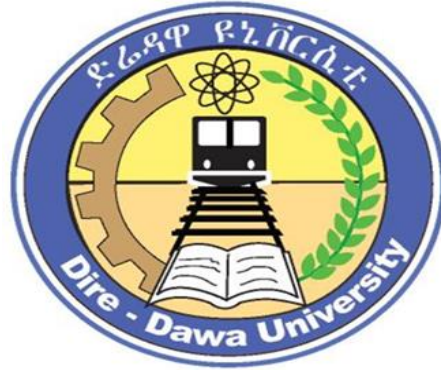


DIRE DAWA UNIVERSITY

**COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF MARKETING MANAGEMENT**



**A RESEARCH PAPER ON THE EFFECT OF PRODUCT ATTRIBUTE ON
CUSTOMER PREFERENCE IN DIRE DAWA:**

IN CASE OF VITA WATER SPRINGS

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APPROVAL OF THE THESIS

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DECLARATION

I, the undersigned, declare that this thesis is my own original work studied in Dire Dawa and has not been presented in any other university. All sources of materials used in this thesis have been duly acknowledged.

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List of Acronyms

Ads	Advertisement
ANOVA	Analysis Of Variance
EBDSN	Ethiopian Business Development Services Network
ESPN	Entertainment and Sports Programming Network
ISO	International Organization for Standardization
Ph.	Power of hydrogen
SPSS	Statistical Package for Social Science
TDS	Total dissolved salt
TV	Television
UK	United Kingdom
VIF	Variance Inflation Factor
VWS	Vita water spring

Abstract

This study was aimed to identify the factors that affect customer choice of bottled water brands among customers of vita water spring in Dire Dawa city. Both descriptive and explanatory study designs was employed. A sample size of 361 respondents was part of this study. The research design was applied both qualitative and quantitative. The techniques used in the study was purposive sampling and the Collected data were analyzed using statistical means such as descriptive analysis, correlation analysis and multiple regression analysis. The final outcome of the study shows the product availability, advertisement, bottle handling, and brand price and brand quality has positive and significant relationship. Based on the above insights, the researcher recommended that the management of bottle water manufacturers should work hard on distribution to ensure consistent availability of their products, focusing on persuasive and attractive advertisement message, serving bottle handle in 2 liter, maintain product quality, set affordable price and design package in sustainable strength with full clear information.

Keywords: - product availability, advertisement, bottle handling, brand price, brand quality, and packaging

CHAPTER ONE

1. Introduction

This chapter gives a detailed introduction of the research proposal starting with a brief background on the intent to study the impact of product attribute on customer preference in bottling company. This chapter includes the background of the study, background of the company, statement of the problem, basic research questions, research objectives, significance of the research, scope, and definitions of the terms and the organization of the research.

1.1. Background of study

At global level, the fastest growth of bottled water consumption is seen in the developing countries especially Asia and South America. The reason to use bottled water is that it is perceived to have convenience, purity and better taste (Hu, Morton and Mahler, 2011). As living organisms, human beings cannot survive without water and it is the major constituent of body cells, tissue and fluids (Gleick Peter, 2004). Next to oxygen, water is the most important substance for human existence. Due to this reason, the pattern of human settlement throughout history has often been determined by its accessibility (Saleh, 2001). According to (Rolando, 2021) on its five years report of its healthy hydration claimed that drinking 1.5 liters per day is a physiological necessity as well as the quality of what we drink has an important role to play in dealing with our health.

In Africa continent factors that influence choice of brand is a crucial concern. A research conducted by (Abednego et al, 2015) to identify factors affecting bottled water choice in Ghana finding of the research prevails that from demographic factors income groups, age, and educational factors have influence on the purchasing power of behavior. However gender was found to be insignificant in the purchase behavior. According to the study conducted by (Lema and Negash, 2018) taking samples from consumers who found in Gondar town to assess factors influencing the brand choice of bottled water the researcher found that packaging, product quality, price, brand name, brand availability, brand image and advertisement were significantly associated with consumers brand choice for bottled water products. 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 (Minyahel and Melaku, 2020).

According to Ethiopian Business Development Services Network (EBDSN) (2013), Manufacturing is now at an early stage of development and currently accounts for about 7 per cent of the GDP and 5.3% of employment. It covers about 145 state-owned and 643 private manufacturing industries of all sizes. Following the government actions to enhance industrialization, different local and foreign investors have started producing and selling bottled water in different parts of Ethiopia. Different bottled drink water manufactures are established around Addis Ababa and other different cities of the country, such as Mekelle, and Dire Dawa.

Several studies have emphasized several factors which determine the preference of bottled water. (Doria, 2006) Outlined dissatisfaction with tap water and health/risk concerns as the reasons why consumers choose to drink bottled water rather than tap water. In addition to this there are also studies have emphasized several factors which determine the choice for bottled water. For instance, a study conducted by Ruth kassaye (2018) the findings indicates that some dimensions of demographic factors(occupations), environmental factors such as alternative water source as well as marketing factors such as convenience and higher quality.

Hence, highly influx of new packed bottle water in turn leads to competitive advantage for consumers in market place. On the basis of this gap there is also lack of clarity and readability in the independent variables used in preceding studies in our country. Recently, it is obviously happening that the number of packed water are highly launched from day to day. As far as researchers know, no studies have been conducted to determine the impact of consumers bottled water brand preference in our country. Therefore, despite this gap this research will examine the impact of product attributes on consumer's preference in vita water Spring Company. At least nine major determinant product attributes will be used to determine the impact of consumer preference of consumers buying decision. These are advertisement, product information, Bottle handling, brand choice, brand image, product availability, quality, price and packaging. Relative impacts of each product attributes on consumer preference of vita bottle water spring product for consumption/trade purpose was examined in this study.

The overall purpose of this study was to indicate the effect of products attributes and consumer's preference of purchase behavior of consumer motive in Dire Dawa city in case of vita water

spring. By understanding product attribute features and intentions of consumer preference was identified, analyzed, interpreted discussed and recommended accordingly.

1.2. Statement of the problem

The worldwide market's companies are under constant pressure to raise the value of the products they are offering as competition on the market gets more intense. However, many firms still don't connect with their customers enough. Although numerous studies have already been carried out to shed light on how customers perceive product qualities, there are still many gaps in the theoretical study on this subject. The general elements, the realism used while doing the research, and the methodology selection all have the potential to progress the state of the art in this field of study. Earlier studies lack the requisite emphasis on a particular product or category and are overly broad.

In Ethiopian context a decade ago the idea of bottled water for many Ethiopians was a trend that characterized the diaspora and the modern, wealth- riven way of life. But today it is common basic necessity that people purchasing bottled water along with their groceries, kiosks, and supermarkets. According to (Pinki, 2014) in order to be successful in the market, companies need to understand why and how consumers make purchase decisions, and what factors influence consumer purchases preference. However, consumers' needs and desires are not yet explored well enough. There is still a gap in research concerning the impact of various product attributes on consumer perception and behavior (Rahman et al , 2017), as well as their relation to the final product preference (sanad, 2016). The fact that the majority of earlier investigations lacked realism also contributes to the evidence's weaknesses. Therefore, the primary cause is the chosen site, which was frequently far away from the actual point of sale. The use of actual products as stimulus goes hand in hand with this stimuli for the respondents, which was also rarely practiced. From a methodical viewpoint, research gaps still exist, since questionnaires were by far the most favored data collection tool. With just few researchers, who gave the respondents the possibility of free responses, important insights might have been neglected and unconsidered until now.

To improve the bottled water market share, the marketers need to understand customer insight in. In today's marketing environment, consumer preference is continuously changing and becoming

highly diversified, buyers were exhibiting diversified, unanticipated and surprising purchase behavior (Nakmongkol, 2009). So to be feasible and seen by customer in this competitive environment they have to comprehend their customer and modify their marketing scheme according to the whim of their customer.

Recently, the bottle water industry was increasing from day to day similarly the customers need and wants of bottle water also high in market place. Thus, better meet market demands and increase customer happiness, advanced research are increasingly necessary by adding new variable gaps. For instance a research conducted by Samrawit Abate on factors affecting brand choice in Addis Ababa by using independent variables brand availability, advertisement, packaging, brand price, brand image and brand the result states the brand availability and frequency of advertisement highly influence the brand choice of bottle water. However this study was intended to investigate by adding new variables from previous study.

Therefore, this research stands to identify the effects of product attributes by incorporating variables in terms of labeling, bottle handling, advertising, packaging, brand name, brand image, product availability, product quality and product price on customer choice to follow up a more developed and compressive research frame works to thoroughly understand the factors that significantly influence the bottled water brand choice of consumers of vita water spring in Dire Dawa city. This study focuses on the general product attributes of bottle water and their customer preference Dire Dawa. So, the study intends to identify the effects of product attributes on the customer preference in vita water spring. Accordingly, the study attempts to find answers to the following research questions.

1.3. Basic Research Question

The general aim of this study was to understand the effects of product attributes in bottled water brand preference of customers in Dire Dawa city. Up on this, the following research questions will be drawn:

1. How brand availability influence customer choice in vita water spring?
2. How product quality influences on customer preference in vita water spring?
3. Is there relationship between advertisement have an impact on customer choice of Vita water spring water?

4. Is packaging have a significant impact on bottled water brand choice in Dire Dawa?
5. What is the effect of labeling/product information in bottle water choice?
6. How bottle handling affect customer choice of vita bottle water in Dire Dawa?
7. In what extent does brand name affect customer choice?
8. How does packaging influence customer choice in vita water spring
9. In what extent brand image influence customer choice of vita water spring?

1.4 Objectives of the Study

1.4.1 General objectives

The general objectives of the study was to identify the factors which affect bottled water brand choice in the case of consumers who are found in Dire Dawa City.

1.4.2 Specific objectives

Based on the above general objective the following specific objectives were supposed to be achieve by the accomplishment of this research.

1. To examine the effect of labeling/ product information on customer preference in vita water springs.
2. To examine bottle handling influences of customer preference in vita water spring
3. To determine the effect of brand quality on customer choice in vita water spring
4. To examine the effects of product availability on customer choice in vita water spring in Dire Dawa
5. To investigate the effect of advertisement on customer preference of vita water spring
6. To determine the effect of packaging on customer preference of vita water spring in Dire Dawa
7. To examine the effects of brand name on customer choice

8. To demonstrate the influence of brand image on customer choice of vita water spring
9. To examine the effect of product price on customer choice of vita water spring

1.4.3 Hypothesis

The researcher believes that the finding of this study perhaps contribute to vita water customer and company as well. The findings reveals Effects of product attributes on customer preference in vita water Spring Company. In addition to the above, this study may give additional benefits to different stakeholder's vita water spring. Managers of vita water spring may use the finding of this study to evaluate and determine the effects of product attribute, which can help them revise their organizational image. The study may also serves as a stepping stone for other researchers and academicians to undertake further research. Other similar organization may also use the finding of this study as input for revising and improving the study on customer choice.

Hypothetically:-

1. Product availability has no significant positive relationship with customer choice
2. Advertisement has no significant positive relationship with customer choice
3. Bottle handling has no significant positive relationship with customer choice
4. Product quality has no significant positive relationship with customer choice
5. Product price has no significant positive relationship with customer choice
6. Labeling has no significant positive relationship with customer choice
7. Packaging has no significant positive relationship with customer choice
8. Brand image has no significant positive relationship with customer choice
9. Brand name has no significant positive relationship with customer choice

1.5 significance of the study

The research analyzed the factors that influence bottled water brand selection among consumers in Dire Dawa city. The significance of this study can be seen in terms of its theoretical contributions and practical implications. Theoretically, the study could fill an important gap in the literature that has been observed with current available literatures. Therefore, the findings of this study could be add to the existing body of the literature and can serve as a starting point on which future studies can be built. On the practical side, this study can help managers in the bottled water industry to identify the major factors that influence consumer preference of

organizational product. As the consequence findings could help organizational management to formulate appropriate marketing strategies to reach the customer satisfaction and attract customers in comparison with competitive company. To sum up the findings can contribute to the bottling water industry, particularly in understanding the factors that customers consider when choosing their water brand. At last but not the least conducting the present study on the factors influencing bottled water brand choice could be used for the experience of the student researchers.

The benefits of this research could be seen in two side. On customer's side, the benefits of this study is to investigate the impacts of product attributes on consumers brand preference in bottling industry. Thus, permit the consumer to rank the product according to the levels of utility they give consumer preference of comparative advantage because Customers are more selective in their buying choices and a good product attributes are valuable to reach them.

On the marketer's side, the study provides the organization to identify the critical factors that influence the organizational product in market place.

1.7. Scope of the study

Geographically, this study was conducted to study the effect of product attribute on customer choice in vita water spring in Dire Dawa. Bottle water users in Dire Dawa was highly increasing from day to day as the consumers are aware of tap water existing in area has high percentage of salts, fluorides and other harmful contents.

Conceptually, although there may be several factors the research was delimited to identify factors that affect customer choice vita water springs. All product attribute features that influence consumer's preference in vita water spring was examined in this study. The study was confined to these determinant elements which are indicative impacts of product attributes on customer preference vita water springs industry. The study was delimited to the data from the rates using questionnaires and interviews in vita water spring industry.

Methodologically, nevertheless customers are the final users of the product in bottling industry they can be counted as business and final consumers because they are involved in resell for purchase that devoted for consumption and other operational purpose. Following this line, from

target customers in Goro and Sabian kebele's that are purposively selected from among other kebele's due to existence of high concentration of vita water spring customer. In separately, in Sabian 5790 and Goro kebele's 4118 vita customers of vita existed respectively from total customers of 30,000 in both kebele's.

1.8 Operational definitions of the terms and concepts

Bottled water: Refers to water that is stored in plastic bottles that are food-grade, meant for the consumption of humans, which in Ethiopia traditionally known as "Highland." Bottle water is any product, including mineral, spring, well water taken from municipal or private utility system, distilled or other water, to which chemicals may be added or and which are put into sealed bottles, packages or other containers to be sold domestic consumption or culinary use as Department of Health, New York State, 2006 report portrays.

Packed drinking water-Is water derived from any source of portable water which is subjected to treatments namely decantation filtration, combination of filtration, accretion, filtration with membrane filter, depth filter, cartridge filter activated carbon filtration, demineralization, re-mineralization reverse osmosis packed (Jain and Singh, 2013) .

Spring water- Is also known as mineral water because it comes from natural spring, which are places where moving underground water comes out of an opening in the lands surface (Dotsika and poutoukis, 2010).

Product- A product is any good, service or idea that can be offered to a market to satisfy a want or need. Therefore, it represent a complex of tangible and intangible attributes or features which include packaging, color, price, functional, social and physiological benefits (Neap and Celik, 1999).

Consumers buying behavior- Is the study of individuals, groups or organizations and all the activities associated with the purchase, use and disposal of goods and service, including consumer's emotional, mental, behavioral responses that follow these activities (Sangroya and Nayak, 2007).

Comparative advantage- In recent article (Brown, Churchill and Peter, 2033), attempting to advance the theory of comparative advantage in the presence of market imperfection.

Product attribute-a product attributes are attributes evaluated by consumer has been found to be affected by a number of factors such as situation, knowledge, motivation and involvement (Engel, Blackwell and Miniard, 1993).

Consumer preference- Is defined as the subjective/individual/ tastes, as measured by utility, of various bundles of goods. They permit consumers to rank these bundles of goods according to the levels of utility they give the consumer (Dhār, 1997).

