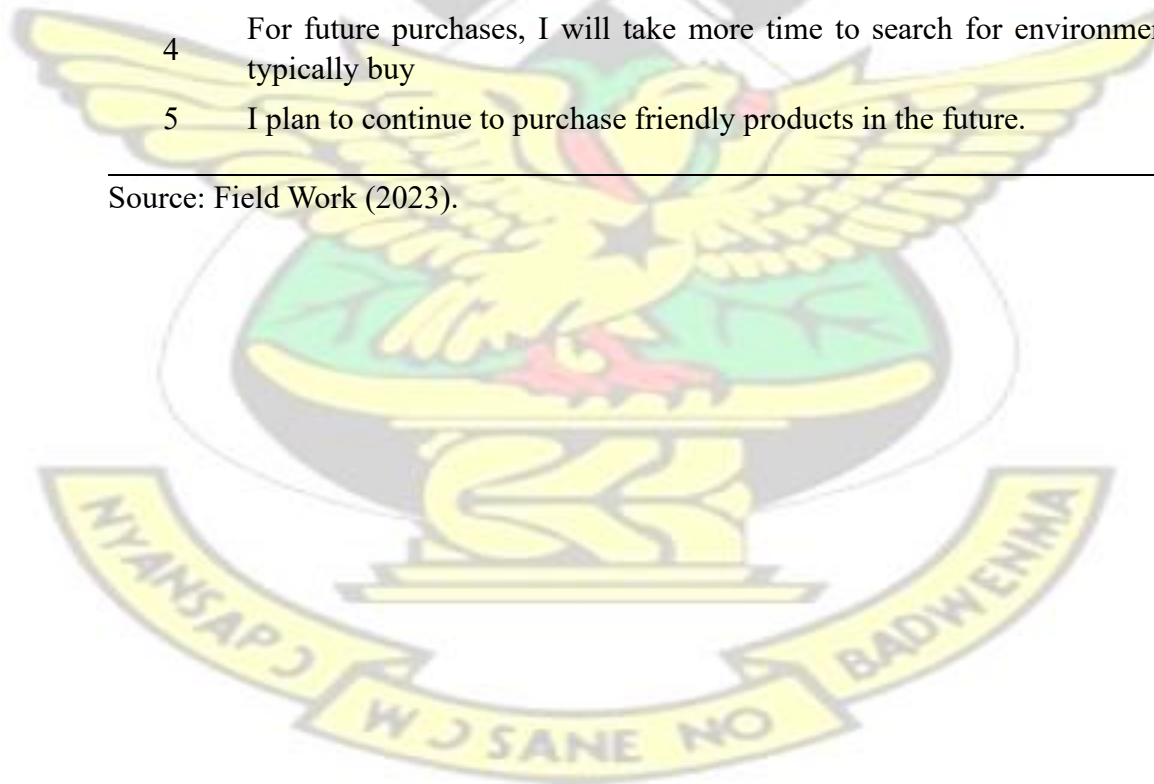
The KMO test helps determine the validity of factor analysis of variables. Since factor analysis always derives factors, the goal is to provide a basic level of correlation within a set of variables to ensure that the resulting factor structure is objective. KMO test values for environmental, product, promotion and Intention are 0.666, 0.782, 0.797 and 0.773 respectively. The KMO score can be interpreted as acceptable if it is greater than 0.50 and better if it is greater than 0.70. The significance means factor analysis is suitable.

When it comes to communalities, values between 0.25 and 0.4 have been projected as satisfactory cutoff values, with ultimate communalities being 0.7 or higher. As shown in Table 4.3 all the items recorded communalities value between 0.45 and 0.84 means all the items meet the accepted values.

The final value assessed in Table 4.3 is the Total Variance Explained (TVE) which indicates the percentage at which the items explain the variable, 70%, 67%, 73%, and 74% are recorded for environmental, product, promotion and Intention respectively. These results imply that the research instrument is regarded as a trustworthy instrument for the study.

The study uses a questionnaire adapted from different kinds of researchers which include Suki (2016), Karunarathna et al. (2020) and Kamble et al. (2020), these researchers used different kinds of respondents and therefore used it on the student to validate the questions on the instrument. Also, a sample size of more than 100 indicates an improvement in the validation of the questions on the questionnaires.

4.4 Correlations

Table 4.4 displays the correlations of the variables. The correlations, in this case, Pearson's Correlation, are represented by the values. The significance level is indicated by the stars. The values show that there is a relationship between the variables.

KNUST

Table 4.4: Correlations

		1	2	3	4	5	6	7	8
1 Age	Pearson Correlation	1.00							
	Sig. (2-tailed)								
	N	**398.00**							
2 Gender	Pearson Correlation	-.245**	1.00						
	Sig. (2-tailed)	0.00							
	N	**398.00**	**398.00**						
3 Education	Pearson Correlation	.300**	.160**	1.00					
	Sig. (2-tailed)	0.00	0.00						
	N	**398.00**	**398.00**	**398.00**					
4 Field	Pearson Correlation	-.132**	-.286**	-.145**	1.00				
	Sig. (2-tailed)	0.01	0.00	0.00					
	N	**398.00**	**398.00**	**398.00**	**398.00**				
5 Environmental	Pearson Correlation	0.01	-0.05	.145**	-.229**	1.00			
	Sig. (2-tailed)	0.82	0.30	0.00	0.00				
	N	**398.00**	**398.00**	**398.00**	**398.00**	**398.00**			
6 Product	Pearson Correlation	0.00	0.06	.185**	-.262**	.637**	1.00		
	Sig. (2-tailed)	0.94	0.21	0.00	0.00	0.00			

