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The Effect of Packed Water Packaging Attributes On Consumers' Purchase Decision: A Case of Selected Packed Water Manufactured In Bahir Dar City

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**BAHIR DAR UNIVERSITY OFFICE OF GRADUATE PROGRAMS
DEPARTMENT OF MARKETING MANAGEMENT (MA) PROGRAM**

**The Effect of Packed Water Packaging Attributes on Consumers' Purchase
Decision: A case of Selected Packed Water Manufactured in Bahir Dar City**



*A Thesis Submitted to the Office of Graduate Programs of Bahir Dar University in
Partial Fulfillment of the Requirements for Master of Arts in Marketing
Management*

BY:

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June, 2022
Bahir Dar, Ethiopia

DECLARATION

I declare that this research paper titled The Effect of Packed Water Packaging Attributes on Consumers' Purchase Decision: A case of Selected Packed Water Manufactured in Bahir Dar City was my original work, and has not been presented either in part or in full in this University for degree or diploma in any other university. All sources of materials used for the research paper have been duly acknowledged. It is submitted here in partial fulfillment of the requirements of the Marketing Management Masters at Bahir Dar University.

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Date _____

**BAHIRDAR UNIVERSITY
OFFICE OF GRADUATE PROGRAMES**

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**By
CHILOTAW EMBIALE**

We, the undersigned, members of the Board of Examiners of the final open defense by Chilotaw Embiale have read and his thesis titled “The Effect of Packed Water Packaging Attributes on Consumers' Purchase Decision: A case of Selected Packed Water Manufactured in Bahir Dar City”, and examined the candidate. This is, therefore, to certify that the thesis has been accepted in partial fulfillment of the requirements for the degree of Masters of Marketing Management (MA).

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Abstract

Packaging is the method of enclosing or protecting products for their distribution, storage, sale, and use. Packaging is capable of performing all these tasks through its elements, namely packaging color, packaging design, quality of packaging materials, packaging size, packaging graphics, and packaging label or printed information. The objective of this study is to examine the effect of packed water packaging attributes on consumers' purchase decisions in the case of selected packed water manufacturers in Bahir Dar city. A mixed research approach was used in this research. Primary data has been collected through a questionnaire, and for analysis purposes, SPSS software was used. In this study, a sample of 384 respondents was used. According to the findings of the research study, it has been observed that packaging is an important factor in influencing consumers' purchase decisions of Choice, Kefeta, and Genet packed mineral waters. It is further concluded that of all the studied packaging elements, packaging design is the most important factor that influences a consumer's purchase decision. Based on the findings of the study, it is recommended that packed mineral water companies in Ethiopia should give great emphasis on continually improving the quality of their package attributes to enhance consumers' purchase decisions.

KeyWords: *Packaging, Buying behavior, purchase decision, independent & dependent variable*

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List of Acronyms

BDU= Bahir Dar University

PC= Package Color

PM= Package Material

PD= Package Design

PS= Package Size

PG= Package Graphics

PI= Packaging Information

CPDB= Customer purchasing decision behavior

CHAPTER ONE

INTRODUCTION

This chapter gives a detailed introduction of the research starting with a brief background on the need to study the effect of packaging on consumer's purchase decision. In this chapter, statement of the problem, basic research questions, research objectives, significance of the research, scope, and definition of terms and organization of the research are also included.

1.1 Background of the Study

In today's world production, storage, distribution and marketing of consumer and non-consumer products is significantly impacted by their packaging. Packaging cause's differentiation from competitors and it is used as a competitive advantage in the market. It also significantly influences the buying decision at the point of sale. Different brands of products use a various range of packaging features such as colors, quality of material, designs, size, graphics and messages. These packaging elements will attract and strengthen customer attention and helps the product identification via the image provided. Packaging is the last resort tool to reach the consumers has a prominent role to transfer any message to them (Deliya and Parmar. 2012).

Customers purchased packaged water for different reasons; among these, the basic ones were domestic travel, water scarcity, contamination, and restaurants and hotels service. The primary reason for purchasing packaged water for market place respondents was restaurants and hotels

service, followed by traveling alone (long journey), contamination of water, and scarcity of water and domestic travel, respectively. However, contamination of tap water was the primary reason for purchasing packaged drinking water for residence place respondents. Scarcity of water, domestic travel, traveling alone, and restaurants and hotel service were ranked second, third, and fourth, respectively. Price of packaged water was the primary factor behind market place customer's preference followed by test and packaging materials of the packaged water. On the contrary, quality of the packaged water was the base for resident place respondents for choosing their product followed by price and packaging material.

Therefore, this research was examined the effect of packaging on consumer's buying behavior of Choice, Kefeta, and Genet water. Six elements of packaging were used to determine consumer's buying behavior. Relative impact of each packaging elements on consumer's buying behavior was measured. Elements of the package which should be highlighted in designing such packages were determined in this study.

The overall purpose of this study is that even though there are various studies that indicate the positive relationship between packaging and consumer's purchase decision, there is no such study conducted in the Alfa mineral water market in Ethiopia. This industry is one of the rising industries in Ethiopia and there are huge operators which involved in bulk shipments within the country. Through identifying the elements of packaging which must be highlighted in the design of these packages, implementing the same on further package designs will significantly help these companies and/or new entrants raise their market sales turnover and profitability.

1.2 Statement of the Problem

While the overwhelming number of studies have investigated the role of packaging in consumer's purchase decision and all have indicated there is a direct influence of product's package in consumer's purchase, use and repurchase decisions, there are no too many studies done regards to such topics in Ethiopia regards to mineral water in the trade.

Today, it is far more common for mineral water to be bottled at the source for distributed consumption. Travelling to the mineral water site for direct access to the water is now uncommon, and in many cases not possible because of exclusive commercial ownership rights. There are more than 4,000 brands of mineral water commercially available worldwide. According to Rundh 2005, packaging attributes attracts consumer's attention to a particular

product, enhances its image, and influences consumer's perceptions about product. Moreover, the packaging attributes of a product imparts unique value to products and works as a tool for differentiation and hence stimulates consumer buying behavior (Underwood, Klein, & Burke, 2001). Mohd (2010) concluded that perceived value significantly influences the purchasing intention of food products and that consumer brand preferences guide their future behaviors. Many studies have been conducted in the area of packaging across the world. However, these studies have failed not come up with a shared conclusion in relation to the influence of packaging attribute on consumer's buying behavior (Silayoi and Speece, 2004; Vila and Ampuero, 2007 and Kuvykaite, 2009). Also Kuvykaite (2009), state that the difference of the findings in this area depends on the context of the research. This seems to suggest that the lack of a common answer to the phenomenon under study is because of diverse contexts, situations/localities products under considerations, among other issues that affect consumer behavior.

Many industries spend millions of dollars trying to come up with package designs that have significant influence in consumer's purchase decisions made at the point of sales. There is paradigm shift from the traditional point of sales service to self-service system globally and also locally here in Ethiopia. This along with the ever-dynamic consumer lifestyle leads to place interest in packaging as an important tool of sales promotion.

Packaging is an important tool for marketing and can play an important role in creating a sustainable competitive advantage. Packaging decision consists of various elements that should be considered i.e. size, design, material, color, text and brand. The collective impact of all these elements plays a significant role in influencing consumer's decision to buy a product or not.

The quality of packaging materials provides an image about the quality of the product itself. This highlights the fact that packaging can be used as a strategic tool to achieve the business goals of commercial firms. In order to achieve your business goals, your products have to provide information and facilitate communication with customers that are becoming more and more demanding these days. This can easily be achieved by proper labeling of your products to enable them communicate with consumer's differently at the point of sales.

Though all these elements of packaging are important in the making packaging decisions, relative impact of each element in its influence to make consumer's make the buy decision varies. Thus, this study examines which packaging elements play a significant role in impacting consumers' purchase behavior and why these elements need to be focused on in designing a package of packed mineral water in the market. Thus, this study will answer the following research questions.

1.3 Objectives of the Study

1.3.1 General Objectives

The general objective of this study is to determine the effect of packaging in consumer's purchase decision behavior of Choice, Kefta and Genet packed mineral waters.

1.3.2 Specific Objectives

Specifically this study was to determine if there is significant relationship between,

- ✓ To examine the relationship between package color and consumer's purchase decision behavior of packed mineral waters'
- ✓ To know the relationship between package materials and consumer's purchase decision behavior of packed mineral waters'
- ✓ To identify the effect of packaging design on consumer's purchase decision behavior of packed mineral waters'
- ✓ To examine the influence of package size on consumer's purchase decision behavior of packed mineral waters
- ✓ To know the impact of package graphics on consumer's purchase decision behavior of packed mineral waters'
- ✓ To investigate the relationship between product package information and consumer's purchase decision behavior of packed mineral waters'

1.4 Research Questions

This study intends to establish the existence or absence of a significant relationship between packed mineral waters of Choice, Kefta, & Genet and consumer's purchase decision behavior. Thus, the following research questions are drawn:

- ✓ Is packaging color have an impact on consumer's purchase decision behavior of packed mineral waters'?
- ✓ Are packaging materials having an impact on consumer's purchase decision behavior of packed mineral waters'?
- ✓ Does packaging design have an impact on consumer's purchase decision behavior of packed mineral waters'?
- ✓ Does packaging size have an impact on consumer's purchase decision behavior of packed mineral waters'?
- ✓ Does packaging graphics have an impact on consumer's purchase decision behavior of packed mineral waters'?
- ✓ Does packaging information have an impact on consumer's purchase decision behavior of packed mineral waters'?

1.5 Hypothesis of the Study

- ✓ Package color has no significant positive relationship with consumer's purchase decision behavior.
- ✓ Package materials have no significant positive relationship with consumer's purchase decision behavior.
- ✓ Package design has no significant positive relationship with relationship consumer's purchase decision behavior.
- ✓ Package size has no significant positive relationship with consumer's purchase decision behavior.
- ✓ Package graphics has no significant positive relationship with consumer's purchase decision behavior.
- ✓ Package information has no significant positive relationship with consumer's purchase decision behavior.

1.6 Significance of the Study

This study helps to determine which packaging elements need to be highlighted in making packaging decision of packed mineral water marketed in the country.

The researcher believe that the findings of this study would be use full to business organization and marketers by identifying relevant packaging elements and how these elements affect consumers purchasing behavior. The findings of this study can be used by new and existing mineral water manufacturers in coming up with strategies and in development of product packaging to hose targets may be the right customers. The findings of this study have revealed that color, graphics, shape, size, package material and product information do affect the buying behavior of consumers and hence mineral water manufactrers can be able to gain insights on what innovations they can make to provide solutions to the current marketing challenges. Mineral water manufacturers can also benefit from the findings to assist their businesses to have a competitive advantage. The regulatory and governmental bodies can use the findings to come up with future product packaging regulations, policies and laws that will aid in regulating and the operationalization of the packaging industry.

This study revealed that of the attributes examined, product information had the most influence on consumer buying behavior. This shows that consumers are more cautious and interested in the ingredients and contents of their packaged water. Hence, regulatory bodies and governmental institutions can use these findings to come up with policies that ensure that consumers understand the product's contents prior to consumption. Moreover it will also has significance among the societies and business people who want to engage in such business activities and need to engage in packaging activities. It will also enable to improve the existing bottled water manufacturers for a better performance of their companies. It will be expected to extend or add to the existing literature on packaging and marketing performance. It will also serves as a reference material for other researchers who needs to make a research on this area at larger scale to carry out comparison among other pure water manufacturing companies. The study will also contribute knowledge to the field of packaging.

1.7 Scope of the Study

This research was conducted to assess the impact of packaging on consumer's purchase decision behavior. Although there may be several factors which influence consumer's purchase decision of Choice, Kefta and Genet packed mineral waters', only the impact of packages was examined in this study. The packaging elements measured in this research are package color, materials, design, size, graphics and packaging information. The study was confined to these elements of packaging which are indicative of the effect that packaging has in consumer's purchase decision behavior of packed mineral waters. The study was delimited to the data obtained from the rates using questionnaires and interviews in the packed mineral waters manufacturing company only while further study of other company in the country have a significant effect on the comprehensiveness of the study.

1.8 Definition of Terms

- ✓ **Packaging** – is a material used to contain a product, protect it from any sort of damages, and contain information about the brand, its quality and ways of using the product.
- ✓ **Consumer Buying Behavior** – is the study of individuals, groups or organizations and all the activities associated with the purchase, use and disposal of goods and services, including the consumer's emotional, mental and behavioral responses that follow these activities.
- ✓ **Competitive Advantage** – is a condition or circumstance that puts a company in a favorable or superior business position than its competitors.
- ✓ **Packaging Elements** – are components of a package such as its color, image, shape, material size and typography
- ✓ **Package Graphics** refers to the creation of the exterior of a product. That includes choices in material and form as well as **graphics**, colors and fonts that are used on wrapping, a box, a can, a bottle or any kind of container. It's a practical tool, yes.
- ✓ **Package Colors** are one of the elements that will set your business apart from others and your choice of **colors** will set your product apart from your competitors' products.
- ✓ **Packaging design** is the connection of form, structure, materials, color, imagery, typography, and regulatory information with ancillary **design** elements to make a product suitable for marketing.

- ✓ **Packaging material** means any article or substance which is intended to or may come into contact with food, including any containers such as cans, bottles, cartons, boxes, cases or sacks, or wrapping and covering **material** such as foil, film, metal, paper, wax paper or cloth;
- ✓ **Packaging information** Packaging as a primary vehicle of communication with the consumer, it provides details about the product at the POS.

1.9 Organization of the Research Paper

The study was presented organized into five chapters. Chapter one introduces the study by giving the background information on the research problem, problem statement, research questions, research hypothesis and objectives, cope of the study, and organization of the research. The next chapter, chapter two was presented a detailed and systematic examination of the literature drawing on the core theoretical, conceptual and empirical foundations of the research. Relevant studies were critically analyze and used to guide and direct the empirical study. Chapter three then moves on to present the methodology of the research collects empirical data using a mixed methods methodology. The justification and the details of the methodology employed will be presented and discussed in detail. Chapter four was presented the data presentation and the analysis of the data and was provided a series of descriptive statistics alongside a more thematic analysis approach. The final chapter, chapter five then was presented the summary, conclusions, recommendations, limitation and areas of future research will be presented.

CHAPTER TWO

REVIEW OF RELATED LITERATURES

2.1. Theoretical Literature Review

2.1.1. Overview of Packaging

Packaging is one of the most important factors which play a vital role in marketing communication, especially in point of sales. Hence it could be treated as one of the most important factors which influence consumer's purchase decision (Ahmed et al.2014). Packaging primarily causes differentiation of a product from its competitors and be considered as a competitive advantage. Packaging is also one of the most important factors that influence the buying decision at the point of sale as that is where it serves as an essential part of sales process (Ehsan 2014).

Laua and Wong, (2000) explained, packaging makes food more convenient and gives the food greater safety assurance from microorganisms, biological and chemical changes such that the packaged foods can enjoy a longer shelf life. Packaging has always been an enabling activity, process, and most recently, technology. As people began to move beyond small group self-sufficiency, they found it necessary to move products from the point of manufacture to the point of use. Products became subject to transportation, handling, and storage conditions, and in many cases were not adequate to withstand these conditions. Packaging became the temporary intermediate step that helped products arrive in good condition (Goodwin and Young, 2011). The marketplace is full of products that gain their market niche solely from the utility given by the package, from hand pumped spray cleaners to aerosol cheese spread; most of these items would be much less useful and would be certainly be much less profitable, if they existed at all, without effective packaging. It would be hard to imagine having to store ketchup in some kind of storage tank in the kitchen rather than getting it from a bottle, and more complex items such as aerosol spray paint or asthma inhalers would be very difficult to use without portable, relatively inexpensive packages that replace large-scale spray equipment and medical nebulizers (Morris, 2011 As Deliza and MacFie, (2001) quoted from (Tom et.al 1987); since the packaging is the first contact between the product and the consumer; it is the means by which food producers

communicate with consumers. If the packaging attracts consumers to a product and the product itself does not deliver what consumers expect, the product perception may be affected, with drastic consequences for consumption and sales. Thus, it is crucial that food producers first identify the attributes that consumer's desire in a product and then design the critical cues to communicate these desired characteristics.

Packaging plays an essential role in marketing and distribution of products. At the point of sale, packaging of products is crucial issue in a consumer's purchase decision (Ghosh. 2017). Packaging impacts the consumer's mindset of product by its exposure. Even after the purchase, the package of the product will continue to impact the consumption experience (Mousavi. and Jahromi. 2014). Packaging is used for several purposes. The first use of packaging is containing a product which determines the amount of the product consumers will purchase (Hussain, S. et al. 2015).

The other use of packaging is to protect product from contamination, environmental damage and theft. Further use of packaging is its importance to facilitate transportation and storing of products. Carrying valuable information and its colorful design that makes attractive displays is also another vital use of packaging (Nasar A. et al. 2012). In other words, packaging is the primary means of identifying a product and indicates the superiority of a product in a market. It is also an important component of the marketing system of products either at domestic or foreign level (Dhurup et al. 2010). It also has a very active role in increasing sales, inventory turnover in the company's warehouse and is also responsible for maximizing the revenue of producers (Hammad and Abouie 2015).

Therefore, that is why there are packaging manufacturers which have long had a special notice for the concept of packaging in order to increase their competitiveness in national and international markets and step in the course of increasing their market share by the aid of factors such as graphic design, the use of quality raw material, unique color, innovative approaches and various ways of labeling in the product packages (Hamdar et al. 2018).

There has been extensive research in packaging's impact on consumer buying behavior over many years. These studies indicate that packaging allows attracting consumer's attention,

transferring valuable product information, positioning the product in the consumer's mind and differentiating the product from others (Chukwu 2018). Therefore, understanding how packaging variables, such as color design, and graphics, impact consumer realization, evaluation, and behavior is of both theoretical and managerial importance (Rahmani et al 2013).

We are witnessing a paradigm shift from the traditional point of sales service to self-service system globally. This along with the ever-dynamic consumer lifestyle led to place interest in packaging as an important tool of sales promotion. Therefore, packaging performs an important role in marketing communications, especially at the point of sale and should be treated as one of the most important factors in influencing consumer's purchase decision (Ahmed and Parmar. 2014).