Brand preference- It is a measure of brand loyalty in which a consumer will choose a particular brand in presence of competing brands, but will accept substitutes if that brand is not available (Yang, Allenby and Fennell, 2002).

1.9 Organization of the research paper

This study was organized into five chapters. Chapter one, it is introductory part of thesis. It was introduce the study by providing background information research problem, research questions, problem statement, objectives of the study, research hypothesis, and scope of the study and the organization of the study. Chapter two present the review of literatures related to the research area. Relevant studies will be critically analyze and used to guide and direct empirical study was served in this paper. Chapter three was present research methodology employed in the study that can clearly outline how use the requested philosophical underpinning of research. Chapter four states about budget break down that estimates costs for upcoming research paper to accomplish.

CHAPTER TWO

2. Related Review Literature

2.1 Introduction

In this chapter study presents an overview of theoretical review literature which discusses theoretical concepts, next chapter study was related with the empirical study which focuses previous study findings and third chapter discusses the conceptual framework which shows the relationship between the dependent and independent variables.

2.2 Theoretical Review Literature

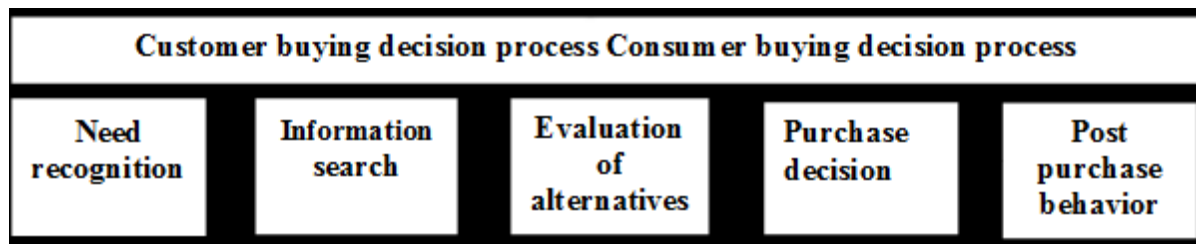
Water is important for human body that each of us should consume daily. Institute of Medicine in US as referred by University of Nevada in 2013, recommended that men should drink 13 glasses and women 9 glasses of water in a day. On the other side, another study recommends the usage of water per day in liters. It says men should take 3.7Liter of water per day and women 2.7Liter (Cheuvront et al, 2004). Understanding consumer behavior and “knowing customers” is not simple. Customers may say one thing but do another. They can get influenced and change their mind the last minute. Consumer buying behavior refers to the buying behavior of final consumers- individuals and households who buy goods and services for personal consumption (Kotler and Lee, 2009). The starting point for understanding buyer is the stimulus response model. Marketing and environmental stimuli enter the buyer’s consciousness. The buyer’s characteristics and decision process lead to certain purchase decisions. The marketers taste is to understand what happens in the buyer’s consciousness between the arrival of outside stimuli and buyer’s purchase decision. A consumer’s buying behavior is influenced by cultural, social, personal, psychological, marketing and environmental factors (Armstrong and Kotler, 2018).

2.2.1. Consumer decision making process

Consumer decision making process is the step where consumer go through satisfying a need or solving a problem. Many authors write about the stages that a consumer passes through purchasing a given product even if many authors express in different ways the steps are still the same. Consumer decision identifies at least two types of decision making. The first involves deliberative decision making with the classic five stages: problem recognition, information search, alternative evaluation, purchase decision and post-purchase behavior. When consumers

have limited processing resources, they may pass directly from problem recognition to purchase decision to the post purchase phase, using affective feeling to direct their choice process. The second type of decision making is affective /experiential. This involves intuitive, automatic, associative, and fast decisions.

According to (Keller and Kottler, 2008) consumers pass through several stages before purchasing something. They argue that the buying process is one which starts long before the actual purchase and continues long after. The marketer therefore needs to focus on the entire buying process, rather than just the purchase decision. Figure-1 shows the consumer decision process. The process starts when the buyer recognizes a problem or *need*. There after the buyer will or will not *search for more information* related to the need. This information will be used to *evaluate alternative brands* in the choice. After evaluation, the buyer actually *buys the product*.



2.2.3. Consumer behavior theory

Consumer behavior refers to the selection, purchase and consumption of goods and services for the satisfaction of their wants. There are different processes involved in the consumer behavior. Initially the consumer tries to find what commodities he/she would like to consume, then he/she selects only those commodities that promise greater utility. After selecting the commodities, the consumer makes an estimate of the available money which he/she can spend. Lastly, the Consumer analyzes the prevailing prices of commodities and takes the decision about the commodities he/she should consume. Meanwhile, there are various other factors influencing the purchases decision of consumer consumption behavior (Rani , 2014). Similarly (Kotler, 2011) states Consumer's buying behavior is influenced by cultural, social, personal, psychological, marketing and environmental factors. Understanding consumer behavior and "knowing customers" is not simple. Customers may say one thing but do another. They can get influenced and change their mind the last minute since needs or wants change from time to time. The starting point for understanding buyer is the stimulus response model. Marketing and

environmental stimuli enter the buyer's consciousness. The buyer's characteristics and decision process lead to certain purchase decisions. The marketer's task is to understand what happens in the buyer's consciousness between the arrival of outside stimuli and buyer's purchase decision. Based on the assumption of traditional demand theory, consumers demand products based on price and income. (Keller and Kotler) Used different products characteristics including product design, product quality, packaging, design, and features to build a research model. The results cleared that product attributes including product information, quality, and price had positive effects on purchase intention. The negative relationship between the health status of residence place customers and the quality of packaged bottled water might be attributed to the fact that customers become more concerned about the quality of the packaged water when they are in bad health condition, which makes them rely only on packaged water rather than using other water sources like tap water (Minyahel and Melaku, 2020).

2.2.4 Bottled Water Consumption Trends

Despite scarce availability and contextual variations in empirical reports, it is important to review the available empirical studies in relation with the factors that affect the consumption of bottled water. Several studies indicate that consumption of bottled water is rising nonetheless its harmful implication to the environment, many consumers drink bottled water instead of tap water (Gleick et al, 2002). Some studies try to investigate consumption of bottled water in comparison with a tap water. A Studies have shown that increased consumption of bottled water is related to a negative consumer perception of tap water quality (Ferrier, 2001)

2.3. Empirical literature reviews

Empirical findings are one of the important components of literature review in research study of any type. This type of literature contributes a lot to identify and assess by revealing the gap that the researcher wants to find out and how the researcher undertakes the study. Here under the researcher will plan to review some important issues which are directly related to the assessing under study. Various empirical studies using different methodologies and techniques had been studied in various dimension of the world to analyze the bottled water brand preference.

Research entitled as "Factors affecting bottled water brand choice in the case of consumers in Addis Ababa" by Samrawit Abate, the result shows product availability and increasing the frequency of advertisement designed a creative most convenient persuasive develop positive

relationship and accessible for the consumers to be chosen by users. Future studies may be recommended to pursue more factors and even set a mediator between the independent and dependent variables for the purpose of research completeness. Thus by taking the theoretical factors which affects consumer preference behavior decision in line with the product attribute factors which is identified by different researchers and by adding important missing variables in depth which were not incorporated in previous researches the following empirical review literature is tabulated.

Table 1: Empirical literature review

srNo	Authors	Title	Data source	Sample size	Methods	Country
1.	(Mbagaya and Mbato, 2011)	Factors influencing the consumption and standards of bottled drinking water	questionnaire survey	120 respondents	Descriptive and percentages	Kenya
2	(Quansah, Okoe and Angenu, 2015)	Factors affecting Ghanaian consumer's purchasing decision of bottled water	Questionnaires	240 respondents	ANOVA & correlation test	Ghana
3.	(Chiltra and Senjith, 2020)	Consumer preference towards packed water	detailed questionnaire	50 respondents	Binary logistic regression & inferential	Chennai
4	(Muriithi Joseph, 2016)	Factors influencing customer choice of bottled water brand	Questionnaires and interview	123 respondents	Correlation and descriptive statistical method	Nairobi central business district
5	(Minyahel	Customer's Perception and	Semi			

	and Melaku, 2020)	Preference towards Packaged Drinking Water	structured questionnaire	200 respondents	Percentages and ordinal logistic regression	Ethiopia
6	(Fitsum and Habteab, 2018)	The relationship between demographic and psychological factors and bottled water buying behavior	Survey questionnaire	575 respondents	Inferential analysis	Eritrea
7	(Genji,Devi and Priya, 2018)	Consumer attitude towards packed drinking water	Detailed questionnaire	300respondents	ANOVA and chi-square	Coimbatore city
8	(Atilola, 2018)	Product attributes and consumer preference	Survey questionnaire	884 respondents	Multiple regression	Zambia
9	(Lemma and Negash, 2018)	Factors Affecting Brand Choice of the Consumers on Bottled Water Brands	Questionnaire and interview	384 respondents	Multiple regression and ANOVA	Addis Ababa
10	(Askan, Topcu and Sahin, 2021)	Determining consumption preference of consumers considering quality attributes of drinking water	Survey questionnaire	400 respondents	Factor analysis and two-step clustering analysis	Igdir ,Turkey
11	(Ogbulie, Nwankwo and Egele, 2019)	Influence of product attribute on consumer purchase decision on malt drink	Questionnaire	323 respondents	Regression and Pearson correlation	Nigeria
12	(Jemal, 2019)	Factors affecting consumer perception towards bottled water	Questionnaire	279	Correlation analysis and	Addis Ababa,

			res and interviews	respondent s	descriptive analysis	Ethiopia
13	(Kusumawati, Saragi and Putriana, 2021)	Analysis of the influence of product attributes and consumer characteristics on consumer preference and purchase decision of vitamin C during covid-19 pandemic	Questionnai res and detailed interviews	159 respondent s	Factor analysis/stru ctural equation modeling	Indonesia

2.3.1 Product availability and brand choice

Both product availability and lack of availability have the potential to trigger the intention to buy. Recent study aims to identify the specific processes by which the latter situation lacks availability. According to an assessment conducted by (Samrawit, 2021) brand availability, packaging, product quality, price, brand name, brand image and advertisement were significantly associated with consumers brand choice for bottled water products. However, the influences of brand availability on consumers brand choice decision were more contributing than others. Consumers can obtain information and increase awareness towards available brands. The easily accessibility of a product has a great influence on customer buying behavior. Brand availability is key brand performance driver and distribution strength is certainly a major factor that drives brand preference and ultimately brand loyalty as the result shows as mentioned above. In a very recent study conducted among students on university campuses on (Qian, 2018) found that “safety and hygiene” and “convenience and availability” were the main factors influencing drinking water choice. Similarly, a study by (Xu and Lin, 2018) investigating bottled water consumption intentions using the theory of planned behavior framework found that perception of bottled water benefits—including convenience, taste, and health factors positively influence purchase intention.

2.3.2 Product packaging and brand choice

Packaging helps in developing brand loyalty from consumer, as easily identifiable brand names create attraction through their colors, symbols or packaging types. According to (Wells, Farely and Armstrong, 2007) in their study, ‘Packaging design for own-label food brands’ explored the

relationship between among packaging and first-rate quality perception. The study was carried out in UK. The study used observation as a research technique. The outcomes shows that more than 43% of consumers use packet photography as proof of product first-class quality. As a consequence, graphics that attract consumers at the point of sale assist the purchasers make the purchase decision speedy. This study examines the importance that is located on package graphics as a tool for differentiation from competitor products. This study's findings explicitly investigates that there is a strong affiliation concerning the influence of package graphics on the purchase decision.

Nowadays, reaching new markets, attracting new customers, retaining existing customers and gaining a competitive advantage are the main concerns of many bottling companies. Due to severe competitive pressure, and to satisfy consumer's needs, companies implement different marketing strategies and practices of marketing to persuade customers or even compel them to purchase their products among various brands. On the basis their activities, companies use high quality, cute and well-designed and stylish attractive packaging. Further (Mutlu, 2018) noted in their research that packaging characteristics like the recyclability of the used packaging material and availability of different packaging sizes are the main factors affects the customers brand choice. Now, packaging has become itself a sales promotion tool for the organizations. The consumer's buying behavior also stimulated by the packaging quality, color, wrapper, and other characteristics of packaging. Packaging is a whole package that becomes an ultimate selling proposition, which stimulates impulse buying behavior. Packaging increases sales and market share and reduces market and promotional costs. According to (Rundh, 2005) package appeals consumer's attentiveness towards a certain brand, increases its image, and stimulates consumer's perceptions about product.

2.3.3 Advertisement and brand choice

A research conducted by (Mutlu and Ozberk, 2018) which was aimed at assessing factors which influence the consumption behavior of Consumers in the Urban Areas of Adana, Turkey. He assured that brand advertisement one of the core factors affecting the brand choice of a given offering. Another study conducted by (Yao, 2011), by taking a college student as a target shows that mass media is associated with bottled water drinking behavior, whereas interpersonal source of information are much stronger of an influence of bottled water drinking behavior.

2.3.4 Product quality and brand choice

According to the findings of (Kajtazi, 2018) consumer's decision of bottled water brand selection is influenced mostly by six key factors, namely quality, marketing, consumer perception, price, preference and package. Among which product quality takes the line share found that, brand quality influence the respondent's buying decision on bottled drinking water (Rahdini, Aisyah and Kumar, 2014). (Simeijn, Riel and Ambrosisni, 2004) Investigated how product quality factors associated with product attributes affect consumer evaluations of branded products. They used a structural model and tested, providing indications of the likelihood of store brand success in various product categories. It was found that quality, Product attributes and related risks, Product complexity and functional risk affects the consumer evaluation of store brands. According to (Doria, 2006), many consumers in developed countries are neither satisfied nor dissatisfied with the quality of the tap water. Moreover, in communities that have serious problems with their tap water, bottled water consumption has often been high. These problems create new opportunities for bottled water producers and marketers, who package and present their products as pure, safe and healthy.

2.3.5 Product price and brand choice

The perception of brand preference has been extensively studied by researchers and studies have shown that factors such as price has an effect on product preference especially when it is the only information available. A different finding were resulted by a study conducted in Nairobi by (Ireri, Kung'u and Muriithi, 2020), in which factors influencing consumer bottled water choice were quality assurance, advertising, and affordable price. According to (Ruth, 2018) from all marketing factors, price shows high significant level. As one of the marketing mix variables, price plays a fundamental role in influencing consumers' perception of products, increasing demand, attracting customers, and promoting brand loyalty, among other things (Dhurup, 2014).

2.3.6 Product image and brand choice

Brand image sums up consumers perceptions regarding a given brands overall personality. This perceived image includes evaluative though not necessarily conscious, considerations of relative strengths and weakness of brand. A research conducted by (Jemal, 2019) which was aimed at identifying the factors affecting consumer perception towards bottled water in Addis Ababa the

case of Aquaddis. Result shows brand image was one factor which influences the perception of the consumers which in turn influence their purchase motives of customers. Brand image is a set of human characteristics associated with a brand. Some authors (Fatema, Azad and Masum, 2013) argue that there is an association of both user imagery and psychological benefits with a brand image and that is an important component of brand equity.