	N	398.00	398.00	398.00	398.00	398.00	398.00	
7 Promotion	Pearson Correlation	-.339**	0.05	-0.04	0.01	.198**	.244**	1.00
	Sig. (2-tailed)	0.00	0.35	0.40	0.87	0.00	0.00	
	N	398.00	398.00	398.00	398.00	398.00	398.00	398.00
8 Intention	Pearson Correlation	.181**	0.05	.263**	-.198**	.647**	.637**	.177**	1.00
	Sig. (2-tailed)	0.00	0.31	0.00	0.00	0.00	0.00	0.00	
	N	398.00	398.00	398.00	398.00	398.00	398.00	398.00	398.00

** Correlation is significant at the 0.01 level (2-tailed). Source: Field Work (2023).

49

As shown in Table 4.4, the dependent variable Intention (Purchase Intention) is found to correlate with the two dependent variables Promotion (r=0.177, p=0.00) and Product (r=0.637, p=0.000) and also correlate with the moderating variable environmental (r=0.647, p=0.00). In the case of the control variables the Field of study (r=-0.198, p=0.00), an education level (r=0.263, p=0.000) and age (r=0.181, p=0.000) were found to be correlating with Purchase Intention.

4.5 Regression Analysis

In this section regression analysis is performed. This includes the relationship between the control variables (Age, Gender, Education Level and field of study), the dependent variable product, and promotion and the moderation interaction (Environment*Product and Environment*Promotion). Multiple regression is used to conduct the analysis. The results are presented in Table 4.5.

As shown in Table 4.5, the value recorded for R-Square is 0.560, this implies that study moderation explains 56% meaning the error recorded in the study is 44%. This result signifies that the model explains 56% of customers intend to purchase bottled water. Also, it was revealed that a p-value of 0.000 is recorded meaning the model significantly predicts the dependent variables. Also, the Adjusted R Square was 0.551, with an F- statistic of 61.996 and the number of respondents was 398.

The results in Table is also showing the Unstandardized Coefficients Beta and t- statistics which are shown in the bracket. The results show that age ($\beta = 0.228$, t=5.195) and gender ($\beta = 0.193$, t=2.742) influence purchase intention significantly at 0.01 while education level ($\beta = 0.057$, t=1.851) influences purchase intention significantly 0.05. But the field of study ($\beta = 0.028$, t=1.344) was found to insignificantly influences purchase intention among the respondents.

Table 4.5: Regression Analysis

S/N	Variable	Model 1
1	Age	0.228*** (5.195)
2	Gender	0.193*** (2.742)
3	Education Level	0.057* **(1.851)**
4	Field of study	0.028 (1.344)
5	Product	0.686*** (4.155)
6	Promotion	0.088*** (2.480)
7	Environment*Product	0.892** (5.280)
8/	Environment*Promotion	-0.096*** (-2.047)
9	(Constant)	-2.245*** (-3.725)

R Square	**0.560**
Sig.	**0.000**
Adjusted R Square	**0.551**
F	**61.996**
N	**398.00**

*** p<.01, ** p<.05, * p<.1.

Source: Field Work (2023).

In the case of the dependent variables, product (β = 0.686, t=4.155) and promotion (β = 0.088, t=2.480) influence purchase intention at 0.01 and 0.05 significant levels respectively. The interaction between Environment and Product (β =0.892, t=5.280) and interaction between Environment and Promotion (β =-0.096, t=-2.047) influence purchase intention at 0.01 and 0.05 significant levels respectively.

4.6 Discussion of the Results

4.6.1 Effect of a Green Product on the Purchase Intention

The first aim of the research was to examine the effect of a green product on the purchase intent of customers of bottled water. Prakash and Pathak (2017) asserted that green products are those that are beneficial to the environment, and the concept implies that ecological goals should be the foundation of design. More realistically, these items are made using safe components and environmentally friendly techniques (Das et al., 2020).

As shown in Table 4.4, green product (β = 0.686, t=4.155, p<0.01) is establish to completely and significantly influence the purchase intention of customers of water bottling companies. This suggests that when a product contributes to environmental protection during production, usage, and disposal, consumers will prefer it. Simply by selecting eco-friendly products, there are numerous ways to lessen the environmental degradation that results from our product. It can be said consumers of bolted water demand products which usually reduce waste and maximize resource efficiency. Consumers' knowledge of green companies has increased their positive green marketing awareness and piqued their interest in reinforcing the environment while preventing its destruction.

Similarly, Suki (2016) found based on the standardized route coefficients of the structural model from the PLS data, it was determined that green brand knowledge was the most important component of green product purchase intention. But Wang et al. (2019) found that in the event of a high professed price, green trust has a bigger influence on green purchasing intention than a low perceived price. The findings of Fazal (2019) revealed that a man-nature attitude and a healthy consumption lifestyle are predictors of green product purchasing intention.

4.6.2 The Effect of Green Promotion on the Purchase Intention

The study's second goal was to investigate how green marketing affected consumers' intentions to buy bottled water. According to Sarmiento and El Hanandeh (2018), green promotion is described as initiatives to inform and change consumers' opinions of green products. Its goal is to provide useful environmental information that is connected to the company's operations (Wang et al., 2019). Although this may result in devoted customers, the business must exercise restraint to avoid coming across as a green washer, which could cause consumers to disregard the promotion, boycott the goods, or file a complaint with the authorities. One of the primary ways that customers form positive relationships with bottled water is through advertising (Quansah et al., 2015).

The study revealed that green promotion ($\beta = 0.088$, t=2.480, p<0.01) completely and meaningfully influences the purchase intention of customers of water bottling companies. This indicates that advertising that emphasizes the promotion of environmentally friendly practices, green packaging, and environmental policies enacted by a company encourages customers to buy the company's goods. This means that companies can increase customer trust and loyalty by promoting their use of sustainable products and ecologically responsible business operations.