Consumer decision making is defined as a psychological orientation that reflects consumer choice approach i.e. when viewing product package, consumers tend to unconsciously imagine the aspects of the product such as appearance, taste and smell. Correct understanding of customers and their buying behavior has numerous advantages (Budiardjo. 2016). Through this, managers and marketers of a company could make the best decisions that meet customer needs and achieve and/or exceed the company goals.

There are three models of analyzing consumer buying decisions. These are economic models, psychological models and consumer behavior models. Economic models are based on the assumptions of rationality and near perfect knowledge about the product. It is quantitative and the consumer is concerned on how to maximize their utility. Psychological models involve some psychological and cognitive processes such as motivation and need recognition. They are qualitative and built on sociological factors such as cultural influences and family values. Consumer behavior model is the practical model used by marketers which involves mixing of both economic and psychological models (Draskovic et al. 2014).

2.1.2. The History of Packaging

For sure packaging today must have been different from what packaging was in early periods. Packaging has been changing from time to time with the advancement of technology, with changing in consumer's need and expectation, with availability of resource. The issue of

packaging and branding using symbols has started as long as the Stone Age to that of Sumerians (Marianne and Sandra, 2012). Packaging dates back beyond recorded history. Primitive people used leaves, hollow gourds, and other containers to carry food and water from one place to another. Later, clay pots were used, and still later, glass and metal containers were developed. In all these cases, the fundamental function of the package was containment of the product, enabling it to be moved as a unit. This purpose is still the basic packaging function of today, but packaging has a number of additional requirements as well. There are numerous ways to classify these functions (Selke, 1997). Calver, (2007) added; packaging's development has been affected over the centuries by advances in technology, by transportation developments, and by societal changes. Just as progress and change have had an impact on all aspects of our lives, so have these things influence packaging. From the above stated literature one can understand that the development of packaging is not a one night achievement rather it is the effort of many years work and straggle. This could be aroused from the need for easy and better living.

Risch, (2009) classified the history of packaging in to three parts which are; early development (with the industrial revolution new manufacturing process and new material started to develop and the package were not initially intended for food products), post-world war II (after the war has ended the focus turned on food and food quality wishing the people to have food all year round. In this time plastics has developed much by which used as a food package) and new package development (it was a turning point by which new food categories created and changes the way of delivering the product to customers. Many package materials like that of aluminum cans was used to pack a product which is first introduced to be opened with can opener which later on ring pull was introduced).

2.1.3. Consumer's Buying Decision Process

The buying decision process is the decision-making process used by consumers regarding market transactions before, during and after the purchase of goods or services. This can be based on a rational cost benefit analysis in the presence of multiple alternatives. The five stages of the consumer are Problem/Need Recognition where the consumer recognizes what the problems/needs are and identifies what product or product type that is appropriate in satisfying the identified need(s), Information search where the consumer searches for the product which

he/she rationally thinks would satisfy the recognized needs, evaluation of alternatives where information search reveals multiple products and the consumer evaluates the available alternatives to understand and identify which products would be most appropriate, purchase decision when after due evaluation of the alternatives, an intention to buy a given product is established (this is subject to two variables – the decision of the consumer if buying the product could be influenced by his peer’s impression of the product and other unforeseen circumstances such as financial limitations etc.) and at last Post Purchase Behavior where a post purchase discord feeling could be felt by the consumer after buying a product making him feel that buying another product would have been better. Addressing such feelings creates goodwill for the product and also increases prospect of frequent repurchase of the product. These five stages merely form a framework to evaluate customer’s buying decision process. It is however, not mandatory that consumers should go through each and every stage, nor is it necessary that they proceed in any particular order (Vieira. 2015).

Companies should pay attention to their consumer’s buying behavior as it has a great impact on the companies' strategies and its success. The company should also create a relevant marketing mix which is valuable to achieve or exceed customer’s satisfaction. This can be performed only through proper study of what, where, when and how consumers buy. Marketers with better prediction to the consumers buying behavior and implementation of the relevant marketing strategies will by far perform better than their competitors (Kumar. 2018).

2.1.4. Factors that Influence Consumers’ Buying Behavior

You’ve been a consumer with purchasing power for much longer than you probably realize—since the first time you were asked which cereal or toy you wanted. Over the years, you’ve developed rules of thumb or mental shortcuts providing a systematic way to choose among alternatives, even if you aren’t aware of it. Other consumers follow a similar process, but different people, no matter how similar they are, make different purchasing decisions. You might be very interested in purchasing a Smart Car, but your best friend might want to buy a Ford F-150 truck. What factors influenced your decision and what factors influenced your friend’s decision?

As we mentioned earlier in the chapter, consumer behavior is influenced by many things, including environmental and marketing factors, the situation, personal and psychological factors, family, and culture. Businesses try to figure out *trends* so they can reach the people most likely to buy their products in the most cost-effective way possible. Businesses often try to influence a consumer's behavior with things they can control such as the layout of a store, music, grouping and availability of products, pricing, and advertising. While some influences may be temporary and others are long lasting, different factors can affect how buyers behave—whether they influence you to make a purchase, buy additional products, or buy nothing at all. Let's now look at some of the influences on consumer behavior in more detail.

A. Situational Factors

Have you ever been in a department store and couldn't find your way out? No, you aren't necessarily directionally challenged. Marketing professionals take physical factors such as a store's design and layout into account when they are designing their facilities. Presumably, the longer you wander around a facility, the more you will spend. Grocery stores frequently place bread and milk products on the opposite ends of the stores because people often need both types of products. To buy both, they have to walk around an entire store, which of course, is loaded with other items they might see and purchase. Store locations also influence behavior. Starbucks has done a good job in terms of locating its stores. It has the process down to a science; you can scarcely drive a few miles down the road without passing a Starbucks. You can also buy cups of Starbucks coffee at many grocery stores and in airports—virtually any place where there is foot traffic.

Physical factors that firms can control, such as the layout of a store, music played at stores, the lighting, temperature, and even the smells you experience are called *atmospherics*. Perhaps you've visited the office of an apartment complex and noticed how great it looked and even smelled. It's no coincidence. The managers of the complex were trying to get you to stay for a while and have a look at their facilities. Research shows that "strategic fragrancing" results in customers staying in stores longer, buying more, and leaving with better impressions of the quality of stores' services and products. Mirrors near hotel elevators are another example. Hotel operators have found that when people are busy looking at themselves in the mirrors, they don't

feel like they are waiting as long for their elevators (Moore, 2008). Not all physical factors are under a company's control, however. Take weather, for example. Rainy weather can be a boon to some companies, like umbrella makers such as Totes, but a problem for others. Beach resorts, outdoor concert venues, and golf courses suffer when it is raining heavily. Businesses such as automobile dealers also have fewer customers. Who wants to shop for a car in the rain?

Firms often attempt to deal with adverse physical factors such as bad weather by offering specials during unattractive times. For example, many resorts offer consumers discounts to travel to beach locations during hurricane season. Having an online presence is another way to cope with weather-related problems. What could be more comfortable than shopping at home? If it's raining too hard to drive to the GAP, REI, or Abercrombie & Fitch, you can buy products from these companies and many others online. You can shop online for cars, too, and many restaurants take orders online and deliver. Crowding is another situational factor. Have you ever left a store and not purchased anything because it was just too crowded? Some studies have shown that consumers feel better about retailers who attempt to prevent overcrowding in their stores. However, other studies have shown that to a certain extent, crowding can have a positive impact on a person's buying experience. The phenomenon is often referred to as "herd behavior" (Gaumer & Leif, 2005).

If people are lined up to buy something, you want to know why. Should you get in line to buy it too? Herd behavior helped drive up the price of houses in the mid-2000s before the prices for them rapidly fell. Unfortunately, herd behavior has also led to the deaths of people. In 2008, a store employee was trampled to death by an early morning crowd rushing into a Walmart to snap up holiday bargains.

B. Personal Factors

- **Personality and Self-Concept**

Personality describes a person's disposition, helps show why people are different, and encompasses a person's unique traits. The "Big Five" personality traits that psychologists discuss frequently include openness or how open you are to new experiences, conscientiousness or how

diligent you are, extraversion or how outgoing or shy you are, agreeableness or how easy you are to get along with, and neuroticism or how prone you are to negative mental states.

Do personality traits predict people's purchasing behavior? Can companies successfully target certain products to people based on their personalities? How do you find out what personalities consumers have? Are extravert's wild spenders and introverts penny pinchers? The link between people's personalities and their buying behavior is somewhat unclear. Some research studies have shown that "sensation seekers," or people who exhibit extremely high levels of openness, are more likely to respond well to advertising that's violent and graphic. The problem for firms is figuring out "who's who" in terms of their personalities.

Marketers have had better luck linking people's self-concepts to their buying behavior. Your self-concept is how you see yourself—be it positive or negative. Your ideal self is how you would *like* to see yourself—whether it's prettier, more popular, more eco-conscious, or more "goth," and others' self-concept, or how you think others see you, also influences your purchase behavior. Marketing researchers believe people buy products to enhance how they feel about themselves—to get themselves closer to their ideal selves. The slogan "Be All That You Can Be," which for years was used by the U.S. Army to recruit soldiers, is an attempt to appeal to the self-concept. Presumably, by joining the U.S. Army, you will become a better version of yourself, which will, in turn, improve your life. Many beauty products and cosmetic procedures are advertised in a way that's supposed to appeal to the ideal self-people seek. All of us want products that improve our lives.

- **Gender, Age, and Stage of Life**

While demographic variables such as income, education, and marital status are important, we will look at gender, age, and stage of life and how they influence purchase decisions. Men and women need and buy different products (Ward & Thuhang, 2007). They also shop differently and in general, have different attitudes about shopping. You know the old stereotypes. Men see what they want and buy it, but women "try on everything and shop 'til they drop." There's some truth to the stereotypes. That's why you see so many advertisements directed at one sex or the other—beer commercials that air on ESPN and commercials for household products that air on Lifetime.

Women influence fully two-thirds of all household product purchases, whereas men buy about three-quarters of all alcoholic beverages (Schmitt, 2008). The shopping differences between men and women seem to be changing, though. Younger, well-educated men are less likely to believe grocery shopping is a woman's job and would be more inclined to bargain shop and use coupons if the coupons were properly targeted at them (Hill & Harmon, 2007). One survey found that approximately 45 percent of married men actually *like* shopping and consider it relaxing.

2.1.5. Models of Consumer Behavior: Basic Models

- **Model of Consumer Buying**

The consumer market is defined as end user markets. Also called Business to Consumer markets, or B2C markets, the product and service offering is bought by the consumer for his personal use. The decision making process in consumer markets is different from the one that takes place in business or industrial markets.

According to Kotler and Armstrong, the basic model of consumer decision making process comprises three major components, viz., marketing and other stimuli (these act as influences), the buyer's black box (these are related to the consumer) and the buyer responses (this is the response part). The components/processes as well as the working dynamics are explained as follows:

- **Marketing and other Stimuli**

A consumer is confronted with a stimulus in the environment. This stimulus could be of two kinds;

A) One that is presented by the marketer through the marketing mix or the 4Ps, product, price, place and promotion;

- ✓ Product: attributes, features, appearance, packaging etc.
- ✓ Price: cost, value, esteem (prestige)
- ✓ Place: location and convenience, accessibility -promotion: advertising, sales promotion, personal selling, publicity, direct marketing.

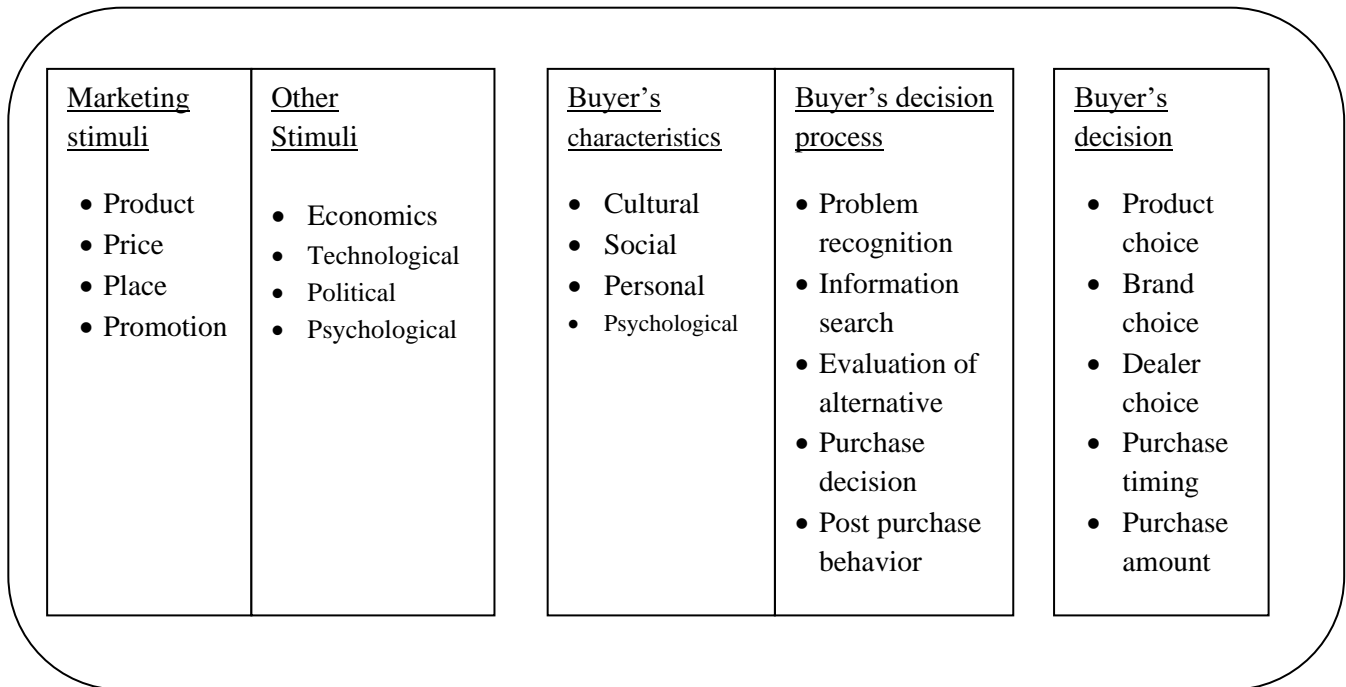
B) The other that is presented by the environment, and could be economic, technological, political and cultural.

- **Buyer's black box**

The stimulus that is presented to the consumer by the marketer and the environment is then dealt with by the buyer's black box. The buyer's black box comprises two sub components, viz., the buyer's characteristics and the buyer decision process.

The buyer's characteristics could be personal, psychological, cultural and social.

Figure 1 .Model of Buyer Behavior



Source: Kotler, P., 2006

A) Personal

- ✓ Age & life-cycle stage (family life cycle: single, newly married couples, full nest I, full nest II, full nest III, empty nest I, empty nest II, solitary survivor)
- ✓ Occupation (occupation affects consumption patterns)
- ✓ Economic situation
- ✓ Lifestyle (pattern of living as Activities, Interest, Opinions, AIOs)
- ✓ Personality (personality is defined in terms of traits; these are psychological characteristics which lead to relatively consistent patterns of behavior towards the environment) & self-concept (self-concept is reflective of identity; how a person perceives himself including attitudes, perceptions, beliefs etc.). Products and brands also

have a personality; consumers are likely to choose such brands whose personalities match their own self.

B) Psychological:

- ✓ Motivation (motives; urge to act to fulfill a goal or satisfy a need/want)
- ✓ Perception (ability to sense the environment and give meaning to it through the mechanisms of selection, organization and interpretation).
- ✓ learning (a relatively permanent change in behavior as a result of ones' experience; relates to memory; learning could be experiential based on direct experience or conceptual based on indirect experience; consumer learning could be based on marketing communication/seller provided information, personal word of mouth and/or experiential).
- ✓ Beliefs (thoughts that a person holds about something; these are subjective perceptions about how a person feels towards an object/person/situation) and attitudes (a favorable or

C) Cultural:

- ✓ -culture (a sum total of values, knowledge, beliefs, myths, language, customs, rituals and traditions that govern a society). Culture exerts the broadest and the deepest influence; e.g. Influences on our eating patterns, clothing, day to day living etc. Cultural influences are handed down from one generation to the next and are learned and acquired).
- ✓ Sub-culture (subset of culture: smaller groups of people within culture with shared value systems within the group but different from other groups; identifiable through demographics).
- ✓ Social class: ordered and relatively permanent divisions/stratifications in the society into upper, middle lower classes; members in a class share similar values, interests, lifestyles and behaviors; the division is based on combination of occupation, income, education, wealth, and other variables. Unfavorable disposition/feeling towards an object, person or a situation).

D) Social:

- ✓ Family: most important influence; (there occurs in a family what is referred to as socialization; family of orientation: parents and siblings; family of procreation: spouse and children; further some decisions are husband dominated, some are wife dominated and some are joint; roles played by family members), family life cycle (stages through

which a family evolves; People's consumption priorities change and they buy different goods and services over a lifetime).

- ✓ Friends and peers, colleagues.
- ✓ Groups: reference groups {these are people to whom an individual looks as a basis for personal standards; they are formal and informal groups that influence buying behavior; reference groups could be direct (membership groups) or indirect (aspirational groups); reference groups serve as information sources, influence perceptions, affect an individual's aspiration levels; they could stimulate or constrain a person's behavior}.
- ✓ Opinion leaders (they influence the opinion of others based on skills, expertise, status or personality).
- ✓ Roles & status: the role refers to the expected activities and status is the esteem given to role by society.

2.1.6. Stages of Buying Decision Process

Research and studies into these factors can provide a marketer with knowledge that can help him serve the consumers more effectively. These characteristics affect the buying decision process, which comprises five steps:

- **Problem recognition**

This is the first stage where a person recognizes that there is a problem or a need to fulfill. This may either be an actual state (AS Type), where a problem has arisen and needs to be sorted out; the product is failing, or the consumer is running short of it, and thus needs a replacement. A problem could also be a desired state (DS Type), where there is an imbalance between the actual state and the desired state; another product seems better and superior to the one that is being currently used, and so the consumer wants to buy it. A need could be triggered off by an internal stimulus or an external stimulus. Marketers need to identify what could trigger a particular need.