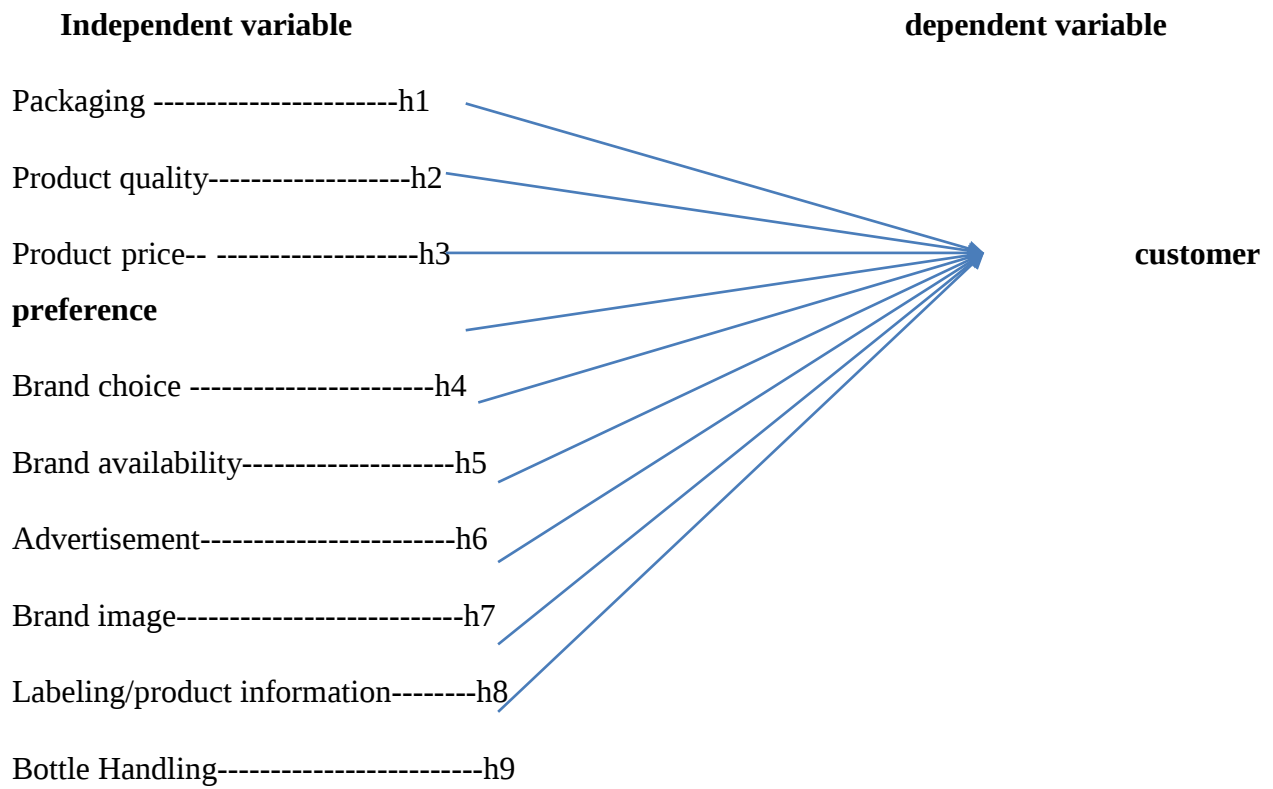
2.3.7 Labeling Product Information and Consumer Behavior

Product information improves the customer's experience of purchasing power if consumers could assimilate and understand the information written on the container of the product (Spink and Singh , 2011). 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. Finally the author 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.

2.4. Conceptual frameworks

As it is discussed in the theoretical part of the literature, consumer behavior is influenced by cultural, social, psychographic, and personal factors but since water is convenience goods that empirical evidence shows most common factors which influence the bottled water brand selection are; Labeling/product information, product quality, Advertisement, packaging, bottle handling, product price, brand image, brand availability and brand name. Conceptual framework gives the relationship between a studies of 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 and Mugenda , 2003). Irrespective of this the following conceptual framework diagram will be constructed.

Figure 1: Conceptual framework of the research



Source: - Legese and Mulugeta, 2018

CHAPTER 3

3. Research methodology

This chapter gives an outline of the research methodology which was used for the research. Therefore, description of study area, the source of data for the study, data and sampling technique, design of the research, a description of the method of data collection techniques was given. In the last part of this chapter the statistical method which was used to analyze the data was discussed.

3.1 Description of study area

Vita water spring bottling company was located in Dire Dawa in industry zone of kebele 02. Vita water spring was produced by twin cities industrialist plc named vita pure and refreshing mineral water which sourced from Awash Basins of sand and rock for thousands of years become crystal clear refreshing mineral water. Vita water spring was established based on the agreement between Ethiopian government commerce in 2005/2013. Currently, vita water spring has two plants with more than 500 permanent and temporary employees.

This intended research was aimed to conducted in Dire Dawa city where about six water bottling companies are widely distributing their to the end users and other bottle products originating from Addis Ababa were also breaching territory of market thus the completion was taken place in such situation. As the result in the area stiff competitive market is going on. Consumers are concerning about brand choice of bottle water in turn to get comparative advantage. Finally in this study the determinant factors that influence consumer preference of bottle water in Dire Dawa in case of vita water spring was identified, analyzed and discussed.

3.1. Research design

Research design is a master plan and it specifies procedures and methods of data collection and analysis of the required information (Zigmud and Babin, 2010). In this research paper both explanatory and descriptive research designs are appropriate in nature. Explanatory research design signifies the effects of certain variables on other dependent variables. Descriptive research design is a belief or researchers that they gave concrete information for the input of paper (Magilvy, 2009). The student researcher justification to use explanatory research design is, at the beginning the student researcher has stated that the aim of this research was to examine the

impacts of product attribute which influence bottled water brand preference and the student researcher also aimed at showing the extent of influence each factor has on the dependent variable. Therefore due to this fact explanatory research design was selected. To sum up to show the extent of influence of the independent variables on the independent variable's explanatory research design was used.

3.2. Research approach

This research was specifically tries to ascertain the impacts of product attributes seeks to show their impacts on consumer preference of buyers purchase motives of vita water spring in Dire Dawa city. As noted in (Creswell, 2009)in terms of investigative study there are three common approaches to business and social research namely, quantitative, qualitative methods approach. For the purpose of this present study, mixed approach which advocates the combination of both qualitative and quantitative has proved to be ideal for the purpose study of the impacts of product attributes on customer preference in consumer's purchases decision behavior of vita water spring. 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

3.3. Source of data

The study was taken based on data that was collected from both primary and secondary sources of data that enable the researcher to meet the objectives of the study outlined at the beginning. The data that collected from the respondents through questionnaires was used as primary data for the paper. Secondary data was collected from articles, magazines, books and proclamations. In attempt to obtain first-hand information, the data was collected from samples through questionnaires. Open ended questionnaires was prepared and administered to gather primary data from the sample of this study. This way of data collection was the most preferable because it enables to secure information at a time. The rest of the data for this research was obtained from secondary sources. **3.4. Target population**

The target population for this population was consumer of vita water spring who are found in Dire Dawa city administration. According to the law of Ethiopia the participants of this study was individuals with an age equal to or greater than 18. According to vita water spring customer data shows that the estimated number of customer in target area was 30,000(VWS, 2022). According to the law of the participants of this study was individuals with age equal to or greater

than 18. This was supposed to avoid additional efforts of seeking parental permission. In addition to this reason the rationale behind for the selection of consumers above the age 18 was supposed to get unbiased data. To make sample representative of a given target population the sample frame in which samples of vita water customer was drawn among 9 kebele's of Dire Dawa city administration then the two kebele's such as Sabian and Goro was purposively selected to be included in the study because high concentration of population and most customers of vita water spring exists as vita water spring sales officer representative data as data shows during interview. The highest number of vita water spring customer were existed. In the two kebele the total customer of vita was 9908(VWS, 2022). The other target population in this study is sales representative experts and the methods that was applied to select sales representative experts is purposive sampling technique.

3.5. Sampling technique

Purposive sampling technique was used to determine the outlets to be included in the study. The selection of outlets to be included in this study was based on sales territory of vita spring water market coverage. Sampling technique which was used to determine a representative consumer sample size was purposive technique. It is a set of techniques in which respondents are selected by convenience due to their proximity, availability or accessibility. To determine the sample size the data was collected from the outlet of customer like as giant hotels, supermarkets, distributors, wholesalers, retailers and cafeteria. To sum up, the justification for using non probability sampling for the consumers of vita water spring, is because of homogenous character of the customers and the estimated number of the customer is known. This indicates that the participants of the research was mainly individual consumers and the units of analysis for this research are individuals as well as the whole distributors of vita packed bottled water.

3.6 Sample size

According to (Glenn, 2003) appropriate sample size was determined by satisfying three criteria, namely the level of precision (sampling error), the confidence level (risk level), and degree of variability distribution of attributes in the population.

Nevertheless, it is difficult to get the exact number of populations who consume vita water spring bottled water researcher can get the total number of populations who lived Dire Dawa from a recent census study. According to vita water sales representative officer 2022, there are about

9908 customers units was selected target study area. The data indicated on Dire Dawa vita water evidence 2022, Sabian customer 579 and Goro customer 4118 respectively. Due to its difficulty to assess or address the whole population, the total numbers of sample respondents is determined by using the simplified formula provided by (Kothari, 2004). To calculate the reasonable representative sample from the two stratum, first the sample size is calculated from the total 9908 customers unit by using the following (Kothari ,2004) formula.

$$n = (z^2 Npq) / [e^2 (N-1) + z^2 pq] \text{ where as,}$$

n = the desired sample size;

z = standard normal variable at the required level of confidence;

p = proportion in the target population estimated to have characteristic being measured;

$$q = 1-p$$

e = marginal error/term error

Expected confidence level of this study was 95% and thus, we use 1.96 for 95%. Given the cost and time limitation for the study, the level of confidence taken for this study was 95%. This implies, as the confidence level increases, the sample size also increases provided that conducting viable research with the limited budget and time could be a challenge. $e = 0.05$. Since the target population number 9908, 50% is recommended to use the value of $p = 0.5$ in which the case “ n ” is the maximum and the sample yield at least the desired precision. Thus, $50\% = 0.5$ and $q = 1 - p = 1 - 0.5 = 0.5$. Therefore, the sample size is determined by:

$$n = 1 + \frac{z^2 Npq}{[e^2 (N - 1) + e^2 pq]}$$

$$n = 1 + \frac{(1.96)^2 (9908) (0.5) (0.5)}{[(0.05)^2 (9908 - 1) + (1.96)^2 (0.5) (0.5)]} = 372$$

Therefore, the sample size of this formula was 372 respondents.

In the first phase, the sample size was calculated from each stratum by using proportional allocation method in the following ways. Calculate the share of the sample size of each stratum (Sabian and Goro) from the total target population sample size by using this formula = Total population of Sabian strata / Total target population * Total pop. Sample size (n) or

$$1. \text{ For Sabian customer } (n_1) \\ = 5790/9908 * 372 = 217$$

$$2. \text{ For Goro customer } (n_2) = 4118/9908 * 372 = 155$$

Note- according vita water spring company sales officer book keeping, Sabian area includes Meskelegna, Sebetegna, Mermersa, Toni, GTZ, Cuba, Industry zone (condominium) and Melka jebdu whereas Goro comprises sub kebele's of Aliy, Boren, and Aweday.

Then from each of stratum sample respondents was selected by systematic sampling technique from the list of customers (Goro customer plus Sabian customer) documented in vita water spring company with the "r" value = 27th will be started at the person numbered 1 and then choose every 27th member of the list. Because $r = N/n$ ($9908/372 = 27$), where, r is the interval between two selected lists, N is total population and n is sample size.

Finally the total sample size in this study was 372 respondents, 4 Key informants or agents of vita water spring and the sample method to select the key informants was purposive/convenience method. Estimated number of customers in selected area and sample size is computed as below. Consequently based on the above analysis, questionnaires will be distributed to 372 customer of vita spring water by using convenience sampling/purposive sampling.

3.7. Data collection instrument

3.6.1. Questionnaires

(Creswell, 2009) As noted that the survey as the preferred type of data collection procedure for research. Survey was 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 and Strack, 2000). A survey by a self-administered questionnaire was considered the most appropriate method for measuring customers buying behavior of Vita water spring. Questionnaires was used because the information that was used can be collected from a sample that was large and confidentiality in respect of the information collected was upheld and in addition Self-administered questionnaires are considered cheaper and quicker way to surveying a large number of respondents and to get accurate data. The questionnaire was developed based on the literature reviewed and by modifying questions from previous researches.

Table 2: Modifications of questions and authors who use variable

Variables	No of items	Author who use	Adopted items for the current study	Remark
Packaging	1	Yalew Mamo	4	Do think packaging attracts you to buy
Advertising	3	Melaku Tadese, Edlawit Tadese and Samrawit Abate	7	Do you think advertisement helps you to find best water
Labeling/product information	1	Self-administered questionnaire	3	Do you think product information influences your purchase motive?
Brand image	2	Samrawit Abate and Edlawit Tadese	6	Do you expect brand image influence your purchase?
Bottle Handling	1	Self-administered	4	Which one you prefer? bottle with handle or bottle without
Brand availability	1	Legese Lema	3	Do you think availability of product influence the purchase
Product quality	2	Legese Lema, Samrawit abate	5	
Product price	1	Ruth kassaye	5	Do think price affect your purchase decision
Brand name	2	Samrawit and	6	Do think brand name lets

		Ruth kassaye		you to buy
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3.6.2 Questionnaire design

The researcher was made an effort to ensure that questions to be clear and concise, easy to understand and clear to discard any misinterpretations and meaningless data. To be understood easily that includes all respondents, the questionnaire will be prepared both in English and Amharic languages (version) because the target area population includes professional and non-professional/educated and illiterate/educated participants to understand the subject matter.

3.6.3 Operationalization's of variables

Operationalization was to mean the process of strictly defining variables into measurable factors. The process defines fuzzy concepts and allows them to be measured, empirically and quantitatively. On the other hand it refers to how the researcher defined and measured a specific variable as it was used in the study.

For this study one of the independent variables was product availability which measures the readiness of packed bottle water accessibility in the market place. It was measured by using an ordinal scale of measurement (it was measured using a scale of strongly agree, agree, neutral, disagree and strongly disagree).

Table 3: operationalization of variables

Types of variables	Operational variable	Level/scales of measurement	Data collection method
Dependent(Y_j)	Customer preference	Ordinal	Questionnaire
Independent(X_{1i})	Product availability	Ordinal	Questionnaire
Independent (X_2)	Packaging	ordinal	Questionnaire
Independent(X_3)	Advertising	Nominal	Questionnaire
Independent (X_4)	Price	Ordinal	Questionnaire
Independent (X_5)	Brand name	Ordinal	Questionnaire
Independent (X_6)	Product information	Ordinal	questionnaire

Independent (X7)	Bottle Handling	Ordinal	Questionnaire
Independent(X8)	Brand image	Ordinal	Questionnaire
Independent (X9)	Product quality	Ordinal	Questionnaire

3.6.4 Interviews

In addition to the questionnaire the researcher was structured in-depth interview concurrently with the design of the questionnaire to collect primary data in customer officer representatives of vita water spring. Structured in-depth interview was enable the researcher to examine the level of understanding a respondent has about the topic. The data obtained from vita water spring sales representative provides researcher to know the total number of customers in target area. Since it is purposeful discussion it helps to elicit primary data responses through direct questioning and it is more important to obtain information with regard to issues that required clarification not expected to access using questionnaires. An interview is generally a qualitative research technique which involves asking open-ended questions to converse with respondents and collect elicit data about a subject. The interviewer in most cases is the subject matter expert who intends to understand respondent opinions in a well-planned and executed series of questions and answers. They can be closed-ended as well as open-ended based on the type of target population. Closed-ended questions can be included to understand user preferences from a collection of answer options whereas open-ended can be included to gain details about a particular section in the interview.