Sarmiento and El Hanandeh (2018), noted that the objectives of green advertising are similar to those of traditional advertising, and include informing consumers about the company and product, convincing them to switch to a green brand, and reminding them of the location and method of purchase.

In addition to obtaining some prediction value per unit of time, the study by Nur et al. (2021) also demonstrated a substantial association between four exogenous variables and the endogenous variable. Moreover, Rizwan et al. (2013) discovered that green perceived risk and value, on the other hand, had a significant influence on green purchase intention.

The reliability of the claim and consumer perception of green advertising, according to Zhu's (2012) research, have a significant impact on customers' intentions to purchase green products.

Tih et al. (2016) research shows that other-benefit appeal boosts purchase intentions more than self-benefit appeal. According to Kusuma and Handayani's (2018) findings, environmental attitude and green advertising have a positive and significant impact on environmental attitude and green purchase intention, and environmental knowledge also has a positive and significant impact on both of these variables.

4.6.3 Green Products and Purchase Intention: Moderation Effect of Environmental Knowledge

The third objective of the study was to evaluate the moderation outcome of environmental knowledge on the relationship amid green products and the purchase intention of customers of bottled water. According to Hosen et al. (2020), environmental awareness is the knowledge of the fragility of our environment and the importance of its preservation. According to Mahmoud et al. (2020), consumers are more likely to make green purchases

because the majority of the production process tends to exceed the effects on the environment.

The third goal of the research was to assess the moderate impact of environmental information on the relationship between the intention of consumers to purchase bottled water and green products. Environmental awareness, according to Hosen et al. (2020), is the understanding of the vulnerability of our environment and the significance of its preservation. Mahmoud et al. (2020) claim that because the majority of the production process tends to outweigh the effects on the environment, consumers are more inclined to make green purchases.

The study found that the collaboration between environmental knowledge and green products (β =0.892, t=5.280, p<0.01) has an important and positive impact on the purchase intention of customers of bottled water. The results imply that environmental information positively and meaningfully moderates the relationship between green products and the purchase intention of customers of bottled water environmental information influences the strength or direction of the relationship between green products and the purchase intention of customers.

4.6.4 Green Promotion and Purchase Intention: Moderation Effect of Environmental Knowledge

The final objective of the study was to evaluate the moderation consequence of environmental knowledge on the relationship between green promotion and the purchase intent of customers of bottled water. According to Liobikienė and Poškus (2019) encouraging environmental awareness is an easy method to protect the environment and help create a loyal client base. The definition of environmental literacy that is most frequently used includes an understanding of the environment, a concern for its problems,

as well as the knowledge, abilities, and drive to work toward resolving current issues and preventing future ones.

The study found that the collaboration between environmental knowledge and green promotion (β =-0.096, t=-2.047, p<0.05) has a significant and negatively influence on the purchase intention of customers of bottled water. The findings suggest that environmental awareness negatively and significantly affect the association between green advertising and customers' intentions to buy bottled water. Environmental awareness affects the direction or strength of the association between green products and consumers' intentions to buy.

The findings of the Karunarathna et al. (2020) study indicate that in order to convince customers to purchase green products, functional characteristics and emotional advantages have emerged as a major component of green product positioning. In order to evaluate the function of consumer environmental attitudes in mediating the relationship between the green marketing mix and green purchase intention, the study also includes a mediation analysis. According to the survey, consumers' environmental attitudes, their desire for green products, and their ability to afford them all have a significant influence on their decision to make green purchases.

The results of Kartawinata et al. (2020) revealed that consumer attitudes and the green marketing mix had a positive influence on the intention to buy green products in West Indonesia. According to Mahmoud et al. (2017), environmental understanding moderates the association between the green marketing mix and purchase intention.

According to Bahl and Chandra's (2018) research, the components of the green marketing mix have a significant impact on consumers' intentions to buy green products and their attitudes toward doing so. It is also quite instructive how the Marketing Mix Factors and Attitude toward Green Behavior Interact to Influence Purchase Intention.