- **Information search**

After a need is recognized, the consumer goes for an information search, so as to be able to make the right purchase decision. He gathers information about the product category and the variations, various alternatives and the various brands. Such a search could be ongoing, specific

or incidental. The consumer could recall information that is stored in his memory (comprising information gathered and stored, as well as his experiences, direct and indirect). He could also seek information from the external environment. The sources of information search could be personal (family, friends, peers and colleagues), commercial (marketers' communication in the form of advertising, salespersons, publicity etc.), public (mass media, consumer forums, government rating agencies) and experiential (self and others' experiences). Personal contacts are highly influential sources, public sources are highly credible.

- **Evaluation of alternatives**

Once the consumer has gathered information and identified the alternatives, he compares the different alternatives available on certain features. These are those features that a consumer considers in choosing among alternatives; these could be functional/utilitarian in nature (benefits, attributes, features), or subjective/emotional/hedonic (emotions, prestige etc.). The consumer also uses decision rules that help a consumer simplify the decision process. At the end of the evaluation, purchase intentions are formed.

- **Purchase decision**

After the consumer has evaluated the various alternatives, he selects a particular brand. Consumer purchases may be trials/first purchases or repeat purchases. The consumer may further have to make decisions on where to buy from, how much to buy, whom to buy from, when to buy and how to pay. It is noteworthy that a purchase intention (desire to buy the most preferred brand) may not always result in a purchase decision in favor of the brand; it could get moderated by attitudes of others and unexpected situational factors.

2.1.7. Post Purchase Behavior

After the purchase, the consumer uses the product and reevaluates the chosen alternative in light of its performance viz. a viz. the expectations. He could experience feelings of neutrality (Performance meets expectations), satisfaction (Performance exceeds expectations) or dissatisfaction (Performance falls short of expectations). This phase is significant as it (i) acts as an experience and gets stored in the memory; (ii) affects future purchase decisions; (iii) acts as a feedback.

2.1.8. Packaging Attributes

Packaging elements that should be evaluated when employing packaging decisions are size, design, material, color, text and/or printed information. These packaging elements are factors that influence the buying behavior of consumer's i.e. packaging color, packaging material, design of wrapper, and printed information (Drexler. 2016).

One essential component of packaging is color. Consumers expect certain type of colors for particular products. Color perceptions vary across cultures and colors symbolize different meanings to consumers (Adam. and Ali 2014). Graphics and colors play important roles in promoting product sales. When companies target customers with high incomes, they have to design a high-quality product which exhibits superior packaging elements. This is because these customers care more about their self-image in society, and tend to choose the better-looking product (Ahmed and Javed, 2015).

According to Mahdia.et al. 2011, consumers' buying behavior is also significantly affected by the labeling of the product. Consumers tend to buy more quantities of a well labeled product. Consumer understands and the information written on the product container definitely alters his/her will to buy the product after reading the label. This means that understanding the label information has a direct influence on sales. Therefore, labeling the product is a determining factor in the purchasing.

Packaging contains and protects the product. Therefore, it is also important to take into consideration the material used to package the product together with its design (Estiri et al. 2010). Packaging material has a strong impact on the buying behavior of consumers. Consumers link the packaging material with certain essential values of the product. High-quality material attracts customer's more than low quality material. Perceptions by consumer's regards to certain materials could affect the perceived quality of a product. The quality of packaging materials provides an image about the quality of the product itself which highlights the fact that packaging can be used as a strategic tool to achieve the business goals of commercial firms (Farashbandi et al. 2013).

Packaging, these days, plays an important role in attracting customers' attention and therefore acts as a strategic tool that influences the recognition of the quality of a product. The functions of packaging seem to provide information and facilitate communication with customers that are becoming more and more demanding. Packaging is also utilized as a space for delivering messages to influence consumers and their buying decisions (Skytte and Jefting 2015). Packaging size is also another determining factor which significantly influences the consumption pattern of products in the market. Packaging size optimization has come to be an important factor that determines consumer's choice of products to use at a relatively fair price in accordance with their economic status (Vladić et al. 2016).

This research tries to examine the effect of packaging on consumer's buying behavior of powder milks. Five elements of packaging will be used to determine consumer's buying behavior. Relative impact of each packaging elements on consumer's buying behavior will be measured. Elements of the package which should be highlighted in designing such packages will be determined in this study.

2.2. Empirical Literature Review

2.2.1. Product Package Graphics and Consumer Buying Behavior

Wells, Farley and Armstrong (2007), in their study, 'Packaging design for own-label food brands' explored the relationship between packaging and quality perception. The study was conducted in the United Kingdom. The study used observation as a research technique. The results showed that more than 43% of consumers use packet photography as proof of product quality. Thus, graphics that attract consumers at the point of sale help the consumers make the purchase decision quickly. This study demonstrated the importance that is placed on package graphics as a tool for differentiation from competitor products. The findings clearly indicated that there is a strong association regarding the influence of package graphics on the purchase decision. Armstrong (2007)

The impact of packaging graphics represents an important issue for food suppliers to consider. However, the limitation of this study is that the context used is the United Kingdom and while consumer buying behavior differs due to different factors, this study will be able to fill that gap. Another study by Mizutani, Okamoto, Yamguchi, Kusakabe, Dand and Yamanaka (2010), that

was conducted on ninety-two students using experimental research. The findings showed juice packages that had images on them had the power to influence the purchased decision. Pleasant images were a source of positivity in regard to taste and juice freshness even if some of the images had no relation to the presented juice. The study also concluded that juices that had congruent images were rated to having a better aroma compared to juices with non-congruent images. The findings were an experimental confirmation that attractive images are efficient in portraying a congruent and pleasant image of the product, the customer will perceive the product in a positive light (Mizutani et al. 2010). The limitations of this study however were that the study only looked at one attribute and there was not comparison with other packaging attributes to be able to determine which attribute affected consumer behavior more. The study also took place in Japan hence the findings are not applicable in the Kenyan Context.

In another study by Tobias Otterbing (2013), on pictorial and textual packaging elements, the results showed that if the textual images are placed on the left-hand side they are more likely to be noticed and pictorial images if placed on the right side are more, likely to be noticed. This study was carried out in Sweden using observation as the research methodology of the study. The findings show that not only is attractiveness of graphics important but the placement of textual and pictorial element is also important so that consumers can notice them. By using graphics manufacturers help consumers to find their choice products quickly by eliminating clutters and if they are not loyal to one brand the graphics attract the consumers and give them the opportunity to consider purchasing a given product (Silayoi, 2004). This study however focused only on the graphical attributes of packing.

However, in a study conducted by Lee (2010) showed that graphics on the packaging for convenience goods has no significant relationship with buying decision. Johan and Tobias (2008) in their study found that all attributes and not just one attribute must be combined to affect purchase behavior (as cited in Sioutis 2011). Sioutis (2011) suggests that graphical information is usually misleading hence consumers do not consider pictures on a package when buying.

2.2.2. Product Package Color and Consumer Behavior

Ares, Deliza, Besio and Gimenez (2010), carried out a research on the influence of various attributes of packaging on the willingness of the consumer to buy chocolate milk desserts and evaluated if the characteristics influence was affected by the level of involvement the consumer had with the product. The study was conducted on 60 participants in Uruguay. The finding disclosed that the level of involvement consumers had with the product had an effect on the interest and reaction of the buyer towards the product (Ares et al., 2010). Package color and image that were found on the product were the attributes with the highest significance regardless of the consumer involvement with the product. Chocolates that were colored brown rather than black and those had pictures of milk desserts were associated with positive values meaning that they were more likely to be bought by the consumers. Additionally, the shape of the package whether round or square did not have a significant effect on the consumer purchasing behavior in the different segments (Ares et al., 2010). The importance of color and image was far much higher compared to the indicated dessert which showed that the packaging played an important role in influencing the perception and purchasing decision of the consumer. However, the limitation of this study is that the thinking that underlies participants' observed actions cannot be observed (Cohen, Manion, and Morrison, 2000) Marshall's, Stuart's & Bell (2006) conducted a study in the United Kingdom to investigate the role packaging color plays in the selection of the products among kindergarten students considering age and gender across three different categories of products including cereals, drinks and biscuits. The logo and brand information for the three product categories was hidden and were presented with an assortment of nine colors. 43 kindergarten students were requested to select a package from each of the group of categories for themselves, another item from each of the categories for a girl and another item from each of the categories for a boy.

According to the findings there was a high correlation between the choice of the product and favorites color across the sampled children but the correlations for individuals was much lower. The study showed that the younger children were likely to choose products in line with their color preferences (Marshall, Stuart & Bell 2006). However, Hedge (1996) reported that the age of a person has an effect on color judgment as a preference attribute. Mutti, Hammond, Borland, Cummings and Fong (2011) conducted a survey in four countries of current and former smokers.

The study showed that a fifth of the smokers thought that some cigarette brands were less harmful compared to other brands. The color on the label was behind this conclusion. Colors such as blue, purple and silver were seen as less harmful compared to black and red colors.

Madden et al. (2000) explains that cultures associate different colors with different things and thus their preferences will be biased in line with their culture color associations. Conversely, Deliya and Parmar (2012) pointed out that the different colors on the product packaging set off differing moods among the consumers. According to a research done by Hollywood (2013) in Belfast, United Kingdom where 6 focus groups containing 33 participants were interviewed on consumer attitudes towards packaging design as a tactical strategy for increasing the commercial value of liquid milk within the dairy industry. The findings showed that skimmed, whole and semi-skimmed milk were differentiated by consumers on the bases of the packet colors. However, the use of standardized colors did not affect the buying behavior of the consumer as there was nothing new on the packaging. Therefore, products are accepted by buyers if the colors on their packaging are common with other packaged products in a given product class (HanneleKauppinen-Raisanen, 2010). Hence, radical color changes can result to confusion for consumers as they look for a particular brand (HanneleKauppinen-Raisanen, 2010).

In a study by Alervall and Saied (2013) conducted in Nigeria on 450 participants to investigate Graphic design application to packaging technology. Majority of respondents, a total of seventy five percent confessed that the major visual factor that affected their purchase behavior was color. According to the results color had an influence on human psychology and instincts. Ares, Deliza, Besio and Gimenez (2010) as well as Nawaz and Asad (2012) supported the importance of color from their studies that found that irrespective of consumers' involvement with the product package, color is the most important variable. However, Sioutis (2011) in his study differs on the influence of color to consumer buying behavior. The findings of his study indicate that color appears to be of low significance. In fact, it is the least significant attribute for all convenience goods. The preferences for the color appeared to be slightly product oriented. However, participants' still stated that calmative colors such as green tend to be healthiness indicators.

2.2.3. Product Package Size and Consumer Behavior

The size of the package is dependent on the target market and the features of the product (Smith, 2004). Frequency of use and consumption of a product rises is dependent on the packaging size (Kotler, 2008). According to Smith (2004) large pack sizes give the impression of better quality and influence consumers in engaging in impulse buying (as cited by Keller, 2009). Big and taller products attract more attention when placed with competing brands, when the consumer has a choice between different brands, they will probably choose to buy packages that are taller than the other (Hoyer & MacInnis, 2010). This finding is supported by an investigation conducted by Agatiya (2012) on the size attribute of packaging that showed that using different packaging size can extend a product into new markets.

A study done by Rundh, (2013) on the relationship between packaging and the influence it has on marketing showed that changes in household sizes lead to changes in the product size purchased. The study was conducted in Sweden through use of four case studies which limited the study as it combined data sources including both qualitative and quantitative data. These findings were however reinforced by a study on packaging size by Silayoi (2004) that was conducted in Thailand using a focus group. The findings that showed that small package size is perceived by the buyers as for small family while large packages are seen as a waste of product for the small families. Another study by Ahmadi (2013) investigated the effect visual components of packaging on consumer behavior in Iran showed that the willingness of the consumer to buy a product rises if the product is packaged in small containers or packages and if the product expiry date is short consumers prefer smaller packages compared to those products in large packages (Ahmadi, 2013). This study was conducted on 49 respondents through a quantitative survey. The findings also showed that market demand suggests that small household purchase products are packaged in small packages (Rundh, 2005). On the other hand, a qualitative study by Alervall and Saied (2013) that was conducted in Sweden to investigate the communication of packaging elements stated that majority of the participants argued that every visual element is important depending on the situations. However, the participants prioritized color in their selection of alternatives, followed by graphics whilst size and shape were chosen by the least number of participants. This study however did not focus on specific product hence the conclusion was generalized across different product categories.

2.2.4. Product Package Shape and Consumer Behavior

Agariya (2012) conducted a quantitative investigation in India on packaging shape and consumer behavior. The findings from the 103 respondents showed that consumer's feeling toward the packaging is transferred to how they felt about the product and that innovative packaging helped consumers easily prefer a product and identify the brand in retail stores. A unique package can create a brand image that stands out from rival brands. This survey however did not conclude which shapes consumer prefers. Ahmadi (2013) did an investigation on the design characteristics of packaging which showed that beautiful designs on packages increases and persuades the customer to buy and eat food products. In qualitative research conducted by Silayoi and Speece (2004) on food package preferences of consumer in Bangkok, Thailand, showed that products with a shape that was straight had a positive utility in comparison to curved shaped products and the same was observed for classic designed packages in contrast to colorful designs. The conclusion was that consumers were highly attracted to a package that is familiar and reliable rather than an exciting package. The study also illustrated that most of the consumers believe that the packaging shape was associated with the ease of carrying and using the product. However according to an study by Ares, Besio, Gimenez and Deliza (2010) that was conducted in Uruguay, the shape of a package, whether round or square had no influence on the buying behavior of the consumer.

2.2.5. Product Package Material and Consumer Behavior

Hollywood (2013) investigated in the UK on the perception of milk based on the packaging material using six focus groups. Cardboard, glass and plastic were the three packaging materials discussed. According to the research findings, there was different perception in line with the packaging materials. Glass as a product of packaging was most preferred however it was considered heavy and it needed to be washed after use. The cardboard packaging was disregarded and it was stated that the packaging cannot keep products fresh and one cannot be able to view the product (Hollywood, 2013). Study participants preferred the plastic containers for milk packaging more than the glass and cardboard containers adding that the top cap screw was able to protect the milk from leaking (Hollywood, 2013). Kuvykaite, Dovaliene, and Navickiene (2009) investigated on the impact of package elements on consumer purchase decision. The study was based on a descriptive research carried out in Lithuania. The findings of

the study showed that material of the product was the most influential visual element that affected the purchasing of washing powder and milk. Other elements such as color, form and graphic were treated as insignificant element of the product package. The study findings were however dependent on time pressure and consumer's involvement level. Contrary, in a study by Ahmed, Parmar and Amin (2014) their findings revealed that consumers can easily change their decisions regarding packaging material depending on different situations.

2.2.6. Product Information and Consumer Behavior

Spink, Singh and Singh (2011) investigated if consumers could assimilate and understand the information written on the container of the product. The study was conducted in the United States through a quantitative survey of 233 respondents. The finding was that packaging information did affect the consumer purchasing behavior and sometimes wrong interpretation of information on the package can affect the sales made. For instance, a warning sign according to the study could influence the buying behavior of the consumer leading to non-purchase of the product. The study however only focused on products with warning labels. A qualitative study done by Chandon and Wansink (2012) did an analysis of the practices used in food marketing in the United States and their effect on the consumption of calories rich diet and how food companies can reach their goals of assisting people eat healthier foods. Chandon and Wansink (2012) mentioned that packaging is a tool that has an influence on healthy eating habits. Furthermore, according to the study the design and messaging on the packaging can influenced eating of a balanced diet.

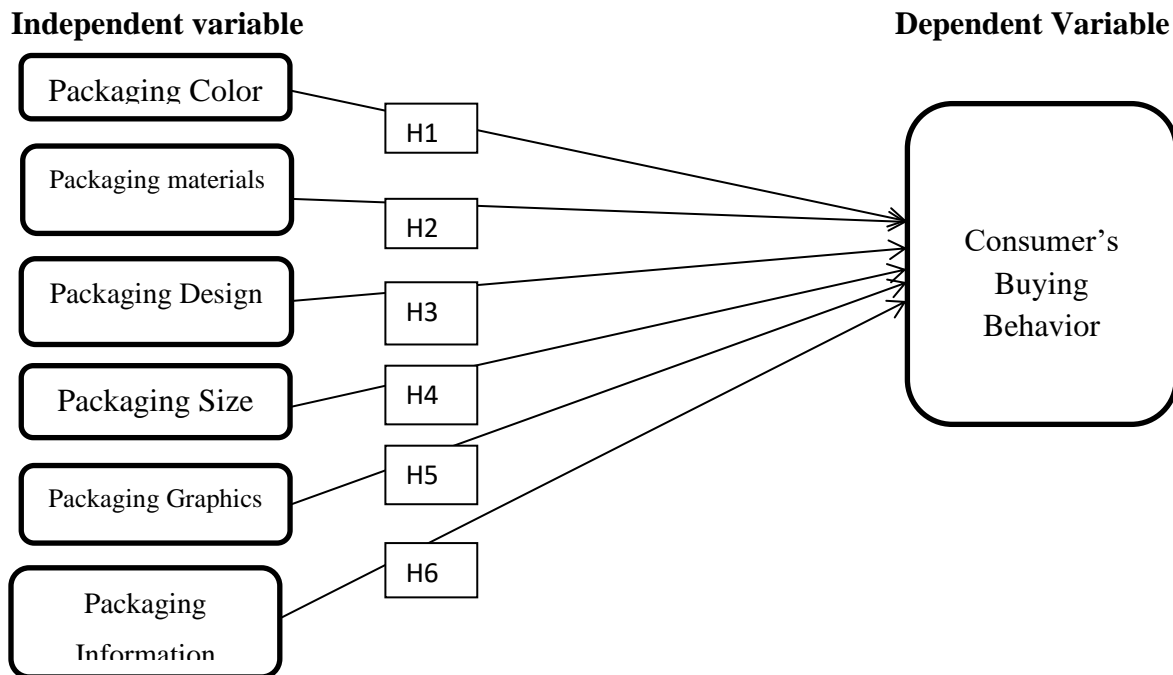
Adam and Ali (2014) in their quantitative study revealed that expiry date of packaged milk positively correlated with the buying behavior of consumers in Pakistan. This shows that before making a purchase, consumers look at expiry dates of packaged milk thus, prolonged expiry dates on products does influence buying behavior. Poturak (2014) carried out a study and found that people aged 22 and above give more consideration to label information when purchasing products. The participants said that the content of the product rather than the appearance interested them more. Although packaging plays an important role in communicating, it is important to remember that the package should not have too much information which can be misleading or inaccurate because buyers can get confused and lose interest (Silayoi&Speece,

2007). It is also significant to remember that not all consumers are literate to read and understand the information on the product packaging. In addition, not all consumers understand the information as provided on the packaging material. Hence, this study seeks to investigate whether product information always influence Kenyan consumers to buy their products.