3.9. Validity and reliability

Reliability is a measure for the consistency of collected data through time and validity refers to whether the items measure what they are supposed to measure. The content validity of the data collection instruments is the extent to which the data was provide accurate and adequate coverage of the objective of the study in vita water spring. The instruments was evaluated by my advisor for content validity to determine whether the items would really solicit relevant information and their suggestions was used to improve on the instrument. Beside this, the study was addresses validity through the review of literature and adapting instruments used in previous researches as well.

Reliability of a research instrument is a measure of the degree to which the instrument yields consistent data after repeated trials. According to (Hair et al , 2006) the minimum acceptable level of the Cronbach alpha is more than 0.7. 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 with in a test if the items are standardized.

4.0. Methods of data analysis and interpretation

After collecting the data through different instruments, the researcher was organized and prepared the various data depending on the sources of information in the form of graph, diagram, narrative, table and figures. Moreover, in order to ensure logical competence and consistency of responses, data editing was carried out each day by the researcher. Mistakes was identified and data gaps are rectified as soon as possible.

The data was analyzed by using descriptive statistics, correlation and linear multiple regression methods. The descriptive statistics was used for the frequency distribution, such as the mean, the mode and the median, but the main focus is on description, rather than examining relationships or associations (Ranjit and Levitus, 2011). Because of this reason correlation and linear multiple regression analyses methods 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 will treat any (two) variables symmetrically; there is no distinction between the dependent and explanatory variables. Furthermore, demographic influence of on consumption preference of consumers were analyzed using independent t-test and ANOVA statistical methods. Finally the data collected from the respondents was entered into table and analyzed using latest version of SPSS software (SPSS 23th) version. 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 was 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 was included in the data discussion and interpretation part of the study. Finally, conclusions and recommendations was drawn based on the data analysis and interpretation.

3.9 Research model and variables

There are two main variables, independent and dependent variable. A dependent variable is the variable that represents the outcome whose variation is supposed to be studied. It is dependent on the product attributes which can be measured by Labeling/Product information, Bottle Handling, advertising, product availability, brand name, brand image, product quality, packaging and product price. Descriptive statistics was presented first and then simple correlation and regression tests will be used in order to determine relationships between variables. Correlation and multiple regression analysis are carried out in order to determine the relationships between the variables listed below. Thus, Independent variable was customer choice whereas dependent variables are (advertising, product availability, brand name, brand image, product quality, Labeling/ product information, Bottle handling, packaging, and product price.) Multiple regressions a flexible method of data analysis that may be appropriate whenever quantitative variables (the dependent) is to be examined in relationship to any other factors (Cohen, West & Aiken, 2003).

The multiple regression model will be: $-Y = a + \beta_1*Ad + \beta_2*PA + \beta_3*BN + \beta_4*BI + \beta_5*PQ + \beta_6*P + \beta_7*PP + \beta_8*L + \beta_9*BH + E_{ij}$

Where: Y = Customer preference/brand choice/

a = y- intercept

β = Slope of the line

E_{ij} = error term

Where,

Ad =advertising

PA=product availability

BN=brand name

BI=brand image

PQ=product quality

P=packaging

PP=product price

L= Labeling

BH= Bottle handling

Source- The regression model is adopted from Kihanya (2013)

3.10 Ethical consideration

According to (Resnik, 2005) 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 obliged 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 have been 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. All participation in this research was voluntary and participants of the study were given a full description of the study before deciding to participate and the reluctance of respondents to answer the questionnaire during the data collection process will be critical in providing the needed inputs for the research work. Every effort in this study will guard against harming any research participant. All surveys were kept anonymous for the research. This study was conducted in a straightforward manner and participants in the research will not be deceived. Lastly, all of the data that is analyzed was reported in this study

CHAPTER 4

RESULTS AND INTERPRETATION

In this chapter the results of the study are analyzed presented and interpreted in detail. As the purpose of the study was to know the impacts of product attributes on customer preference in vita water spring Industry. All necessary data was collected from the target respondents using questionnaires and interview. The analysis section basically has three sections. The first part focuses on the demographic characteristics of respondents, the second and third part deals with on the main purpose of the research i.e. impacts of product attributes on customer preference. This part of study begins by presenting the reliability and validity test, response rate, demographic information of the respondents, followed by a descriptive statistics, correlation, and ordinal logistic regression analysis.

4.1 Respondent Rate

A total of 372 questionnaires were distributed to respondents of Vita water spring key customers in Dire Dawa City in Sabian and Goro villages. Among 372 total respondents 361 which are 97.04% were properly filled the intended questionnaire and returned back to the researcher exhaustive manner, whereas 11 respondents i.e. 2.95% of the respondents were not able to return back the questionnaire to researchers due to numerous cases. Thus, questionnaires were not part of the study due to incompleteness of data. So unreturned questionnaire had been discarded from the study. Therefore, 361 questionnaire was valid for analysis of this paper, besides, the data extracted were coded and entered to Statistical Package for Social Sciences (SPSS) 23 version.

4.2 Background Information of Respondents

This research took into consideration responses from 372 vita water spring key customers in selected areas of Dire Dawa City. This section gives background of information, analysis of the respondents' from which the data were collected.

4.3. Descriptive summary for customer satisfaction of vita water spring

Table 4:- descriptive statistics of respondents

Description	Frequency	Percent	Valid Percent	Cumulative Percent (%)

What is your overall feelings of vita water spring?	Very satisfied	50	13.9	13.9	13.9
	Dissatisfied	89	24.7	24.7	38.5
	Neutral	65	18.0	18.0	56.5
	Satisfied	121	33.5	33.5	90.0
	Very Dissatisfied	36	10.0	10.0	100.0
	Total	361	100.0	100.0	

Source: own survey result, 2022

As it can be computed from table 4 above, out of the 361 respondents' 13.9% (50) of the respondents had been very satisfied about overall all feelings of vita water spring water, 27.4 % (79) respondents had very satisfied about the overall feeling of packaging, 24.7% (89) of respondents vita water spring key customers had dissatisfied about feelings of overall service provisions, 18 % (65) of respondents had been reacted as neutral about the overall feelings of vita water spring whereas 33.5% (121) of the respondents had very satisfied feeling about overall vita water spring and the rest 10%(36) of the respondents of vita water spring customers overall feeling were very dissatisfied. From this result, the majority of respondents have satisfied over all feelings toward vita water spring. This provides the researcher to get realistic responses from the target respondents since the respondents have feeling about vita water spring the overall.

4.1.1. Reliability Test

To study variability of the data collected, reliability test was done on the data collected on each statements. Reliability test was made using Cronbach's Alpha we can say a measuring instrument is reliable if it provides consistent results (Kothari, 2004). In the study a very high Cronbach's Alpha value was realized (the more it tends to 1 the better it is) see the table below which proves that the data is highly reliable. This indicates the internal data consistency is highly correlated. According to this data the reliability is acceptable as seen below.

Table 4: Reliability test

Cronbach's alpha	N of items
.808	9

Spss result, 2022

4.1.2. Validity

Refers to the ability of a measurement scale to measure what it proposes to measure, and degree to which it is free from systematic and random error. A measurement needs to be reliable to be valid, but not the opposite.

The following measures were taken to make certain validity and data collection instruments.

1. The questionnaire's items were derived from earlier, relevant research that were carried out at various levels.
2. A pilot survey was conducted on purposively selected consumers and understandable in every aspect before the main work was conducted.
3. Few questionnaires were derived from self-administered from dependent variables like Bottle handling

4.4 Demographic Characteristics

This part of a study provides a profile of respondents who involved desirably in the study and it denotes basic characteristics. The information generated to address the stated research objectives is solicited from respondents with diverse demographic characteristics. This part of the questionnaire requested a limited amount of information related to personal and professional characteristics of respondents. Accordingly, the demographic variables about the respondents were summarized and described in the next table. These variables include: sex, age, educational status, professional level, marital status & monthly income of the respondents included in this study.

Table 5: Summary of demographic variable

		Frequency	Percentage
Gender of respondents	Male	210	58.2%
	Female	151	41.8%
Age of respondents	18-29	126	34.9%
	30-39	150	41.6%

	40-49	44	12.2%
	50 Years and above	41	11.4%
academic qualification	Grade 12 and below	81	22.4%
	First degree	148	41.0%
	Diploma	103	28.5%
	Masters	24	6.6%
	PhD and above	5	1.4%
Marital status of respondents	Single	137	38.1%
	Married	184	51.1%
	Divorced	39	10.8%
Professions of respondents	Student	30	8.3%
	Self-employed	127	35.2%
	NGO employee	19	5.3%
	Private Organization	59	16.3%
	Retired	18	5.0%
	governmental employee	108	29.9%
Monthly incomes of respondents	3000ETB and below	19	5.3%
	3001ETB -5000ETB	32	8.9%
	5001ETB-10,000ETB	132	36.6%
	above 10001ETB	178	49.4%
Professions of respondents	Student	30	8.3%
	Self-employed	127	35.2%
	NGO employee	19	5.3%
	Private Organization	59	16.3%
	Retired	18	5.0%
	governmental employee	108	29.9%

Source: Own survey result, 2022

As can be seen from the above table 6, demographic factor shows the gender of the respondents. This information was necessary to enable the researcher to obtain detail information on whether the respondents were either male or female in this study. Hence, in this research the majority of

the respondents were male respondents constitute 210(58.2%) of the total number vita customers (respondents) whereas and the remaining 151(41.8%) were female. This reveals that in this part of study the majority of respondents of vita water spring customers were males. Here, we can understand the study were not basically affected by being sex difference.

Regarding to, Demographic factors of age displays the age of respondents in this paper. Table above shows the age of the vita water spring customers (respondents) with the following age range: 18-29 years are 126 respondents represented by 34.9%, 30- 39 years are 150 respondents represented by 41.6%, 40-49 years are 44 respondents represented by 12.2% %, and above 50 years and above were 41 respondents represented by 11.4%. The researcher found it necessary using the age distribution to determine the various reasoning and understandings of the working class on the impact of product attributes on customer preference in vita water spring.

Regarding the educational level, 81(22.4%) of the respondents are at primary school and below, 148(41%) were at educational level of first degree, 103(28.5%), were diploma, 24(6.6%) respondents were at educational level of masters and 5 (1.4%) of respondents were PhD and above. This implies the majority of respondents participated in the study holds educational level of first degree whereas the least level of respondent were educational level of PhD and above.

Regarding with the respondents marital status of the, those who were single constitutes 164 (45.4%), those who were engaged in married constitutes 193(53.5%) respondents, and 3(0.3%) were divorced from their couple relationship. This implies that majority of married respondents were parts of the study. On the basis of profession 30(8.3%) were students, 127(35.2%) of the respondents were self-employed, 19(5.3%) of the respondents were NGO employees, 59 (16.3%) of the respondents of key vita customers were employees of Private organization, 18 (5.0%) of the respondents were retired from their employment period, the rest 108(29.9%) customers of vita were working in governmental institution. This implication states that majority of respondents were part of this study involved were engaged in self-employment.

According to monthly incomes of respondents, 19(5.3%) earned 3000ETB and below per month, 32(8.9%) the customers were receiving monthly income in between 3001ETB - 5000ETB, 132(36.6%) were gained income between in range of 5001ETB-10,000ETB and 178(49.4%) gains monthly income above 10001ETB.

4.6 Respondents Bottled Water Consumption Behavior

As shown in the table 7 below the consumer behavior of bottled water consumption was illustrated as follows.

Description		Number of respondents	Percentage (%)
Respondents seasonal consumptions of packed bottle water	Dry	137	38.0%
	Rainy season	16	4.4%
	Always	208	57.6%
respondents level of awareness about vita packed water	Very low	39	10.8%
	Low	31	8.6%
	Medium	152	42.1%
	High	112	31.0%
	Delighted	27	7.5%
Respondents preferred packed bottle size	0.5 Liter	39	10.8%
	2Liter	60	16.6%
	1.5 Liter	0	0%
	20 Liter	195	54.0%
	1Liter	67	18.6%
Respondents consumptions of packed bottle water per day	1Liter	41	11.4%
	2Liter	210	57.9%
	0.5Liter	17	4.7%
	Above 2Liter	93	25.8%
respondents market place of bottle water	Cafeteria	63	17.5%
	Kiosk or Retailer	121	33.5%
	Supermarket	58	16.1%
	Distributers	73	20.2%
	Hotels	38	10.5%
	Direct purchase from company	8	2.2%

Source: own survey result, 2022

According to the table 7 above, six key questions on customer behavior were used to evaluate the respondents' bottle water real customers of vita water spring. From above data the respondent's reaction for a given question intended to respond the "seasonal consumption of bottle water" upon respondents bottled water consumption behavior 137(38.0%) the respondents consumption is high in dry season, 16(4.4%), 208(57.6%) consumption behavior of vita water customer reaction is always. Here we can conclude the majority of vita customer's consumption behavior is always high. On the other hand the consumption behavior of respondents were very low in rainy season. The respondents were asked to respond customer's level of awareness about vita water spring. Here the response reactions of customers reveals 39(10.8%) very low, 31(8.6%) were low, 151(42.1%) were medium, 112(31.0%) were high, 27(7.5%) were delighted.

Accordingly, customers hierarchal preference of bottle size, 39(10.8%) of the key customers of vita water spring preferred 0.5 liter, 60(16.6%) of the respondents were preferred 2liter bottle water. None of the respondents react their preference were 1.5 liter which indicates customers never prefer, 195(54.0%) customers of vita water spring preferred 20 liter and the rest 41(11.4%) of the respondents preferred 1 liter of vita water spring product. Depending up on this result, the majority of respondents prefer 20 liter for their personal consumption in contrary 1.5 liter is relatively less preferred by respondents. Moderately 2 liter is also preferred next to 20 liter. Generally from the result, we can conclude that having various size bottling of vita water spring influences their purchase decision of the respondents. The respondents were asked about the amount of water they purchase at a time by presenting the question" how many liter you consume per day" the respondents replied 41(11.4%) 1 liter were consumed per day, 210(57.9%) of the respondents respond 2 liter 17(4.7%) of the respondents replied 0.5 liter were consumed per day and finally 93(25.8%) of the respondents react above 2 liter were consumed per day. On line with this, majority of the respondents were consume 2 liter per day. On the other side 0.5 liter were less consumed by respondents.

Regarding to the respondents market place the respondents also questioned about the marketplace from "where they buy the bottled water most regularly", 63(17.5%) of the respondents were purchase from cafeteria, 121(33.5%) of the respondents purchase vita water

spring from retailer/kiosk, 58(16.1%) of the respondents were replied to supermarket, 73(20.2%) of the respondents were purchase from distributors ,38(10.5%) of the respondents buys from Hotels and the left 8(2.2%) were purchase from direct company. Here, the implication signifies the majority of customers purchase vita water spring from retailers/kiosk and relatively few number of respondents purchase directly from the company.

4.6.1 Respondents perception on product information

Product information improves the customer experience regardless of what sector you're in. Buyers always want more information about a given product, to answer any purchase objections. In this respect four questions were asked in this study.

