



SCHOOL OF COMMERCE

DEPARTMENT OF MARKETING MANAGEMENT

MASTER'S PROGRAM- MARKETING MANAGEMENT

**THE EFFECT OF BRAND IMAGE ON CONSUMERS BUYING
DECISION: IN THE CASE OF ASTRAZENECA BIO
PHARMACEUTICAL COMPANY**

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**A THESIS SUBMITTED TO ADDISABABA UNIVERSITY SCHOOL OF
COMMERCE IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR
MASTERS OF ARTS DEGREE IN MARKET MANAGEMENT**

BY:

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STATEMENT OF CERTIFICATION

This is to certify that **Rahmet Ali** carried out this research on the topic entitled *The Effect of brand image on consumers buying decision; in the AstrazenecaBio pharmaceutical company* and this work is original in nature and is suitable for submission for the award of the Master of Arts Degree in Marketing Management.

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Approval

The undersigned certify that we have read and hereby recommended to the Addis Ababa University to accept the thesis submitted by Rahmet Ali entitled “**the effect of brand image on consumer buying decision;in the Asterazeneca Bio pharmaceutical company**”, in partial fulfillment of the requirements for the award of a Degree of Masters in Marketing Management.

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ABSTRACT

This study investigates the effect of brand image on consumer purchase decisions within the context of AstraZeneca's bio pharmaceutical products. Conducted in Addis Ababa, Ethiopia, the research focuses on medical professionals who purchase medicines from AstraZeneca. Utilizing a survey questionnaire, data was collected and analyzed using descriptive statistics, correlation, and regression analysis. The descriptive analysis revealed that, the mean score for consumer purchase intention was above 4.00 on the Likert scale, indicating high purchase intention for

AstraZeneca products. The correlation analysis showed that all independent variables positively correlated with the dependent variable. Regression analysis further confirmed the significant impact of brand image variables on consumer purchase decisions. Specifically, brand competence had a strong and positive effect (p-value = 0.001; $\beta = 0.715$), followed by brand association (p-value = 0.015; $\beta = 1.42$), and brand personality (p-value = 0.03; $\beta = 0.81$). Conversely, brand identity (p-value = 0.92; $\beta = 0.04$) and brand attitude (p-value = 0.351; $\beta = 0.047$) did not have a statistically significant impact on purchase decisions. The coefficient of determination (R-square) was 0.562, indicating that 56.2% of the variance in consumer purchase decision is explained by the brand image variables. The study concludes that AstraZeneca should prioritize enhancing brand competence, strengthening positive brand associations, and developing a distinctive brand personality to improve consumer trust and drive purchase decisions. Recommendations include investing in research and development, maintaining stringent quality control, engaging in effective communication and CSR initiatives, and collaborating with healthcare professionals. These strategies are essential for AstraZeneca to achieve better consumer engagement and loyalty in the competitive pharmaceutical market.

Key words: brand image, brand identity, brand personality, brand association, brand attitude, brand competence, consumer purchase intention.

Acknowledgement	ii
STATEMENT OF CERTIFICATION	iii
Declaration.....	Error! Bookmark not defined.
Signature page.....	Error! Bookmark not defined.
ABSTRACT	iv
Table of Contents.....	ix
Abbreviations and Acronyms -	xii
List of Tables	xiii
List of figures.....	xiv
CHAPTER ONE	1
1. Introduction.....	1
1.1. Background of the Study.....	1
1.2 Statement of the Problem	4
1.3. Basic Research Questions	6
1.3.1. Main Research Question	6
1.3.2. Sub-research questions.....	6
1.4. Objectives of the study	6
1.4.1. General Objective	6
1.4.2. Specific Objectives	6
1.5. Significance of the study	7
1.6. Scope of the study	7
1.7. Organization of the research.....	8
CHAPTER TWO 2. Review of Related Literatures	9
2.1. Introduction	9
2.2. Theoretical review framework	9
2.2.1. Brand.....	9
2.2.2. Brand image	9
2.2.3. Dimensions of brand image	11
2.2.4. Consumer Buying Behavior.....	13
2.2.5. Consumer Buying Decision Process.....	13
2.2.6. Indicators of purchasing decision/model stages of consumer purchasing decision.....	14
2.3. Empirical Review framework	15
2.3.1. The role of brand identity on consumer buying decision	15
2.3.2. The role of brand personality on consumer buying decision.....	16
2.3.3 The role of brand association on consumer buying decision.....	18
2.3.4 The role of brand attitude and behavior on consumer buying decision.....	18

2.3.5. The role of brand benefit and competence on consumer buying decision.....	19
2.4. Research gap.....	20
2.5. Conceptual framework	21
CHAPTER THREE	23
3. Methodology	23
3.1. Introduction	23
3.2. Description of the Study Area	23
3.3. Research approach.....	25
3.4. Research design.....	25
3.5. Population of the Study	26
3.5.1. Sampling technique.....	27
3.5.2. Sample Sizes	28
3.6. Data sources and Types	28
3.7. Sources of data and data collection tools	28
3.8. Data Analysis Techniques	29
3.9. Reliability and Validity	30
3.9.1 Reliability.....	30
Dimensions	31
Number of items	31
Cronbach Alpha	31
3.9.2 Validity	31
3.10. Ethical Issues.....	32
CHAPTER FOUR.....	33
4. Results and Discussion	33
4.1. Introduction	33
4.2. Response Rate	33
4.3. Demographic Characteristics of Respondents.....	33
4.4. Descriptive Analysis of variables.....	34
4.4.1. Brand personality	34
4.4.2. Brand association.....	35
4.4.3. Brand identity.....	37
4.4.4. Brand attitude.....	37
4.4.5. Brand competence.....	38
4.4.6. Consumer purchasing decision	38
4.5. Inferential Statistics Result.....	39
4.5.1. Correlation	39
4.5.2. Assumptions of regression analysis	40

4.5.3. Regression Analysis.....	42
4.5.4. Hypotheses Testing.....	44
4.6. Discussion of results.....	46
CHAPTER FIVE	48
5. SUMMARY, CONCLUSION AND RECOMMENDATION	48
5.1. Introduction.....	48
5.2. Summary of Findings.....	48
5.3. Conclusion.....	48
5.4. Recommendation.....	50
REFERENENCE	52
APPENDIX: QUESTIONNAIRE	55

Abbreviations and Acronyms -

USA- United States of America

GI- Gastrointestinal

DM- Diabetes mellitus

List of Tables

Table 1. Reliability test	31
Table 2. Age of respondents	33
Table 3. Gender.....	33
Table 4. Education level of respondents	34
Table 5. Brand Personality.....	35
Table 6. Brand Association.....	35
Table 7. Brand Identity	37
Table 8. Brand Attitude.....	37
Table 9. Brand Competency	38
Table 10. Consumer purchasing Decision	38
Table 11. Correlation	39
Table 12. Collinearity Statistics.....	41
Table 13. Model Summary,	42
Table 14. ANOVA	42
Table 15. Regression Coefficients	43

List of figures

Figure 1. Dimensions of Brand Image	11
Figure 2. Conceptual Framework	21
Figure 3. Normality.....	Error! Bookmark not defined.
Figure 4. Linearity	41

CHAPTER ONE

1. Introduction

1.1. Background of the Study

Brand these days have become a status symbol. Customers all over the world now prefer branded products. But why is the question. Is it the quality that attracts customers towards brand or some other related factor? This study is aimed at analyzing the effect of brand on consumer buying behavior. Along with finding the effect of brand on consumer buying behavior. The purpose of the study is to have depth knowledge of what actually is branding and consumer behavior. Marketers use brands as to get the competitive advantage on other competitors playing an imperative role in the success of companies.

Brand holds a great importance in consumer's life. Consumer's choose brands and trust them the way they trust their friends and family members to avoid uncertainty and quality related issues. The effect of brand image on consumer buying decision in the area of bio pharmaceutical market which is the main topic of this research will have a broad and deep understanding how a brand affect consumer's responses.

As the researcher tries to investigate the study which are found globally there are numerous definitions and ideas about brand image. Today, people are more conscious about the brand compared to the past. One of the factors that can influence the buying decision is brand image. In the perspective of brand communication, brand image is an important element in brand development process. It is related on how consumer communication interprets the brand messages and actualizes it in consumer's life. Thus, it becomes the part of how they construct their self-concept and also for the purchasing product purpose (Wijaya, 2013).

Brand image is the beliefs and perception of the consumers about a specific product (Lau & Phau, 2007). Brand Image develops over time and is based on customers' experience or interaction with the brand. Moreover, the formation of a consistent brand image is a duty for the business because it can make a better relationship towards the customers (Pahwa, 2020). Companies use strategies to build brand image because it becomes an objective and mental feedback of the customers when they are buying a product. Thus, positive brand image exceeds the customer expectations and enhances the brand value of an organization (Juneja, 2005).

The previous studies conducted by Oscar & Keni (2019) and Foster (2017) linked the influence of brand image to buying decision which both produce positive and significant influences. In line with those previous studies, the study conducted by Oladepo & Abimbola (2015) stated that brand image has a positive and significant effect on buying decision, it happens because the brand will simplify the decision making when consumers are faced with uncertain conditions so that products with the most powerful brand in the minds of consumers will be chosen.

We can also look a study which has done in Africa with the title of "the impacts of brand image and country image on South African consumer's purchase intention to mobile phones from Korea, Japan and China", As the researcher states Brand image refers to a set of beliefs about a particular brand, a bundle of associations organized in a meaningful way, or awareness of a brand reflected by consumer's brand associations (Keller, 1993). The brand image refers to the good and bad feelings of the product itself, such as the beliefs about the brand of a certain company, and the thinking or impression associated with the product. In order to establish a successful international marketing strategy to preoccupy African market, it is essential to understand how brand image and country image affect the purchase behavior of African consumers.

According to Vivek Ananthan (2010), marketers' main objectives are getting new consumers and retaining the existing ones to increase their market share and sales volume. The cost of getting new customers is five times greater than the cost of retaining the current customer (Reicheld & Sasser, 1990). To do so, marketers are spending huge amount of money, energy, and time for branding. In order to build strong brand and brand name.

In Addis Ababa, there are a lot of packed food products at a different brand name; these brands are whether they are local or international brands. These brands are primarily focused on providing tons of packed food products to the target consumers of the city. Bole sub-city is one of the main market centers to the packed food providers due to the modernity value, the population density as well as with the high number of consumers. In the study “The Impact of Branding on Consumers Buying Behaviour Of Packed Food Products” the researcher believe that doing an effective work in the minds of customers through branding and knowing the impact of the branding on the consumers buying behavior helps to the companies to build strong brands and get a competitive advantage on the market for both of new and existing companies too.

Other research which has made in Ethiopia with title of “Factors Affecting Consumers’ Purchase Decision of Over-The-Counter (OTC) Medicines: Empirical Evidences from Community Pharmacies in Ethiopia” investigate and put different factors that affect consumer purchase decision on the pharmaceutical sector, among the factors country of origin or brand is one of.

According to Saydan (2013), country-of-origin is one of the most important factors that significantly influence the purchasing decision of consumers. The country of origin “made in label” has been used as an important function in meeting with today’s competitive and global environment in order to increase product sales. Laroche et al., (2005) also revealed that a product’s country of origin influences consumers’ evaluation of it. In addition, Pappu et al. (2006) in their study suggested that country of origin of a product is an important marketing element known to influence consumer behavior. Finally, familiarity with the name or brand has also been reported in pharmacy is an important factor influencing purchases of medicines. This is because medicine’s country of origin, which was associated with the manufacturing company’s background, as well as by the manufacturing company have valuated higher than the product’s advertisement and packaging (Kevrekidis, et al., 2018).