Similarly, Weisstein et al. (2014) study findings also show that customers' professed value moderates the consequences of perceived quality and reported savings on green purchase intents. The findings of Hsu et al. (2017) demonstrate that country of origin and price sensitivity can strengthen the favorable impacts on the linkages between purchase intention and its antecedents. These factors include attitude, subjective norm, and perceived behavioral control. According to Liao et al (2020) research, views about green products are significantly and favorably influenced by green customer value. According to Indriani et al research from 2019, attitude completely mediates the link between environmental knowledge and the intention to make green purchases.
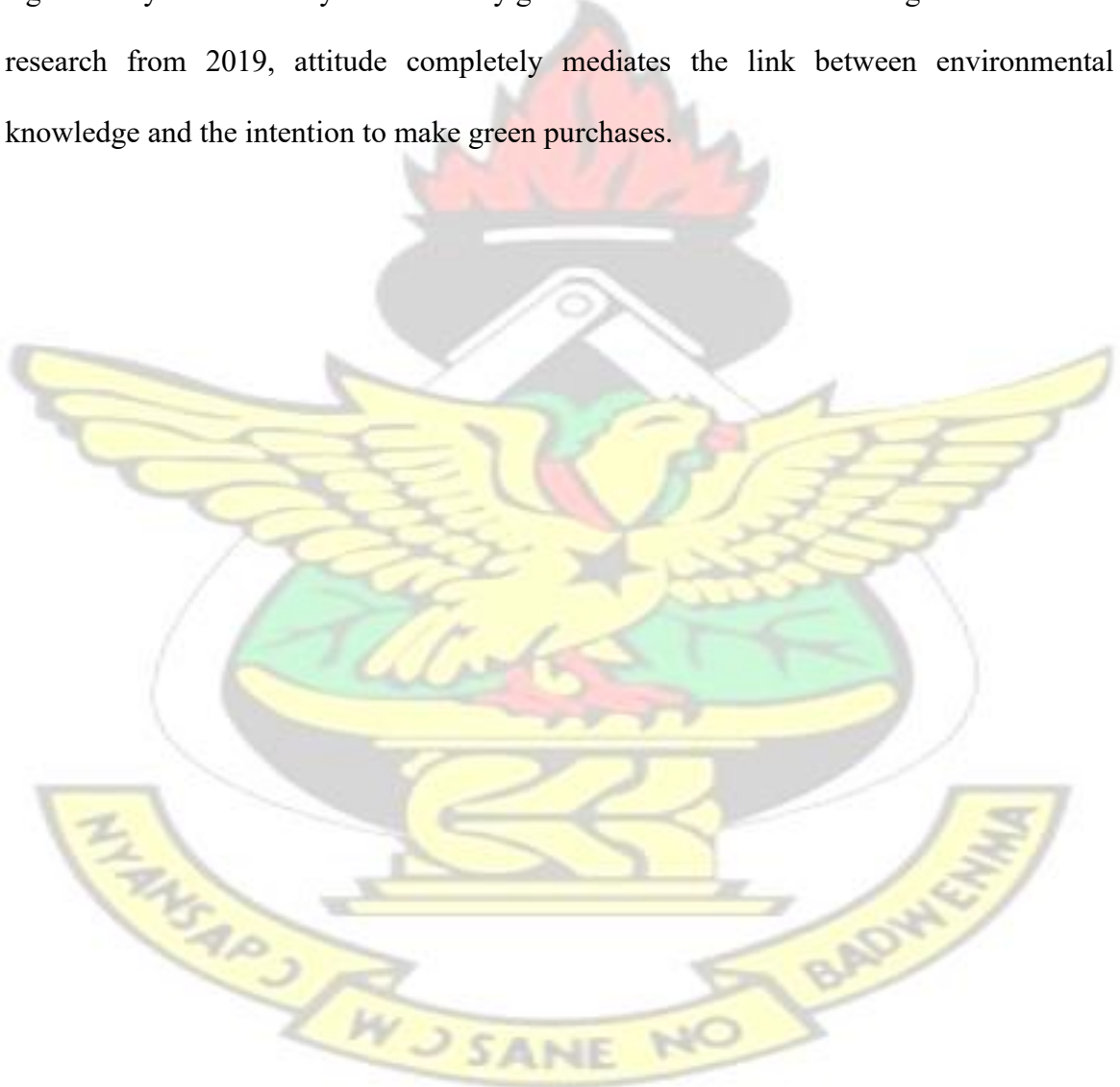
CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

The findings from the questionnaires given to respondents are summarized in this chapter. The main objective of the study is to investigate the connection between environmentally conscious marketing strategies, consumer environmental awareness, and consumer purchase intentions.

5.2 Summary of Findings

This segment of the research presents a summary of findings gathered from the research based on the objective outlined above. In this section, the researcher gives accounts of the outcome of the fieldwork.

5.2.1 Green Product and Purchase Intention

The first aim of the research was to examine the effect of a green product on the purchase intention of customers of bottled water. It was revealed green products positively and significantly influence the purchase intention of customers of water bottling companies. This implies that when a product contributes to environmental protection during production, usage, and disposal, consumers are more likely to purchase it. Simply by selecting eco-friendly products, there are numerous ways to lessen the environmental degradation that results from our product. There it can be said that consumers of bolted water demand products usually reduce waste and maximise resource efficiency. Consumers' knowledge of green companies has increased their positive green marketing consciousness and piqued their interest in reinforcing the environment while averting its destruction.

5.2.2 Green Promotion and Purchase Intention

The study's second goal was to investigate how green marketing affected consumers' intentions to buy bottled water. The study found that clients of water bottling companies are considerably and positively influenced by green promotion when considering making

a purchase. This refers to marketing that emphasizes the promotion of environmentally friendly practices, green packaging, and environmental policies enacted by a company in order to persuade customers to buy the company's goods. This means that companies can increase customer trust and loyalty by promoting their use of sustainable products and ecologically responsible business operations.

5.2.3 Environmental Knowledge and Green Products Interaction

The study's third goal was to investigate the moderating impact of environmental knowledge on the association between green products and consumers' intentions to buy bottled water. According to the study, consumers' intentions to buy bottled water are significantly and favorably influenced by the connection between environmental knowledge and green products. The results imply that environmental knowledge positively and significantly moderates the relationship between green products and the purchase intention of customers of bottled water environmental knowledge influences the strength or direction of the relationship between green products and the purchase intention of customers.

5.2.4 Environmental Knowledge and Green Promotion Interaction

The study's ultimate goal was to investigate the moderating impact of environmental knowledge on the association between green advertising and consumers' intentions to buy bottled water. According to the study, consumers' intentions to buy bottled water are significantly and negatively impacted by the relationship between environmental awareness and green marketing. The findings suggest that environmental awareness negatively and significantly affects the association between green advertising and customers' intentions to buy bottled water. Environmental awareness affects the direction or strength of the association between green products and consumers' intentions to buy.

5.3 Conclusions

The primary goal of this study is to investigate the connection between environmentally conscious marketing strategies, consumer environmental awareness, and consumer purchase intentions. Descriptive research, used in this study, tries to precisely and methodically describe a population, circumstance, or phenomena. There are 85,000 people in the study, including students at Kwame Nkrumah University of Science and Technology (KNUST) in Kumasi.