Table 8: Descriptive statistics for perception of respondents about product information

	N	Min	Max	Mean	Std. Deviation
Vita water spring product information provides you to get full information to purchase without any hesitation	361	1	5	3.05	1.200
Knowing the product information persuades you to buy vita bottle water	361	1	5	3.65	1.036
product information indicated in label influences vita water spring	361	1	5	2.63	1.124
Vita Water spring that shows the products are enriched with essential nutrients influence your purchase motives	361	1	5	2.70	1.088
Valid N (list wise)	361				

Source: own survey result, 2022

The statement indicating in the above table 9 shows the relatively least level of agreement was (product information indicated in label influences vita water spring) which means (M=2.63 and SD=1.124). The standard deviation of 0.7850 of depicts that the majority of respondents agreed on effects labeling/product information has impact on customer choice. Thus most respondents agreed on the product information indicated in labeling were not influence their brand preference. The maximum mean perception of product information is 3.0055 shows indicates

that most respondents basically agreed with the statement of the study. This reveals the product information can influence the preference of customers.

4.6.2 Respondents perception on Bottle Handling

Bottle handling is about equipment that will carry the bottle water and containers throughout all the operations: bottle unscrambles, filling, capping and labeling and prevents from falling and provides convenience handling service provision for customer. Moreover, bottle handling provides customers to hold sustainably to move from place to place.

Table 9: Respondents perception about Bottle Handling

	N	Min	Max	Mean	Std. Deviation
absence of bottle handle influence the purchasing power in vita water spring	361	1	5	3.50	1.080
bottle water handle minimizes risks of slipping and falling from hand	361	1	5	3.89	.946
Bottle Handle provides choice in vita water spring	361	1	5	3.64	1.034
Bottle handle in vita water spring influences the portability and durability	361	1	5	2.66	1.246
Valid N (list wise)	361				

Source: own survey result, 2022

As shown in table above 9, respondents concerning results of Bottle handling agreed that respondents reach on consensus that they are agree on bottle handlings of Vita water spring in 2liter influence the purchase motives of respondents with the overall the average Mean= 3.4231. The SD=0.946 of the majority of respondents response rate indicates that most respondents agreed on the statement asked as” bottle handle minimizes risks of slipping and falling from hand” influence choice of customers.

4.6.3 Respondents Perception on Advertisement

Advertising is a non-personal, mass media about a product, brand, company or store. It significantly influences consumers ‘preference, images, beliefs and attitudes towards products and brands, and in turn, affects their purchase behaviors of customers. Online with this, the

respondents were asked to respond six key items using five point Likert scale. To assess respondents' perception of bottled water advertisements and their degree of agreement or disagreement with the indicators.

Table 10: Respondent's perceptions of Advertisements

	N	Min	Max	Mean	Std. Deviation
Have you watched vita water spring advertisement on TV	361	1	5	2.34	1.139
Do you hear vita water spring advertisement on FM radio	361	1	5	2.35	1.162
Vita water spring advertisement reminds your brands soon	361	1	5	2.98	1.212
Do you think Advertisement is necessary to attract to choice brand	361	1	5	3.76	1.008
Advertisements help to find the best bottled water brand	361	2	5	3.67	1.046
Do you believe that more frequency of advertisements is helpful for brand choice	361	1	5	3.91	.848
Valid N (list wise)	361				

Source: own survey result, 2022

As it can be seen in table 10 above, concerning results on advertisement most respondents agreed the vita water spring company were not focusing on advertisement. The standard deviation of SD=1.139 statement asked to respond as "Have you watched vita water spring advertisement on TV "was highly disagreed by most respondents. The average mean (M=3.168) Thus the respondent's reaction highly reflects most real customers of vita water spring reach on consensus that they are not agree up on Advertisement on TV and FM media. On the circumstance of advertisements affordability the respondents agreed (average mean of 2.98) shows the advertisement increases to attract customers of vita water spring customer purchase decision. The standard deviation, SD=0.64100 of the least mean of advertisement response rate

indicates the majority of the respondents response portrays taking part advertisement on social media is not applicable.

4.6.4 Respondents Perception on packaging

Packaging means the wrapping or bottling of products to make them safe from damages during transportation and storage. In most researches packaging were considered as one of the determinants for consumption of and brand preference of bottled water. It keeps a product safe and marketable and helps in identifying, describing, and promoting the product. Regarding to packaging item the respondents were asked four questions by using five point Likert scale.

Table 11: Respondents Perceptions on packaging

	N	Min	Max	Mean	Std. Deviation
The font used in writing the name and ingredient composition of the vita water spring product influences behavior on buying decision.	361	1	5	2.99	1.090
Full colors on Vita water spring packaging have an impact on consumer's buying decision.	361	1	5	3.07	1.171
Appealing graphics on vita water spring water packaging have an impact on consumer buying decision.	361	1	5	3.47	1.110
Size of bottled water has influence on my preference of bottled water brand	361	1	5	3.48	1.155
Valid N (list wise)	361				

Source: own survey result, 2022

Based on above result, the average mean for perception of packaging was $M=3.2587$ as it can be seen in table 11, Concerning results on packaging attribute, in vita water spring influences their purchase decision. The standard deviation of $SD=1.090$ which indicated that majority of the respondents didn't respond as alleged on packaging. This least level of agreement was responded for "The font used in writing the name and ingredient composition of the vita water spring product influences behavior on buying decision". This shows packaging has an impact on

customers purchase decision in vita water spring. So, packaging is one of basic factor that significantly influence product preference.

4.6.5 Respondents perception on brand price

Price perception is a customer perception about what a customer should sacrifice in order to obtain products or service provisions. Price perception could also define as a codified price by the customer. Generally, a customer tends to interpret a price based on their subjective perceptions and transfer them as a concept of expensive or cheap on their memory. However, price perception is not the products or services the real monetary price. Price has a significant impact on how consumers perceive items/products/services/, drives up demand, draws in clients, and fosters brand loyalty. In this purpose, respondents were questioned on five items using five point Likert scale. The statement which responds agreement on. The statement with lowest level of agreement was “I prefer the best brand bottled water whatever its price” (M=2.96 and SD=1.163).

Table 12: Respondents perception on Brand price

Descriptive Statistics					
	N	Min	Max	Mean	Std. Deviation
I prefer a bottled water brand if its price is cheaper	361	1	5	3.67	1.192
I prefer the best brand bottled water whatever its price	361	1	5	2.96	1.163
I won't buy bottled water if it is not good product for the price.	361	1	5	3.07	1.066
I prefer bottled water brand whose price is economical	361	1	5	3.09	1.172
Low price is one of my priorities when making a buying decision	361	1	5	3.63	1.278
Valid N (list wise)	361				

Source: own survey result, 2022

From table presented in 12, the average score for mean 3.67 and 2.96 ranges between standard deviation of 1.066 and 1.278. The statement which responds reach on consensus of agree on were” I prefer a bottled water brand if its price is cheaper”. The overall mean for the perceptions of respondents on brand price $M=3.2853$, $SD=0.64051$ respectively. This implies the majority of the customer’s buying intention was meager of low price product. Based on this consequence the response rate shows brand price significantly influence the buying perceptions of vita water spring customers. So, brand price is going to be one of the determinant factor in vita water spring customers.

4.6.6 Respondents Perception on Brand image

Brand Image is how customers think of a brand. It can be defined as the perception of the brand in the minds of the customers. With regard to brand image the respondents were asked five basic items by using five point Likert. The value of mean score of the item composition ranged between 3.3 and 3.04. Similarly, standard deviation was ranged between 1.194 and 1.084.

Table 13: Respondent’s perceptions of Brand Image

	N	Min	Max	Mean	Std. Deviation
Vita water spring bottle design, logo, name and symbol provides to remember the brand image	361	1	5	3.28	1.198
A well-known the brand is always better in quality than a lesser known brand	361	1	5	3.04	1.194
Vita water spring brand image is easily recognizable by end users	361	1	5	3.19	1.186
I always go for the well-known branded products.	361	1	5	3.30	1.084
Valid N (list wise)	361				

Source: own survey result, 2022

As discussed above in table 13 lowest level of agreement was “A well-known the brand was always better in quality than a lesser known brand” with mean value of ($M=3.19$, $SD=1.194$).

The statement stated as” I always go for the well-known branded products” with the mean value of (M=3.30, SD=1.084) was agreed as neutral by most respondents. This implication reveals most respondents of vita water spring customers lack awareness of brand image.

4.6.7 Respondents perception on Brand availability

Brand availability is a key factor in brand performance and distribution power is certainly a key factor in driving brand preference and ultimately brand loyalty. Ease of product availability has a significant impact on customer purchasing behavior. The respondent was presented with four items. The results states that the mean of item composition is between 4.04 and 3.78 and 1.230 and 0.830 mean and standard deviation respectively. This output indicates high variability standard deviation in responses. The statement which respondents of vita water spring react with Agree “Availability of the brand influence your choice decision in vita water spring” M=4.04, SD=.936. This states availability of brand in vita water spring customers is highly determinant factor in purchase decision behavior.

Table 14: Respondents Perceptions of Brand Availability

	N	Min	Max	Mean	Std. Deviation
Availability of the product influence brand choice in vita water spring	361	1	5	4.04	.936
Do you believe the brand available in market first choice as far as available in market place	361	2	5	3.95	.830
Do you buy bottled water which is Consistently available in market place	361	1	5	3.80	.896
You won't choose a brand if you can't get it when you need it	361	1	5	3.78	1.230
Valid N (list wise)	361				

Source: own survey result, 2022

In the order to see the general perception of the respondents regarding to product availability of vita water spring customer's perception the respondents were asked to respond four crucial

questions. From question asked respondents as” Availability of the brand influence your choice decision in vita water spring “most respondents agreed on their consensus whereas the least level of respondents in this category agreement in vita water spring customers perception was (M=3.78 SD =0.830). On the other side, all highest mean indicates that at least most but not all the respondents agreed on intended questions asked by researchers. The average mean of perceptions of respondents on product availability M=3.8910 and SD=0.56261. This explicitly demonstrates product availability is highly significant influential factor in vita water spring customers.

4.6.8 Respondents perceptions on product quality

Product quality refers to how well a product satisfies customer needs, serves its purpose and meets industry standards. When evaluating product quality, businesses consider several key factors, including whether a product solves a problem, works efficiently or suits customers' purposes. Regarding to this dimension the respondents were asked four items by applying five point Likert scale.

Table 15: Respondents Perceptions of Product quality

	N	Min	Max	Mean	Std. Deviation
do buy vita Bottled water that is produced as per acceptable ISO quality standard	361	1	5	3.38	1.048
Do you buy vita bottled water that I consider it has a consistent quality	361	1	5	3.40	1.099
Vita water spring taste influence my choice of the brand	361	1	5	3.03	1.152
Do you prefer packed bottled water than tap/local water because tap water is supposed contain high concentration of salts and fluorides that is risky for health	361	1	5	3.89	1.072
Valid N (list wise)	361				

Source: own survey result, 2022

In table above 15 the questionnaire item regarding to perceptions of product quality asked to respond as” I prefer packed bottled water than tap/local water because tap water is supposed contain high concentration of salts and fluorides that is risky for health” with value of (M=3.89, SD=1.072) indicates majority of the respondents had minimum realization on bottle water preference other than tap water was directly related with health care implication. On respondent’s side, the majority of respondents grab some sort of awareness about preference of bottle water than municipal water. The overall perceptions of product quality (M=3.4245, SD=0.70219) implies the product quality was going to be one of the determinant factors in vita water spring customers.

4.6.9 Respondents perception on Brand Choice

The brand choice is ideal for purchasing behavior of customers and more specifically to model the process which customers follow when making decision. With this item, target respondents response rate were evaluated by six questions through Liker scale.

Table 16: Respondents Perceptions of Product quality

	N	Min	Max	Mean	Std. Deviation
The vita brand is special to you?	361	1	5	3.50	1.108
Are you familiar with the brand of vita?	361	1	5	3.69	.886
Do you choose the vita brand based on the brand's sustainable quality?	361	1	5	3.15	1.025
I say positive things about the brand to other people?	361	1	5	3.42	.856
Vita brand gives me sense of belongingness	361	1	5	3.14	1.101
Is Vita brand the most reliable to you?	361	1	5	3.27	.994
Valid N (list wise)	361				

Source: own survey result, 2022

Regarding to the reactions of respondents perceptions on brand choice the average value of the item ranges between M=3.69 to 3.14 whereas the standard deviation ranges between 1.108 and 0.886 which shows minimal level of variation. The statement in which most respondents agreed

was “I am very familiar with the brand of vita water spring” (M=3.69 and SD=0.886). Based on above result the statement with least level of agreement was” Vita brand gives me sense of belongingness” (M=3.14, SD=1.101). The overall mean of perceptions of brand choice M=3.3610 and SD=0.52131. Generally from the result, brand choice is one of principal factor in vita water spring customers that significantly impacts the customer’s preference motives.

Table 17: descriptive Summary of the Mean & Standard deviation

	N	Min	Max	Mean	Std. Deviation
Product information	361	1	5	2.63	1.124
Bottle Handling	361	1	5	3.89	.946
Advertisement	361	1	5	2.34	1.139
Packaging	361	1	5	2.99	1.090
Brand price	361	1	5	3.67	1.192
Brand image	361	1	5	3.28	1.198
Availability of the brand	361	1	5	4.04	.936
Brand quality	361	1	5	3.40	1.099
Brand choice	361	1	5	3.14	1.101
Valid N (list wise)	361				

Source: own survey result, 2022

From table above 17, descriptive summary of independent variables response rate provides the researchers to layout critical determinant factors of product attributes (independent variables) against dependent variable (product preference). To sum up, the output reveals to recommend each variables based on their influential power accordingly.

4.7. Inferential Analysis

Basically the study has employed correlation and regression analysis to determine whether there is statistically significant relationship between the independent variables and dependent variables (customer preference).

4.7.1 Correlation Analysis

The study conducted correlation analysis to show strength of relationship between independent (customer preference) and dependent variables of the study. 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 18: Correlation matrix analysis of independent variables

Correlations

		AD	PI	BH	BP	P	PQ	PK	BI	PP
AD	Pearson Correlation	1								
	Sig. (2-tailed)									
	N	361								
PI	Pearson Correlation	.343 [*]	1							
	Sig. (2-tailed)	.000								
	N	361	361	1						
BH	Pearson Correlation	.350 [*]	.560 ^{**}	1						
	Sig. (2-tailed)	.000	.000							
	N	361	361	361						
BP	Pearson Correlation	.325 [*]	.444 ^{**}	.405 ^{**}	1					
	Sig. (2-tailed)	.000	.000	.000						
	N	361	361	361	361					
PA	Pearson Correlation	.267 [*]	.178 ^{**}	.247 ^{**}	.346 ^{**}	1				
	Sig. (2-tailed)	.000	.001	.000	.000					
	N	361	361	361	361	361				
PQ	Pearson Correlation	.246 [*]	.397 ^{**}	.416 ^{**}	.379 ^{**}	.137 ^{**}	1			
	Sig. (2-tailed)	.000	.000	.000	.000	.009				

	N	361	361	361	361	361	361			
P	Pearson Correlation	.263 [*]	.412 ^{**}	.255 ^{**}	.030	.222 ^{**}	.249 ^{**}	1		
	Sig. (2-tailed)	.000	.000	.000	.572	.000	.000			
	N	361	361	361	361	361	361	361		
BI	Pearson Correlation	.328 [*]	.544 ^{**}	.284 ^{**}	.368 ^{**}	.268 ^{**}	.314 ^{**}	.408 [*]	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		
	N	361	361	361	361	361	361	361	361	
PP	Pearson Correlation	.349 [*]	.442 ^{**}	.348 ^{**}	.153 ^{**}	.191 ^{**}	.296 ^{**}	.489 [*]	.121 [*]	1
	Sig. (2-tailed)	.000	.000	.000	.004	.000	.000	.000	.022	
	N	361	361	361	361	361	361	361	361	1
**. Correlation is significant at the 0.01 level (2-tailed).										
*. Correlation is significant at the 0.05 level (2-tailed).										
Source:- own survey result, 2022										

Where AD= Advertisement, PI= Product Information, BH= Bottle Handling, BP= Brand Preference, PA= Product Availability, PQ= Product quality, P= packaging, BI= Brand image, PP= Product price

We found the Pearson correlation(r) values shown in the table above with value $P < 0.01$, indicating a reliable relationship between variables. The degree of relationship among dependent and independent variable ranges 0.489 to 0.121^{**} subsequently, the strength of the correlation between product information and customer preference and bottle handling and customer preference was found to be positive and strongest ($r=0.444$, $p<0.01$). The advertising aspect was also strongly positively associated with customer preference ($r=0.343$, $p<0.001$). Additionally, product availability are strongly positively associated with customer preference ($r=.416$, $p<0.001$). A relatively weak positive association was observed for brand image ($r=.121$, $p<.001$). In general, all independent variables are significantly positively associated with brand choice at the 0.01 significance level.