Brand image has a significant impact on consumer purchasing decisions in the pharmaceutical industry (Anabila, 2014). This is further supported by the findings of Oladepo (2015), who found that brand image have significant impact on consumer buying decisions. However, the specific impact of brand image on purchasing decisions in the bio pharmaceutical sector will be explicitly addressed in these studies.as there are a lot of advantage of brand image on influencing consumers buying decisions, it helps to understand the factors that influence consumer buying behavior. The stronger the brand image in the customer's mind, the more confident the customer will be that they are or will be loyal to the product they purchase.

1.2 Statement of the Problem

Branding has emerged as a top management priority in the last decade, due to the growing realization that brands are one of the most valuable intangible assets that firms have. Driven in part by this intense industry interest, academic researchers have explored a number of different brand-related topics in recent years, generating scores of papers, articles, research reports, and books.

The study is necessary to know the consumer behavior during purchasing products specifically medicines. The study is needed to know the impact of brand image on the sales of pharmaceutical products and the preparations made by individuals and pharmaceutical company.

In the highly competitive pharmaceutical industry, brand image can differentiate one product from another. The main aim of this research to answer and asses what is the impact of brand image on consumers' buying decisions in the pharmaceutical industry specifically in the company which is called AstraZeneca pharmaceutical company. And how does it influence or affect consumer behavior of perceptions, preferences, and choices when selecting medications.

Though many companies are able to have better products and yet are sometimes unable to compete in the market due to poor branding activities. Thus strong brands have the potential to generate long term and loyal customers, which would eventually leads to an increase in sales in the future (Hess, Story and Danes, 2011)

As a result of the challenges in managing brands and its benefits. This research brought into focus a critical evaluation of branding and its role or impact in the purchase decision making process of consumers.

According to Kahle and Kim in the present day's growing competitive market place, consumers have to make their choice between a variety of product or brands in the market that differ very small in its price or function. They argue that in such situations, their final decision depends on the image they relate with dissimilar brands. Additionally the authors express that the brand image has increased reputation as the feeling and images associated with brand and a well-known and accepted brand image is one of the most important assets a firm possesses (Kahle and Kim, 2006)

The findings of the paper will help the industry for promoting their products for condition in which it needs to be taken. The results also help pharmaceutical industry to contribute to better health and improve the positioning from their competitors which are some problems on the pharmaceutical health sectors.

The aim and matter of the investigation is initiated by the present situation in the Ethiopian pharmaceutical market where there is a lack of information about how consumer react to brand image while making purchases, its believed that this investigation is essential to analyze the effect of branded medications on consumer buying behavior.

Other aim of the statement of the problem in the study is to fill the knowledge gap of what is the impact of brand image on consumers' buying decisions in the pharmaceutical industry, and how does it influence their perceptions, preferences and choices when selecting medications. And also to full fill the gap which exists in many companies, examining the extent to which brand image influences consumer behavior and the specific factors that contribute to this impact.

Despite AstraZeneca being a prominent bio pharmaceutical company, the study will create high understanding on the impact of brand image on consumers' buying decisions.

1.3. Basic Research Questions

1.3.1. Main Research Question

What is the effect of brand image on consumers buying decision of AstraZeneca Bio pharmaceutical?

1.3.2. Sub-research questions

This study addressed:

1. What is the effect of brand identity on consumer buying decision regarding AstraZeneca Bio pharmaceutical company?
2. What is the effect does personality affect on consumer buying behavior in regarding AstraZeneca bio pharmaceutical company?
3. What is the effect of brand association on consumer buying decision behavior regarding AstraZeneca bio pharmaceutical company?
4. What is the effect of brand attitude on consumer buying behavior regarding AstraZeneca Bio pharmaceutical company?
5. What is the effect of brand competence on consumer buying decision in the case of AstraZeneca Bio pharmaceutical company?

1.4. Objectives of the study

1.4.1. General Objective

The general objective of this study is to determine and assess the role of brand image dimensions in terms of consumer buying decision on AstraZeneca bio pharmaceutical company.

1.4.2. Specific Objectives

Specifically, this study:

- 1, to Identify the effect of brand identity on AstraZeneca pharmaceutical company consumer buying decision.
- 2, To examine the effect of brand personality on AstraZeneca pharmaceutical company consumer buying decision.
- 3, To Assess the effect of brand association on AstraZeneca pharmaceutical company consumer buying decision.

4, To evaluate the effect of brand attitude on AstraZeneca pharmaceutical company consumer buying decision.

5, To Identify the effect of brand competence on AstraZeneca pharmaceutical company consumer buying decision

1.5. Significance of the study

The study is planned to identify and discover how brand image affect consumer buying decision and how branded medication influence to be purchased. The power of brand lies on consumers mind for over many decades. Branding actually begins in the 1500s but major shifts took place in 19th and 20th century. Through decades of experimentation and technological advancement, brands have learned how to break through the clutter and capture the attention of their customers. The study in its attempt to understand the buying behavior of the pharmaceutical products has chosen AstraZeneca pharmaceutical company from Addis Ababa town. The significance of this study is to magnify brand and make a clear identification how brand image affect consumers purchase decision which was the topic for several years and decades as mentioned above. Despite with that the study will analyze the current brand image position and its effects on the consumer purchase decision. The study also helps to assess the effect of brand knowledge on consumer buying decision. This result of the research is believed to be important towards for those academicians by giving deep understanding and gives continuity knowledge about how brand image affect consumer purchasing decision on the health sector and medication so that researchers and students could be beneficial. AstraZeneca pharmaceutical company will analyze that a strong brand image can help build a positive reputation for a pharmaceutical company, and work on brand image dimensions plays significant role on consumer buying decision. Predominantly the research will identify and explain all the area of brand image and consumer behavior relation in the broad health sector of pharmaceutical company and gives detail explanation how brand image affect consumer buying decision. The purpose of this study is also to examine the awareness of patients about brand in pharmaceutical industry. The findings of the paper will help the industry for promoting the medicine for condition in which it needs to be taken. The result will also help pharmaceutical industry to contribute to better health and improve the positioning

1.6. Scope of the study

This study focused on the effect of consumer buying decision on AstraZeneca pharmaceutical company in Addis Ababa. This study would describe the effect of brand image variables that

influence the buying decision on pharmaceutical sector. the study would help in giving further understanding, how these variables affect the decision making of the consumers.

The methodology of this study used explanatory and descriptive research approach. this design was selected since it can have benefit in giving good quantity of responses from extensive variety of people in giving a significant and correct picture of events and seek to give an explanation for peoples notion and behavior on the basis of the data collected.

The research focused on the effect of brand image in consumer buying decision. Thus, the independent variables are (1) brand identity; (2) brand personality; (3) brand association; (4) brand competence; and, (5) brand attitude. And the indecent variable is consumer buying behavior or buying intention. Geographically, this study was targeted on the AstraZeneca Bio pharmaceutical company within the selected Agent of the company located in Saris, Addis Ababa Ethiopia. The study was conducted in the year of 2024.

1.7. Organization of the research

The study is organized into five chapters.

Chapter one includes an introduction, statement of the problem, basic research questions, objective of the study, definition of terms, significant of the study and scope of the study.

Chapter two includes literature review related to brand image and the effect of brand image on consumer buying decision and related topics with AstraZeneca pharmaceutical company. In this chapter both theoretical and empirical evidences related to the topic under study will be discussed.

Chapter three deals about the methodology that deals with research design and approach, data source, sampling techniques, source of data collection and research approach and ethical issues.

Chapter four includes data analysis and interpretation. These chapters summarize and prepare the results or findings of the study, and discuss the results in accordance with the review related literature.

The last part of the study is chapter five which includes summary, conclusions and recommendations.

CHAPTER TWO

2. Review of Related Literatures

2.1. Introduction

Under chapter two the related literatures reviewed. Thus, under 2.2, the issues articulated are definition of concept which are the constructs incorporated in the current study like organizational culture, customer satisfaction and customer loyalty. Theoretical literatures which strengthen the constructs also revised under 2.3. The review of previous empirical studies at global, regional and national level incorporated under 2.4. Finally, 2.5 constituted the conceptual framework of the current study.

2.2. Theoretical review framework

2.2.1. Brand

Brand is one of important factor in marketing activities, because introducing activities and offering products or services cannot be separated from dependable brand. Besides, the brand is also an important attribute of a product and a brand identity to differentiate the company's products with other products that produced by competitors. By giving the brand on a product, it makes the product easier to be recognized by consumers. Managing the brand means creating an association to the brand so that a product or brand can be embedded in the customer mind as a result of the communication that has been done. Plugging a product or brand into customer mind is an attempting in other to make the product or brand has a strategic position in the market so it can compete stronger in the increasingly tight competition area. In order to provide a clear description of the meaning of the brand, the following are some understanding of the brand, according to experts.

Brand according to America Marketing Association (Kotler, 2009:258):

“A brand is a term, design, name, symbol or any other features that distinguish one company's product to the others.” Broadly speaking, the Brand is a name, term, symbol, design or a combination of those things are intended to identify the goods or services by an individual or a group and as well as to differentiate their products with other competitors' products.”

2.2.2. Brand image

It is explained by Business Dictionary in Neupane (2015:10): “Brand image is a unique set of associations in the mind of customers regarding what a brand stand for and the implied promises

the brand makes.” This means that the brand image is a unique set of associations in the minds of customers about what brands stand for.

Brand image is defined as an impression or perspective the customers form about a specific brand in their mind and thought. Branding begins in the 1500s, but major shifts took place in the 19th and 20th centuries. Through decades of experimentation and technological advancements, brands have learned how to break through the attention of their customers. Europe and USA transformed during the 18th and 29th centuries with new manufacturing processes.

Further about the Brand image is defined by Kotler and Keller in Heriati & Septi (2012: 174) “*The Perceptions and belief held by customers, as reflected in the associations held in consumer memory*”. This indicates that perceptions and beliefs held by the customer as the association is reflected in the memory of consumers. Consumer perception of a brand also means that consumers will assess whether a brand is considered more superior or inferior compared to other brands such as the functional aspects, durability or it might also emotionally. With a positive image of a brand, the purchase will be more likely to be carried by consumers Setiadi (2003: 180).

Consumers could also often to buy products with famous brand because they feel more comfortable (emotional) with things that are already known. Stated in Widiyaningsih Aaker (2013).brand image is the way consumers think of brand, and is defined as a perception of customers about the brand. From those definitions, it can be interpreted that brand image as a description obtained by the consumer and formed by the consumer on a certain brand (Foster, 2016).

A perception of the consumer about the brand means that consumer will assess whether the brand is considered as more inferior or superior compared to other brands (Lau & Phau, 2007.brand image has an important position to influence the consumer’s buying decision because one of the decisions in the structure of buying is the decision according to the choice of brand. Brand image has the ability to enhance the consumer buying decision (Silva & Alwi, 2008).

Moreover, when purchasing a product, consumers do not just buy a product as a commodity but also the symbolic value contained in the brand. It is easier for consumers to identify the brand embedded in their minds (Foster, 2016).Brand image facilitates consumers in differentiating the quality of the product with the competitors’ products and enhancing the consumer’s perception of

the quality of the product, which means the perception that has been formed by the brand has the ability to influence the consumer's buying decision (Foster, 2016). A brand is the single most important investment a marketer can make in their business because a brand image is what people say about the company when the company is not in the room.