Since the population is large some of the students are being sampled based on the Slovin formula and the sample size for the study is 398. In this investigation, a straightforward random sample technique is employed. Simple random sampling uses 398 randomly generated integers, which are used to select a sample for this investigation. The primary sources are where the study's data will come from. Primary sources provide raw information and first-hand evidence. Using the use of closed-ended questionnaires with a five-Likert scale, the study's data has been gathered. Statistical techniques from the Statistical Package for the Social Sciences are being used by the researcher to produce the data analysis based on the objectives and questions from the study (SPSS). Descriptive statistics make up a significant portion of the data analysis.

The study revealed that green promotion and products positively and significantly influence the purchase intention of customers of water bottling companies. It was also revealed that environmental knowledge significantly moderation the relationship between green products, promotion and the purchase intention of customers of bottled water.

Therefore, the study concludes that green products and promotion have a significant relationship between the purchase intention of customers of bottled water and environmental information moderates the relationship among green products, promotion and purchase intention of customers. Thus, customers pay attention to environmental

knowledge, and green products and promotion are more important. Consequently, the continuous improvement in product quality and promotion concentrating on the green mix can bring high yields for the company.

5.4 Recommendations

The following recommendations are offered in light of the study's findings:

The study found that green products have an influence on customers' intentions it is therefore recommended that companies improve their products and develop them to be friendly products to the environment. This will improve their sale and profit as customers will demand more.

The study results indicated that public knowledge of green marketing was essential to customers' purchase intention, therefore there is a need to raise public awareness of the importance of green marketing in companies. Businesses must adopt sustainable business practices and marketing efforts to communicate a product's environmental benefits.

The study results indicate that knowledge of the public environment is essential to customers' intention, therefore it is recommended that companies establish a special section for environmental grievances that may be caused by their activities to address them. In order to benefit the local community, it is also advised that promotional campaigns be run to highlight the part that bottled water firms play in the use of green marketing. This study concentrated on water bottle companies; it is therefore recommended that further study is carried out using other industries like Chemical companies since such companies have a high risk of impacting the environment.

A study using rural settings is recommended since this study was on educated people in city settings. In addition, a study on the relationship between green product quality, green customer satisfaction, and green customer loyalty is recommended.

REFERENCES

Abdulla, N., Wrya, H. and Durmaz, O., 2020. Green product perception in Kurdistan Region of Iraq. Black Sea Journal of Management and Marketing, 1(1), pp.1-15.

Agustini, M., Baloran, A., Bagano, A., Tan, A., Athanasius, S. and Retnawati, B., 2021. Green marketing practices and issues: a comparative study of selected firms in Indonesia and Philippines. Journal of Asia-Pacific Business, 22(3), pp.164-181.

Ajzen, I., 2006. Behavioral interventions based on the theory of planned behavior.

Alvarez, R.M., Atkeson, L.R., Levin, I. and Li, Y., 2019. Paying attention to inattentive survey respondents. Political Analysis, 27(2), pp.145-162.

Amin, M., Uthamaputhran, S. and Ali, F., 2015. The effectiveness of green product positioning and marketing strategies towards purchase intention in Malaysia. International Journal of Innovation and Learning, 17(4), pp.516-528.

Antwi, S.K. and Hamza, K., 2015. Qualitative and quantitative research paradigms in business research: A philosophical reflection. European journal of business and management, 7(3), pp.217-225.

Aschale, A., Fufa, D., Kekeba, T. and Birhanu, Z., 2021. Intention to voluntary blood donation among private higher education students, Jimma town, Oromia, Ethiopia: Application of the theory of planned behaviour. Plos one, 16(3), p.e0247040.

Asenahabi, B.M., 2019. Basics of research design: A guide to selecting appropriate research design. International Journal of Contemporary Applied Researches, 6(5), pp.76-89.

Bahl, S. and Chandra, T., 2018. Impact of marketing mix on consumer attitude and purchase intention towards' green'products. A Journal of research articles in management science and allied areas (refereed), 11(1), pp.1-11.

Banerjee, S.B., 2017. Corporate environmentalism and the greening of strategic marketing: Implications for marketing theory and practice. In Greener Marketing (pp. 16-40). Routledge.

Banerjee, S.B., 2017. Corporate environmentalism and the greening of strategic marketing: Implications for marketing theory and practice. In Greener Marketing (pp. 16-40). Routledge.

Bennett, M. and James, P., 2017. The green bottom line. In The green bottom line (pp. 3060). Routledge.

Bhatia, M. and Jain, A., 2013. Green marketing: A study of consumer perception and preferences in India. Electronic Green Journal, 1(36).

Biswas, A., 2020. A nexus between environmental literacy, environmental attitude and healthy living. Environmental Science and Pollution Research, 27(6), pp.59225931.

Brei, V.A., 2018. How is a bottled water market created?. Wiley Interdisciplinary Reviews: Water, 5(1), p.e1220.

Bryła, P., 2018. Organic food online shopping in Poland. British Food Journal.

Chopra, S. and Chaudhary, M., 2021. Take A Chance At Making The World A Better Place: A Paradigm For Sustainable Development Through Green Marketing.

Clark, W.A. and Finley, J.C., 2007. Determinants of water conservation intention in Blagoevgrad, Bulgaria. Society and natural resources, 20(7), pp.613-627.

Conick, H., 2019. How Brands Can Help Consumers Green Up Their Act. Marketing News, a Publication of the American Marketing Association.