2.3. Conceptual Framework

Conceptual framework gives the relationship between a study’s dependent and independent variables. Research uses this framework to give the opposable outline that can be used as a possible course of outline or the preferred approach to be used for the subject of research (Mugenda&Mugenda, 2003). According to Kuvykaite, Dovaliene and Navickiene (2009) packaging elements could be treated as a set of various elements communicating different messages to a consumer. Butkeviciene (2008) states that packaging sends valuable information to the consumer about a product that assists in positioning it in the mind of consumer and in this way, has an impact on consumer’s buying decision. The behavior that consumers display in the searching for, purchasing, using, evaluating and disposing of products, services or ideas.

Figure 2. The relationship between packaging elements and consumer buying behavior



Source –adapted from Betty JepchirchirKosgei (2018)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Research Methodology

Methodology is the philosophical framework within which the research is conducted or the foundation upon which the research is based” (Brown, 2006). The purpose of this study is to determine the effect of packaging attributes on consumer’s purchase decision behavior of selected packed waters, therefore mixed methods was used, Because it helps the researcher to best understand the research problems and mine large amounts of information from populations with adequate level of accuracy. Under the aspect of mixed methods, the researcher combines quantitative and qualitative research techniques and methods to provide the best understanding of a research problem (Creswell, 2003). (Amin, 2005) States that quantitative design are plans for carrying out research oriented towards quantification and are applied in order to describe current conditions or to investigate relationships including cause and effect relationships.

3.2. Research Design

The types of research design used for this study were both explanatory research and descriptive research design in nature. Explanatory research design justifies the effect of certain variables on other dependent variables. This contributes to the current knowledge (Yogesh and Singh, 2006). According to Kothari (1990), the major purpose of descriptive research is to describe the state of affairs, as it exists at present. The descriptive part of a research includes survey and fact-finding enquiries of different kinds. The main importance of descriptive research is description of the state of affairs as it exists at present (Kothari, 2004). The research approach in this study was both quantitative and qualitative research approach. In this research, the researcher used concurrent mixed methods, because concurrent procedures, enable the researcher to converge quantitative and qualitative data in order to provide a comprehensive analysis of the research problem. In this design, the researcher will collect both forms of data at the same time and then will integrate the information in the interpretation of the overall results (Creswell, 2003). In this research the researcher tends to base knowledge claims on pragmatic grounds employing both quantitative and qualitative data to best understand research problems. The quantitative research approach was used for testing the existing thought among variables.

3.3. Research Approach

As noted in Creswell (2003) in terms of investigative study there are three common approaches to business and social research namely, quantitative, qualitative and mixed methods approach. For the purpose of the present study, mixed approach which advocates the combination of both qualitative and quantitative has proved to be ideal for the study. The central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone (Creswell 2009).

3.4. Sources of Data

The study was undertaken based on the data that were collected from both primary and secondary sources of data that enable the researcher to meet the objectives of the study outlined at the beginning. In an attempt to obtain first-hand information, the data was collected from samples through questionnaires. Closed-ended questionnaires were prepared and administered to gather primary data from the sample of the study. This instrument is preferred because it enables to secure information at a time. The rest of the data for this research was obtained from secondary sources.

3.5. Target Population

According to Ngechu(2004), a population is a well-defined set of people, services, elements, and events, group of things or households that are being investigated to generalize the results. The target populations for this research were customers purchasing selected packed waters during the study period from Outlets found in Bahir Dar. The samples were selected to represent the relevant attributes of the whole population which are packed water users of Choice, Kefeta, and Genet.

3.6. Sampling Technique

Sampling technique which was used to determine a representative consumer sample was non-probability sampling technique. Non- probability sampling was used since the target populations in the study were not well defined and there is no interest in drawing inferences from the sample of the population. In this study purposive sampling and convenience sampling methods were used to determine the outlets to be included in the study. The outlets included in this study were

selected based on their sales volume of packed waters for a selected period of time from one of the suppliers of selected packed waters in the market.

This method of sampling is also less expensive and implemented quickly. Convenience sampling is the type of non-probability sampling technique to be employed. It is set of techniques in which respondents are selected by convenience due to their proximity, availability or accessibility.

3.7. Sample Size

Sample size refers to the number of element to be included in the study. The study applied non-probability sampling. The sample size was determined by using the formula of (Krejcie and Morgan (1970)) to select the sample out of the total population.

Therefore, $ss = (Z\text{-score})^2 * p * (1-p) / (\text{margin of error})^2$

$S_s = (1.96)^2 * 0.5 * (1-0.5) / (0.05)^2$

$S_s = 3.8416 * 0.25 / 0.0025$

$S_s = 384$

(Z-score is 1.96 for a 95% confidence interval)

3.8. Data Collection Instruments

3.8.1. Questionnaires

Creswell (2009) noted a survey as the preferred type of data collection procedure for research. Survey is the most appropriate for obtaining factual and attitudinal information or for research questions about self-reported beliefs, opinion, characteristics and present or past behaviors (Neuman, 2000). A survey by a self-administered questionnaire was considered the most appropriate method for measuring customers buying behavior of selected packed waters. Questionnaires were used because the information that is used can be collected from a sample that is large and confidentiality in respect of the information collected is upheld and in addition Self-administered questionnaires are considered cheaper and quicker way to surveying a large number of respondents. By modifying the questions from earlier studies with a similar focus, the questionnaire for this study was developed (Bekele, 2021).

3.8.2. Questionnaire Design

The researcher has made an effort to ensure that questions to be concise, easy to understand and clear to avoid any misinterpretations. Questions were prepared by using a five point Likert scale. The Likert-style rating method of questionnaire design enables numerical value to be assigned to cases for easy quantitative analysis. According to Hair et al. (2010) Likert scales are most appropriate for research designs that use self-administered surveys, personal interviews, or online surveys. Each question of the questionnaire is assigned a number indicating strongly disagree measured as 1, disagree measured as 2, neutral measured as 3, agree measured as 4, and strongly agree measured as 5.

3.9. Validity and Reliability

The content validity of the data collection instruments is the extent to which the data provides accurate and adequate coverage of the objectives of the study. The instruments were evaluated by my supervisor and peers for content validity to determine whether the items would really solicit relevant information and their suggestions were used to improve on the instruments. Beside this, the study addresses validity through the review of literature and adapting instruments used in previous research. Reliability of a research instrument is a measure of the degree to which the instrument yields consistent data after repeated trials. There are several different reliability coefficients. One of the most commonly used is called Cronbach's Alpha. Cronbach's Alpha is based on the average correlation of items within a test if the items are standardized. According to the Hair et al. (2006) the minimum acceptable level of the Cronbach alpha is more than 0.70. Thus, reliability was tested using Cronbach's alpha.

3.10. Method of Data Analysis and Interpretations

After collecting the data through different instruments, the researcher organized and prepared the various data depending on the sources of information. Moreover, in order to ensure logical competence and consistency of responses, data editing was carried out each day by the researcher. Mistakes were identified and data gaps were rectified as soon as possible. The data was analyzed by using descriptive statistics, correlation and linear multiple regression methods. The descriptive statistics also used for the frequency distribution, such as the mean, standard deviation, description, rather than examining relationships or associations (Ranjit, 2011). Because of this reason correlation and linear multiple regression analyses methods were needed.

The primary objective of Correlation analysis is to measure the strength or degree of linear association between two variables. But in correlation analysis, on the other hand, the researcher treated any (two) variables symmetrically; there is no distinction between the dependent and explanatory variables.

In regression analysis there is an asymmetry in the way the dependent and explanatory variables are treated so the strength or degree of linear association between two variables was known (Gujarati, 2004). The data collected from the respondents were entered into table and analyzed using latest version of SPSS software (SPSS 20). This technique was selected because it helps to summarize the sample, provides and allows describing the characteristics of the data collected and it helps to thoroughly analyze and interpret the questions one by one in order to reach meaningful results. In doing so tables were used to present and made easily understandable the findings in order to arrive at meaningful results. Frequency distributions of all respondents provided in the questionnaires was counted and computed. Data collected from document analyses were included in the data discussion and interpretation part of the study. Finally, conclusions and recommendations were drawn based on the data analysis and interpretation.

3.11. Ethical Considerations

According to David Resnik Ethics has been defined as ‘norms for conduct that distinguish between or acceptable and unacceptable behavior.’ People think of ethics as rules for distinguishing between right and wrong. Ethical issues are very important and should not be overlooked especially in research projects. This is because the researcher might end up violating a respondent’s right. Perhaps very important for every researcher to know and may be oblige to apply the ethics in research where necessary. Due to human participants in this research, there is still a need to consider the ethical approach of this research. The following ethical issues were taken into account for this study. These issues are; voluntary participation and informed consent, no harm to participants, anonymity, deceiving subjects, and analyzing and reporting of the research findings.

CHAPTER FOUR

DATA ANALYSIS, DISCUSSION AND INTERPRETATION

4.0. Introduction

This chapter deals with data presentation, analysis, and interpretation of the study. It has two main parts: the first part is the background information of the respondents; the second part consists of analysis and interpretation of data collected from respondents through questionnaires. In order to address the research questions, 384 questionnaires were prepared and distributed. The researcher was able to get back three hundred sixty eight (368) out of 384 questionnaires administered which gives 98.11% response rate. This was done in order to obtain a larger response rate. For analysis and interpretation, using Statistical Package for Social Science (SPSS) of 20 versions was used.

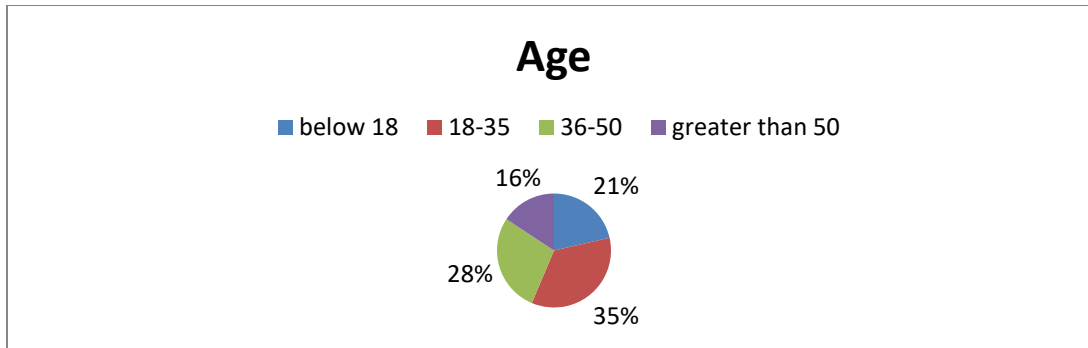
4.1. Background Information of Respondents

This research took into consideration responses from 368 respondents of Bahir Dar City packed mineral water users. This section gives background information, analysis of the respondents' response from which the data were collected.

4.1.1 Age distribution

According to the figure 3 below, 129(35%) users of packed mineral water were at the age limit of 18-35, 103(28%) users of packed mineral water were at the age limit of 36-50, 79(21%) users of packed mineral water were below 18 years and 58(16%) users of packed mineral waters were greater than 50 years old. Therefore the researcher can conclude that most of Kefta, Choice and Genet packed mineral water users are adults (at the age limit of 18-35).

Figure 3: Age distribution of respondents



Source; own survey, 2022

4.1.2. Gender, Educational Back Ground and Income Level Analysis

Table 1 below shows that, the gender, education and income background of respondents. The gender distribution indicate that 64.4% were males and the remaining 35.6% were females. Related to the educational level of the respondents,147(39.9%) were degree holders, 122(33.15%) were masters holders, 82(22.28%) were diploma and below and 17(4.61%) were PhD and above holders respectively from the total sample respondents who consume Kefta, Choice and Genet packed mineral water under consideration.

Table 1: Gender, educational back ground and income level analysis

Demographic analysis					
		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	237	64.4	64.4	64.4
	Female	131	35.6	35.6	100.0
	Total	368	100.0	100.0	
Educational back ground	Degree	147	39.9	39.9	39.9
	Masters	122	33.15	33.15	100.0
	PHD	17	4.61	4.61	
	Diploma and below	82	22.28	22.28	
	Total	368	100.0	100.0	

Source: Survey Questionnaire, 2022

4.1.3. Level of Awareness about the Concept of Packaging

As seen from table 2, out of the 368 respondents, 36.4% (134) of the respondents had medium level of awareness, 31.5% (116) respondents had a high level of awareness on the concept of packaging, 13.6 % (50) of respondents had a low level of awareness about the concept of packaging, 12.5 % (46) of respondents had a very high level of awareness about the concept packaging and the rest 5.98% (22) of the respondents had very low understanding about the concept packaging. From this, the majority of respondents have awareness about the concept. This helps the researcher to get realistic responses from them since they have awareness about the effect of packaging in consumer’s purchase decision behavior of Kefta, Choice and Genet packed mineral water.

Table 2: Level of awareness about the concept of packaging

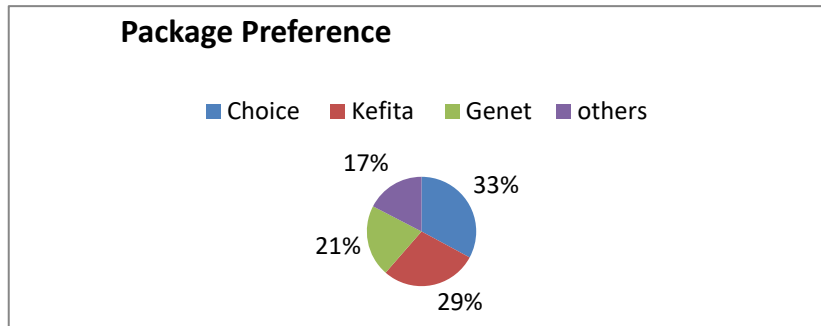
		Frequency	Percent	Valid Percent
What is your level of awareness about the concept of packaging?	Very low	22	5.98	5.98
	Low	46	12.5	12.5
	Medium	134	36.4	36.4
	High	116	31.5	31.5
	Very high	50	13.6	13.6
	Total	368	100.0	100.0

Source: Survey Questionnaire, 2022

4.1.4. Level of consumer package preference

Based on figure 4 below, 121(33%) of respondents were prefer Choice packed mineral water’s package, 105 (29%) of respondents prefer were Kefita packed mineral water’s package, 78(21%) of respondents prefer Genet packed mineral water’s package and the rest 64(17%) responds as they prefer other brands. Therefore the researcher can conclude that most of the respondents preferred the package of Choice mineral water’s packaging attributes.

Figure 4 : package preference



Source: Survey Questionnaire, 2022

4.2. Data Analysis Part of the Study

4.2.1. Descriptive Statistics Result of Variables

The Cronbach's alpha test is used to measure the reliability of the questionnaire. Validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure. The questionnaire was carefully designed and tested with a few members of the population for further improvements. To check the reliability of the instrument Cronbach's alpha was used. As per the test the Cronbach's alpha (α) values generated from SPSS, the reliability test for packaging color consisted of five questions and the result is 0.857 representing 85.7% scale reliable. The reliability test for packaging material consisted of five questions and the result is 0.861 representing 86.1% scale reliable. The reliability test for packaging design consisted of five questions and the result is 0.841 representing 84.1 % scale reliable. The reliability test for packaging size consisted of four questions and the result is 0.878 representing 87.8 % scale reliable. The reliability test for packaging graphics consisted of four questions and the result is 0.852 representing 85.2% scale reliable. The reliability test for packaging information consisted of five questions and the result is 0.847 representing 84.7% scale reliable. The reliability test for Consumer's Purchasing Decision Behavior consisted of six questions and the result is 0.852 representing 85.2% scale reliable. This result is considered high according to the Alpha Coefficient Range. As shown in table 3 below, coefficients for the variables a factor range from 0.841 to 0.878 and thus, we can conclude that the questions regarding the effect of

packaging on consumer's purchase decision behavior of packed mineral waters' is accepted. The total test scale of the variables as shown in table below is 85.5% which indicated a good internal consistency of the data. According to Cronbach (1951), an alpha (α) in the range $0.7 \leq \alpha < 0.9$ indicates good internal consistency.

Table 3: Cronbach's alpha test result for the questionnaire Reliability

Variables	N	Cronbach's Alpha if Item Deleted
Packaging Color	368	.857
Packaging Material	368	.861
Packaging Design	368	.841
Packaging Size	368	.878
Packaging Graphics	368	.852
Packaging Information	368	.847
Consumer's Purchasing Decision Behavior	368	.852
Total Scale		.855

Source: Survey Questionnaire, 2022

- **Packaging Color**

As it can be seen in table 4 below, Concerning results on packaging color respondents reach on consensus that they are supposed that the color of a packaging mineral water could lead their purchasing decision (mean= 3.79, SD=0.773). Respondents have also agreed that full colors on packed mineral water packaging have an impact on their purchasing decision (mean=3.8, SD=0.881). And also, respondents agreed that light colors on packed mineral water packaging have an impact on consumer's buying decision. (Mean=3.72, SD=0.937). Further respondents agreed that warm colors on packed mineral water packaging have an impact on their purchasing decision (Mean=3.67, SD=0.966). In addition to this, respondents agree that cold colors on packed mineral water packaging have an impact on their purchasing decision (Mean=3.72, SD=0.949). Generally, from the result we can conclude that packaging colors on packed mineral water packaging have an impact on customer's purchasing decision, (Mean=3.74) the mean is above average. The result is consistent with prior studies which argue that the positive and significant relationship was observed by Nawaz and Asad (2012), supported the importance of

color from their studies that found that irrespective of consumers' involvement with the product package, color is the most important variable.