2.2.3. Dimensions of brand image

Summarizing the results of various studies on literatures and relevant previous research, then it can be concluded that the main dimensions that influence and shape the image of a brand, forth in the following diagram.

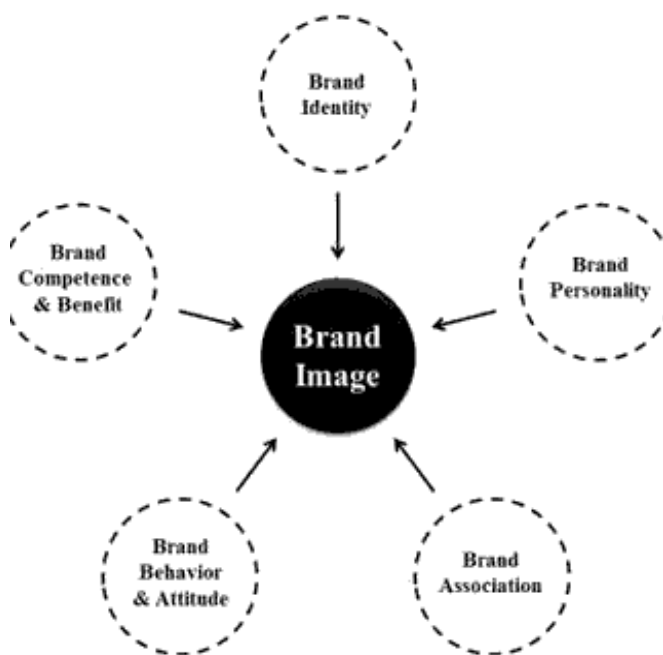


Figure 1. Dimensions of Brand Image

(Source: Author's concept developed and elaborated from Aaker, 1991; Aaker, 1997; Arnould, et al., 2005; Davis, 2000; Drezner, 2002; Hogan, 2005; Keller, 1993; Mowen & Minor, 2001; Plummer, 1995; Upshaw, 1995; Brexendorf & Kernstock, 2007; Wijaya, 2012)

2.2.3.1. Brand Identity

The first dimension is brand identity. Brand identity refers to physical or tangible identities related to the brand or product that makes consumers easily identify and differentiate with other brands or products, such as logo, colors, packaging, location, corporate identities, slogan, and others.

2.2.3.2. Brand Personality

The second dimension is brand personality. Brand personality is the distinctive character of a brand that makes up certain personalities as human being, so that consumer audiences can easily distinguish with other brands in the same category, such as assertive character, stiff, dignified, noble, friendly, warm, compassionate, sociable, dynamic, creative, independent, and so on. As explained earlier, Aaker (1997) mentioned several dimensions of brand personality as competence, sincerity, excitement, sophistication, and ruggedness, while Plummer (1985) illustrated the brand personality with tones of character such as 'youthful', 'colorful' and 'gentle'.

2.2.3.3. Brand Association

The third dimension is brand associations. Brand association is specific things that deserve or always associated with a brand, can arise from a unique offering of a product, recurring and consistent activities for example in terms of sponsorship or social responsibility activities, issues that are very strong related to a brand, or person, the certain symbols and meanings that are very strong attached to a brand, such as Benetton = colorful people, Coca Cola = Cheerfulness, art+technology = Apple, Family's fast food restaurant = McD, Nike = Tiger Woods, Obama = First Black US President etc..

2.2.3.4. Brand Attitude and Behavior

The fourth dimension is brand attitude. Brand attitude or brand behavior is the attitude or behavior of a brand when communicating and interacting with consumers in order to offer benefits and values that it has. In other words, brand attitude and behavior is attitudes, manners and behaviors that brand and all its attributes indicates when communicating and interacting with consumers which in turn influences consumers' perceptions and judgments toward the brand (Wijaya, 2012). Often a brand in ways that are not appropriate and violating ethics in communication, or delivering the poor service so that affects public perceptions of the attitudes and behavior of the brand, or conversely, attitudes and behaviors sympathetic, honest, consistent between promise and reality, good service, and concern for the environment and the wider community will potentially be shaping good perceptions of the attitudes and behavior of the brand. So brand attitude and behavior includes communication attitudes and behaviors, activities and attributes attached to the brand when dealing with consumer audiences (Keller, 1993), as well as employee and/ or brand owners' behaviors (Brexendorf & Kernstock, 2007).

2.2.3.5. Brand Benefit and Competence

The fifth dimension is brand benefit and competence. Brand benefit and competence are the values, advantages and distinctive competencies offered by a brand in solving consumer problems, which enable consumers to get benefit because their needs, desires, dreams and obsessions manifested by what it has to offer. Values and benefits here can be functional (Keller, 1993), emotional, symbolic or social (Wijaya, 2012), such as product brand of a clothes detergent with benefits are being able to clean clothes to be cleaner (functional benefit/ value), make the wearer is more confident and feel comfortable (emotional benefit/ value), be a symbol of a clean lifestyle of modern society (symbolic benefit/ value), and inspire greater community to care about a healthy lifestyle and environmental preservation (social benefit/ value). Benefits, advantages and distinctive competencies of a brand will affect the brand image of the product, individual or institution and company.

2.2.4. Consumer Buying Behavior

Consumer buying decision is an action towards a variety of alternative actions that are owned, it is a process that starts from problem recognition that can be solved through the product purchase (Brata et al., 2017). When consumer buys a product, they are faced with choices of some existing products before deciding to make a purchase. Purchasing decision is the selection of more than one option to carry out. Consumers make buying decisions based on specific impulses and various motives. The stronger the motives and the consumer's impulse, then the stronger the buying decision of a particular product purchases (Hsin Chang & Wang, 2011). Companies have to be able to capture consumer's impulse and motive to make a purchase (Diallo et al.2013). Companies are required to make a product that can meet the consumer's expectation and motives to buy a product. Moreover, buying decision is the process of integration that combines the knowledge of evaluating behaviour of alternatives and choosing the one of those alternatives. There are five steps of buying decision process, which consist of problem introduction, needs, information search, evaluation of alternatives, buying decision, and after purchase behaviour (Kotler & Keller, 2013)

2.2.5. Consumer Buying Decision Process

According to Kotler (2003) in the buying decision process of people play different roles in decision-making process. He claims that it can be divided into five functions which are initiator, influencer, decider, buyer and user as follows.

Initiator: The person who first suggests the idea of buying the product or service; information may be gathered by this person to help the decision.

Influencer: The person who attempts to persuade others in the group concerning the outcome of the decision and typically gather information and attempt to impose their choice criteria on the decision.

Decider: The individual with the power and/or financial authority to make the ultimate choice regarding whether to buy, what to buy, how to buy, or where to buy.

Buyer: The person who conducts the transaction and makes the actual purchase.

User: The person who consumes or uses the product or service

Moreover through marketing textbooks and consumer researchers sometimes employ slightly different terms some of the stages, as a result the study of consumer behaviour focuses mainly on these seven stages and how a range of factors influence each stage of consumers' decision. Need recognition, problem awareness, Search for information, Pre-purchase evaluation of alternatives Purchase Consumption and Post-Consumption Evaluation Divestment.

2.2.6. Indicators of purchasing decision/model stages of consumer purchasing decision

Explained by Wibowo & Karimah (2012: 6) there are five model stages of consumer purchasing decision process: Introduction of problems, information search, alternatives evaluation, purchase decision and post-purchasing behavior. In this study the authors use Indicator of Purchasing Decision. Kotler and Armstrong in Wibowo & Karimah (2012: 6) as a reference for this research reference. As the explanation, here are some explanations are described as follows.

According to Kotler and Armstrong: five model stages of consumer purchasing decision process are:

1. Problem Introduction- Problem introduction is a situation where there is a difference between the desired situation to the actual circumstances occurred, Sumarwan (2004; 234). According to Fadli and Inneke (2008) this indicator can be measured by: Fulfilling needs, commodity products, and product quality.

2, Search Information- According to Sumarwan (2004; 294), information search started when a consumer think that the decision could be met by purchasing and consuming a product. According

to Fadli and Inneke (2008), this indicator can be measured through: Barriers to information, observation products and media promotion of the product.

3, Alternatives Evaluation- Alternatives Evaluation is the process of evaluating the chosen alternative product or brand and select them according to the customer wants. Sumarwan (2004; 294). According to Fadli and Inneke (2008) this indicator can be measured through: product prestige value, the purchase price in general and quality standards.

4, Purchasing Decision- The strong self-confidence in consumers or customer which is the trust where by the decisions towards taken purchasing is correct (Astuti and Cahyadi 2007 in Amira Tria Hanin, 2011). According to Fadli and Inneke (2008) this indicator can be measured through: The influence of others, desire and ability of consumers and intensity of consumer purchasing. Consumers.

Post-Purchasing Behavior will evaluate the product that had been bought, whether it is satisfactory or not, if it is satisfactory and in accordance with consumers' expectations then there is a possibility they will come back to buy the product. According to Fadli and Inneke (2008), the indicator can be measured through: An assessment of the quality, recommendation to others as well as an assessment of the product

2.3. Empirical Review framework

Different studies attributing the strong relationship between brand images and buying decision has been conducted by researchers involving various aspects. For example the research conducted by Watson et al (2015) investigated the influence of brand image on buying decision of branded apparel products in Germany. The result found that brand image is able to influence buying decision in a positive direction.

The rapid development of the business world, followed by high levels of competition between companies requires management companies, especially large trading company to be able to produce products which have a good brand image in other to survive and to continue to develop their business. In modern marketing system, a product is not only important to be given a brand but also be able to give a good impression on consumers mind so that consumers ultimately decide to make a purchasing.

2.3.1. The role of brand identity on consumer buying decision

Kuenzel et al., (2010) mentioned that the concept of brand identification is built on social identity theory, which has been employed widely in other disciplines. Identification based on social identity theory is in essence a perception of oneness with a group of persons. Brands possess deep meaning (Albert et al., 2013) and serve to build consumers' self-concept or identities.

Brewer (1991) informed that brand identification has been emphasized that identification fulfils the need for social identity and self - identification. Using the identification concept in a brand-customer context can be justified in terms of the social identity theory itself, where identification with an organization can also happen without a need to interact or have formal ties with an organization. Consumers with stronger brand identification are more prone to engage in pro-brand activities, such as supporting the company goals, protecting its reputation, supporting its products and brand loyalty (Bhattacharya & Sen, 2003).