4.7.2 Multiple regression analysis

A linear regression model was used to determine whether independent variables influence the dependent variable or not. The dependent variable (customer preference) was regressed against

the independent variables. The significance level of 0.05 with 95% confidence interval was used (Mark and Goldberg, 1998). The prediction was carried out basing on the effect of the nine independent factors: Advertisement, Bottle Handling, Product information, Packaging, Product quality, Product price, Brand image, Product availability and Brand choice. The preliminary reason for using multiple regression analysis was to assess the direct impact of product attributes on the customer preference in vita water spring.

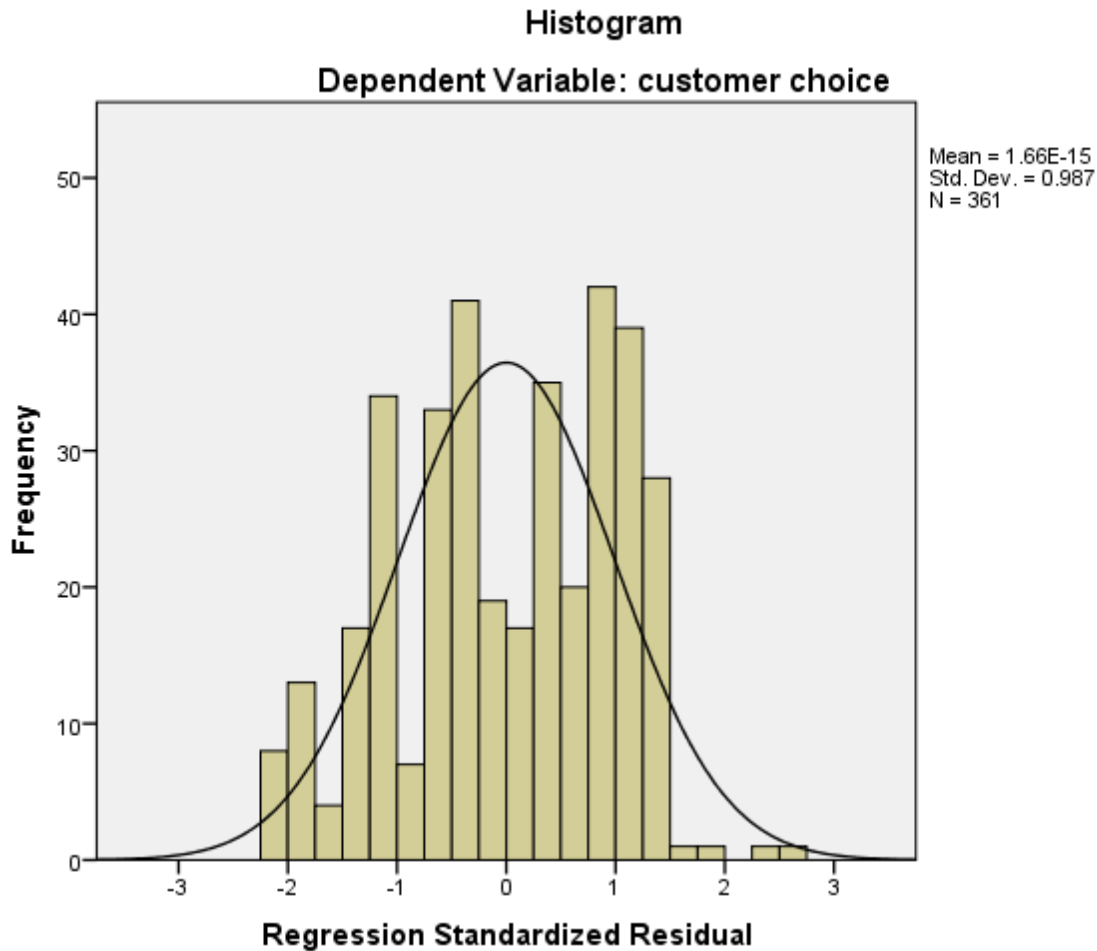
4.7.2.1 Common Regression Assumption test

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. In this study five assumptions was going to be tested. These are Normality, multi-collinearity, linearity and Homoscedasticity and autocorrelation (Hair et al, 1998). In the following paragraphs, each assumption is tested and explained accordingly.

I. Normal Distribution

According to (Weinstein, 2002) 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 ($E = 0$).

Figure 2: Normality distribution



Source: own survey result, 2022(spss23)

II. Multi-co linearity

According to (Alin, 2010), the presence of Multicollinearity can be recognized simply by looking at the value of the variance inflation coefficient [VIF] for each explanatory variable. In other words, a VIF greater than 10 implies interdependence between the independent variables, while all variables less than 10 have no interdependence between the variables. 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).

Table 19: multi-co linearity assumption test

Variables	Tolerance	VIF
Advertisement	0.751134	1.331321
Product information	0.452757	2.208691
Bottle Handling	0.600526	1.665208
Packaging	0.634225	1.576728
Brand price	0.583117	1.714921
Brand image	0.553165	1.807780
Availability of the brand	0.856058	1.168146
Brand quality	0.756316	1.322199

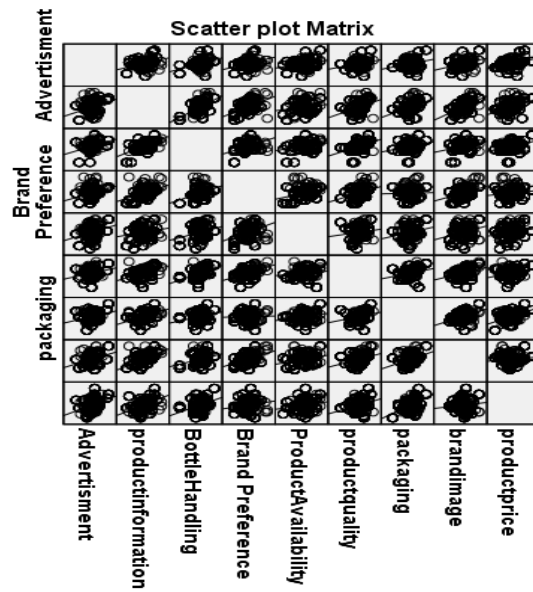
Source: own survey result, 2022(spss23)

As clearly seen from the above table 19, 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.

III. Linearity assumption test

The third assumption for computing multiple regressions is testing of the linear relationships between dependent and the independent variables. To determine whether the relationship between the dependent variable and independent variables is linear; plots of the regression residuals through SPSS software had been used. As showed in the scatter plot, figure below, the visual inspections of the scatter plot shows there exists a linear relationship between the predictors and the predicted variable (Panagiotidis, 2009).

Figure 3: scatter plot for regression standardized residual

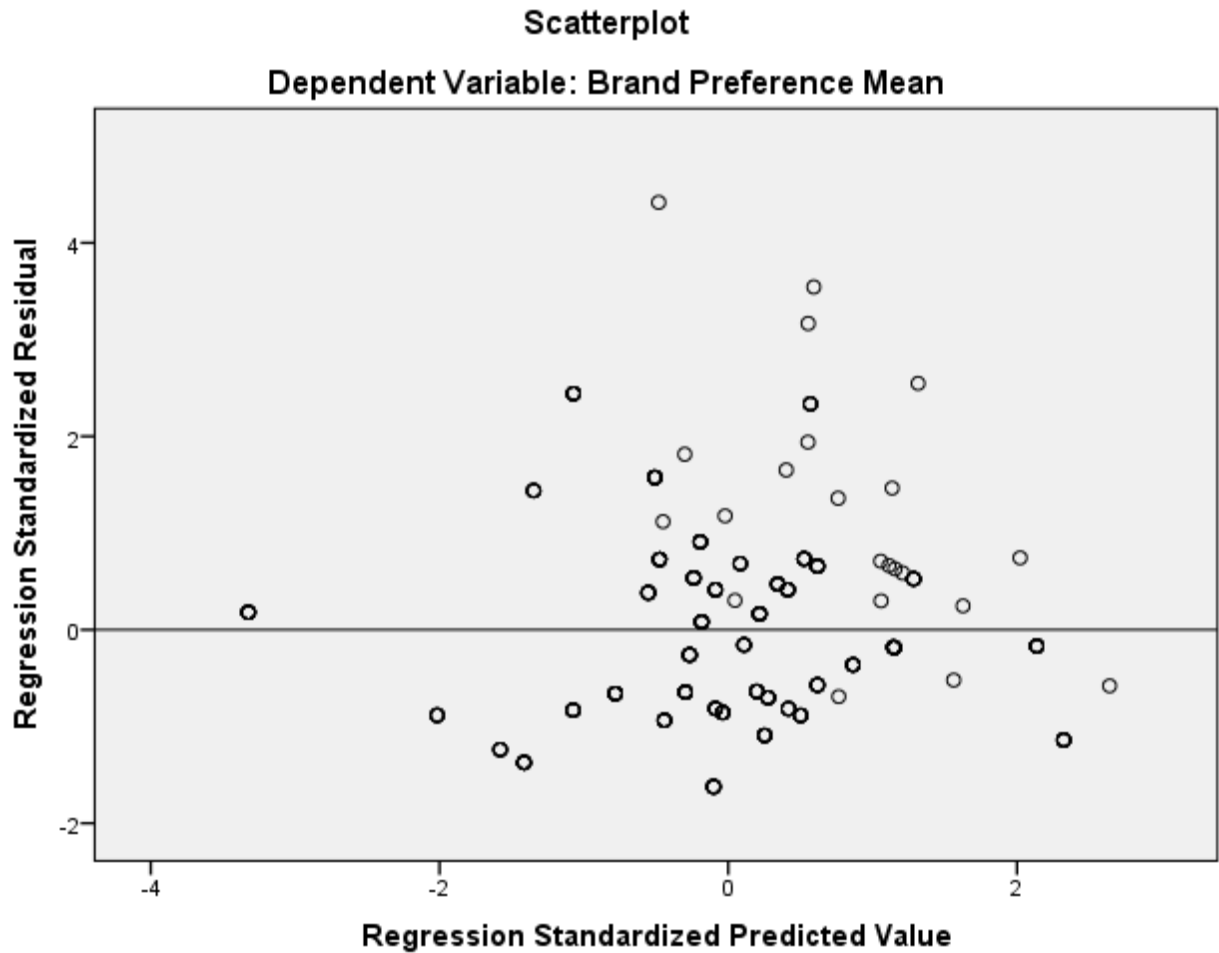


Source: own survey result, 2022(Spss 23)

IV. Homoscedasticity

Homoscedasticity refers to whether these residuals are equally distributed, or whether they tend to bunch together at some values, and at other values, spread far apart. Checking the dependency of the relationships between variables. Homoscedasticity is related to the assumption of normality (Jarque and Bera, 1980).

Figure 4: homoscedasticity test assumption scatterplot



Source: own survey result, 2022(spss23)

v. Autocorrelation assumption test

The fifth and last assumption for computing multiple regression test is Autocorrelation. The Durbin-Watson statistic is a number that test for autocorrelation in the residuals from a statistical regression analysis .The Durban-Watson statistics always between 0 and 4 .The value 2 means that there is no autocorrelation in the sample of the study. Values approaching 0 indicate positive auto correlation and values toward 4 indicates negative autocorrelation (Bryman et al).

Table 6: model summary of autocorrelation test

	Durbin-Watson
	1.848

a. Predictors: (Constant), product price, brand image, Product Availability, product quality, Advertisement, Bottle Handling, packaging, product information

b. Dependent Variable: customer Preference

Source: own survey result, 2022(spss23)

As the rule, 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 below 2 as indicated above table 21. 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.

4.6.2 Multiple regression analysis

A multiple regression analysis was performed to draw stronger inferential conclusions from the observed associations between the dependent and independent variables and to predict the dependent variable (customer preference) based on the values of a set of independent variables. It identifies how much the variance of the dependent variable is explained when more than one independent variable influences the dependent variable at the same time. Various diagnostic tests were performed according to the requirements of the regression model before performing the analysis. The study thus came up with a regression result model summary, the ANOVAs and regression beta model for the effect sizes and the regression model as presented in the following table below.

Table 21: model summary of multiple regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.635 ^a	.404	.390	.40712	1.848

a. Predictors: (Constant), product price, brand image, Product Availability, product quality, Advertisement, Bottle Handling, packaging, product information

b. Dependent Variable: customer Preference

4.6.2.1 ANOVA result (Analysis of variance)

Table 22: ANOVA result (Analysis of variance)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	39.491	8	4.936	29.783	.000 ^b
	Residual	58.343	352	.166		
	Total	97.834	360			

a. Dependent Variable: customer Preference

b. Predictors: (Constant), product price, brand image, Product Availability, product quality, Advertisement, Bottle Handling, packaging, product information

Source: own survey result, 2022 (spss23)

The ANOVA table 22 above, F value of 29.783 implies 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. customer preference of buying behavior and it is evidenced that the model is statistically significant predictor of purchasing decision behavior for that reason the p value is less than 0.05. Thus regression model is a good fit of the data well. Therefore, a significant amount of customer preference is influenced by the dimensions of product attributes.

4.6.2.2. Regression beta value

Table23: beta regression values

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.272	.192		6.624	.000
	Advertisement	.096	.039	.118	2.493	.013
	product information	.185	.041	.272	4.452	.000
	Bottle Handling	.087	.041	.112	2.117	.035
	Product Availability	.225	.041	.243	5.451	.000
	product quality	.147	.035	.197	4.170	.000
	Packaging	-.214	.038	-.290	-5.606	.000
	brand image	.103	.040	.144	2.597	.010
	product price	-.023	.044	-.028	-.526	.600

a. Dependent Variable: customer Preference

Based on the above table 22 and interpretation below the finding the researcher can develop the following estimated regression model as follows.

Customer preference= 1.272+0.096(Advertisement) +0.185(product information) + 0.087 (Bottle handling) + 0.225(Product availability) + 0.147 (product quality) + (-2.14) (packaging) + 0.103 (brand image) + (-0.023) (brand price).