Cullen, A. and Noonan, P.S., 2021. Who owns and cares about the data? A method for identifying and gathering information for business research investigations. Business Information Review, 38(1), pp.21-27.

Dangelico, R.M. and Vocalelli, D., 2017. "Green Marketing": An analysis of definitions, strategy steps, and tools through a systematic review of the literature. Journal of Cleaner production, 165, pp.1263-1279.

Darwall, R., 2019. Green tyranny: exposing the totalitarian roots of the climate industrial complex. Encounter Books.

Das, M., Mandal, B. and Katiyar, V., 2020. Environment-friendly synthesis of sustainable chitosan-based nonisocyanate polyurethane: a biobased polymeric film. Journal of Applied Polymer Science, 137(36), p.49050.

Deepak, R.K.A. and Jeyakumar, S., 2019. Marketing management. Educreation Publishing.

Duncan, L., Shen, H., Gelaye, B., Meijsen, J., Ressler, K., Feldman, M., Peterson, R. and Domingue, B., 2019. Analysis of polygenic risk score usage and performance in diverse human populations. Nature communications, 10(1), pp.1-9.

Emanuelson, U. and Egenvall, A., 2014. The data–Sources and validation. Preventive veterinary medicine, 113(3), pp.298-303.

Groenland, E. and Dana, L.P., 2020. Qualitative methodologies and data collection methods: Toward increased rigour in management research.

Guthrie, G., 2010. Basic research methods: An entry to social science research. SAGE Publications India.

Hair, J.F., Page, M. and Brunsveld, N., 2019. Essentials of business research methods. Routledge.

Hawkins, G., 2011. Packaging water: plastic bottles as market and public devices. Economy and Society, 40(4), pp.534-552.

Hosen, N., Nakamura, H., & Hamzah, A. (2020). Adaptation to climate change: Does traditional ecological knowledge hold the key?. Sustainability, 12(2), 676.

Hsu, C.L., Chang, C.Y. and Yansritakul, C., 2017. Exploring purchase intention of green skincare products using the theory of planned behavior: Testing the moderating effects of country of origin and price sensitivity. Journal of Retailing and Consumer Services, 34, pp.145-152.

Indriani, I. A. D., Rahayu, M., & Hadiwidjojo, D. (2019). The influence of environmental knowledge on green purchase intention the role of attitude as mediating variable. International Journal of Multicultural and Multireligious Understanding, 6(2), 627635.

Kapferer, J.N. and Bastien, V., 2017. The specificity of luxury management: Turning marketing upside down. In Advances in luxury brand management (pp. 65-84). Palgrave Macmillan, Cham.

Kartawinata, B.R., Maharani, D., Pradana, M. and Amani, H.M., 2020, August. The role of customer attitude in mediating the effect of green marketing mix on green product purchase intention in love beauty and planet products in indonesia. In Proceedings of the International Conference on Industrial Engineering and Operations Management (Vol. 1, pp. 3023-3033).

Karunarathna, A.K.P., Bandara, V.K., Silva, A.S.T. and De Mel, W.D.H., 2020. Impact of green marketing mix on customers' green purchasing intention with special reference to Sri Lankan supermarkets.

Ketelsen, M., Janssen, M. and Hamm, U., 2020. Consumers' response to environmentallyfriendly food packaging-A systematic review. Journal of Cleaner Production, 254, p.120123.

Kusuma, P.N.P.D. and Handayani, R.B., 2018. The effect of environmental knowledge, green advertising and environmental attitude toward green purchase intention. Russian Journal of Agricultural and Socio-Economic Sciences, 78(6), pp.95-105.

Kytö, E., Virtanen, M. and Mustonen, S., 2019. From intention to action: Predicting purchase behavior with consumers' product expectations and perceptions, and their individual properties. Food quality and preference, 75, pp.1-9.

Lam, S.P., 2006. Predicting intention to save water: Theory of planned behavior, response efficacy, vulnerability, and perceived efficiency of alternative solutions 1. Journal of Applied Social Psychology, 36(11), pp.2803-2824.

Liao, Y.K., Wu, W.Y. and Pham, T.T., 2020. Examining the moderating effects of green marketing and green psychological benefits on customers' green attitude, value and purchase intention. Sustainability, 12(18), p.7461.

Liobikienė, G., & Poškus, M. S. (2019). The importance of environmental knowledge for private and public sphere pro-environmental behavior: modifying the value-beliefnorm theory. Sustainability, 11(12), 3324.

Liobikienė, G., Grincevičienė, Š. and Bernatonienė, J., 2017. Environmentally friendly behaviour and green purchase in Austria and Lithuania. Journal of cleaner production, 142, pp.3789-3797.

Lycett, M., 2013. 'Datafication': making sense of (big) data in a complex world. European Journal of Information Systems, 22(4), pp.381-386.

Mahmoud, T. O. (2018). Impact of green marketing mix on purchase intention. International Journal of Advanced and applied sciences, 5(2), 127-135.

Mahmoud, T.O., Ibrahim, S.B., Ali, A.H. and Bleady, A., 2017. The influence of green marketing mix on purchase intention: The mediation role of environmental knowledge. International Journal of Scientific & Engineering Research, 8(9), pp.1040-1048.

Matthews, C.E., Hagströmer, M., Pober, D.M. and Bowles, H.R., 2012. Best practices for using physical activity monitors in population-based research. Medicine and science in sports and exercise, 44(1 Suppl 1), p.S68.

Merriam, S.B. and Grenier, R.S. eds., 2019. Qualitative research in practice: Examples for discussion and analysis. John Wiley & Sons.

Mirabi, V., Akbariyeh, H. and Tahmasebifard, H., 2015. A study of factors affecting on customers purchase intention. Journal of Multidisciplinary Engineering Science and Technology (JMEST), 2(1).