Brand identification is defined as „the extent to which the consumer sees his or her own self-image as overlapping the brand's image (e.g. Sternberg et al., 1987; Bagozzi et al., 2006). Brand identification is also known as self-image congruence Sirgy M. J. et al., (1997) and self-connection. Although a number of previous studies (e.g. Algesheimer et al., 2005; Brown et al., 2005) have investigated the role of brand identification, none has investigated the relationship between brand identification and brand love. Bergkvist et al., (2009) informed that brand identification influences consumer's brand love, and they considered that brand identification as antecedents of brand love. Bergkvist et al., (2009) cited from (Ahuvia et al., 2006) that loved objects are central to people's identity. The informants in his study use objects they love to boost their identity and reconcile conflicting identities. Although Ahuvia does not explicitly discuss causality or causal order, his study suggests that a consumer is more likely to love a brand, the stronger, he or she identifies with. For example, Ahuvia reports how one of his informants requires a „deep connection with what she sees as her desired identity as a culturally sophisticated

2.3.2. The role of brand personality on consumer buying decision

Brand personality. In contrast to “product-related features,” which tend to serve a utilitarian function for consumers, brand personality tends to serve a symbolic function (Keller, 1993). Brand personality is a kind of brand association that explains the symbolic consumption and the emotional connections that consumers establish with a brand (Aaker et al., 2004; Aaker and Fournier, 1995; Aaker, 1997, 1999). According to Caprara et al. (2001), personality is a viable metaphor whose latent idea lies in the fact that a consumer creates affinities toward 31 Brand

personality brands based on his or her personality (Louis and Lombart, 2010). According to Aaker (1997), brand personality is defined as the set of human characteristics related to a brand, based on an approach that results from the anthropomorphizing of the brand. This identification between individual and brand traits may contribute toward the development and reinforcement of the relationships between customers and brands (Sundar and Noseworthy, 2016). Some researchers have shown the importance of brand personality and how this concept allows a consumer, through the use of and identification with a brand, to express his or her own self (Belk, 1988) or an ideal self (Malhotra, 1988). Viewed from this perspective, according to Kim et al. (2001), self-expression is related to its self-expressive value, in the sense that it helps consumers to express and enhance their self-concept and reflect their personality. The same authors found that, the higher the self-expressive value and the distinctiveness of the brand personality, the more attractive the brand personality will be. In the present research, brand personality is explored considering its five dimensions: peacefulness, passion, sincerity, sophistication and excitement. It should be noted that these brand personality dimensions reflect the Spanish scale, developed by Aaker et al. (2001). It is therefore an adaptation of the original scale developed by Aaker with American consumers (1997), since commercial brands may carry both culturally common and culturally specific meanings, which is precisely why the Spanish scale was adopted for this research, as it is culturally closer to the population being studied. Several different consequences of brand personality have been identified, such as brand quality, attitudes toward the brand, intentions of future behavior, trust, attachment, commitment, persuasion and affect (Su and Tong, 2015). However, even if these impacts are empirically tested, their means of transfer are not absolutely clear. Most research attempts to identify the impacts of each of these dimensions, but sometimes only a few of the are analyzed (Molinillo et al., 2017; Roy et al., 2016; Matzler et al., 2016). Because of their importance and the potential factorial structure of the data collected, sincerity and excitement are the most cited dimensions and the ones that are easiest for customers to perceive (Roy et al., 2013). Accordingly, Malär et al. (2012) suggest using the singularity of a brand's personality, instead of considering all its dimensions. In fact, when attempting to develop a brand personality, companies focus their marketing efforts on a combination of dimensions that converge on "single-mindedness" (Malär et al., 2012), a singular idea that is formed in a customer's or prospective customer's mind. Consequently, more than their individual impacts, what matters is how these dimensions combine to produce a single idea in the consumer's mind. Finally, Aguilar et al. (2016) suggest that the use of a reflexive second-order model for brand personality provides a better fit and an easier explanation of the effects of brand personality on its outcomes. In fact, in

using a secondorder model, the perceptions related to all dimensions are retained and contribute to the overall explanation, contrary to modeling based on a first-order approach. In this way, it is possible to identify an overall impact as well as the weights of the brand personality dimensions (Aguilar et al., 2016)

2.3.3 The role of brand association on consumer buying decision

Definition of brand associations Although there has not always been agreement on how to measure brand image (Dobni and Zinkhan, 1990), one generally accepted view is that, consistent with an associative network memory model, brand image can be defined as perceptions about a brand as reflected by the cluster of associations that consumers connect to the brand name in memory. Thus, brand associations are the other informational nodes linked to the brand node in memory and contain the meaning of the brand for consumers. One way to distinguish between brand associations is by their level of abstraction, that is, by how much information is summarized or subsumed in the association. In line with this criterion, Keller (1993, 1998) classifies brand associations into three major categories: attributes, benefits and attitudes. Attributes are those descriptive features that characterize a brand, such as what a consumer thinks the brand is or has and what is involved with its purchase or consumption. Benefits are the personal value consumers attach to the brand attributes, that is, what consumers think the brand can do for them. Brand attitudes are consumers' overall evaluations of a brand. The associations related to the functions represent a greater degree of abstraction than those referring to the attributes, and so are more accessible and remain longer in the consumer's memory (Chattopadhyay and Alba, 1988). A further specific feature of the functions is that they have a positive nature, that is, the brand value is greater, the higher the level. For these reasons, and given the interest of working with a multidimensional measure of brand associations, we will examine the associations concerning the functions.

2.3.4 The role of brand attitude and behavior on consumer buying decision

Wang (2013) contributed to the research about consumer BA, and concluded that visual packaging affects a consumer's food product quality perception and their brand preference.

This was consistent with O'Callaghan and Kerry (2016) who determined that as familiarity with a product increased, the consumer's attitude and acceptance of technologically related changes to the packaging increased.

Grinsven and Das (2016) also studied the importance of brand logos, and suggested that brand logos that are simple offer benefits that are short-term, while complex logos give longer term benefits.

According to Venter de Villiers et al. (2018), with female South African consumers, BA is often times used as a measure in determining a potential buyer's behavior.

Yoon and Park (2012) have also added that BA is the perception of direction and strength of a consumer in relation to a brand. A consumer's BA also plays a significant role in the selection process as their association with a particular brand is an essential aspect in the success of a brand, since brands convey the consumer's attitude developed toward a brand (Ansary and Hashim, 2018).

This is also consistent with research on Italian organic food consumers, in which Nosi et al. (2020) indicated the importance of a vendor's CSR image and the perceived value of their ecological welfare in a consumer's attitude.

2.3.5. The role of brand benefit and competence on consumer buying decision

Brand competence can be defined as consumers' considerations that a brand has the ability and skills to meet consumers' intentions, and it emphasizes on a brand's competitiveness, intelligence, and skills (Judd et al., 2005; Cuddy et al., 2007). It is noted that consumers' perceptions of a brand's warmth and competence influence their purchase intentions and brand loyalty (Kervyn et al., 2012), admiration (Aaker et al., 2012), attitude (Ivens et al., 2015), and trust (Kim et al., 2018). Purchase intention is a core construct of consumer behavior and is defined as subjective likelihood that consumers will buy a specific product (Dodds, 1991).

Consumers believe that a brand's products will be desirable if the brand is perceived as a highly competent brand which may improve consumers' purchase intentions for products (Aaker et al., 2012). However, in case of product failure, perceived warmth has greater predictive power for purchase intention than does perceived competence (Zawisza and Cinnirella, 2010; Xu et al., 2013). Recent research shows that perceived warmth and perceived competence are both important drivers of purchase intention (Kolbl et al., 2019; Crisafulli et al., 2020).

Technology anxiety, people-focused advertising versus self-focused advertising appeal types, and product involvement moderate the influence of warmth and competence on the purchase intention of consumers (Zawisza and Pittard, 2015). Consumers consider various channels to obtain brand information, purchase brand-related products, use various services provided by brands, and

participate in brand-related activities in tandem with gradually forming a brand impression as their understanding of the brand deepens (Schnurr, 2017). Scholars note that significant differences exist in the information-processing methods between male and female consumers (Darley and Smith, 1995). According to the empathizing–systemizing theory, men’s psychology and behaviors are more influenced by cognition, while women are more affected by emotion. Accordingly, gender may have moderating effects on the influence exerted by brand perception on purchase intention because of these differences. This study focused on answering three research questions by conducting two experiments and a path analysis: (1) Can both perceived warmth and competence always stimulate purchase intention of consumers? (2) What mediating mechanism is underlying competence and warmth’s effect on this purchase intention? And (3) do perceived competence and warmth’s effects on purchase intention vary between genders?

2.4. Research gap

Based on the review of studies related to the effect of brand image on consumer buying behavior in the pharmaceutical industry, there are several gaps and opportunities for further research:

Integration of Brand Identification and Brand Love: While studies (Bergkvist et al., 2009; Ahuvia et al., 2006) suggest a link between brand identification and brand love, the specific causal relationships and underlying mechanisms remain underexplored. Further research could investigate how different dimensions of brand identification (e.g., self-concept overlap with brand image) influence the development and intensity of brand love among consumers.

Temporal Dynamics of Brand Personality: Research on brand personality (Aaker, 1997) typically focuses on static associations like sincerity, excitement, etc. There is a need to explore how brand personality evolves over time and interacts with changing consumer perceptions and market contexts. Longitudinal studies could provide insights into how brands maintain or adapt their personalities in response to market dynamics.

Measurement and Impact of Brand Associations: While Keller (1993, 1998) categorizes brand associations into attributes, benefits, and attitudes, there is variability in how these associations are measured and their relative impact on consumer behavior. Future studies could develop more refined methods for measuring brand associations and explore their differential effects across diverse consumer segments and product categories.

Gender Differences in Brand Perception: The influence of brand perception on purchase intention may vary between genders (Zawisza and Pittard, 2015). However, existing research often overlooks nuanced gender differences in brand-related behaviors and decision-making processes. Further investigation could uncover how gender-specific cognitive and emotional processes influence responses to brand cues and marketing stimuli.

Brand Competence and Warmth in Crisis Situations: Recent studies (Zawisza and Cinnirella, 2010; Xu et al., 2013) highlight the differential impact of perceived warmth and competence on purchase intentions, especially in cases of product failure or crisis. Exploring how brands manage perceptions of competence and warmth during crises, and their subsequent effects on consumer trust and loyalty, represents a promising area for future research.

Addressing these research gaps could provide deeper insights into the complex dynamics of brand-consumer relationships in the pharmaceutical industry and contribute to more effective brand management strategies.

2.5. Conceptual framework

Independent variables

Dependent variable

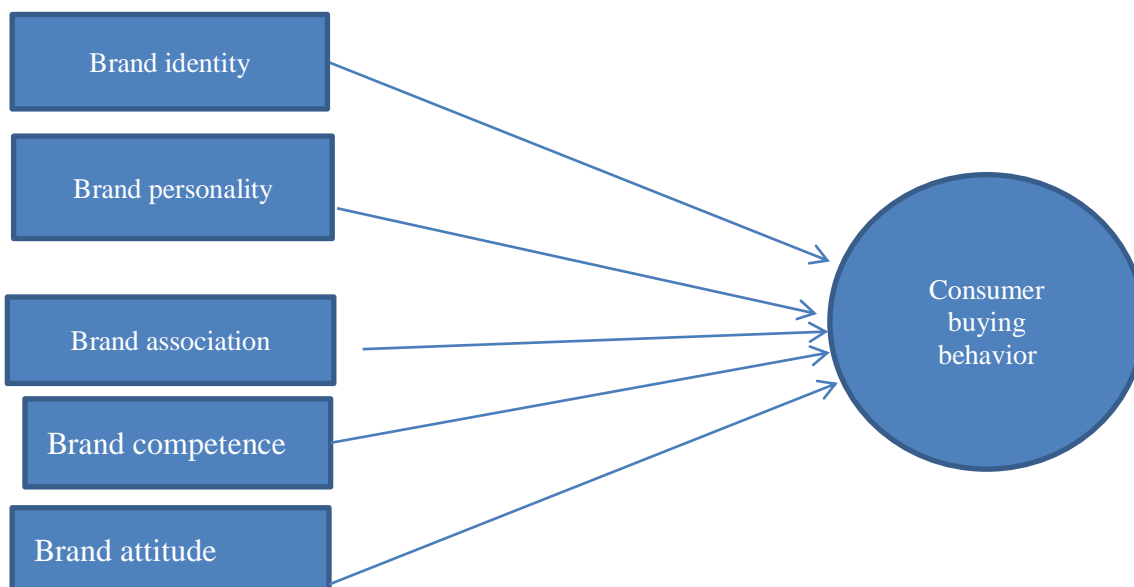


Figure 2. Conceptual Framework

(Source: Dimensions of Brand Image (source: author’s concept developed and elaborated from Aaker, 1991; Aaker, 1997; Arnould, et al., 2005; Davis, 2000; Drezner, 2002; Hogan, 2005; Keller,

1993; Mowen & Minor, 2001; Plummer, 1995; Upshaw, 1995; Brexendorf & Kernstock, 2007; Wijaya, 2012)

From this the following hypothesis were developed:

Hypotheses

H1: Brand identity has a positive and significant effect on consumers buying decision on AstraZeneca Bio pharmaceutical.