Table 4. Packaging color

R.No	Items	N	Mean	Std. Deviation
1.1	The color of a packaging of packed mineral water could lead my purchasing decision.	368	3.79	.773
1.2	Full colors on packed mineral water packaging have an impact on my purchasing decision.	368	3.80	.881
1.3	Light colors on packed mineral water packaging have an impact on consumer's buying decision.	368	3.72	.937
1.4	Warm colors on packed mineral water packaging have an impact on my purchasing decision.	368	3.67	.966
1.5	Cold colors on packed mineral water packaging have an impact on my purchasing decision.	368	3.72	.949
	Grand Mean		3.74	

Source: Survey Questionnaire, 2022

- **Packaging material**

As it can be seen in table 5 below, Concerning results on packaging materials respondents reach on consensus that they are supposed that the material quality of packed mineral water product packaging influences their purchase decision (Mean= 3.98, SD=0.891). Respondents are also agreed that versatility of packed mineral water product packaging (i.e. can reuse the package) influences their purchase decision, (Mean=3.73, SD=0.946). And also, respondents agreed that safety of packed mineral water product packaging influences their purchase decision,(Mean=3.93, SD=0.882). Further respondents agreed that the packaging material in packed mineral water products show the products are environmentally friendly, (Mean=3.83, SD=0.877). In addition to this, respondents agree that packed mineral water product packaging material influences their purchase decision (Mean=3.76, SD=0.926). Generally from the result, we can conclude that Material quality of packed mineral water product packaging, (Mean=3.98, SD=0.891) is above average. Therefore, the result shows that packaging material has an impact on consumer purchasing decision behavior. The finding supports the argument of (Akpan&Amran, 2014) that an increase in packaging color leads to effective consumer purchasing decision behavior.

Table 5. Packaging material

R.No	Items	N	Mean	Std. Deviation
2.1	Material quality of packed mineral water product packaging influences my purchase decision.	368	3.98	.891
2.2	Versatility of packed mineral water product packaging (i.e. can reuse the package) influences my purchase decision.	368	3.73	.946
2.3	Safety of packed mineral water product packaging influences my purchase decision.	368	3.93	.882
2.4	The packaging material in packed mineral water products show the products are environmentally friendly.	368	3.83	.877
2.5	Packed mineral water product packaging material influences my purchase decision.	368	3.76	.926
Grand Mean			3.85	

Source: Survey Questionnaire, 2022

- **Packaging Design**

As it can be seen in table 6 below, Concerning results on packaging design respondents reach on consensus that they have supposed that the picture qualities of packed mineral water package have an impact on drawing attention to consumer’s purchasing decision (Mean= 3.67, SD=0.921). Respondents have also agreed that appealing graphics on packed mineral water packaging have an impact on consumer’s purchasing decision, (Mean=3.56, SD=0.916). And also, respondents agreed that photographs image on packed mineral water packaging has an impact on consumer’s purchasing decision, (Mean=3.75, SD=0.969). Further respondents agreed that the font used in writing the name and ingredient composition of the packed mineral waters’ product influences behavior on their purchasing decision, (Mean=3.68, SD=0.1.060). In addition to this, respondents agree that images of people on packed mineral water packaging have an impact on my purchasing decision (Mean=3.62, SD=0.1046). Generally from the result, we can conclude that packaging design on packed mineral water has an impact on consumer’s purchasing decision, (Mean=3.67) the mean is above average. Therefore, the result shows that packaging design has an impact on consumer’s purchasing decision behavior. However the result is inconsistent with prior studies which argue that the positive and significant relationship was

observed by Ares, Besio, Gimenez and Deliza (2010) that was conducted in Uruguay, the design of a package, whether round or square had no influence on the buying behavior of the consumer.

Table 6. Packaging design

R.No	Items	N	Mean	Std. Deviation
3.1	The picture qualities of packed mineral water package have an impact on drawing attention to my purchasing decision.	368	3.67	.921
3.2	Appealing graphics on packed mineral water packaging have an impact on my purchasing decision.	368	3.56	.916
3.3	Photographs image on packed mineral water Packaging has an impact on my purchasing decision.	368	3.75	.969
3.4	The font used in writing the name and ingredient composition of the packed mineral waters' product influences behavior on my purchasing decision.	368	3.68	1.060
3.5	Images of people on packed mineral water packaging have an impact on my purchasing decision.	368	3.62	1.046
Grand Mean			3.67	

Source: Survey Questionnaire, 2022

- **Packaging Size**

As it can be seen in table 7 below, Concerning results on packaging size, respondents reach on consensus that they have agreed that the type of packaging on opening packed mineral water influences their purchase decision (Mean= 3.51, SD=0.926). Respondents have also agreed that size of packed mineral water bottle packaging (i.e. individual packages vs. family size) influences their purchase decision, (Mean=3.44, SD=1.134). And also, respondents agreed that having various size bottling of packed mineral water influences their purchase decision, (Mean=3.52, SD=0.151). Further respondents agreed that the packaging of packed mineral water in a refill format influences their purchase decision, (Mean=3.46, SD=0.1028). Generally from the result, we can conclude that having various size bottling of packed mineral water influences their purchase decision, (Mean=3.75, SD=0.969) the mean is above average. Therefore, the result shows that packaging size has an impact on consumer purchasing decision behavior. The result is inconsistent with prior studies which state that big and taller products

attract more attention when placed with competing brands, when the consumer has a choice between different brands, they will probably choose to buy packages that are taller than the other (Hoyer & MacInnis, 2010).

Table 7: Packaging size

R.No	Items	N	Mean	Std. Deviation
4.1	The type of packaging on opening packed mineral water influences my purchase decision.	368	3.51	.926
4.2	The size of packed mineral water bottle packaging (i.e. individual packages vs. family size) influences my purchase decision.	368	3.44	1.134
4.3	Having various sizes bottling of packed mineral water influences my purchase decision.	368	3.52	1.151
4.4	The packaging of packed mineral water in a refill format influences my purchase decision.	368	3.46	1.028
Grand Mean			3.48	

Source: Survey Questionnaire, 2022

- **Packaging Graphics**

As it can be seen in table 8 below, Concerning results on packaging graphics, respondents reach on consensus that they have agreed that the graphics of packaging packed mineral water influences their purchase decision (Mean= 3.62, SD=0.883). Respondents have also agreed that the graphical combination of packed mineral water that can be easily be remembered influences their purchase decision, (Mean=3.59, SD=0.918). And also, respondents agreed that the graphical combination of packed mineral water stands out me to use it among other competitive products influences their purchase decision, (Mean=3.59, SD=0.25). Further respondents agreed that the quality of picture on the packed mineral water packaging influences purchase decision, (Mean=3.69, SD=0.935). Generally from the result, we can conclude that the packaging graphics of packed mineral water influences customer's purchase decision, (Mean=3.62) the mean is above average. Therefore, the result shows that packaging graphics has an impact on consumer purchasing decision behavior. However, the result is inconsistent with prior studies which conducted by Lee (2010) showed that graphics on the packaging for convenience goods has no significant relationship with buying decision. Johan and Tobias

(2008) in their study found that all attributes and not just one attribute must be combined to affect purchase behavior (as cited in Sioutis 2011). Sioutis (2011) suggests that graphical information is usually misleading hence consumers do not consider pictures on a package when buying.

Table 8: Packaging graphics

R.No	Items	N	Mean	Std. Deviation
5.1	The graphics of packaging packed mineral water influences my purchase decision.	368	3.62	.883
5.2	The graphical combination packed mineral water that can be easily been remembered influences my purchase decision.	368	3.59	.918
5.3	The graphical combination of packed mineral water stands out me to use it among other competitive products influences my purchase decision.	368	3.59	.925
5.4	The quality of picture on the packed mineral water Packaging influences my purchase decision.	368	3.69	.935
Grand Mean			3.62	

Source: Survey Questionnaire, 2022

- **Packaging Information**

As it can be seen in table 9 below, Concerning results on packaging information respondents reach on consensus that they have supposed that packed mineral water packaging labels influence their purchase decision (Mean= 3.82, SD=0.844). Respondents have also agreed that the clarity of information on the labels of packed mineral water influence their purchase decision, (Mean=3.88, SD=0.893). And also, respondents agreed that the font size used on the packed mineral water packaging is legible and can be understood easily and it influences their purchase decision, (Mean=3.85, SD=0.984). Further respondents agreed that the font style used on packed mineral water attracts their attention and it influences their purchase decision, (Mean=3.81, SD=0.890). In addition to this, respondents agree that the information listed on the labeling of packed mineral water are enriched with quality and it influences their purchase decision (Mean=3.74, SD=1.035). Generally from the result, we can conclude that the packaging information on the labels of packed mineral water influence customer's purchase

decision, (Mean=3.82) the mean is above average. Therefore, the result shows that packaging information has an impact on consumer purchasing decision behavior. The result is consistent with prior studies which argue that packaging plays an important role in communicating, it is important to remember that the package should not have too much information which can be misleading or inaccurate because buyers can get confused and lose interest (Silayoi&Speece, 2007).

Table 9: Packaging information

R.No	Items	N	Mean	Std. Deviation
6.1	Packed mineral water packaging labels influence my Purchase decision.	368	3.82	.844
6.2	The clarity of information on the labels of packed mineral water influence my purchase decision	368	3.88	.893
6.3	The font size used on the packed mineral water packaging is legible and can be understood easily by customers influences my purchase decision.	368	3.85	.984
6.4	The font style used on packed mineral water attracts my attention and it influences my purchase decision.	368	3.81	.890
6.5	The information listed on the labeling of packed mineral water is enriched with quality and it influences my purchase decision.	368	3.74	1.035
Grand Mean			3.82	

Source: Survey Questionnaire, 2022

- **Consumer Purchasing Decision Behavior**

The study sought to examine the effect of packaging in consumer's purchase decision behavior of packed mineral water attributed to the impact of packaging color, packaging material, packaging design, packaging size, packaging graphics and packaging information. Table 10 below presents the findings. Consumer's purchasing decision of packed mineral water is affected by color of packaging with (M=3.59, SD=.951), Consumer's purchasing decision of packed mineral water is affected by packaging material with (M=3.83, SD=.846), Consumer's purchasing decision of packed mineral water is affected by packaging design with (M=3.85, SD=.1.000), Consumer's purchasing decision of packed mineral water is affected by the size of packaging with (M=3.76, SD=.999), Consumer's purchasing decision of packed mineral water is affected by packaging graphics with (M=3.73, SD=.964) and Consumer's purchasing decision of packed mineral water is affected by printed information of packaging with (M=3.78,

SD=.883).The overall mean of 3.76 imply that a majority of respondents moderately agreed on the purchase decision behavior of packed mineral water.

Table 10: Consumer Purchasing Decision Behavior

R.No	Items	N	Mean	Std. Deviation
7.1	My purchasing decision of packed mineral water is affected by color of packaging?	368	3.59	.951
7.2	My purchasing decision of packed mineral water is affected by packaging material?	368	3.83	.846
7.3	My purchasing decision of packed mineral water is affected by packaging design?	368	3.85	1.000
7.4	My purchasing decision of packed mineral water is affected by the size of packaging?	368	3.76	.999
7.5	My purchasing decision of packed mineral water is affected by packaging graphics?	368	3.73	.964
7.6	My purchasing decision of packed mineral water is affected by printed information of packaging?	368	3.78	.883
Grand Mean		368	3.76	

Source: Survey Questionnaire, 2022

4.2.2. Inferential Statistics

The research determines the effect of packaging in consumer’s purchase decision behavior of packed mineral water. In order to achieve this, both correlation and regression analyses were conducted.

4.2.2.1. Correlation Analysis

The study conducted correlation analysis to show strength of relationship between independent and dependent variables of the study(See table 11 below). In statistics significance testing p–value indicates the level of relation of the independent variable to dependent variable. If the significance number found is less than the critical value also known as the probability value (p) which is set statistically at 0.05 , then the conclusion would be that the model is significant in explaining the relationship otherwise it will be regarded as non-significant. Table 11 below presents the correlation analysis results.

The results presented in Pearson Correlations table showed that, Packaging color was the first variable to be positively and significantly correlated to consumer's purchase decision behavior of packed mineral waters $r=0.443$; $p=0.000<0.05$. Thus Packaging color had 44.3% positive significance relationship with procurement performance. This implies that an increase in Packaging color increases in consumer's purchase decision behavior of packed mineral waters'. The result is consistent with prior studies which argue that the positive and significant relationship was observed by Nawaz and Asad (2012), supported the importance of color from their studies that found that irrespective of consumers' involvement with the product package, color is the most important variable.

Packaging material was the second variable to be positively and significantly related with consumer's purchase decision behavior of packed mineral waters at $r=0.441$; $p=0.000 < 0.05$. Packaging material had 44.1% positively and insignificantly related with consumer's purchase decision behavior at 5% level of significance. Increase in packaging material leads to increase consumer's purchase decision behavior. The result is consistent with prior studies which argue that the positive and significant relationship was observed by Ahmed, Parmar and Amin (2014) their findings revealed that consumers can easily change their decisions regarding packaging material depending on different situations.

Packaging design was the third variable to be positively and significantly associated with consumer's purchase decision behavior at $r=0.649$; $p=0.000 < 0.05$. Packaging design had 64.9% positively and insignificantly related with consumer's purchase decision behavior at 5% level of significance. The study also illustrated that most of the consumers believe that the packaging design was associated with the ease of carrying and using the product. However the result is inconsistent with prior studies which argue that the positive and significant relationship was observed by Ares, Besio, Gimenez and Deliza (2010) that was conducted in Uruguay, the design of a package, whether round or square had no influence on the buying behavior of the consumer.

Packaging size was the fourth variable to be positively and significantly associated with consumer's purchase decision behavior as shown by $r=0.374$; $p=0.000<0.05$. Packaging size had 37.4% positively and significantly related with consumer's purchase decision behavior at 5% level of significance. This means that as increase in packaging size leads to increase in

consumer's purchase decision behavior. The result is inconsistent with prior studies which state that big and taller products attract more attention when placed with competing brands, when the consumer has a choice between different brands, they will probably choose to buy packages that are taller than the other (Hoyer & MacInnis, 2010).

Packaging graphics was the fifth variable to be positively and significantly associated with purchase decision behavior at $r=0.615$; $p=0.000<0.05$. Packaging graphics was 61.5% positively and significantly related to purchase decision behavior at a 5% level of significance. However, the result is inconsistent with prior studies conducted by Lee (2010) which showed that graphics on the packaging for convenience goods has no significant relationship with buying decision. Johan and Tobias (2008) in their study found that all attributes and not just one attribute must be combined to affect purchase behavior (as cited in Sioutis 2011). Sioutis (2011) suggests that graphical information is usually misleading hence consumers do not consider pictures on a package when buying.

Packaging information had 62.6% positively and insignificantly related to purchase decision behavior at a 5% level of significance. The result is consistent with prior studies which argue that packaging plays an important role in communicating, it is important to remember that the package should not have too much information which can be misleading or inaccurate because buyers can get confused and lose interest (Silayoi & Speece, 2007).

As the above result indicates and as observed from table 11 all of the independent variables selected in this study have positive relationship with the purchase decision behavior. The p-value also indicates that all the six variables significantly affect purchase decision behavior of packed mineral waters'. Therefore, all the independent variables have positive relationship with the dependent variable. The correlation indicates that the positive increment in the independent variables have positive effect on the procurement performance. So that, any improvement in one of the independent variable will positively affect purchase decision behavior of packed mineral water. Therefore all the six independent variables are important predictors of purchase decision behavior of packed mineral water.

Table 11: Correlation Analysis

Correlations								
		PC	PM	PD	PS	PG	PI	CPDB
Packaging Color	Pearson Correlation	1						
	Sig. (1-tailed)							
	N	368						
Packaging Material	Pearson Correlation	.654**	1					
	Sig. (1-tailed)	.000						
	N	368	368					
Packaging Design	Pearson Correlation	.609**	.476**	1				
	Sig. (1-tailed)	.000	.000					
	N	368	368	368			+	
Packaging Size	Pearson Correlation	.332**	.337**	.454**	1			
	Sig. (1-tailed)	.000	.000	.000				
	N	368	368	368	368			
Packaging Graphics	Pearson Correlation	.420**	.399**	.647**	.382**	1		
	Sig. (1-tailed)	.000	.000	.000	.000			
	N	368	368	368	368	368		
Packaging Information	Pearson Correlation	.497**	.504**	.563**	.373**	.725**	1	
	Sig. (1-tailed)	.000	.000	.000	.000	.000		
	N	368	368	368	368	368	368	
Consumer Purchasing Decision Behavior	Pearson Correlation	.443**	.441**	.649**	.374**	.615**	.626**	1
	Sig. (1-tailed)	.000	.000	.000	.000	.000	.000	
	N	368	368	368	368	368	368	368

** . Correlation is significant at the 0.01 level (1-tailed).

Source: Source: Survey Questionnaire, 2022

4.2.2.2. Assumption Testing for Regression Analysis

Meeting the assumptions of regression analysis is necessary to confirm that the obtained data truly represented the population and that researcher has obtained the best results (Hair et al., 1998). Three assumptions for regression analysis used in this study were discussed for the individual variables: multi-collinearity, linearity and normality and Homoscedasticity (Hair et al., 1998). In the following paragraphs, each assumption is explained

Assumption 1, Multicollinearity Test:

Multiple regressions, is used to analyze relationships between more than two variables, and non-linear regression, which is used to analyze relationships that do not have a straight-line pattern. In multiple regression analysis, multicollinearity refers to a situation where a number of independent variables are closely correlated to one another. Multicollinearity test is done using variance inflation factor (VIF). The VIF indicates whether a predictor has a strong linear relationship with other predictor(s). As a rule of thumb, if the VIF of a variable exceeds 10, there will be a serious multicollinearity problem. The tolerance statistics, which is the reciprocal of VIF (1/VIF), also used to test multicollinearity. Tolerance values below 0.2 indicates serious multicollinearity problem.