Source: own survey result, 2022 (spss23)

The negative result of brand price indicates that the majority customers were influenced by price. All independent variables highly influence the customer choice. As beta coefficient shows that advertisement had coefficient of 0.096 which is greater than zero. The findings indicate that keeping all other independent variables constant, a unit increase in advertisement will lead to 0.096 decrease in customer preference. Based at 5% level of significance, advertisement was found to have calculated t-value (t =2.493) which is greater than tabulated value of t> 1.96 and a significance level of 0.013 thus the value of greater than 0.05. This implies advertisement coefficient is significant at 0.05 levels.

As beta coefficient shows that product information had coefficient of 0.185 which is greater than zero. The result shows that keeping all other independent variables as constant, a unit increase in product information will lead to 0.185 decrease in customer preference of purchasing behavior. Based at 5% level of significance, product information was to have found calculated ($t=4.452$) which is greater than tabulated value of $t>1.96$ and a significance level of 0.000 hence the value greater than 0.05 levels. This implications shows that product information coefficient is insignificant at 0.05 levels. This indicates product information has insignificant positive influence of customer preference.

As beta coefficient shows that bottle had handling coefficient 0.087 which is greater than zero. The finding demonstrates taking all other remaining independent variables as constant, a unit increase in bottle handling will lead to 0.087 decrease in customer preference buying behavior. Based at 5% level of significance, of bottle handling coefficient was have to found calculated ($t=2.117$) which is greater than tabulated value of $t>1.96$ and a significance level of 0.035 i.e. the value greater than 0.05 levels. This implies that bottle handling coefficient is significant at 0.05 level. The findings indicate bottle handling in 2 liter has a significant positive influence.

As beta coefficient shows that product availability had coefficient of 0.225 which is greater than zero. The finding states that supporting all independent variables as constant, a unit increase in product availability will lead to 0.225 decrease in customer choice of buying decision behavior. Based at 5% level of significance, product availability coefficient was have to found calculated ($t= 5.451$) which is greater than tabulated value of $t>1.96$ and a significance level of 0.000 i.e the value greater than 0.05 levels of confidence. This signifies that product availability coefficient is insignificant at 0.05 level. This result indicates product availability insignificantly influence the preference of customers.

As beta coefficient indicates that product quality had coefficient of 0.147 which is greater than zero. The result indicates keeping all other remaining independent variables as constant, a unit increase in product quality will lead to 0.147 decrease in customer preference. Based at 5% level of significance, product quality was found to be calculated ($t=4.170$) which is greater than tabulated value of $t>1.96$ and a significance level of 0.000 i.e greater than 0.05 level. This result indicates product quality insignificantly influence the customer preference. As beta coefficient indicates that packaging had coefficient of -.214 which is less than zero. The result shows that

keeping all other independent variables constant a unit increase in packaging will lead to -.214 decrease in customer preference. Based at 5% level of significance, packaging was found to be calculated ($t = -5.606$) which is less than tabulated value $t < 1.96$ and significance level of 0.000 i.e less than 0.05 level. This indicates packaging has significant negative influence of customer preference.

As beta coefficient indicates that brand image had coefficient of 0.103 which is greater than zero. The findings states that keeping all other independent variables constant, a unit increase in brand image 0.103 decrease in customer preference. Based on 5% level of significance, brand image was found to be calculated ($t = 2.597$) which is greater than tabulated value of $t > 1.96$ and significance level of 0.010 i.e 0.05 level thus significant at 0.05 level. This indicates brand image has positive significant influence.

Lastly, as the beta coefficient indicates that had brand price coefficient of -.023 which is less than zero. The findings shows that keeping all independent variables as constant, a unit increase in brand price -.023 decrease in customer preference buying behavior. Based at 5% level of significance, brand price was found to be calculated ($t = -.526$) which is less than tabulated value of $t < 1.96$ and significant at level of 0.600. This indicates brand price has negative significant influence on customer preference.

Based on the above table 5.9 and interpretation finding the researcher can develop the following estimated regression model as follows.

4.7. Discussions of multiple Regression

Regression analysis study applied to examine and investigate the impact of product attributes on customer preference. The coefficient of determination R^2 is a measure of the proportion of the variance of the dependent variable (customer preference) and the mean explained by the independent or predictor variables (Saccani, Johansson and Perona, 2007). The study revealed that product attribute has a positive and significant impact on customer preference of vita water spring users. Findings of the study indicated that all dimensions of the product attribute elements have statistically significant relationship with customer preference of bottle water. However some of the findings of this results are consistent that were compatible with earlier findings and with previous empirical studies, while others contradict them that couldn't go hand in hand with current result i.e the result didn't resemble each other.

For instance, A study conducted by (Mulugeta and Negash, 2018) have Studied on” The Factors Affecting Brand Choice of the Consumers on Bottled Water products in Gonder city, the independent variables of their study was failed to use packaging whereas the current study conducted in Dire Dawa entitled as “impact of product attribute on customer preference” in vita water spring result depicts packaging was incorporated as influential factor of customer preference. Another study conducted by (Tariku, 2017) on” Determinants of Customers Brand Preference towards Bottled Water Products” in Hawassa City have inconsistent findings that cannot resemble hand in hand with this study since the result shows the product availability has negative and not significant however the current study results indicates availability of product has positive and negative significance on customer preference of vita water spring at significance level of 95%. As (Yalew, 2014) cited” Influence of Bottled Water Packaging Attributes on Consumers’ Purchase Decision” in Addis Ababa. The researcher used packaging elements as dependent variable but he used as independent variable in his research work were packaging color, shape, size, graphic design, and product packaging information and failed to include packaging innovation and font style of packaging however the current study has used packaging as one of independent variable which has effect on customer preference. According to study conducted by (Zhang, 2015)on effect of promotional practice on brand image resembles the findings of current study thus, the result indicates the advertisement has positive significant influence similarly advertisement in this study has positive significant influence on customer preference which states the result was compatible hypothesis with the result of this study.

4.7.1. Hypothesis Testing

The goal of the hypothesis was to determine whether independent variables [Advertising, Handling, Price, Brand Name, Handling, Product Information, Product Quality, Brand Image and Packaging] had a significant impact on the dependent variables (brand preference). Hypothesis testing is one of the most popular techniques in statistical decision-making. In general hypothesis test involves presuming an initial claim to be true and then testing it with a sample of evidence.

The alternative hypothesis (denoted by H_a) and the null hypothesis (denoted by H_o) are both included in the hypotheses test. The initial assertion, known as the null hypothesis, is frequently made using data from earlier studies or general knowledge. The research hypothesis is another name for the alternative hypothesis. The probability value (P-value) for the specified test can be

used to inform the decision-making process for the hypothesis test.

- ✓ We reject the null hypothesis and declare support for the alternative hypothesis if the p-value is less than or equal to a preset 0.05 level of significance.
- ✓ If the P-value exceeds the 0.05 level of significance, the null hypothesis is not rejected, and the alternative hypothesis is not supported.

Based on this, the researcher created two hypotheses, using the results of Table 5.9. Beta regression coefficient, to examine how product attribute affects customer preference.

1. advertisement

Hypothesis Ho1 predicts that advertisement has significant positive impact on customer preference of purchasing behavior. As shown below table 25, the relationship between advertisement and customer preference has positive coefficient (coefficient=0.096, p-value<0.05). Thus, advertisement has positive significance relationship between with customer preference. The positive and significant coefficient of the percentage of advertisement is not accepted whereas the Ha1 hypothesis is accepted. The current result is consistent with the finding of other studies' results. A study by (Niazi et al, 2012) conducted in southern Nigeria is inconsistent with the above outcome which resembles the current result.

2. Product availability

Hypothesis Ho2 predicts that the product availability has no significant positive impact on customer preference of vita water spring. As shown below table 25, the relationship between product availability and customer preference has positive and significant positive coefficient (coefficient=0.225, p-value<0.05), thus product availability has positive but significance relationship with customer preference. The positive and significant coefficient of the product availability is not accept. Meaning that the Ha2 hypothesis is accepted. According to (Gensch, 1987) result dedicates Availability of products signifies the purchase decision of customer preference which has the same implication with current study.

3. Product information

Hypothesis Ho3 predicts that product information has no significant positive impact on customer preference. As shown below table 25, the relationship between product information and customer preference has positive coefficient of (0.185, p-value<0.05), thus product information has positive but significance relationship with customer preference. The positive

and significant coefficients of the percentage product information rejects this hypothesis. But Ha3 hypothesis is accepted. A study conducted by (Liu, Yang and Zhu, 2011) the findings reveals the product information has negative significance on customer choice whereas the current studies result contradicts the hypothesis of earlier studies. Thus, this findings shows that product information has positive significant impact on choice of customers.

4. Bottle handling

Hypothesis Ho4 predicts that bottle handling has no significant positive impact on customer preference of buying decision behavior. As shown below table 25, the relationship between bottle handling and customer preference has significant positive coefficient (coefficient= .087, p-value<0.05) i.e bottle handling has positive and significant coefficients with customer preference. The positive and significant coefficients of the percentage of bottle handling rejects this hypothesis, but Ha4 hypothesis is accepted.

5. Product quality

Hypothesis Ho5 predicts that product quality has no significant positive impact on customer preference in vita water spring customers. As shown below table 25, the result depicts relationship between product quality and customer preference has significant positive coefficient (coefficient=.147, p- value<0.05) i.e product quality has positive and significant impact on customer preference of decision buying intention. The positive and significant coefficients of the percentage of product quality not accepted. However Ha5 is accepted. A study conducted by (Jacobson and Aaker, 1987) findings states that product quality has significant positive impact on customer preference. Thus, hypothetically compatible with the previous findings that resembles the current study.

6. Packaging

Hypothesis Ho6 predicts that packaging has no significant positive impact on customer preference of buying decision behavior. As depicted below table 25, the relationship between packaging and customer preference has significant positive coefficient (coefficient= -.214, p-value<0.05). Packaging has positive and significant coefficients of the percentage packaging

hypothesis not accept this hypothesis. But Ha6 hypothesis is accepted. The current result is consistent with the finding of other studies' results (Deliya and Parmar, 2012) packaging color significantly and positively influence the brand preference of the consumers however the current study was not compatible with previous.

7. Brand price

Hypothesis Ho8 predicts that brand price has no significant positive impact on customer preference. As shown below table 25, the relationship between brand price and customer preference has significant positive coefficient (coefficient= -.023, p- value<0.05). The brand price has negative and significant coefficient of the percentages of brand price hypothesis rejects whereas Ha8 accepts. Price is used by many of the consumers as an indication of the product quality which is a vital factor in the purchase decision (Volckner and Hofm, 2007). This result shows consistent with current study being affect positive and significantly the purchase behavior of customers.

8. Brand image

Hypothesis Ho7 predicts that brand image has no significant positive impact on customer preference of purchase decision behavior. As shown below table 25, the relationship between brand image and customer preference has significant positive coefficient (coefficient=.103, p-value<0.05). Brand image has positive and significant coefficient of the percentage of brand image hypothesis not accepted but Ha7 hypothesis accepts. Research conducted by (Ataman and Ulengin, 2003) clarifies that brand Image plays a key role to enhance a business performance because brand image has a direct impact which can change people's purchasing behavior which has similar findings that obviously affect choice of customer at 95% level of confidence.

To sum up result clearly indicates that all product attribute variables have positive & significance relationship with customer preference which is significance at $p=0.01$ level.

Ho: independent variables do not have a significant impact on brand preference

Ha: independent variables have a significant impact on brand preference. The Significance Level $\alpha = 0.05$ and Reject the null hypothesis if $p\text{-value} \leq 0.05$.

Table 7: Summary of the Hypothesis Result

Hypothesis	Relationship	Result	Actual Relationship	Decision
Ho1	Advertisement	Significant	Positive	Accepted
Ho2	Product availability	Significant	Positive	Accepted
Ho3	Product information	Significant	Positive	Accepted
Ho4	Bottle handling	Significant	Positive	Accepted
Ho5	Product quality	Significant	Positive	Accepted
Ho6	Packaging	Significant	Positive	Accepted
Ho7	Brand image	Significant	Positive	Accepted
Ho8	Brand price	Significant	negative	Accepted

NB- the negative result of brand price reveals price was significant factor in vita water spring customers

CHAPTER FIVE

SUMMARY OF MAJOR FINDING, CONCLUSION AND RECOMMENDATION

In chapter four of the study's analytical result has been mentioned. However this chapter's is going to be overview the findings, conclusion and recommendation will be its main focus.

5.1. Summary of the Major Finding

The primary goals of this study was to examine how product attributes affect consumer preference in the Vita Water Spring in Dire Dawa City of Goro and Sabian neighbors. Data were gathered from 361 key customers of Vita Water spring using both an explanatory and descriptive research design and by applying purposive sampling technique. Correlation and multiple regression was used to identify the data relationship.

The study was conducted in Dire Dawa city from selected sites of Sabian and Goro on customers of the vita water spring with a total of 361 respondents participating with answering distributed questionnaires. Among the respondents of 361, 210(58.2%), were male and 151(41.8%) were female respectively. Demographic factor displays the age of respondents which, the researcher found the majority 90% of the participant were aged enough. As the result, the age distribution helps to determine the various reasoning and understandings of the working class on the impacts of product attributes on customer preference of vita water spring.

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. Majority of the respondents were educated first degree which 148(41%), 103(28.5%) of respondents were at diploma level, 24(6.6%) of the respondents were educated in master level, 81(22.4%) of the respondents were educated grade 12 and below and 5(1.4%) of the respondents were educated PhD and above respectively.

Regarding to the overall feelings of vita water spring 121(33.5%) of the respondents was satisfied, 89(24.7%) of the respondents was dissatisfied, 65(18%) of the respondents were neutral, 50(13.9%) of the respondents was very satisfied and the remaining 36(10%) of the respondents was very dissatisfied about vita water spring.

From the descriptive analysis, mean and standard deviation used on the analysis of the nine independent variables on impacts of product attributes on customer preference in vita water spring, the result were found to be more significant in influencing customer preference in vita water spring.

According to independent variables on dependent variables

1. Product availability and customer choice

Based on customers of vita water spring data the total mean of 4.04 presents that majority of respondents were most agree with item intended to respond in the study. The standardize beta value for brand availability was 0.225 and statistically significant at $p < 0.05$. Based on the result product availability is the first highest influential factor on customer preference in vita water spring.

2. Advertisement and customer choice

The mean value of 2.34 reveals that majority of respondents are reach consensus towards agree level agreement with the questions raised to respond by customers in the study. The standardize beta value for advertisement was founded to be 0.096 and significant at $p < 0.05$. This implies that a one unit increase in advertisement pertinently enhances the customer preference of vita water spring by the amount of 0.096. Based on the survey result advertisement is going to be the second determinant factor in customer preference of vita water spring.

3. Brand price and customer choice

The result indicates that he overall mean of brand price 3.67 states majority of the respondents were agreed on the items stated towards in given study. The standardize beta value for brand price was founded to be -.023 and significant at $p\text{-value} < 0.05$. This implication provides that increase in one unit in brand price enhances the customer preference of vita water spring by the amount of -.023. Consequently, the result shows that brand price significantly influence customer preference in vita water spring. Brand price is the third most determinant factor in customer preference of vita water spring.