H2; Brand personality has a positive and significant effect on consumers buying decision on AstraZeneca Bio pharmaceutical.

H3; Brand association has a positive and significant effect on consumers buying decision on AstraZeneca Bio pharmaceutical.

H4; Brand attitude has a positive and significant effect on consumers buying decision on AstraZeneca Bio pharmaceutical.

H5; Brand competence and benefit has a positive and significant effect on consumers buying decision on AstraZeneca Bio pharmaceutical.

CHAPTER THREE

3. Methodology

3.1. Introduction

This chapter clarifies the research approach, research design, research methods, sampling techniques and the instruments to be employed in the data gathering, collection procedures, and analysis methods. It will explain how brand image affects consumer purchasing decisions with the evidence of data collection.

3.2 Description of the Study Area

Conducting a study on AstraZeneca bio pharmaceutical company in Addis Ababa, Ethiopia offers several practical advantages and strategic opportunities for research. Firstly, Addis Ababa serves as a pivotal location due to the presence of AstraZeneca's agent or office within the city. This proximity facilitates direct access to company representatives and operational insights that are crucial for comprehensively understanding the dynamics of AstraZeneca's market presence in Ethiopia. Researchers can engage closely with local stakeholders, gaining valuable perspectives and data that may not be accessible from remote locations.

Secondly, Addis Ababa's status as the capital city and economic center of Ethiopia ensures access to a diverse population base. This diversity includes healthcare professionals, patients, and consumers of pharmaceutical products, offering a broad spectrum of insights into how brand image and consumer perceptions shape purchasing decisions across various demographic and socio-economic segments. Studying in Addis Ababa allows researchers to capture nuanced cultural factors and market behaviors that influence pharmaceutical consumption in Ethiopia.

Moreover, Addis Ababa provides robust research infrastructure supported by academic institutions, research centers, and healthcare facilities. These resources not only facilitate data collection and analysis but also offer opportunities for collaboration and validation of findings within the local scientific and academic community. Access to comprehensive research resources enhances the depth and reliability of the study outcomes, ensuring that findings are grounded in both empirical evidence and local context.

Logistically, conducting research in Addis Ababa streamlines operational aspects such as participant recruitment, data collection, and coordination with stakeholders. The city's centralized location and well-developed transportation network reduce logistical barriers, optimizing the efficiency and timeline of the research project. This logistical convenience is particularly advantageous when navigating the complexities of research involving multinational companies and diverse consumer demographics.

Ethically, conducting research in Addis Ababa ensures adherence to local regulations and ethical standards governing research involving human subjects and commercial entities. Researchers can establish clear protocols for participant consent, data confidentiality, and ethical approval in collaboration with local regulatory bodies and institutional review boards. This ensures that the research is conducted responsibly and ethically, respecting the rights and privacy of participants while maintaining integrity in data collection and analysis.

In conclusion, choosing Addis Ababa as the research location for studying AstraZeneca's bio pharmaceutical products aligns strategic advantages with practical considerations. It leverages proximity to company operations, access to diverse populations, robust research infrastructure, logistical convenience, and ethical compliance, making it an ideal setting to investigate the impact of brand image on consumer behavior in the pharmaceutical industry context of Ethiopia.

3.2. Research approach

The study conducted in AstraZeneca pharmaceutical company to answer the research questions, quantitative approach is adopted. Quantitative research aims to test the research method model, the significance of relationships among the variables and factors, and the hypotheses (Saunders and Lewis 2012). Quantitative method was used, which involved administering a questionnaire to selected respondents among customers.

3.3. Research design

The researcher adopted a mix of descriptive and explanatory research design. The explanatory research design, as it tries to investigate the effect of brand image on consumer buying decision. Additionally, as this research design is a way to connect the idea of cause and effect. It helps to provide a deep intuition into the topic which is 'the effect of brand image on consumer buying decision'. In addition, descriptive is also employed to describe the current status.

3.4. Population of the Study

The target population for this study encompasses medical professionals who procure medicines from AstraZeneca bio pharmaceutical company. This includes a broad spectrum of healthcare providers such as doctors, pharmacists, nurses, and healthcare administrators who make purchasing decisions on behalf of their healthcare facilities or patients. These professionals play a crucial role in the pharmaceutical supply chain by selecting and prescribing medications based on their efficacy, safety, and therapeutic benefits.

Medical professionals involved in purchasing medicines from AstraZeneca are tasked with ensuring the availability of essential pharmaceuticals that meet the specific needs of their patients and healthcare institutions. Their purchasing decisions are guided by a variety of factors including clinical efficacy, patient safety, regulatory compliance, cost-effectiveness, and the reputation of the pharmaceutical brand. Given the critical nature of their responsibilities, these professionals must stay informed about the latest advancements, therapeutic options, and market dynamics in the pharmaceutical industry.

It is important to note that the exact number and identity of customers who purchase medicines from AstraZeneca are not precisely known and can be considered infinite in scope. This is due to the diverse range of healthcare facilities, medical practices, and patient populations served by AstraZeneca's products across Addis Ababa and Ethiopia more broadly. The customer base includes public and private hospitals, clinics, pharmacies, and other healthcare settings where AstraZeneca's pharmaceuticals are prescribed and dispensed.

Studying this target population provides insights into the factors influencing purchasing decisions within the healthcare sector, including the impact of brand image, product quality, service reliability, and customer support. Understanding the perspectives and preferences of medical professionals who procure medicines from AstraZeneca is essential for assessing brand loyalty, market penetration, and competitive positioning in the Ethiopian pharmaceutical market.

By focusing on medical professionals as key stakeholders in the pharmaceutical supply chain, researchers can explore how perceptions of AstraZeneca's brand image influence their purchasing behaviors and decision-making processes. This study aims to uncover valuable insights that can inform strategic marketing initiatives, improve customer engagement strategies, and enhance the overall competitiveness of AstraZeneca's bio pharmaceutical products in Ethiopia.

3.5.1. Sampling technique

To address the research questions effectively, a convenient sampling method was employed to select respondents, utilizing the Cochran formula to determine the sample size. Convenient sampling is a non-probability sampling technique where participants are selected based on their easy availability and accessibility to the researcher, rather than through random selection from a specific population. This approach was chosen due to practical considerations such as time constraints, budget limitations, and the need for quick access to relevant respondents who meet the criteria for inclusion in the study.

The Cochran formula is a widely recognized method for determining sample size in survey-based research, ensuring that the sample is representative enough to draw valid conclusions without requiring a complete enumeration of the entire population. It takes into account the desired level of confidence, margin of error, and the estimated proportion of the population that possesses the characteristic of interest. By using this formula, researchers can calculate the minimum sample size needed to achieve a reliable estimate of the population parameters.

In the context of this study focusing on AstraZeneca's bio pharmaceutical products in Addis Ababa, Ethiopia, convenient sampling allowed researchers to efficiently gather data from medical professionals and other stakeholders involved in the procurement and use of these medicines. This method facilitated access to a diverse range of respondents across different healthcare settings, including hospitals, clinics, and pharmacies, who play pivotal roles in the supply chain and decision-making processes related to pharmaceutical purchases.

By applying the Cochran formula, researchers were able to determine an appropriate sample size that balances the need for statistical reliability with practical considerations. This involved specifying a confidence level (typically 95% or higher) to indicate the certainty of results falling within a certain range of the true population parameter, and a margin of error (typically expressed as a percentage) to define the acceptable degree of deviation from the sample estimate.

Through this sampling approach, the study aimed to capture insights into how brand image, product quality, and other factors influence purchasing decisions among medical professionals in Addis Ababa specifically related to AstraZeneca's bio pharmaceutical offerings. The findings derived from this methodological approach contribute to a deeper understanding of market dynamics, customer preferences, and strategic opportunities for enhancing market presence and customer satisfaction in the Ethiopian pharmaceutical sector.

3.5.2. Sample Sizes

Based on the information provided and the Cochran formula for sample size calculation, here is a breakdown of the calculation and its implications. In the study Cochran's (1963) formula was applied to determine the appropriate sample size for a large or infinite population. The formula was:

Where:

n = is the initial sample size.

Z = is the Z-value corresponding to the desired confidence level.

P = is the estimated proportion of the population that has the attribute of interest.

e = is the desired level of precision (margin of error).

While determine Parameters for Cochran's Formula:

- Confidence Level: Commonly 95% ($Z = 1.96$).
- Estimated Proportion (p): If unknown, use 0.5 for a conservative estimate.
- Margin of Error (e): Commonly 5% (0.05).
- Therefore, $n = 384.16$

Therefore, the sample size needed is approximately **384**.

3.6. Data sources and Types

Both primary and secondary sources of data were used. The primary data were obtained through questionnaire whereas the secondary data were the document.

3.7. Sources of data and data collection tools

Using a survey questionnaire for data collection in this research offers several advantages, particularly in facilitating quantitative analysis to uncover patterns among large populations. A structured questionnaire is designed to gather specific information by presenting participants with predetermined response options, such as Likert scales or multiple-choice questions. This approach

ensures that responses can be easily quantified and analyzed statistically, allowing researchers to use analytical techniques to identify trends, correlations, and associations within the data. For instance, Likert scales can measure the intensity of attitudes or opinions, providing numerical data that can be subjected to statistical analysis like mean, median, and correlation coefficients.

One of the key benefits of structured questionnaires is the standardized responses they elicit. By providing predetermined answer options, structured questionnaires help ensure consistency in responses across participants. This minimizes ambiguity and improves the reliability of the data collected. It also simplifies the process of data entry and coding for subsequent analysis, making it easier to handle large volumes of data efficiently. This efficiency is particularly advantageous when studying consumer behavior or opinions across diverse demographics in Addis Ababa, as it allows for systematic and comprehensive data collection.

Moreover, the structured format promotes objectivity in data collection and analysis. It reduces the potential for researcher bias that might arise in qualitative data collection methods where interpretation of open-ended responses can vary. Participants respond to specific prompts with predefined choices, which enhances the reliability and validity of the findings. Researchers can easily compare responses based on demographic characteristics or other variables of interest related to consumer behavior towards AstraZeneca's bio pharmaceutical products.

3.8. Data Analysis Techniques

Both descriptive and inferential statistics will be used to interpret the findings of the study. While descriptive statistics summarize the characteristics of a data set and key variables. Descriptive statistical methods such as mean and graphs were used to summarize demographic data and the key variables of the study.