Mukonza, C. and Swarts, I., 2020. The influence of green marketing strategies on business performance and corporate image in the retail sector. Business strategy and the Environment, 29(3), pp.838-845.

Nam, C., Dong, H. and Lee, Y.A., 2017. Factors influencing consumers' purchase intention of green sportswear. Fashion and Textiles, 4(1), pp.1-17.

Nardi, P.M., 2018. Doing survey research: A guide to quantitative methods. Routledge.

Nardi, P.M., 2018. Doing survey research: A guide to quantitative methods. Routledge.

Nekmahmud, M., & Fekete-Farkas, M. (2020). Why not green marketing? Determinates of consumers' intention to green purchase decision in a new developing nation. Sustainability, 12(19), 7880.

Nguyen, K.T., Xu, N.Y., Zhang, J.Y., Shang, T., DuBord, A.Y., Heinemann, L., Krisiunas, E.P., Stumpe, T., Seid, D.A. and Klonoff, D.C., 2022. Green diabetes summit 2021. Journal of Diabetes Science and Technology, 16(1), pp.233-247.

Nugraha, A. and Setyanto, R.P., 2018. The effects of vlogger credibility as marketing media on brand awareness to customer purchase intention. Journal of research in management, 1(2).

Nur, F., Akmaliah, N., Chairul, R. and Safira, S., 2021. Green purchase intention: The power of success in green marketing promotion. Management Science Letters, 11(5), pp.1607-1620.

Ormston, R., Spencer, L., Barnard, M. and Snape, D., 2014. The foundations of qualitative research. Qualitative research practice: A guide for social science students and researchers, 2(7), pp.52-55.

Ottman, J.A., 2017. The new rules of green marketing: Strategies, tools, and inspiration for sustainable branding. Routledge.

Paciarotti, C. and Torregiani, F., 2021. The logistics of the short food supply chain: A literature review. Sustainable Production and Consumption, 26, pp.428-442.

Peña-García, N., Gil-Saura, I., Rodríguez-Orejuela, A. and Siqueira-Junior, J.R., 2020. Purchase intention and purchase behavior online: A cross-cultural approach. Heliyon, 6(6), p.e04284.

Peña-García, N., Gil-Saura, I., Rodríguez-Orejuela, A. and Siqueira-Junior, J.R., 2020. Purchase intention and purchase behavior online: A cross-cultural approach. Heliyon, 6(6), p.e04284.

Peterson, R. A. (2001). On the use of college students in social science research: Insights from a second-order meta-analysis. Journal of consumer research, 28(3), 450-461.

Polit, D.F. and Beck, C.T., 2010. Generalization in quantitative and qualitative research: Myths and strategies. International journal of nursing studies, 47(11), pp.14511458.

Prakash, G. and Pathak, P., 2017. Intention to buy eco-friendly packaged products among young consumers of India: A study on developing nation. Journal of cleaner production, 141, pp.385-393.

Prakash, G. and Pathak, P., 2017. Intention to buy eco-friendly packaged products among young consumers of India: A study on developing nation. Journal of cleaner production, 141, pp.385-393.

Quansah, F., Okoe, A. and Angenu, B., 2015. Factors affecting Ghanaian consumers' purchasing decision of bottled water. International Journal of Marketing Studies, 7(5), p.76.

Rahaman, H., 2018. Digital heritage interpretation: a conceptual framework. Digital creativity, 29(2-3), pp.208-234.

Rajput, N., Sharma, U., Kaur, B., Rani, P., Tongkachok, K. and Dornadula, V.H.R., 2022. Current global green marketing standard: changing market and company branding. International Journal of System Assurance Engineering and Management, 13(Suppl 1), pp.727-735.

Razzak, M. R., & Jassem, S. (2019). Socioemotional wealth and performance in private family firms: The mediation effect of family commitment. Journal of Family Business Management.

Rizwan, M., Ahmad, S.U. and Mehboob, N., 2013. Enhancing the green purchase intention based on green marketing: an empirical study from Pakistan. Asian Journal of Empirical Research, 3(2), pp.208-219.

Sarma, P.K., 2022. Farmer behavior towards pesticide use for reduction production risk: A Theory of Planned Behavior. Cleaner and Circular Bioeconomy, 1, p.100002.

Sarmiento, C.V. and El Hanandeh, A., 2018. Customers' perceptions and expectations of environmentally sustainable restaurant and the development of green index: The case of the Gold Coast, Australia. Sustainable Production and Consumption, 15, pp.16-24.

Schildkamp, K., 2019. Data-based decision-making for school improvement: Research insights and gaps. Educational research, 61(3), pp.257-273.

Schleicher, D.J., Baumann, H.M., Sullivan, D.W. and Yim, J., 2019. Evaluating the effectiveness of performance management: A 30-year integrative conceptual review. Journal of Applied Psychology, 104(7), p.851.

Sileyew, K.J., 2019. Research design and methodology (pp. 1-12). Rijeka: IntechOpen.

Sogari, G., Pucci, T., Aquilani, B. and Zanni, L., 2017. Millennial generation and environmental sustainability: The role of social media in the consumer purchasing behavior for wine. Sustainability, 9(10), p.1911.

Song, Y., Qin, Z. and Yuan, Q., 2019. The impact of eco-label on the young Chinese generation: The mediation role of environmental awareness and product attributes in green purchase. Sustainability, 11(4), p.973.

Sönnichsen, S.D. and Clement, J., 2020. Review of green and sustainable public procurement: Towards circular public procurement. Journal of cleaner production, 245, p.118901.