4. Product information and customer choice

The grand mean of product information with mean value of 2.63 indicates that the majority of respondents intended to react were agreed on the dimensions toward a specific study. The standardize beta value for product information and customer preference were founded to be .185 which is significant at $p\text{-value} < 0.05$, this implies that increment in one unit of product information enhances the customer preference of vita water spring. As the result product information is going to be one the determinant factor in vita water spring.

5. Bottle handling and customer choice

The overall mean of bottle handling in 2 liter was founded 3.89 which signifies that the majority of the respondents agreed on items asked by researchers in a given study. The standardize beta value of bottle handling and customer preference of vita water spring were found to be .087 which is significant at $p\text{-value} < 0.05$.

5.2. Conclusion

The main goal of this study was to determine how product characteristics affect customer choice in Vita Water Spring. According to the research findings, all the nine dependent variables had a positive and significant influence on consumer's purchase decision of vita water spring at point of product choice. Product attribute elements, such as product availability, advertisement, brand price, bottle handling, product information, brand quality, packaging, brand image, brand choice on the customer preference were positively and significantly correlated. Therefore, it can be concluded from the research that these product attributes has the highest impact on customer preference in vita water spring. The results from this study were found to be consistent with previous research findings that all observed elements of product attributes are very important in influencing customer preference of vita water spring.

Based on the study's objectives, data analysis, and findings, the following conclusion was made:

Product availability

Based on the finding, Product availability attribute is the first and most important influential factor which reveals bottled water customer preference in vita water spring. In this study the researcher recommends vita water spring to concentrate the distribution channel to make accessible service provision in territory in which vita water customers exists. Consumers can obtain information and increase awareness towards available brands. The easily accessibility of a product has a great influence on customer buying behavior

Advertisement

Currently, bottle water was highly launched and penetrated in market to satisfy the needs and wants of customers. Based on the finding, advertisement is the second important factor that significantly influence the customer preference of vita water spring since it serves creating awareness and attract new entrants of bottle water users. Respective of excess bottle water, advertisement plays great role to fulfill the demands of customers and customer preference in market place. On the manufacturer side, collaborating with the concerned body of government

marketers should work together to make brand prominent and prevalent in market place. Practicing advertisement as more effective and power full tools in the success of increase and building the company's brand image. Consumers of bottled water become more knowledgeable on the environmental awareness, they consume more bottled water, which is consistent with most as the respondent's response study reports.

Bottle handling

Bottle handling was going to be one of the crucial determinant factor in customer preference in vita water spring. Bottle handling in vita water spring represents an important factor which influence positive significantly the purchase decision of customer. Handle enables the customers to hold and freely move from place to place.

Brand price

Nowadays Packed bottled water is counted basic necessity for consumers. The convenience benefits of bottle water is immense as it is so easy to transport and deliver to customers in handy in any situation. As the demands of the product increase the price of the product may increase or decrease based on seasonal market. The respondent's reaction shows that they prefer brand with its cheapest price. The finding of the study shows that brand price positively influences consumers' purchase decision in vita water spring.

Product quality

Product quality was one of indicators of customer preference in vita water spring. The respondents were agreed on they concern on product quality bottle water by expecting related with personal health care. This dimensions of product characteristics that influence the customer preference purchase behavior of vita water spring were chosen by the respondents as one of the crucial factor.

Product information

According the finding the production information is taken as one of significant factor that influence the purchase behavior of customer preference. The respondents agreed that product information is an attribute that persuades the buyers of bottle water and impacts their preference.

Packaging

Packaging information on vita water spring product represents an important component in

support marketing communication strategies of mineral water producing companies. Bottle water Manufacturers should focus on the information that contains short, clear and precise information on labeling. To be used on the packaging attract majority of the existing customers other new entry customers. Packaging is directly related to enhance the purchasing decision behavior of customers. So, packaging influence customer preference in vita water spring.

Brand image

Brand image was going to one of the other influential factor in customers. As the result states the respondents agreed on they always go well-known brand. Thus, the brand images significantly impacts customer preference in small amount of extent.

Brand name

Even if to the minimum, brand name the respondents agreed customers use them to identify a business as well as what service offers in bottling industry.

Generally, this study finding and results allows the primarily bottle water producers to consider customer characteristics especially their preference. As the consequence, the manufacturer should focus four predominant factors such as product availability, advertisement, brand price and bottle handling to capitalize these crucial determinant factors provides the company to solve the customer preference easily and accessibly.

5.3. Recommendation

According to the research findings the researcher recommends that owners of vita water spring in Dre Dawa should give deep and great emphasis on the elements of product attributes. Depending up on this final findings, result and conclusion, the researchers recommendations are drawn as follows: The conclusions from this study imply that product attributes such as product availability, advertisement, product price, bottle handling, product information, product quality, packaging, brand image and brand choice of vita water spring play a significant role in influencing the customer preference in Dire Dawa city. These aspects play an important role in the consumer's preference of brand. It also provides a map that clearly shows the key points to look at from the manufacturer's perspective. Therefore, in order to solve the problem/complains/ bottle water producer/owner/general manager/ must come up with different strategy to fulfill the customers preference of vita water spring.

Based on the findings of this study, bottled water manufacturers should specifically consider the following recommendations for each determining factor.

- **Availability of product:** - availability of product vita water spring represents important component in affecting the customer preference of vita water spring. As the result indicates, Product availability is perceived positively, it influences purchase intentions via customer involvement. The bottle water producer would come up with consistent product availability by increasing the mass production and adjust proper distribution channel to satisfy the customers demand.
- **Advertisement:** - nowadays bottle water market and consumer consumption was highly increasing from day to day. On respective concept, advertisement considered as a public communication that promotes a product, service, brand or event. According to the result advertisement was come to be the second prominent influential factor that significantly affect customers. Based on the result, the research recommends manufacturers of bottle to advert their product to target audience aware of your existence, helping them take the first step into the sales funnel and also provides to attract new customers rather than holding the existing customers. Last but not least, the overwhelming majority of ads are designed to increase sales, whether by directly promoting a specific product, service or deal
- **Bottle handling:** - provides benefit from high-quality solutions and a system that keeps bottles upright, stable and safe holding. The respondents agreed that bottle handling in vita water spring significantly affect the customer choice. Based the result researcher recommends organization to come up with bottle handle that does not easily removed from the torque of bottle.
- **Brand price:-** in Ethiopia, due to rapid growth of bottling industry and demands of consumers the price recession the customers was goes to engage willing to pay or not. Based on the study of this paper price is one of the third factors that significantly affect the purchase decision of customers in vita water spring. Hence, the researcher based on result recommends the bottle water manufacturers to set acceptable price by expecting the value of customer's affordability.
- **Product quality:** - water that has been packaged in sealed containers for human consumption and may come from a variety of sources including springs, aquifers,

icebergs, or municipal tap water supplies. The result of this study indicates the product quality significantly influence the customer preference of vita water spring. The researcher recommends the companies quality department to ensure quality fulfilling ISO certification in collaboration with Ethiopian conformity assessment to standardize the sustainable product quality more.

- **Product information:-**product information is one of mandatory element at any aspect. Bottle water producers should labeled and specify all necessary information about ingredients/mineral composition/, PH and TDS value, source and geography. According to study, respondents agreed that product information significantly influence the purchasing power. Here, researchers recommend an organization to show all necessary information's on labeled side clearly that could be easily understand by customers.
- **Packaging:** - 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, mineral water producing industries should automate their working process to improve the customers purchasing decision behavior in order to increase their profitability. Likely the concerned body, the government and marketers should work together to significantly influence consumer's purchase decision behavior of Alpha mineral water in the market to have high market share.
- **Packaging:** - producers should pay attention to how they design their packaging product/bottle Size, color, shape, overall design, image quality, legibility of label content. The respondents agreed that packaging influence their purchase preference of product. The study revealed that packaging is related to increase the purchasing decision behavior of customers. Thus, the study recommends 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.
- **Brand image:** - brand image is one the factor influence the brand choice. Bottled water management is highly encouraged to build a strong brand to make it easier for customers to choose from their competitors. Researcher recommends the bottle water producers management team to highly encourage to build a strong brand to make it easier for customers to choose from their competitors.

- **Brand name:** - purchasing behavior of consumers and more specifically the buying process which consumers follow when making decisions were influence by brand choice. Researcher recommends the manufacturer prominence focusing on fashion, quality, and price consciousness.

To conclude, bottle water manufacturer should consider and prioritize top for main factors such as product availability, advertisement, Bottle handling, and product price and product quality. However, other variables are also positively and significantly associated with brand choice and should be considered as influential factor that can affect customer preference .

5.4. Limitations of the Study

Like any other research, there are some inherent limitations with the findings in this study. There are other product attribute variables that may impact the purchasing decision behavior of customer preference of vita water spring. However the independent variables the researcher selects to study were limited to product availability, advertisement, brand price, bottle handling, product information, brand quality, packaging, brand image, brand choice their impact on customer preference. Besides, as far as purchasing decision behavior is concerned this study focused only on product attributes mentioned as independent variable in this study, which was limited to vita water spring real customer in Sabian and Goro kebele's and sub kebele's existing in the area. Therefore, the generalizability of the study may be limited due to other variables that may affect purchasing decision behavior of customers. However, to measure purchasing decision behavior of customers in a broader sense, market based measures can be proposed for future researchers.

5.5. Direction for Future Research

Based on the recommendations and limitations of this study, future research could follow various possibilities of research to better explain the impacts of product attribute and customer preference in purchase decision behavior. This research was conducted from a consumer perspective only. We also recommend further research in these areas given the determinants not covered in this study, as this study has some limitations.

First, future research could attempt to explore the nature of these relationships and impacts between product attribute and customer preference in context of Ethiopia.

Secondly, this study assesses the impacts of product attribute on customer preference of purchase behavior in vita water spring as independent variable, to measure the outcomes consumer's purchase decision behavior.

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 product attributes and the customer preference of behavior can also explained further and should be considered in the future research.

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7. Appendix

Part one: General information

Dear respondents,

This questionnaire is developed for educational purpose only. I am a student of DIRE DAWA UNIVERSITY in the field of MARKETING. I am collecting data for my thesis under the title of EFFECTS OF PRODUCT ATTRIBUTE ON CONSUMER PREFERENCE: IN THE CASE OF VITA WATER SPRING IN DIRE DAWA. Thank you in advance, for cooperating to fill this questionnaire which will be ideal input for the research completion. All your personal detail and data will be confidential and you don't mention your name. The objective of this research is to determine the impact of product attribute on consumer preference of purchase decision in vita water spring.

If you have any question please contact the student researcher via 09-21-28-15-15 or addisutilahun151@gmail.com

Please patiently provide all answer as per the instruction on each part.

Please circle your answer on a given choice

Part one: personal information/demographic profile

1.1 Gender

A Male

B. Female

1.2 Age

A. 18-29years

C. 40-49years

B. 30-39

D. 52 years and above

1.3 Yours academic qualification

A. grade 12 and below

B. diploma

B. First degree

C. masters

D. PhD and above

E. specify if others

1.4. Marital status

A. single

B. Married

C. Divorced

1.5 profession

A. student

B. self-employed

C. NGO employee

D. private organization

E. retired

F. Governmental employee

1.6 monthly income

A. 3000ETB and below

C. 5001ETB-10,000ETB

B. 3001 ETB -5000ETB

D. Specify if others

1.7 seasonal consumption of bottle water is high in:-

A. Dry season

B. Rainy season

C. Always

Part two: Bottled water consumption behavior/general statement related with topic

1. What is your level of awareness about vita water spring?

A. Very low

B. Low

C. Medium

D. High

E.

Delighted

2. Which size of vita bottle water spring is preferable for you?

A. 0.5 Liter

B. 2 Liter

C. 1.5 Liter

D. 20 Liter

E. 1 Liter

3. How many liter of bottle water you do consume per day?

A. 1 liter

B. 2liter

C. 0.5 liter

D. above 2 Liter

4. Where is your market place of bottle water?

A. Cafeteria

B. kiosk or retailers

C. Supermarket

D. Distributors

E. Hotels

F. Direct purchase from company

5. How do you feel about the overall product preference of Vita water spring?

A. Very dissatisfied

B. Dissatisfied

C. Neutral

D. Satisfied

E. Very satisfied

Part three: Determinants that influence bottle water preference of Vita water spring

Based on your experience, please indicate, if the following perspectives have been affecting your brand choice Yalew Mamo (2014).

Where,

SD=Strongly Disagree

N=Neutral

D=Disagree

A=Agree

SA=Strongly Agree

	SD=1	D=2	N=3	A=4	SA=5
Labeling/product information					
Vita water spring labeling provides you to get full information to purchase without any hesitation					
	SD=1	D=2	N=3	A=4	SA=5
Knowing the product information persuades you to buy vita bottle water					
product information indicated in label influences vita water spring					
Vita Water spring that shows the products are enriched with essential nutrients influence your purchase motives					

Handling					
absence of bottle handle influence your purchasing power in vita water spring					
bottle water handle minimizes risks of slipping and falling from hand					
Handle provides your bottle water purchase intention in vita water spring					
Bottle water handle in vita water spring influences the portability and durability					

	SD=1	D=2	N=3	A=4	SA=5
Advertisement					
Do you have watched vita bottled water spring advertisement on TV					
Do you have hear vita water spring advertisement on FM radio					
Vita water spring advertisement reminds me the brands soon					
Advertisement is necessary to attract me.					
Advertisements help me to find the best bottled water brand					
Do you believe that more frequency of advertisements is helpful for brand preference					

Packaging	SD=1	D=2	N=3	A=4	SA=5
The font used in writing the name and ingredient composition of the vita water spring product influences behavior on buying decision.					
Full colors on Vita water spring packaging have an impact on consumer's buying decision.					
Appealing graphics on vita water spring water packaging have an impact on consumer buying decision.					
Size of bottled water has influence on my preference of bottled water brand					

	SD=1	D=2	N=3	A=4	SA=5
Brand price					
prefer a bottled water brand if its price is cheaper					
I prefer the best brand bottled water whatever its price					
I won't buy bottled water if it is not good product for the price.					
I prefer bottled water brand whose price is economical					
Low price is one of my priorities when making a buying decision					

	SD=1	D=2	N=3	A=4	SA=5
brand Image					
Vita water spring bottle design, logo, name and symbol provides to remember the brand image?					
Do you believe well-known the brand is always better in quality than a lesser known brand?					
Vita water spring brand image is easily recognizable by end users					
Do you go always for the well-known branded products?					
Do you believe feel more secure when I buy bottled water with of a well-known brand?					

Availability of product	SD=1	D=2	N=3	A=4	SA=5
Does Availability of the product influence your brand choice in vita water springs?					
The brand will be my first preference as far as available					
Do buy always bottled water which is Consistently available in market place?					
Do you won't choose a product if you can't get it when you need it?					

<i>Product Quality</i>	SD=1	D=2	N=3	A=4	SA=5
Do you buy vita Bottled water that is produced as per acceptable ISO quality standard?					
Do you buy vita bottled water that you consider it has a consistent quality?					
Vita water spring taste influence my choice of the brand?					
Do you prefer packed bottled water than tap/local water because tap water is supposed contain high concentration of salts and fluorides that is risky for health?					

Brand Name	SD=1	D=2	N=3	A=4
Do you think vita brand is special to you?				
Are you am very familiar with the brand of vita?				
Do you choose the vita product based on the brand's sustainable quality?				
Do say positive things about the vita brands to other people?				
Vita brand gives you sense of belongingness?				
Vita brand is the most reliable to you?				