Inferential statistics help in research to come to conclusions and make predictions based on data collected. Pearson correlation analysis will be used to test the direction and strength of the relationship between brand image and consumer purchase decision. As it is difficult to collect data from the whole population, inferential statistics can only acquire data from samples. This method will help to find out the relationship between brand image dimensions and consumer buying behavior using correlation analysis via SPSS (Statistical Package for Social Sciences).

The model specification of the study is presented below:

$$Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + e$$

Where:

Y=consumer buying decision

a= intercept

X1: brand identity

X2: brand personality

X3: brand association

X4: brand attitude and behavior

X5: brand benefit and competence

e: Error Term

3.9. Reliability and Validity

Key indicators of the quality of a measuring instrument are the reliability and validity of the measures. The process of developing and validating an instrument is in large part focused on reducing error in the measurement process.

3.9.1 Reliability

Reliability is defined as "the degree to which test scores are free from errors of measurement. Measurement errors reduce the reliability (and therefore the generalizability) of the score obtained for a person from a single measurement" (AERA et al., 1985, p. 19). Typically, reliability is operationalized by examining consistency, quantitatively defined, among independent observations or sets of observations that are intended as interchangeable consistency among independent evaluations or readings of a performance, consistency among performances in response to independent tasks, and so on.

In fact, Feldt and Brennan (1989) describe the "essence" of reliability analysis as the "*quantification of the consistency and inconsistency in examinee performance*" (p. 105) a questionnaire should consistently reflect the construct that it is measuring. This is to say that the outcome of the instrument yields the same result with a replicated test.

There are varieties of methods for calculating internal consistency, of which one of the most frequently used is Cronbach's alpha. Cronbach's alpha -To have confidence in a measure such as this, it is needed to test its reliability, the degree to which it is error free. the type of reliability we

will be examining here is internal consistency reliability, the degree to which multiple measures of the same thing agree with one another. The study used the Cronbach alpha method to evaluate the internal consistency of the research instrument which is a close-ended questionnaire. In general high reliability can be interpreted as 7 to 9.0.

Table 1. Reliability test

Dimensions	Number of items	Cronbach Alpha
Reliability of data between brand personality and Consumer purchasing behavior	6	0.705
Reliability of data between brand association and Consumer purchasing behavior	4	0.711
Reliability of data between brand identity and Consumer purchasing behavior	3	0.75
Reliability of data between brand attitude and Consumer purchasing behavior	4	0.717
Reliability of data between brand competence and Consumer purchasing behavior	4	0.71
Overall reliability test	24	.865

(Source: Survey Data, 2024)

The reliability test revealed that with a score of above 0.70, the Cronbach's alpha of each independent and dependent variable was adequate. Besides, the overall reliability of all the 24 items was found to be 0.865 indicating a good level of internal consistency among the measurement items used in the study.

3.9.2 Validity

Validity is the extent to which the interpretations of the results of a test are warranted, which depends on the particular use the test is intended to serve. The responsiveness of the measure to change is of interest in many of the applications in health care where improvement in outcomes as a result of treatment is a primary goal of research. Several issues may affect the accuracy of data collected, such as those related to self-report and secondary data sources. Self-report of patients or subjects is required for many of the measurements conducted in health care, but self-reports of behavior are particularly subject to problems with social desirability biases. Data that were

originally gathered for a different purpose are often used to answer a research question, which can affect the applicability to the study at hand. In health care and social science research, many of the variables of interest and outcomes that are important are abstract concepts known as theoretical constructs. Using tests or instruments that are valid and reliable to measure such constructs is a crucial component of research quality. As the aim is to check and be sure how accurately a method measures what it is intended to measure the researcher estimate the result which are found from participant by comparing the results to other relevant data or theory. Beside to that the researcher should ensure careful study planning and use multiple sources and data such as interviews, observation and documents.

3.10 Ethical Issues

Research ethics matter for scientific integrity, human rights and dignity, and collaboration between science and society. These principles make sure that participation in studies is voluntary, informed, and safe for research subjects Even if a research idea is valuable to society, it doesn't justify violating the human rights or dignity of the study participants . All participants are able to withdraw from, or leave the study at any point without feeling an obligation to continue. All participants have a right to privacy, the researcher should protect their personal data for as long as for store or use it. A patient/participant's information sheet was provided to further explain the study. The potential participants were given appropriate time to read the information sheet and to decide whether or not they wanted to be involved in this study. If the participant of the study prefer for conducted interview in a private the right should be respected. However, notified that their actual age would be used for the purpose of reporting the data from the interview. Data were shared with the other two qualitative researchers for the purpose of reaching agreement of the interpretation without exposing the participants' details at any interim stage.

CHAPTER FOUR

4. Results and Discussion

4.1. Introduction

This chapter discusses data presentation, data set for statistical analysis, statistical assumptions, descriptive statistical analysis, and statistical inferential analysis. The regression analysis method will be utilized to test the hypotheses.

4.2. Response Rate

Using the sample size calculation indicated in chapter three, 384 questionnaires were distributed. Among those 384 only 8 questionnaires were denied because they had not been fulfilled. 376 questionnaires were completed in present the results and make a conclusion with appropriate manner. Consequently, 376 questionnaires were used to analyze the data.

4.3. Demographic Characteristics of Respondents

Table 2. Age of respondents

		Frequency	Percent
Age	18-30	136	36.2
	30-45	113	30.1
	above 45	127	33.8
	Total	376	100.0

(Source: Survey Data, 2024)

From 376 respondents, the greater number was between the ages of 18-30 years, accounting for 36% of the total number of the respondents. This is followed by those between ages of above 45, who make up 33%. The third number of respondents represented 30% who were between the age of 30-45 years. the result revealed that the largest group of respondents found between 18-30.

Table 3. Gender

		Frequency	Percent
Gender	male	207	55.1
	female	169	44.9
	Total	376	100.0

(Source: Survey Data, 2024)

from all the respondents, 55.1% were male and 44.9% were female, with male respondents making up the largest proportion of respondents than females. based on the analysis just over half of the respondents were males.

Table 4. Education level of respondents

		Frequency	Percent
education level of responders	High school	5	1.3
	Postgraduate	108	28.7
	Degree	89	23.7
	Medical doctors/specialist	174	46.3
	Total	376	100.0

(Source: Survey Data, 2024)

According to the result on the level of education, 1.3% of the respondents were high school, 23.7% of the respondents had their first degree, and 28.7% of them had masters and 46.3% are medical doctors and medical specialist. Demographic analysis for the respondents indicates that the majority of the respondents 174(46.3%) were medical doctors and specialist. from all respondents included health officers, nurses and pharmacists. as medicines are a core part on health care the researcher tries to investigate how brand image affect customers purchasing decision by contacting directly from health professionals. this implies that doctors have direct contact with pharmaceutical industry.

4.4. Descriptive Analysis of variables

In this study, the variables were assessed using a 5-point Likert Scale where respondents could indicate their agreement from Strongly Disagree (labeled as 1) to Strongly Agree (labeled as 5). To interpret the data, the range intervals were determined following a standard approach. This involved calculating the difference between the maximum and minimum values of the scale (5 - 1 = 4) and dividing by the highest value on the scale (4 / 5 = 0.8). This calculation was then adjusted by adding the minimum value of the scale (1) to establish the thresholds for each category. Therefore, the categories used for interpretation were: Strongly Disagree if the mean score ranged from 1 to 1.8; Disagree from 1.6 to 2.64; Neutral from 2.65 to 3.2; Agree from 3.21 to 4.2; and Strongly Agree from 4.21 to 5.00.

4.4.1. Brand personality

Regarding the Brand personality of AstraZeneca Bio pharmaceutical company the following items were asked and the responses are presented in the following table.

Table 5. Brand Personality

	Mean	Std. Deviation
AstraZeneca bio pharmaceutical company brand medications embodies its desired personality traits	4.27	.868
The word trustworthy is best described for the brand personality trait of AstraZeneca bio pharmaceutical medications	4.09	.892
One of the personality trait for the brand AstraZeneca bio pharmaceutical company is being innovative.	4.08	.868
Competence is the major personality trait for AstraZeneca bio pharmaceutical company	4.07	.878
AstraZeneca bio pharmaceutical branded medications aligns with its target audiences values and preferences	4.19	.771

(Source: Survey Data, 2024)

According to responses analyzed, the mean score was between 4.1105 and 4.3343. This means most of the respondents fall in the agreed range. Therefore, consumer recognition to the brand, brand familiarity and consumer’s intention and health officers feedback about AstraZeneca Bio pharmaceutical company brand was good, the result implies that, brand personality of AstraZeneca company was one of the factor that affect the consumers purchase decision.

4.4.2. Brand association

Table 6. Brand Association

	Mean	Std. Deviation
I have a clear image of the type of person who would use the brand AstraZeneca company medication	4.35	.669
I trust AstraZeneca brand medication	4.30	.726
I associate this brand with a good feeling	4.34	.720
I associate my preferred brand with excellence	4.39	.636

(Source: Survey Data, 2024)

According to responses analyzed, most of the responses fall in the agreed range. Therefore, the result showed that in terms of brand association, the consumer have a trust with the brand and associate the brand with excellence and good feeling. The patients and also medical doctors have a clear, positive experience with the brand of AstraZeneca Bio pharmaceutical medications

4.4.3. Brand identity

Table 7. Brand Identity

	Mean	Std. Deviation
The consumer's recognition to AstraZeneca brand is high.	4.22	.718
AstraZeneca brand is familiar to me.	3.83	.989
AstraZeneca brand medications have a strong improvement to my health.	4.17	.681

(Source: Survey Data, 2024)

According to responses analyzed, the mean score was between 4.17 and 4.22. This means most of the respondents fall in the agreed range. Therefore, consumer recognition to the brand, brand familiarity, brand value, and consumer's assumption of AstraZeneca Bio pharmaceutical company was good, which indicates that the company gives a brand which the consumer satisfied with.

4.4.4. Brand attitude

Table 8. Brand Attitude

	Mean	Std. Deviation
I have a positive attitude with AstraZeneca brand medications	4.29	.696
Buying AstraZeneca products is a good decision.	4.22	.708
I think AstraZeneca pharmaceutical medications are reliable and credible brand.	4.19	.760
I think AstraZeneca company has a good brand	4.31	.723

(Source: Survey Data, 2024)

Most of the responses fall in the agreed range, which implies that, most of the respondents have positive attitude towards the brand AstraZeneca Company medications

4.4.5. Brand competence

Table 9. Brand Competency

	Mean	Std. Deviation
AstraZeneca Bio pharmaceutical company leading in the market.	4.00	1.044
The company is successful in pharmaceutical market	4.12	.842
Service and products of AstraZeneca are reliable.	4.12	.804
The company supplies good products and services to the market.	4.07	.877

(Source: Survey Data, 2024)

According to brand competence most of the respondents fall in the agreed range which indicates that the respondents believes AstraZeneca Bio pharmaceutical company is leading in the market, successful in pharmaceutical industry market and the products and services the company supplying to the market are reliable and good.