Table 12: Multicolliniarity test

Variables		Collinearity Statistics		
		Tolerance	VIF	1/VIF
	PC	.450	2.225	0.449
	PM	.523	1.911	0.523
	PD	.420	2.382	0.419
	PS	.762	1.312	0.762
	PG	.384	2.605	0.383
	PI	.408	2.449	0.408

Dependent Variable: CPDB

Source: Survey Questionnaire, 2022

As clearly seen from the above table 12 that there is no multicollinearity issue, whereby the VIF value is less than 10 and the value of tolerance is not below 0.2 (Field,2005). Hence, the assumption of multicollinearity has not been violated.

Assumption 2, Autocorrelation Test

Secondly, linear regression analysis requires that there is little or no autocorrelation in the data. Autocorrelation occurs when the residuals are not independent from each other. While a scatter plot allows you to check for autocorrelations, you can test the linear regression model for autocorrelation with the Durbin-Watson test. The value of Durbin Watson assume to be between 0 and 4, values around 2 indicate no autocorrelation. From our test, the value of Durbin Watson is about 2.011(see Table13). Thus it lies between $0 < 2.011 < 4$ (see table 13). The value of Durbin Watson is close to 2 indicates there is no violation of Autocorrelation. Thus, from an explanation of the information presented in the entire tests one can conclude that there is no significant data problems that would lead to say the assumptions of multiple regressions have been seriously violated.

Table 13: Tests of Autocorrelation

Model	Durbin-Watson
1	2.011

a. Predictors: PC, PM, PD, PS, PG, PI

b. Dependent Variable: CPDB

Source: *Source: Survey Questionnaire, 2022*

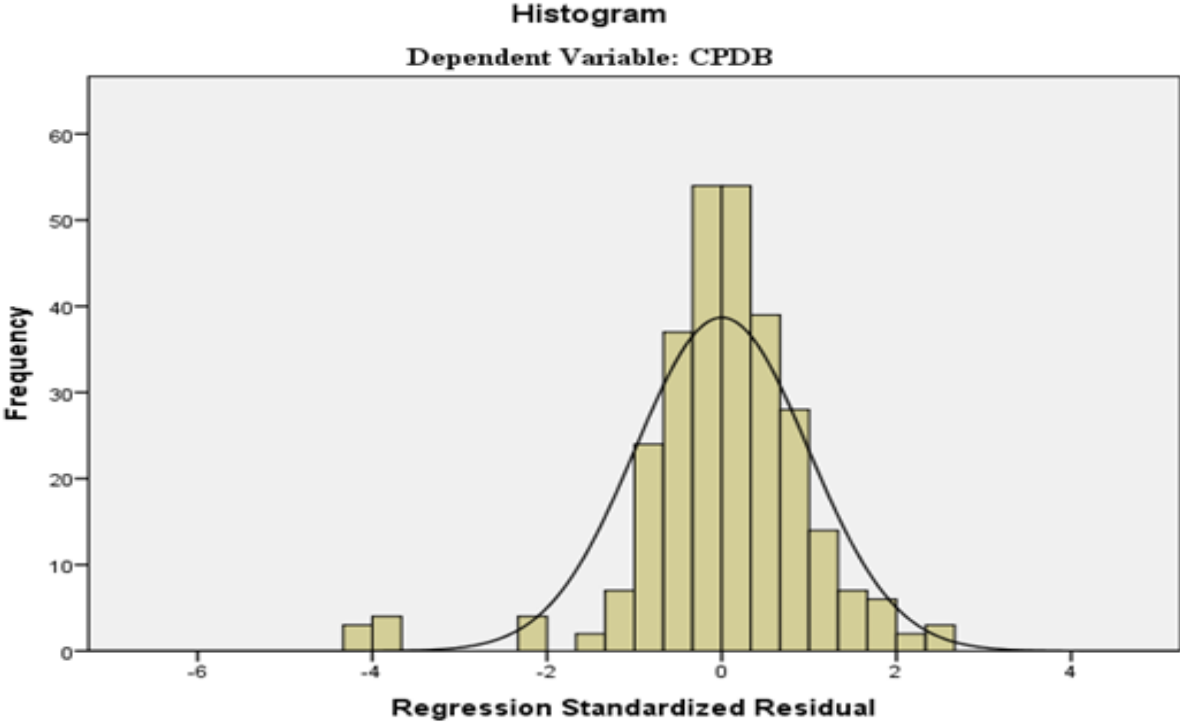
Assumption 3: Normality Test (Errors are Normally Distributed)

This test is performed to confirm the assumption of disturbances terms is normally distributed. The analysis requires all variables to be multivariate normal. This assumption can best be checked with a skewness and kurtosis value. As per the assumptions, the error term should be normally distributed or expected value of the errors terms should be zero ($E(u_t) = 0$). The first test is JarqueBera test of normality of residuals. The study findings show that all the variables had skewness and kurtosis values less than 1. The invariant normality of variables can be assumed if the skewness statistics is within the interval (-3.0, 3.0) and kurtosis statistic lying in the interval (-10.0, 10.0) (Kline, 2011). Therefore the data used in the study had normal distribution.

Figure 5 and 6 shows the frequency distribution of the standardized residuals compared to a normal distribution. As you can see, although there are some residuals (e.g., those occurring around 0) that are relatively far away from the curve, many of the residuals are fairly close to 0. Moreover, the histogram is bell shaped which lead to infer that the residual (disturbance or

errors) are normally distributed. Thus, no violations of the assumption normally distributed error term.

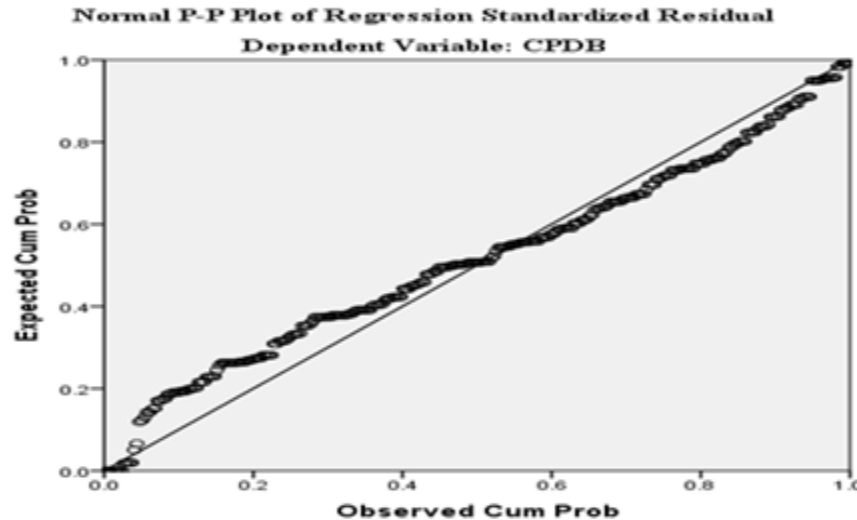
Figure 5: A Histogram shows normality test



Source: *Source: Survey Questionnaire, 2022*

Figure 6

Figure 6 : P-P Plot Linearity Assumption Measures



Source: *Source: Survey Questionnaire, 2022*

Assumption 4: Linearity relationship

The fourth assumption for computing multiple regressions is testing of the linear relationships between dependent and the independent variables. As showed in the below scatter plot, figure 4.5, the visual inspections of the scatter plot shows there exists a linear relationship between the predictors and the predicted variable. This means that, a unit increase of the one or all predictors causes respective increments for the strategic plan implementation.

Assumption 5 - Independence of Residuals

The independence of residuals is the last assumption for multiple regressions. The independence of the residuals can be measured by Durbin-Watson statistics. The value of the Durbin-Watson statistic ranges from 0 to 4. As a general rule, the residuals are independent (not correlated form one observation to the other one) if the Durbin-Watson statistic is approximately 2, and an acceptable range is 1.50 - 2.50 (Muluadam, 2015). For this study Table 14, the output value of Durbin-Watson is **2.011**; approximate to 2, indicating that there is no correlation among the residuals.

Table 14: Durbin-Watson Statistics for Independence of Residuals

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.731 ^a	.534	.524	3.03847	2.011
a. Predictors: (Constant), PI, PS, PC, PM, PD, PG					
b. Dependent Variable: CPDB					

Source: *Survey Questionnaire, 2022*

4.2.2.3. Regression Analysis

A linear regression model was used to determine whether independent variables affect the dependent variable. The dependent variable (purchase decision behavior) was regressed against the independent variables. The prediction was carried out basing on the effect of the six independent factors: packaging color, packaging material, packaging design, packaging size, packaging graphics, and packaging information. In addition, the coefficients for each independent variable generated from the model were subjected to a t-test, in order to test each of the hypotheses under study. The study thus came up with a model summary, the ANOVAs for the effect sizes and the regression model as presented in table below 15, 16, 17 and 18 the findings indicated that the model correlation coefficient was 0.731 which indicated that the model predicted over 73.1% of the change in the independent variable. The R² value =0.534 meaning 53.4% of the variance in the model can be predicted using the independent variables or in simple words 53.4% of purchase decision behavior is explained by the constructed independent variables. However, the remaining 46.6% changes in purchase decision behavior packed mineral waters are caused by other factors that are not included in the model. Therefore, the constructed purchase decision behavior determinant factors (such as packaging color, packaging material, packaging design, packaging size, packaging graphics and packaging information) are good explanatory variables of the factors for purchase decision behavior of packed mineral waters.

Table 15: Correlation Result for the variables

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson

1	.731 ^a	.534	.524	3.03847	2.011
a. Predictors: (Constant), PI, PS, PC, PM, PD, PG					
b. Dependent Variable: CPDB					

Source: *Source, Survey Questionnaire, 2022*

The ANOVA table 16 demonstrates the overall model significance, and this analysis help us to make sure the above model (on model summary table) is statistically significant predictor of the outcome i.e. purchasing decision behavior and it is evidenced that the model is statistically significant predictor of purchasing decision behavior for the reason that the p value is less than 0.05. Therefore, a significant amount of purchasing decision behavior is influenced by the dimensions which constitute packaging color, packaging material, packaging design, packaging size, packaging graphics and packaging information. Furthermore, it can be concluded as, the overall regression model is significant, $F= 53.751$, $p < .05$, $R^2= 0.534$ (i.e., the regression model is a good fit of the data well).

Table 16: Analysis of variance (ANOVA)

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2977.450	6	496.242	53.751	.000 ^b
	Residual	2594.269	281	9.232		
	Total	5571.719	287			
a. Dependent Variable: CPDB						
b. Predictors: (Constant), PI, PS, PC, PM, PD, PG						

Note: * indicates the estimated regression model is significant at 5% level of significance.

Source: *Source: Survey Questionnaire, 2022*

Table 17 below shows that the coefficient of dependent variable procurement performance and all independent variables. The ‘Y’ intercept 3.913 is the predicted value of the intensity of purchasing decision behavior when all the other variables are 0, implying that without inputs of independent variables level of packaging color, packaging material, packaging design, packaging size, packaging graphics and packaging information unit would be 3,913.

As beta coefficient shows that packaging color had a coefficient of .063 which is greater than zero. The findings indicate that taking all other independent variables constant, a unit increase in

packaging color will lead to a .063 increase in purchasing decision behavior. Based at 5% level of significance, packaging color was found to have a calculated $t = 2.876$ (greater than the tabulated value of $t > 1.96$) and significance level of 0.002 thus the value of less than 0.05. This means that the packaging color coefficient is significant at 0.05 levels. This shows that packaging color has a significant positive influence on purchasing decision behavior.

As beta coefficient shows that packaging material had a coefficient of .108 which is greater than zero. The findings indicate that taking all other independent variables constant, a unit increase in packaging material will lead to a .108 increase in purchase decision behavior. Based at 5% level of significance, packaging material was found to have a calculated $t = 1.572$ (less than the tabulated value of $t < 1.96$) and significance level of 0.007 thus the value of less than 0.05. This means that the packaging material coefficient is significant at 0.05 levels. This shows that packaging material has a significant positive effect on purchase decision behavior.

As beta coefficient show that packaging design had a coefficient of 0.415 which is greater than zero. The findings indicate that taking all other independent variables constant, a unit increase in packaging design will lead to a 0.415 increase in purchasing decision behavior. Based at 5% level of significance, packaging design was found to have a calculated $t = 5.937$ (greater than the tabulated value of $t > 1.96$) and significance level of 0.000 thus the value of less than 0.05. This means that the packaging design coefficient is significant at 0.05 levels. This finding shows that packaging design has significant positive influence on purchasing decision behavior.

As beta coefficient show that packaging size had a coefficient of 0.040 which is greater than zero. The findings indicate that taking all other independent variables constant, a unit increase in packaging size will lead to a 0.040 increase in purchasing decision behavior. Based at 5% level of significance, packaging size was found to have a calculated $t = 3.696$ (greater than the tabulated value of $t > 1.96$) and significance level of 0.013 thus the value of less than 0.05. This means that the packaging size coefficient is highly significant at 0.05 levels. This shows that packaging size has a high significant positive influence on purchasing decision behavior.

As beta coefficient shows that packaging graphics had a coefficient of 0.209 which is greater than zero. The findings indicate that taking all other independent variables constant, a unit increase in packaging graphics will lead to a 0.209 increase in purchasing decision behavior.

Based at 5% level of significance, packaging graphics was found to have a calculated $t = 2.206$ (greater than the tabulated value of $t > 1.96$) and significance level of 0.028 thus the value of less than 0.05. This means that the packaging graphics coefficient is significant at 0.05 levels. This shows that packaging graphics has a high significant positive influence on purchasing decision behavior.

As beta coefficient show that packaging information had a coefficient of 0.342 which is greater than zero. The finding indicate that taking all other independent variables constant, a unit increase in packaging information will lead to a 0.342 increase in purchasing decision behavior. Based at 5% level of significance, packaging information was found to have a calculated $t = 4.402$ (greater than the tabulated value of $t > 1.96$) and significance level of 0.000 thus the value of greater than 0.05. This means that the packaging information coefficient is significant at 0.05 levels. This indicates that packaging information has significant positive influence on purchasing decision behavior.

Table 17: Regression coefficients

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.912	1.177		3.324	.001
	PC	.063	.073	.053	2.876	.002
	PM	.108	.069	.088	1.572	.007
	PD	.415	.070	.373	5.937	.000
	PS	.040	.058	.032	3.696	.013
	PG	.209	.095	.145	2.206	.028
	PI	.342	.078	.280	4.402	.000

a. Dependent Variable: CPDB

Source: *Source: Survey Questionnaire, 2022*

Based on the above table finding the researcher can develop the following estimated regression model: $CPDB = \alpha + \beta_1PC_1 + \beta_2PM_2 + \beta_3PD_3 + \beta_4PS_4 + \beta_5PG_5 + \beta_5PI_5 + \varepsilon$ $CPDB = 3.912 + .063(\text{Packaging color}) + .108(\text{packaging material}) + .415(\text{packaging design}) + .040 (\text{packaging size}) + .209 (\text{packaging graphics}) + .342 (\text{packaging information})$

4.3. Discussion of Findings

This study was carried out to identify the effect of packaging on consumer's purchase decision of Choice, Kefta and Genet Packed mineral waters in Bahir Dar city. The study revealed that packaging color has a positive and significant effect on consumers' purchase decision of packed mineral waters with a beta value of 0.063. This result is supported by the finding of Ehsan, 2014 which states that consumers are significantly impacted by the color of the product. In this study, packaging colors influences the consumers' view on packed mineral waters and affect their final purchase decision.

The package design also influences consumers' purchase decision of packed mineral waters. Generally, consumers take into consideration and also decide to purchase packed mineral waters based on packaging color, size, materials, graphics, and information.

Packaging color, size, materials, graphics, information and design, also has an important correlation with consumers' purchase decision of packed mineral water, that is to say packed mineral water buyers usually checks the packaging elements and affordability before buying it. Based on the finding, it can conclude that there is a segment whose product choice is influenced by the packaging elements. Therefore; the actual number of consumers that are influenced or take into consideration of quality of packaging elements will definitely be even higher than what the research result shows here.

It is important for packed mineral water companies that their product is the first product choice that the consumer makes in that specific product category as nearly all consumers agreed that they usually buy the same product again and again. The most common reason for this purchasing pattern is that they know that the product does work. Through previous experience they have learnt about the product and that it is a solution to their problem or need. Some customers do not have the time or energy to explore other options and buy the same product again. These purchase decisions are finally made by consumers on the supermarkets and sub distributors and retailers based on packaging through its elements which it plays a vital role in marketing communication and makes the product preferable than other.

4.4. Hypotheses Testing

Hypothesis testing is based on unstandardized coefficients beta and P-value to test whether the hypothesis is accepted or not. To check the determinant level of purchasing decision behavior six hypotheses were developed. The regression results of each variable on the effect of packaging on customer's purchasing decision behavior of packed mineral water were analyzed based on the unstandardized beta coefficients and P-value to test whether the hypothesis is accepted or not.

✓ Packaging color

Hypothesis H₀₁ predicts that the packaging color has no significant positive impact on purchasing decision behavior. As shown below in table 18 the relationship between packaging color (PC) and purchasing decision behavior (CPDB) has a positive coefficient (Coefficient = 0.063, p-value < 0.05). Thus packaging color has positive significance relationship with purchasing decision behavior. The null hypothesis, which states that there is no positive and significant impact of packaging color on purchasing decision behavior, is rejected. The alternative hypothesis (H_{a1} hypothesis) is therefore accepted.

✓ Packaging material

Hypothesis 2 (H₀₂) states that the packaging material, has no significant positive impact on purchasing decision behavior. As shown below in table 18, the relationship between packaging material (PM) and purchasing decision behavior (CPDB) has a positive coefficient (coefficient = 0.108, p-value < 0.05). As a result, packaging material has a positive and significant impact on consumer purchasing behavior. Hence, the null hypothesis—which claims that packaging material has no positive or significant effect on how consumers behave when making purchases—is disproved. This indicates that the alternative hypothesis (H_{a2} hypothesis) is approved.

✓ Packaging design

The H₀₃ hypothesis states that packaging design has no significant influence on consumer purchasing decision-making. Table 18 below demonstrates that there is a positive relation between packaging design (PD) and purchasing decision behavior (CPDB) (coefficient = 0.415, p-

value 0.05). Therefore, the null hypothesis that claims packaging design has no positive or significant impact on how consumers make decisions about what to buy is rejected. This indicates that the alternative hypothesis (Ha3 theory) is accepted.