Suki, N.M., 2016. Green product purchase intention: impact of green brands, attitude, and knowledge. British Food Journal.

Szabo, S. and Webster, J., 2021. Perceived greenwashing: the effects of green marketing on environmental and product perceptions. Journal of Business Ethics, 171(4), pp.719-739.

Taber, K.S., 2018. The use of Cronbach's alpha when developing and reporting research instruments in science education. Research in science education, 48(6), pp.12731296.

Taherdoost, H., 2016. Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. How to test the validation of a questionnaire/survey in a research (August 10, 2016).

Tih, S., Chan, K.T., Ansary, A. and Ahmed, A., 2016. Green advertising appeal and consumer purchase intention. Jurnal Pengurusan, 47(1), pp.1-19.

Trivellas, P., Malindretos, G., & Reklitis, P. (2020). Implications of green logistics management on sustainable business and supply chain performance: evidence from a survey in the greek agri-food sector. Sustainability, 12(24), 10515.

Trumbo, G. J. and O'Keefe, C., 2001. Intention to conserve water: Environmental values, planned behavior, and information effects. A comparison of three communities sharing a watershed. Society & Natural Resources, 14(10), pp.889-899.

Wang, H., Ma, B. and Bai, R., 2019. How does green product knowledge effectively promote green purchase intention?. Sustainability, 11(4), p.1193.

Wang, H., Ma, B. and Bai, R., 2019. How does green product knowledge effectively promote green purchase intention?. Sustainability, 11(4), p.1193.

Watson, J.C., 2017. Establishing evidence for internal structure using exploratory factor analysis. Measurement and Evaluation in Counseling and Development, 50(4), pp.232-238.

Weisstein, F.L., Asgari, M. and Siew, S.W., 2014. Price presentation effects on green purchase intentions. Journal of Product & Brand Management.

Wesselink, R., Blok, V. and Ringersma, J., 2017. Pro-environmental behaviour in the workplace and the role of managers and organisation. Journal of cleaner production, 168, pp.1679-1687.

Wilson, J., 2014. Essentials of business research: A guide to doing your research project. Essentials of Business Research, pp.1-376.

Zhu, B., 2012, October. The impact of green advertising on consumer purchase intention of green products. In Proceedings of World Business and Economics Research Conference.

Zubcsek, P.P., Katona, Z. and Sarvary, M., 2017. Predicting mobile advertising response using consumer colocation networks. Journal of Marketing, 81(4), pp.109-126.

APPENDIX A

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI SCHOOL OF BUSINESS

This questionnaire is intended to solicit information on the Topic **"Effect of Green Marketing Practices on Purchase Intention: Moderation Role of Environmental Knowledge"**. The research is purely meant for academic purposes and it is being conducted in partial fulfilment of the requirement for the award of a Master of Science Degree. The researcher assures all respondents that the answers provided would be treated as confidential and anonymous.

SECTION A: **DEMOGRAPHIC CHARACTERISTICS**

1. Age of respondents   A) Below 20 years   [ ]

        B) 21 – 25 years   [ ]

        C) 26 – 30 years   [ ]

        D) Above 30 years   [ ]

2. Gender of respondents

        A) Male   [ ]

        B) Female   [ ]

3. Education Level

        A) 1st Year Undergraduate (Level 100)   [ ]

        B) 2ndYear Undergraduate (Level 200)   [ ]

        C) 3rdYear Undergraduate (Level 300)   [ ]

        D) 4th year and above Undergraduate (Level 400 & beyond)   [ ]

        E) Postgraduate   [ ]

4. What is your field of study at the University?

        A) Business   [ ]

        B) Economics   [ ]

        C) Humanities (arts, social science, language, etc.) other than A and B [ ]

        D) Sciences or Engineering   [ ]

        E) Others   [ ]

SECTION B: **GENERAL QUESTIONS**

Kindly indicate the extent to which you agree to each of the following items using a Likert scale of 1 – 5 [where 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree and 5 =Strongly Agree].

S/N	Part A-**Environmental knowledge/ awareness**	1	2	3	4	5
1	Environmental issues are an emergency issue					
2	Environmental issues are consumers' responsibility					
3	I wish to see less packaging waste generated by processed food products					
4	I am worried about how all of my activities affect the environment					
5	I know that I buy products that are environmentally safe.					
6	I am very knowledgeable about environmental issues.					

7	I know a lot of information about friendly products.					
S/N	**Part B- Green Product**	**1**	**2**	**3**	**4**	**5**
1	Bottle Water Companies develop and make available some environmentally friendly products.					
2	By buying a green product, I indirectly influence environmental protection.					
3	If consumers keep purchasing green products, the production of green products will eventually increase.					
4	A green product like bottled water usually comes smaller in portions but at higher prices.					
5	I'm more likely to buy bottled water that is packaged in an ecofriendly manner and made easy for recycling or composting.					
S/N	**Part C: Green Promotion**	**1**	**2**	**3**	**4**	**5**
1	The water bottle company devotes a special day to the environment					
2	Water bottle company support holding. Seminars and conferences related to the environment					
3	Employees of the Water bottle company direct the customers to the hour they can use the products in a way that does not harm the environment					
4	Water bottle Companies contribute to supporting the environmental centers					
S/N	**Part D: Purchase Intention**	**1**	**2**	**3**	**4**	**5**
1	For future purchases, I plan to seek out environmental products.					
2	For future purchases, I will take more time to search for environmentally friendly alternatives to products that I typically buy.					
3	I plan to spend time searching company websites to learn more about environmentally friendly options.					
4	For future purchases, I will take more time to search for environmentally friendly alternatives to products that I typically buy					
5	I plan to continue to purchase friendly products in the future.					