4.4.6. Consumer purchasing decision

Table 10. Consumer purchasing Decision

	Mean	Std. Deviation
I will recommend AstraZeneca bio pharmaceutical products to other people	4.46	.587
I am satisfied with the product of AstraZeneca Bio pharmaceutical medications	4.43	.593
I have an intention that I will prescribe/take the brand of AstraZeneca company products	4.24	.549

(Source: Survey Data, 2024)

According to the response analyzed, the responses fall in the agreed range which implies consumers are satisfied with the product and the service of AstraZeneca Company, consumers have intention to recommend to others and health officers trust the brand to prescribe for their patients.

4.5. Inferential Statistics Result

4.5.1. Correlation

The Pearson correlation among the variables of the study is presented below

Table 11. Correlation

		brand personality	Brand association	brand identity	brand competence	Consumer purchase decision	brand attitude
Brand personality	Pearson Correlation	1	.243**	.127*	.249**	.266**	.376**
	Sig. (2-tailed)		.001	.014	.001	.001	.001
	N	376	376	376	376	376	376
Brand association	Pearson Correlation	.243**	1	.321**	.257**	.280**	.539**
	Sig. (2-tailed)	.001		.001	.001	.001	.001
	N	376	376	376	376	376	376
Brand identity	Pearson Correlation	.127*	.321**	1	.166**	.143**	.481**
	Sig. (2-tailed)	.014	.001		.001	.006	.001
	N	376	376	376	376	376	376
Brand competence	Pearson Correlation	.249**	.257**	.166**	1	.740**	.463**
	Sig. (2-tailed)	.001	.001	.001		.001	.001
	N	376	376	376	376	376	376
Consumer purchase intention	Pearson Correlation	.266**	.280**	.143**	.740**	1	.370**
	Sig. (2-tailed)	.001	.001	.006	.001		.001
	N	376	376	376	376	376	376
Brand attitude	Pearson Correlation	.376**	.539**	.481**	.463**	.370**	1
	Sig. (2-tailed)	.001	.001	.001	.001	.001	
	N	376	376	376	376	376	376

Correlation is significant at the 0.01 level (2-tailed).

(Source: Survey Data, 2024)

As indicated in table, the independent variable brand image dimensions brand identity, brand personality, brand association, brand attitude and brand competence have a positive coefficient correlation on consumer purchase intention of AstraZeneca Bio pharmaceutical company. The highest strong coefficient correlation in this research is between brand competence and consumer purchase intention ($r=.740^{**}$, $p \leq 0.01$). It indicated that here is a significant positive relationship between brand competence and consumer purchase intention. The second highest strong coefficient of correlation is between brand association variable and consumer purchase intention ($r=.280^{**}$, $p \leq 0.01$). Hence, there is a significant positive relationship between brand association

and consumer purchase decision. The third highest variables of brand image is brand personality ($r=0.266^{**}$, $p \leq 0.01$). Therefore there is significant positive relationship between brand personality and consumer purchase intention. The fourth variables of brand image i.e. Brand identity also has significant positive relationship with consumer purchase intention where ($r=0.143^{**}$, $p \leq 0.01$) only the fifth brand image variable i.e. brand attitude ($r=0.006^{**}$, $p \leq 0.01$) lay on the moderate correlation. Generally the above correlation matrix shows that all variables are positively and either moderately correlates with the dependent variable.

4.5.2. Assumptions of regression analysis

4.5.2.1 Normality test

According to Kline (2011), a normality test is used to determine whether sample data has been drawn from a normally distributed population (within some tolerance). The Central Limit Theorem states that the sampling distribution of the sample means approaches a normal distribution as the sample size gets larger than 30 irrespective of the shape of the population distribution (Field, 2009)

4.5.2.2 Linearity Test (Normal P-P Plot)

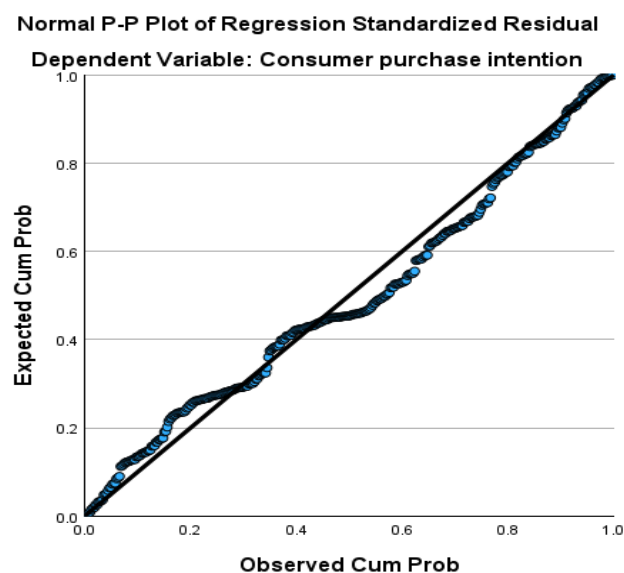


figure 3 normality test (Source: Survey Data, 2024)

This is the graph that the researcher can inspect to see if a distribution is normally distributed is called a P–P plot (probability–probability plot) graph plots the cumulative probability of a variable against the cumulative probability of a particular distribution (Field, 2005)

According to the p-p plot result revealed the little circle almost follow the normality line, which means the predictor variable in the regression have a straight line relationship and the normal distribution appear to be good fit to the data.

4.5.2.3. Linearity Test

the histogram diagram shown below in Figure 4 helps to show the normality of the data

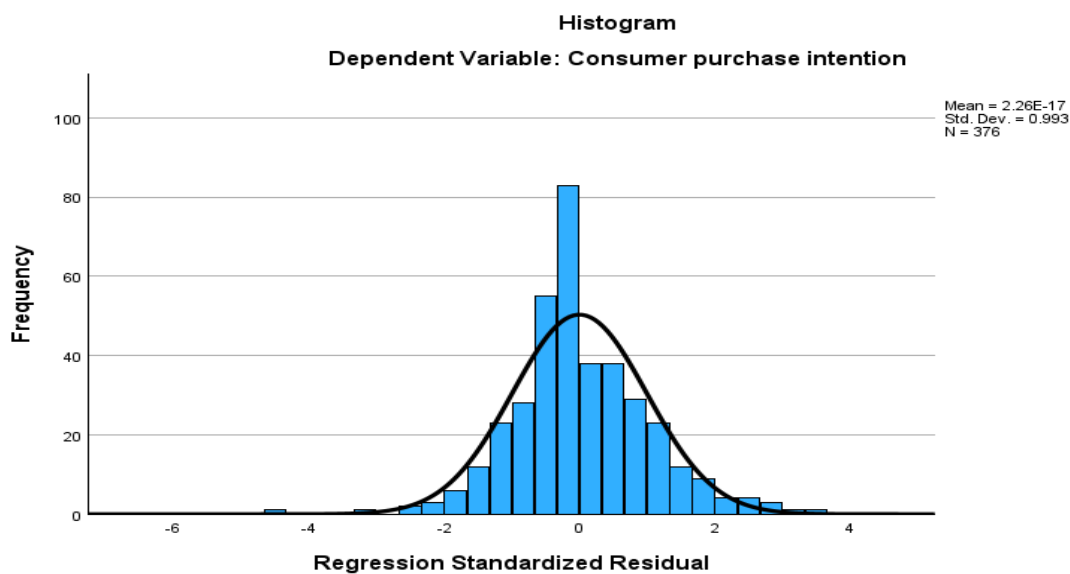


Figure 3. normality test (Source: Survey Data, 2024)

the above normality-histogram graph indicated, the histogram is reasonable symmetrically bell-shaped. This implies that there is no serious violation of the normality assumption

4.5.2.4. Multi Collinearity

Table 12. Collinearity Statistics

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Brand personality	.846	1.183
	Brand association	.702	1.424
	Brand identity	.756	1.323
	Brand competence	.776	1.289

	Brand attitude	.477	2.096
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(Source: Survey Data, 2024)

Indicted from the above normality-histogram graph, the histogram is reasonable symmetrically bell-shaped. This implies that there is no serious violation of the normality assumption.

4.5.3. Regression Analysis

Table 13. Model Summary,

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.750 ^a	.563	.557	.24184	1.502
a. Predictors: (Constant), brand competence, brand identity, , brand personality, brand association, brand attitude					
b. Dependent Variable: Consumer purchase intention					

(Source: Survey Data, 2024)

factors: (Constant), Brand Competence, Brand Identity, Brand Personality, Brand Association, Brand Attitude b. Dependent Variable: Consumer Purchase decision Source: Survey Result, 2022
R – Indicates the value of the multiple correlation coefficient between the predictors and the outcome, with a range from 0 to 1, a larger value indicating a larger correlation and 1 representing an equation that perfectly predict the observed value (Pedhazur, 1982). From the model summary (R = 0.750) indicates that the linear combination of the five independent variables (brand identity, brand personality, brand association, brand attitude and brand competence) strongly predict the dependent variable (consumer purchase intention). R2 is a measure of how much of the variability in the outcome is accounted for by the predictors. As revealed by the model summary, 56% of consumers purchase intention is affected by brand identity, brand personality, brand association, brand attitude and brand competence, and the rest influenced by other factors that are not accounted for in the model.

Table 14. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regressio	27.818	5	5.564	94.816	.001 ^b

	n					
	Residual	21.711	370	.059		
	Total	49.529	375			
a. Dependent Variable: Consumer purchase decision						
b. Predictors: (Constant), Brand Competence, Brand Identity, Brand Personality, Brand Association, Brand Attitude						

(Source: Survey Data, 2024)

In the ANOVA variables included in this model have a significance correlation to the dependent variable were used to address the general objective of the study. In addition, this analysis is used to identify the appropriateness of the model in estimating the effect of brand image on the purchase decision. The table above presents the F test result aimed to certify whether the independent variables involved in the model have significance correlation to the dependent variable and also reflects the statistical significance of the whole model (Bryman, 2005). The significance value of F changes is below 0.05 showed that the independent variables are significantly correlated with the dependent variable. As shown in table above the value of F changes produced by multiple regression procedure is equal to the value of F and this is also supported by the significance value that less than 0.05, which is 0.000. Therefore, this model is fit that the independent.

Table 15. Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.389	.136		10.249	.001
	Brand personality	.048	.022	.081	2.173	.030
	Brand association	.062	.026	.100	2.436	.015
	Brand identity	.002	.022	.004	.092	.927
	Brand competence	.506	.028	.715	18.291	.001
	Brand attitude	-.032	.034	-.047	-.933	.351
Dependent Variable: Consumer purchase intention						

(Source: Survey Data, 2024)

In the multiple regression, this standardized regression coefficient Bate (β) is useful, because it allows you to compare the relative strength of each independent variable's relationship with the dependent variable (Pedhazur, 1982). Based on these results, the regression equation that predicts

consumer purchase intention based on the linear combination of brand identity, brand personality, brand association, brand attitude, brand competence is as follows:

$$Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + e$$

$$CPI = 1.389 + 0.0480BP + 0.062BA + 0.02BI + 0.032BATT + 0.506BC + \epsilon \dots \dots (2)$$

Where: Y = Consumer purchase intention

α = is a constant (the intercept of the model);

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = the regression unstandardized coefficient of each brand image variables.

BP = Brand personality

BA = Brand association

BI = identity

BAT = Brand attitude

BC = Brand competence

ϵ = is the error term the significance level of each variable (P-value) is: .003, .015, .92, 0.351, 0.001 and their standardized coefficients are 0.81, 0.1424, 0.04, 0.715 & 0.047 respectively.