✓ **Packaging size**

Hypothesis H04 predicts that packaging size has no significant positive impact on purchasing decision behavior. Table 18 above demonstrates that there is a positive coefficient (Coefficient = 0.040, p-value 0.05) between packaging size (PS) and purchasing decision behavior (CPDB). Therefore, the null hypothesis, which asserts that packaging size has no positive and significant impact on purchasing behavior, is thus rejected. The alternative hypothesis (Ha4 hypothesis) is therefore accepted.

✓ **Packaging graphics**

Hypothesis H05 predicts that packaging graphics have no significant positive impact on purchasing decision behavior. According to table 18 above, there is a positive correlation between packaging graphics (PG) and purchasing decision behavior (CPDB) (Coefficient = 0.209, p-value 0.05). Therefore, the null hypothesis that claims packaging graphics have no positive or significant impact on consumer decision-making is rejected. This indicates acceptance of the alternative theory (Ha4 hypothesis).

✓ **Packaging information**

Hypothesis H06 predicts that packaging information has no significant positive impact on purchasing decision behavior. As shown above in table 18, the relationship between packaging information (PI) and purchasing decision behavior (CPDB) has a positive coefficient (coefficient = 0.342, p-value < 0.05). Therefore, the null hypothesis that states there is no positive and significant effect of packaging information on purchasing decision behavior is rejected. This means the alternative hypothesis (Ha4 hypothesis) is accepted.

Table 18: Summary of the Hypothesis Result

Hypothesis	Result	Reason
H1: Package color has no significant positive relationship with consumer's purchase decision behavior.	Accepted	$\beta = 0.063,$
H2: Package materials have no significant positive relationship with consumer's purchase decision behavior.	Accepted	$p < 0.05)$
H3: Package design has no significant positive relationship with relationship consumer's purchase decision behavior.	Accepted	$\beta = 0.108,$
H4: Package size has no significant positive relationship with consumer's purchase decision behavior.	Accepted	$p < 0.05)$
H5: Package graphics has no significant positive relationship with consumer's purchase decision behavior.	Accepted	$\beta = 0.415,$
H6: Package information has no significant positive relationship with consumer's purchase decision behaviour	Accepted	$p < 0.05)$

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1. Summary

The study was conducted to investigate the effect of packaging on consumer's purchase decision behavior of packed mineral waters. After reviewing previous researches and related literature, six elements of packaging were examined and the effect of each on consumer's purchase decision was investigated. Packaging color, packaging material, packaging design, size and practicality of packaging graphics and printed information were the six packaging elements studied in this research. Accordingly, a conceptual framework was developed, hypothesis formulated and appropriate research design was implemented to reach at the conclusions.

The study was conducted in Bahir Dar city on customers of the Choice, Kefta and Genet packed mineral waters' users with a total of 368 respondents participating with answering questionnaires distributed. Among the respondents, 64.4% were male and 35.6 were female. Demographic factor displays the age of respondents which, the researcher found the majority 63% of the participant were aged enough. Therefore, the age distribution helps to determine the various reasoning and understandings of the working class on the effect of packaging in consumer's purchase decision behavior of packed mineral waters.

Demographic factor examines the academic credentials of the respondents. The information is necessary to assist the researcher to recognize whether the respondents are educated or illiterate. All of the respondents were educated first degree and above educational level. This shows that the respondents are objectively educated and they could understand and give rational responses to the questionnaire distributed to them. Out of 384 questionnaires distributed to customers, 368 questionnaires (98.6% response rate) were collected back properly and filled.

Regarding to the awareness level of respondents on the concept of packaging, the majority of respondents 90.7% have awareness about the concept. This helps the researcher to get realistic responses from them since they have awareness about the effect of packaging in consumer's purchase decision behavior of packed mineral water. The majority of respondents, about 79.5 % have over all feeling about packaging of packed mineral waters. This helps the researcher to get

realistic responses from them since they have feeling about the overall packaging of packed mineral waters.

From the descriptive analysis, mean and standard deviation used on the analysis of the six variables on package elements of packed mineral waters', the result were found to be more significant in influencing consumers to purchase packed mineral waters.

From the inferential statistics, out of the packaging elements, Packaging color, packaging material, packaging design, packaging size and practicality of packaging graphics and packaging information on the package on the consumer's buying decision were positively and significantly correlated. Therefore, these packaging elements have an impact on consumer's purchase decision behavior of packed mineral waters.

5.2. Conclusion

The relationship between packaging color (PC) and purchasing decision behavior (CPDB) has a positive coefficient (coefficient = 0.063, p-value 0.05). As a result, packaging color has a positive influence on purchasing behavior. The null hypothesis, which states that there is no positive and significant impact of packaging color on purchasing decision behavior, is rejected. This means the alternative hypothesis (Ha1 hypothesis) is accepted.

The relationship between packaging material (PM) and purchasing decision behavior (CPDB) has a positive coefficient (coefficient = .108, p-value<0.05). Thus, packaging material has a significant positive effect on purchasing decision behavior. Therefore, the null hypothesis, which states that there is no positive and significant influence of packaging material on purchase decision behavior, is rejected. This means the alternative hypothesis (Ha2 hypothesis) is accepted.

The relationship between packaging design (PD) and purchasing decision behavior (CPDB) has a positive coefficient (coefficient = .415, p-value<0.05). Thus, packaging design has a positive and significant effect on purchasing decision behavior. Hence, the null hypothesis that states there is no positive and significant effect of packaging design on purchase decision behavior is rejected. This means the alternative hypothesis (Ha3 hypothesis) is accepted.

The relationship between packaging size (PS) and purchasing decision behavior (CPDB) has a positive coefficient (coefficient = 0.040, p-value<0.05). As a result, packaging size has a positive

influence on purchasing behavior. Therefore, the null hypothesis that states there is no positive and significant effect of packaging size on purchasing decision behavior is rejected. This means the alternative hypothesis (Ha4 hypothesis) is accepted.

The relationship between packaging graphics (PG) and purchasing decision behavior (CPDB) has a positive coefficient (coefficient =0.209, p-value<0.05). Thus, packaging graphics have a positive and significant effect on purchasing decision behavior. Therefore, the null hypothesis that states there is no positive and significant effect of packaging graphics on purchasing decision behavior is rejected. This means the alternative hypothesis (Ha4 hypothesis) is accepted.

The relationship between packaging information (PI) and purchasing decision behavior (CPDB) has a positive coefficient (coefficient =0.342, p-value<0.05). Thus, packaging information has a positive insignificant effect on purchasing decision behavior. Therefore, the null hypothesis that states there is no positive and significant effect of packaging information on purchasing decision behavior is rejected. This means the alternative hypothesis (Ha4 hypothesis) is accepted.

According to the research findings, all the six package elements had a positive and significant influence on consumer's purchase decision of packed mineral water at point of sales. Packaging elements, such as packaging color, packaging material, packaging design, size and practicality of packaging graphics and packaging information on the package on the consumer's buying decision were positively and significantly correlated. Therefore, it can be concluded from the research that these packaging elements has the highest influence on consumers purchase decision of packed mineral water. The results from this study were found to be consistent with previous research findings that all observed packaging elements are very important in influencing the purchase decision process of packed mineral waters'.

5.3. Recommendation

According to the research findings the researcher recommends that players in the packed mineral water of Ethiopia should give great emphasis on the elements of their package attributes. Based on the findings and conclusions the following recommendations are drawn:

- The conclusions from this study imply that package color, materials, design, graphics, information and package size of Choice, Kefta and Genetpacked mineral waters play a

significant role in influencing purchase decision behavior of customers. Therefore, companies must come up with convenient sizes of packages with attractive designs to increase their turnover of packed mineral waters.

- Packaging information on packed mineral water product represents an important component in support marketing communication strategies of mineral water producing companies, should focus on the information to be used on the packages to attract majority of the purchasers and influence their purchase decision behavior of Choice, Kefta and Genet mineral waters.
- Improving the use of packaging element such as package color, materials, design, graphics, information and package size improves the purchasing power of the customers. Therefore, packed water producing industries should automate their working process to improve their packaging elements in order to enhance the customers purchasing decision behavior. Likely all concerned parties in packed water producing industries should work together to significantly influence consumer's purchase decision behavior of packed mineral waters so as to increase their market share and profitability.
- Finally it is revealed that packaging is related to increase the purchasing decision behavior of customers. Thus, the study recommended that attention should be given to the better utilizing of packaging elements by considering the needs and wants of their customer's preferences to increase the purchasing decision behavior of customers and this will increase the profitability of the industry.

5.4. Limitation

Like any other research, there are some inherent limitations with the findings of this study. There are other packaging variables such as packaging labels, brand image, innovation, and practicality that may affect the purchasing decision behavior of customers of packed mineral waters. However the variables the researcher selects to study were limited to package color, materials, design, graphics, information and package size of mineral water producing industry and their impact on purchasing decision behavior. Besides, as far as purchasing decision behavior is concerned this study focused only on packaging element, which was limited to Choice, Kefta and

Genet mineral waters customers of Bair Dar. Therefore, the generalizability of the study may be limited due to other variables that may affect purchasing decision behavior of customers. Hence, to address this limitation future researchers should measure purchasing decision behavior of customers in a broader sense, by including more than six packaging elements /variables in the multiple regression model.

5.5. Future Research Directions

Based on the recommendations and limitations of this study, future research could follow various possibilities of research to better explain the relationship between packaging elements and purchasing decision behavior of customers. First, future research could attempt to explore the nature of these relationships in other unselected mineral water producing companies in Ethiopia as well employing different methods to explore the behavior of such relationships. Secondly, this study assesses the effect of packaging elements on of Choice, Kefta and Genet mineral waters as independent variable, to measure consumer's purchase decision behavior; future researches should see the impact of package color, materials, design, graphics, information and package size on the other purchase decision behavior factors concerning customers other than Bahir Dar city. Finally, including more mineral water producing industries in the sample and increasing the number companies in the observation can lead to more robust result and the relationship of packaging element and the purchase decision behavior can also explained further and should be considered in the future research.

References

- Ahmed, R. R, Parmar, V. and Amin, M. A. 2014. Impact of product packaging on consumer's buying behavior. *European Journal of Scientific Research*, 122 (2): 145-157. (n.d.).
- Ares, G., &Deliza, R. (2010). Studying the influence of package shape and color on consumer expectations of milk desserts using word association and conjoint analysis *Food Quality and Preference*
- Ares, G., Gimenez, A., Bruzzone, F., Antunez, L., Sapolinski, A., Vidal, L., & Maiche, A. (2012).Attentional capture and understanding of nutrition labeling: A study based on response times. *International Journal of Food Sciences and Nutrition*
- Africa.com.(n.d.). Packaging in Africa: Fast-Moving Consumer Goods. Retrieved from <https://www.africa.com/packaging-in-africa-fast-moving-consumer-goods/> on 13th April 2016.
- Ajzen, I. (1991). The theory of planned behaviour. *Organizational behaviour and human decision processes*.
- Ajzen, I., &Fishbein, M. (1980). Understanding attitudes and predicting social behaviour. Englewood Cliffs NJ: Prentice-Hall.
- Baker, J., Grewal, D. & Levy, M. (1992).An experimental approach to making retail store environmental decisions.*Journal of Retailing*.
- Babin, B.J., Hardesty, D., Suter, T., 2003. Color and shopping intentions: the intervening effect of price fairness and perceived affect. *Journal of Business Research*
- Bo, R. (2009) Packaging design: creating competitive advantage with product packaging. *British Food Journal*.
- Celhay, F., Boysselle, J., & Cohen, J. (2015). Food packages and communication through typefaces design: The exoticism of exotypes. *Food Quality and Preference*.
- Deliya, M. B., &Pramar, B.J (2012).Role of Packaging on Consumer Buying Behavior- Patan District.*Global Journal of Management and Business Research*.
- Deliza, R., &MacFie, H. (2001).Product packaging and branding.In L. J. Frewer& E. Risvik (Eds.), *Food, people and society*. Springer, Germany
- Deliza, R., H. &Macfie, et al. (2003).Use of Computer-generated Images and Conjoint Analysis to Investigate Sensory Expectations.*Journal of Sensory Studies*.
- Elliott, C., &Brierley, M. (2012).Healthy Choice? Exploring how children evaluate the healthfulness of packaged foods. *Canadian Journal of Public Health*.
- Fitzsimons, G. J., &Baba Shiv (2001).Nonconscious and Contaminative Effects of Hypothetical Questions on Decision Making. *Journal of Consumer Research*, 28(2), 224-238.
- Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research*.
- Gonzalez M. P., Thorhsbury S., &Twede D. (2007). Packaging as A Tool for Product Development:Communicating Value to Consumers. *Journal of food distribution research*.

- Gro'nroos, C. (1994). Quo vadis, marketing? Towards a relationship marketing paradigm. *Journal of Marketing Management*.
- Hannele, K. R. & Harri, T.L. (2010) Exploring consumers' product specific color meanings. *Qualitative Market Research: An International Journal*.
- Hawkes, C. (2010). Food packaging: The medium is the message. *Public Health Nutrition*.
- Im, S., Montoya, M.M., & Workman, J.P.Jr. (2003). Antecedents and consequences of creativity in product innovation teams. *Journal of Product Innovation Management*.
- Jacoby, J. (1971) A model of multi-brand loyalty. *Journal of Advertising Research*. 11, 25-30.
- Jobber, D. (1995). *Principles and Practice of Marketing*. McGraw-Hill: Berkshire.
- Johns, N. & Pine, R. (2002) Consumer behavior in the food service industry: a review. *International Journal of Hospitality Management*.
- Karimi, P. O. M. (2013). The Study of Relationship between Packaging Elements and Purchase Behavior: Consumers of Food, Cosmetics and Health Products. *Interdisciplinary Journal of Contemporary Research in Business*.
- Kandampully, J. (2002). Innovation as the core competency of a service organization: the role of technology, knowledge and networks. *European Journal of Innovation Management*, 5(1), pp.18-26.
- Koutroulou, A. and Tsourgiannis, L. (2011) "Factors Affecting Consumers' Purchasing Behavior towards Local foods in Greece. The Case of the Prefecture of Xanthi". *Scientific bulletin economic sciences*.
- Lee, W. L. (2010). The influence of packaging attributes on consumers' purchase decision of packaged food. MBA. Sainsuniversity.
- Liao, L. X., Corsi, A. M., Chrysochou, P., & Lockshin, L. (2015). Emotional responses towards food packaging: A joint application of self-report and physiological measures of emotion. *Food Quality and Preference*.
- Lifu, F.L. (2012). An analysis of the effect of product packaging on consumers' buying choice in Calabar Municipality, Cross River State, Nigeria. *Asian Journal of Business Management*.
- Marshall, D., Stuart, M., & Bell, R. (2006). Examining the relationship between product package color and product selection in pre-schoolers. *Food quality and Preference*.
- Mbwesa, J. K. (2006). Introduction to management research, a student's handbook. Basic modern management Consultants, Nairobi, Kenya. 79
- McKinsey & Company. (2012). The rise of the African consumer. Retrieved from <http://www.mckinsey.com/industries/retail/our-insights/the-rise-of-the-african-consumer>
- McNeal, J.U., & Ji, M.F. (2003). Children's visual memory of packaging. *Journal of Consumer Marketing*, 20, 400-427.
- Mizutani, N., Okamoto, M., Yamaguchi, Y., Kusakabe, Y., Dan, I., & Yamanaka, T. (2010). Package images modulate flavor perception for orange juice. *Food quality and preference*.
- Minyahil Tilahun, (2020) Customer's Perception and Preference towards Packaged Drinking Water

- Mueller, S., & Szolnoki, G. (2010). The relative influence of packaging, labeling, branding and sensory attributes on liking and purchase intent: Consumers differ in their responsiveness. Food quality and preference.
- Nawaz, A. and Asad, L. 2012. Effect of Product Packaging in Consumer Buying Decision. Journal of Business Strategies, 6(2): 1-10.
- Nayyar, E.V. (2012). Packaging – An Innovative Source of Impulsive and Abrupt Buying Action. International Journal of Management and Information Technology.
- Ng, M., Chaya, C., & Hort, J. (2013). The influence of sensory and packaging cues on both liking and emotional, abstract and functional conceptualizations. Food Quality and Preference.
- Olson, J. C and Jacoby, J. (1974), "Measuring Multi-Brand Loyalty", in NA - Advances in Consumer Research Volume 01, eds. Otterbring, T., Shams, P., Wästlund, E., & Gustafsson, A. (2013). Left isn't always right: Placement of pictorial and textual package elements. British Food Journal. 115. (10).
- Orth, U. R., & Malkewitz, K. (2008). Holistic package design and consumer brand impressions. Journal of Marketing, 72(3), 64–81.
- Orodho, A.J, Kombo, D.K., (2002). Research methods. Nairobi. Kenyatta university, institute of open learning.
- Pinya, S. & Mark, S. (2007) the importance of packaging attributes: a conjoint analysis approach. European Journal of Marketing.
- Prathiraja, P. H. K. and Ariyawardana, A. (2003) "Impact of Nutritional Labelling on Consumer Buying Behavior", Sri Lankan Journal of Agricultural Economics, Vol. 5(1).
- Prone, M. (1993). Package design has stronger ROI potential than many believe. Marketing News, 27, 13.
- Rebollar, R., Lidon, I., Martin, J., & Fernandez, M. J. (2012). Influence of chewing gum packaging design on consumer expectation and willingness to buy. An analysis of functional, sensory and experience attributes. Food Quality and Preference.
- Rettie, R., & Brewer, C. (2000). The Verbal and Visual Components of Package Design. Journal of Product Brand Management..
- Robinson, T. N., Borzekowski, D. G., Matheson, D. M., & Kraemer, H. C. (2007). Effects of fast food branding on young children's taste preferences. Archives of Pediatric and Adolescent Medicine.
- Short, D. (1974). Packaging: Marketing's secret weapon. Marketing Times, September/October 6–8.
- Sheppard, B. H., Hartwick, J., & Warshaw, P. R. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. Journal of Consumer Research.
- Silayoi, P. & Speece, M. (2007) the importance of packaging attributes: a conjoint analysis approach. European Journal of Marketing.
- Silayoi, P. and M. Speece (2004). Packaging and Purchase Decisions. British food journal.
- Underwood, R.L. (2003). The communicative power of product packaging: Creating brand identity via lived and mediated experience. Journal of Marketing Theory and Practice.
- Uys, H., & Basson, A. (1991). Research methodology in nursing. Pretoria: Kagiso Tertiary.

Appendix 1
Bahir Dar University

College of Business and Economics

Department of Marketing Management Post-Graduate Program

Dear Respondent,

RE: COLLECTION OF RESEARCH DATA

I am a postgraduate student in Bahir Dar University undertaking a Marketing Management research project on “effect of packed water packaging attributes on consumers’ purchase decision on selected packed waters. You are kindly requested to assist in data collection by responding to the questions in the accompanying questionnaire. The information provided will exclusively be used for academic purposes only and will be treated with utmost confidence. You will also be provided with a copy of the final report upon your request.

Your support is highly appreciated.

Yours faithfully,

Chlotaw Enbiale

Section 1: General Information

The following question lists different general questions, please kindly tick (√) on your answer in the appropriate box.

1. Gender

Male Female

2. Age

< 18 18-25 26-35 36-45 > 45

3. Academic Qualification

Diploma and below Bachelors Masters PhD and Above

4. Do you buy packed water from here?

Yes No

5. Which brand of bottled water manufactured in and around Bahir Dar do you prefer?

Choice Kefeta Genet Others, Specify

6. What is your current monthly income in Ethiopian birr?

Under 2,000

2,000-3,999

4 4,000-7,999

8,000-15,999

16,000 or more

would rather not to say

Section 2: -Determinants of Buying Decisions

Packaging attributes and consumer’s buying behavior of packaged mineral water manufactured in and around Bahir Dar.

N. B. Product 'X' means the bottled water you prefer

The following table lists different packaging characteristics and the attributes of each characteristic, please kindly tick (√) your answer in the appropriate boxes or respond by writing if requested.

1. Influence of color on purchase behavior indicates to what extent you agree to the following statements.

1=strongly agree, 2=agree, 3= neither agree nor disagree, 4 = disagree, 5=strongly disagree

1	Packaging color	1	2	3	4	5
1.1	Changing color of a packaging of “X” packed water could lead to change in consumer’s buying decision					
1.2	Full colors on “X” packed water packaging have an impact on consumer’s buying decision.					
1.3	Light colors on “X” packed water packaging attributes have an impact on consumer’s buying decision.					
1.4	Warm colors on “X” packed water packaging have an impact on consumer’s buying decision.					
1.5	Cold colors on “X” packaging have an impact on consumer’s buying decision					

2. Influence of materials on purchase behavior indicates to what extent you agree to the following statements.

1=strongly agree, 2=agree, 3= neither agree nor disagree, 4 = disagree, 5=strongly disagree

2	Packaging materials	1	2	3	4	5
2.1	Material quality of “X” packed water product packaging influences my purchase decision					
2.2	Versatility of “X” water product packaging (i.e. can reuse the package) influences my purchase decision					
2.3	Safety of “X” water product packaging influences my purchase decision					
2.4	Ability to recycle “X” water products packaging influences my purchase decision					
2.5	“X” water product packaging material influences my purchase decision					
3	Packaging Design	1	2	3	4	5
3.1	The picture qualities of “X” packed water package have impact in drawing attention on buying decision.					
3.2	Appealing graphics on “X” packed water packaging have an impact on consumer buying decision.					
3.3	Photographs image on “X” packed water packaging have an impact on consumer buying decision.					
3.4	The font used in writing the name and ingredient composition of the “X” water product influences behavior on buying decision.					
3.5	Images of people on “X” packed water packaging have an impact on consumer buying decision.					

Packaging Size	1	2	3	4	5
Type of opening of choice packed Water packaging influences my purchase decision					
Shape of “X” packed Water packaging influences my purchase decision					
Size of “X” packed Water packaging (i.e. individual					

packages vs. family size) influences my purchase decision					
“X” packed Water Packaging of various sizes influences my purchase decision					
The packaging of the product in a refill format in conjunction with different affordable sizes influences my purchase decision					
“X” packed Water products that are packaged in a unique manner that could aid storage and preservation influences my purchase decision					
Packaging that shows the products are enriched with quality					

5. Influence of size on purchase behavior indicates to what extent you agree to the following statements.

1=strongly agree, 2=agree, 3= neither agree nor disagree, 4 = disagree, 5=strongly disagree

5	Package graphics	1	2	3	4	5
5.1	The graphics of “X” packed water packaging influences my purchase decision					
5.2	The graphics combination that can be easily be remembered influences my purchase decision					
5.3	The graphics combination that makes the product stand out among other competitive products influences my purchase decision					
5.4	Attractive packaging influences my purchase decision					
5.5	The picture quality of the product packaging influences my purchase decision					
5.6	The appetizing standard of the picture quality of the product influences my purchase decision					

6. Influence of Package Labeling/Printed Information on purchase behavior indicates to what extent you agree to the following statements.

1=strongly agree, 2=agree, 3= neither agree nor disagree, 4 = disagree, 5=strongly disagree

6	Printed Information	1	2	3	4	5
6.1	“X” packed Water product packaging labels influence my purchase decision					
6.2	Too small to read “X” packed Water products labels influence my purchase decision					
6.3	The font used on the “X” packed Water product packaging is legible and can be understood by customers influences my purchase decision					
6.4	The font used on “X” packed Water products that attracts my attention from distance influences my purchase decision					
6.5	The font used in writing ingredient composition of “X” packed Water products that is legible and could be easily interpreted by customers influences my purchase decision					

Appendix 2

በባ/ዳር ዩኒቨርሲቲ የንግድ እና ኢኮኖሚክስ ኮሌጅ

የማርኬቲንግ አስተዳደር የድህረ-ምረቃ ፕሮግራም

ውድ ተጠሪ

:የጥናት መረጃ ስብሰባ

በባህር ዳር ዩኒቨርሲቲ የድህረ-ምረቃ ተማሪ ነኝ "በተመረጡ የታሸጉ ውሃዎች ላይ በተጠቃሚዎች ግዢ ውሳኔ ላይ የታሸጉ የውሃ ማሸጊያ ባህሪዎች ተፅእኖ ላይ የማርኬቲንግ ማኔጅመንት ጥናት ፕሮጀክት እያካሄድኩ ነው። ከዚህ ጋር ተያይዞ ባለው መጠይቅ ውስጥ ላሉት ጥያቄዎች ምላሽ በመስጠት በመረጃ አሰባሰብ ላይ እንድትረዱኝ በትህትና እጠይቃለሁ። የቀረበው መረጃ ለአካዳሚክ ዓላማ ብቻ የሚያገለግል ሲሆን በከፍተኛ እምነት ይታከማል። እንዲሁም በጥያቄዎ መሰረት የመጨረሻውን ሪፖርት ቅጂ ይሰጥዎታል።

ስለ ድጋፍዎ በጣም እናመሰግናለን።

ቸሎታው እንቢያለ

የሚከተለው ጥያቄ የተለያዩ አጠቃላይ ጥያቄዎችን ይዘረዝራል፤ እባክዎ በደግነት (✓) በተገቢው ሳጥን ውስጥ በመልሱ ላይ ምልክት ያድርጉ።

1. ጾታ

ወንድ ሴት

2. ዕድሜ

< 18 18-35 36-50 51-65 65

3. የትምህርት ደረጃ

ዲፕሎማና በታች ባችለር ማስተርስ ኤች.ዲ እና በላይ

4. የታሸገ ውሃ ከዚህ ይገዛሉ?

አዎ አልገዛም

5. በባህርዳር እና አካባቢው ከሚመረቱት የታሸገ ውሃዎች የትኛውን ይመርጣሉ?

ከፍታ ትንሽ ለ ይግለጹ

6. ወርሃዊ ገቢዎ በኢትዮጵያ ብር ምን ያህል ነው?

ከ2,000 በታች 2,000-3,999 4,000-5,999 6,000-7,999 8,000 በላይ

ምንም መናገር ልፈልግም

ክፍል 2: - የግዢ ውሳኔዎች

በባህርዳር እና አካባቢው የሚመረቱ የታሸገ የማዕድን ውሃ የማሸጊያ ባህሪያት እና የገዢዎች ባህሪ።

N.B. ምርት 'X' ማለት የመረጡት የታሸገ ውሃ ማለት ነው።

የሚከተለው ሠንጠረዥ የተለያዩ የማሸጊያ ባህሪያትን እና የእያንዳንዱን ባህሪያት ይዘረዝራል፤ እባክዎን በደግነት (✓) መልስዎን በተገቢው ሳጥኖች ውስጥ ምልክት ያድርጉ ወይም ከተጠየቁ በጽሁፍ ይመልሱ።

1. በግዢ ባህሪ ላይ የቀለም ተጽዕኖ በሚከተሉት መግለጫዎች ምን ያህል እንደተስማሙ ያሳያል።

1= በጽኑ እስማማለሁ፣ 2= እስማማለሁ፣ 3= አልስማማም፣ አልስማማም፣ 4 = አልስማማም፣ 5= በጣም አልስማማም

	የማሻሻያ ቀለም	1	2	3	4	5
1.1	የ "X" የታሸገ ውሃ ቀለም መቀየር በተጠቃሚዎች ግዢ ውሳኔ ላይ ለውጥ ሊያመጣ ይችላል					
1.2	በ "X" የታሸገ የውሃ ማሻሻያዎች ላይ ሙሉ ቀለሞች በተጠቃሚዎች ግዢ ውሳኔ ላይ ተፅዕኖ አላቸው.					
1.3	በ "X" የታሸገ የውሃ ማሻሻያ ባህሪያት ላይ የብርሃን ቀለሞች በተጠቃሚዎች ግዢ ውሳኔ ላይ ተፅዕኖ አላቸው.					
1.4	በ "X" የታሸገ የውሃ ማሻሻያ ላይ ያሉ ሙቅ ቀለሞች በገዢው ግዢ ውሳኔ ላይ ተፅዕኖ አላቸው.					
1.5	በ "X" ማሻሻያ ላይ ቀዝቃዛ ቀለሞች በተጠቃሚዎች ግዢ ውሳኔ ላይ ተፅዕኖ አላቸው					

2. በግዢ ባህሪ ላይ የቁሳቁሶች ተጽዕኖ በሚከተሉት መግለጫዎች ምን ያህል እንደተስማሙ ያሳያል።

1= በጽኑ እስማማለሁ፣ 2= እስማማለሁ፣ 3= አልስማማም፣ አልስማማም፣ 4 = አልስማማም፣ 5= በጣም አልስማማም

	የማሻሻያ እቃዎች	1	2	3	4	5
2.1	የ "X" የታሸገ የውሃ ምርት ማሻሻያ ቁሳቁስ ጥራት በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
2.2	የ "X" የውሃ ምርት ማሻሻያ (ማለትም ማሻሻያ እቃውን እንደገና መጠቀም ይችላል) በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
2.3	የ "X" የውሃ ምርት ማሻሻያ ደህንነት በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
2.4	የ "X" የውሃ ምርቶችን እንደገና ጥቅም ላይ ማዋል መቻል በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
2.5	"X" የውሃ ምርት ማሻሻያ እቃዎች በግዢ ውሳኔ ላይ ተጽዕኖ					

	ያሳድራሉ					
3	የማሸጊያ ንድፍ	1	2	3	4	5
3.1	የ "X" የታሸገ የውሃ ፓኬጅ የምስል ጥራቶች በግዢ ውሳኔ ላይ ትኩረትን በመሰጠት ላይ ተጽእኖ አላቸው.					
3.2	የይግባኝ ግራፊክስ በ "X" የታሸገ የውሃ ማሸጊያ ላይ በተጠቃሚዎች ግዢ ውሳኔ ላይ ተጽእኖ ያሳድራል.					
3.3	የፎቶግራፎች ምስል በ "X" የታሸገ የውሃ ማሸጊያ ላይ በተጠቃሚዎች ግዢ ውሳኔ ላይ ተጽእኖ ያሳድራል.					
3.4	የ "X" የውሃ ምርት ስም እና ንጥረ ነገር ለመጻፍ ጥቅም ላይ የዋለው ጸሁፍ መጠን በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል። በ "X" የታሸገ የውሃ ማሸጊያ ላይ ያሉ ሰዎች ምስሎች በገዢው ግዢ ውሳኔ ላይ ተጽእኖ አላቸው.					
4	የማሸጊያ መጠን	1	2	3	4	5
	የታሸገ የውሃ ማሸጊያ አይነት በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
4.1	የ "X" የታሸገ የውሃ ማሸጊያ ቅርፅ በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
4.2	የ "X" የታሸገ የውሃ ማሸጊያ መጠን (ማለትም የግለሰብ ጥቅሎች እና የቤተሰብ ብዛት) በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
4.3	"X" የታሸገ የውሃ የተለያዩ መጠን ያለው ማሸጊያ በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
4.4	ከተለያዩ ተመጣጣኝ መጠኖች ጋር በማጣመር ምርቱን በመሙላት ቅርጻት መጠቅለል በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
4.5	"X" የታሸገ የውሃ ምርቶች በልዩ ሁኔታ የታሸጉ ማከማቻ እና ተጠብቆ እንዲቆዩ በኔ የግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራሉ					
4.6	ምርቶቹን የሚያሳዩ ማሸጊያዎች በጥራት የበለፀጉ ናቸው					

5. በግዢ ባህሪ ላይ የመጠን ተጽዕኖ የሚያሳየው በሚከተሉት መግለጫዎች ምን ያህል እንደተስማሙ ያሳዩ

1= በጽኑ እስማማለሁ፣ 2= እስማማለሁ፣ 3= አልስማማምም፣ አልስማማም፣ 4 = አልስማማም፣ 5= በጣም አልስማማም

	የማሸጊያ ግራፊክስ	1	2	3	4	5
5.1	የ "X" የታሸገ የውሃ ጅሽግ ግራፊክስ በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
5.2	በቀላሉ ሊታወስ የሚችል የግራፊክስ ጥምረት በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
5.3	ምርቱ ከሌሎች ተወዳዳሪ ምርቶች መካከል ጎልቶ እንዲታይ የሚያደርገው የግራፊክስ ጥምረት በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
5.4	ማራኪ ጅሽግ በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
5.5	የምርት ማሸጊያው የምስል ጥራት በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
5.6	የምርቱ የምስል ጥራት የምግብ ፍላጎት በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					

6. የጥቅል መሰየሚያ/የታተመ መረጃ በግዢ ባህሪ ላይ የሚያሳድረው ተጽዕኖ በሚከተሉት መግለጫዎች ምን ያህል እንደተስማማዎት ያሳይ

1= በጽኑ እስማማለሁ፣ 2= እስማማለሁ፣ 3= አልስማማምም፣ አልስማማም፣ 4 = አልስማማም፣ 5= በጣም አልስማማም

6	የታተመ መረጃ	1	2	3	4	5
6.1	"X" የታሸገ የውሃ ምርት ማሸጊያ መለያዎች በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራሉ።					
6.2	"X" የታሸገ የውሃ ምርቶች መለያዎች ለማንበብ በጣም ትንሽ በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራሉ።					
6.3	በ"X" የታሸገ የውሃ ምርት ማሸጊያ ላይ ጥቅም ላይ የዋለው ቅርጽ-ቁምፊ/ፎንቱ/ ሊነበብ የሚችል እና በደንበኞች ሊረዳው ይችላል የግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
6.4	ትኩረቴን ከርቀት የሚስበው በ "X" የታሸገ የውሃ ምርቶች ላይ ጥቅም ላይ የዋለው ቅርጽ-ቁምፊ/ፎንት/ በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					
6.5	የሚነበብ እና በደንበኞች በቀላሉ ሊተረጎም የሚችል የ"X" የታሸገ የውሃ ምርቶችን ለመጻፍ ጥቅም ላይ የዋለው ቅርጽ-ቁምፊ በግዢ ውሳኔ ላይ ተጽዕኖ ያሳድራል።					

ክፍል 3: የተመረጡ የታሸጉ ውሃዎች የገዢው ግዢ ባህሪ

1. እንደ ምርጫዎ የታሸገ ውሃ ምን ያህል ጊዜ ይገዛሉ?

U. አልፎ አልፎ () ለ. በተደጋጋሚ () ሐ. በጣም በተደጋጋሚ () D. በጭራሽ ()

2. የታሸገ ውሃ ሲገዙ ምን ይመርጣ?

U. ዋጋ () B. ማሸጊያ () ሐ. ብራንድ () D. ግብዓቶች ()

3. ለመረጡት የታሸገ ውሃ ትክክለኛ ፍጆታ ከመጠቀምዎ በፊት ለውሃ ምርት ቅድመ ግምት (አዎንታዊ/አሉታዊ) አለዎት?

U. ሁልጊዜ () ለ. አንዳንድ ጊዜ () ሐ. አልፎ አልፎ () መ. በጭራሽ ()

4. የመረጡት የታሸገ ውሃ የታሸገው የውሃ ምርቶች የመጀመሪያ ግዢ ምርጫዎ ቢሆንም ምርቱን ለመግዛት ባደረጉት ውሳኔ ላይ ተጽእኖ ያሳድራል?

U. ሁልጊዜ () ለ. አንዳንድ ጊዜ () ሐ. አልፎ አልፎ () መ. በጭራሽ ()

5. የታሸገ ውሃ ከመግዛትዎ በፊት መረጃ ይፈልጋሉ?

U. ሁልጊዜ () ለ. አንዳንድ ጊዜ () ሐ. አልፎ አልፎ () መ. በጭራሽ ()

6. በመደብሩ ውስጥ በምን ያህል ጊዜ በሚገዟቸው የታሸጉ የምግብ ምርቶች ላይ ውሳኔ ያደርጋሉ?

U. ሁልጊዜ () ለ. አንዳንድ ጊዜ () ሐ. አልፎ አልፎ () መ. በጭራሽ ()

7. የሚታዩት የምግብ ምርቶች ማሸጊያ ምርቱን ለመግዛት ባደረጉት ውሳኔ ላይ ተጽእኖ ያሳድራሉ?

U. ሁልጊዜ () ለ. አንዳንድ ጊዜ () ሐ. አልፎ