The p-value of the independent variable BAT (brand identity) and BA (brand attitude) is above 0.05 which implies that there is no significant relationship with the dependent variable (consumer purchase intention) because the significant value cannot be met the requirement which is the value of significant should be less than 0.05 (Pallant, 2010). Therefore, according to the result revealed on table, Hypothesis H3 and H4 is rejected. But according to the study result brand competence has the highest degree of influence on consumer purchase decision. Followed by brand association.

4.5.4. Hypotheses Testing

Hypothesis testing is one of the most used methods in static decision-making. The aim of the hypotheses is to examine whether the independent variables (brand personality, brand association, brand identity, brand attitude and brand competence) have a positive effect on dependent variables (Purchase decision).

Therefore, According to the result revealed,

H1, There is significant and positive relationship between brand personality and consumer purchase intention.

The regression analysis shows that brand personality and consumer purchase intention has strong significant and positive effect on customers purchase decision. (P-value=0.03; β =0.81) which means the value of significant ($p > 0.05$) hence, the hypothesis is supported.

H2. There is significant and positive relationship between brand association and consumer purchase intention.

The second hypothesis which states, there is a positive relationship between brand association and consumer purchase intention is also supported because the (p -value=0.015, β =1.4) which is less than 0.05 hence brand association has a significant relationship with consumer purchase intention; hence, the hypothesis is supported.

H3. There is significant and positive relationship between brand identity and consumer purchase intention

The regression analysis shows that brand identity and consumer purchase intention has no significant and positive effect on customers purchase decision (P-value=0.92 β =0.04); hence, the hypothesis is not supported. This indicates that consumers do not base their decision on the brand identity image benefits.

H4. There is significant and positive relationship between brand attitude and consumer purchase intention.

The forth hypothesis states, there is no a positive relationship between brand attitude and consumer purchase decision, because the (p -value=0.351, β =0.715) which is not less than 0.05 hence brand association has no a significant relationship with consumer purchase decision; hence, the hypothesis is supported.

H5. There is significant and positive relationship between brand competence and consumer purchase intention.

The last hypothesis which states, there is a positive relationship between brand competence and consumer purchase intention is supported because the (p -value= 0.001, β =0.047) which is less than

0.05 hence brand a competence has a significant and strong relationship with consumer purchase decision; hence, the hypothesis is strongly supported.

From this we can conclude that brand personality, brand association and brand competence has a major and significant impact on consumer buying decision.

4.6. Discussion of results

The aim of this study was to evaluate the effect of brand image on consumer purchasing decision on AstraZeneca Bio pharmaceutical company. Brand image play vital role on buying behavior. So, the researcher motivated to assess the main core factor affecting consumer purchasing decision using five factors. Based on the result shown brand has a positive and significant effect on consumer purchasing decision. with the regression analysis ($p\text{-value} = 0.001$; $\beta=0.715$) Ahearne et al. (2005) supported the fact that brand competence is the main factor in brand attractiveness, and also Fournier (1998) indicated in their study brand competence helps a company to have the ability and skills to meet consumers intention. Specially in the wide pharmaceutical sector having the knowledge about the factors that puts a positive perception on consumers mind leads to develop brand trust and ability to achieve corporate goals.

In order to answer the research questions that were planned to measure the extent and magnitude, multiple-linear regression has been implemented based on the research objective. The research finding in table shows that three from five independent variables (brand association, brand personality and brand competence) have a positive and statistically a significant result and the remaining two (brand identity and brand attitude) has no a significant and positive effect on consumer purchase decision.

Based on the result shown brand association has a positive and significant effect on consumer purchasing decision intention with the regression analysis ($p\text{-value} = 0.015$; $\beta=1.42$) Ahearne et al. (2005) supported the fact that brand association has crucial factor in shaping customer and brand attractiveness, and also Fournier (1998) indicated in their study brand association helps create relationship between company and consumers. Lee, Goh and Noor, 2019, in his study concluded that brand association is one of the important factor affection consumer purchase intention. Gusti Ngurah, Dika krisnawan Jatra, 2021, Giktorija Grigaliunaite, Lina Pileliene, 2017 also supported this hypothesis in their research. The regression analysis showed brand personality, also has factor on consumer purchasing decision. The last factor which has a positive impact on customers

purchasing decision is brand competence. it has a very big significant effect on consumer purchase intention with the regression analysis ($p\text{-value} = 0.001$; $\beta=0.75$)

Brand attitude and brand identity results that means $p\text{-value}=0.351$; $\beta=0.047$), $p\text{-value}= 0.92$; $\beta=0.04$ Do not support the analysis. Therefore according this research finding brand attitude and brand identity has no a significant and positive relationship with consumer purchase sing decision so, those hypothesis are rejected.

from the above study the three variables brand association, brand personality and brand competence have a big role for AstraZeneca Bio pharmaceutical company in order to promote and magnify there brand image and increase their sales.

CHAPTER FIVE

5. SUMMARY, CONCLUSION AND RECOMMENDATION

5.1. Introduction

This chapter consists of summary of the research, conclusion, recommendation and area of further research are presented. In an attempt to answer research questions the summary of the findings was presented. Based on the results important conclusions were drawn. Finally, sound recommendations were forwarded in view of the results and the conclusion.

5.2. Summary of Findings

The result of the descriptive statistics analysis of demographic characteristics of respondents revealed that almost half of the respondents 55.1% were male and 44.9% were female, majority of the respondents were in the age range of 18 to 30 which is 136.2% of the respondents, 113 or 30.1% were in aged of 30-45 and respondents above 45 age were 33.8 % or 127 individuals. Majority of the respondent's occupation were medical doctors and specialist. According to the result of the average descriptive statistics, the mean score of consumer purchase intention was above (4.00) of the Likert scale this indicated that consumer purchase intention AstraZeneca company medications are high.

Based on the findings of the regression analysis brand competence $p\text{-value} = 0.001$; $\beta=0.0715$), contribute statistically significant and positive contribution to consumer purchase intention, brand identity ($p\text{-value}0.92$; $\beta=0.04$) do not have a statistically significant and positive contribution to consumer purchase decision, brand association have a positive contribution to consumer purchase decision with ($p\text{-value} 0.015$; $\beta=1.42$).brand personality ($p\text{-value} 0.03$; $\beta=0.81$.), according to the regression result have a statistically significant and positive contribution to consumer purchasing decision and brand attitude ($p\text{-value} 0.351$; $\beta=0.047$) have no a positive contribution to consumer purchase intention. The score of the coefficient correlation determinant (R-square) is .562 which indicates that 56.2% consumer purchase decision depends on the variables of brand image.

5.3 Conclusion

The findings indicate that:

Most brand image variables, except for brand attitude and brand identity, significantly and positively influence consumer purchase decisions. Among these, brand competence emerged as the most critical factor, strongly impacting consumer buying decisions. This suggests that consumers place a high value on the perceived skills, abilities, and competitiveness of AstraZeneca as a brand when deciding to purchase its pharmaceutical products.

Correlation analysis was employed to examine the relationships between various brand image variables and consumer purchase decisions. The correlation matrix results showed that all independent variables positively and moderately correlated with the dependent variable, indicating a consistent influence of brand image components on purchase decisions. This analysis supports the notion that enhancing different aspects of brand image can positively affect consumer behavior.

Further regression analysis confirmed the impact of independent variables on consumer purchase decisions. The first hypothesis, which posited that brand personality has a significant and positive effect on consumer purchase intention, was supported by the data. Consumers who perceive AstraZeneca as having a distinctive and appealing personality are more likely to purchase its products. Similarly, the second hypothesis regarding brand association also held true, showing that positive associations with the brand significantly enhance purchase decisions. These findings underscore the importance of maintaining a strong and favorable brand image to drive consumer behavior.

Among the variables studied, brand competence was found to have the strongest and most positive effect on consumer buying decisions. This highlights that in the competitive pharmaceutical market, demonstrating high competence can give AstraZeneca a substantial advantage. By focusing on enhancing perceptions of its competence, AstraZeneca can improve consumer trust and loyalty, ultimately leading to increased sales and market share.

Conversely, the study found that brand identity and brand attitude did not have a significant and positive effect on consumer purchase intentions for AstraZeneca's bio pharmaceutical products. This indicates that while these elements are important, they may not be as critical in influencing purchase decisions as other factors like brand personality, brand association, and brand competence. This insight suggests that AstraZeneca should prioritize strengthening its competence and associations to achieve a more substantial impact on consumer purchasing behavior.

In conclusion, the study provides valuable insights into the factors that influence consumer purchase decisions for AstraZeneca's bio pharmaceutical products. Emphasizing brand competence and maintaining positive brand associations and personality are crucial strategies for enhancing consumer trust and driving purchase decisions. By focusing on these areas, AstraZeneca can position itself more effectively in the competitive pharmaceutical market and achieve better consumer engagement and loyalty.

5.3. Recommendation

Based on the findings of this study on the effect of brand image on consumer purchase decisions for AstraZeneca's bio pharmaceutical products, several recommendations can be made to enhance the company's brand image and influence consumer behavior more effectively.

1. Focus on Enhancing Brand Competence, given that brand competence has the most significant impact on consumer purchase decisions, AstraZeneca should prioritize initiatives that reinforce its image as a highly competent and reliable pharmaceutical company. This can be achieved through:
 - ✓ Investing in Research and Development: Continuously innovate and introduce cutting-edge treatments that demonstrate the company's expertise and commitment to advancing healthcare.
 - ✓ Quality Assurance: Maintain stringent quality control processes to ensure that all products meet the highest standards, thereby reinforcing consumer trust in the brand's competence.
 - ✓ Professional Endorsements: Engage respected healthcare professionals to endorse and recommend AstraZeneca's products, leveraging their credibility to enhance the brand's competence perception.

2. Strengthen Positive Brand Associations the positive brand associations significantly influence consumer purchase decisions. AstraZeneca can strengthen these associations through the following strategies:
 - ✓ Customer Engagement: Create meaningful interactions with consumers through health awareness campaigns, educational seminars, and community outreach programs that associate the brand with positive health outcomes.

- ✓ Corporate Social Responsibility (CSR): Implement and communicate CSR initiatives that highlight the company's commitment to social and environmental responsibility, thereby building a positive association with the brand.
- ✓ Effective Communication: Use clear and consistent messaging across all marketing channels to reinforce the benefits and positive attributes of AstraZeneca's products.

3. Develop a Distinctive Brand Personality, a strong and appealing brand personality can attract and retain consumers. AstraZeneca should work on developing a distinctive and relatable brand personality by:

- ✓ Humanizing the Brand: Utilize storytelling in marketing campaigns that showcase the human side of the company, including patient stories and employee experiences, to create a more personal connection with consumers.
- ✓ Consistency in Messaging: Ensure that the brand's personality traits (such as being innovative, caring, and trustworthy) are consistently communicated across all touchpoints, including advertising, social media, and customer service interactions.
- ✓ Visual Identity: Maintain a cohesive visual identity that reflects the brand's personality, using logos, color schemes, and design elements that resonate with the target audience.

6. Collaborate with Healthcare Professionals engaging with healthcare professionals can enhance AstraZeneca's brand image and credibility:

- ✓ Professional Partnerships: Form strategic partnerships with medical institutions and professional organizations to co-host events, conduct joint research, and publish findings that highlight AstraZeneca's contributions to the medical field.
- ✓ Continuous Education: Offer continuous medical education programs for healthcare professionals to keep them informed about the latest advancements and products from AstraZeneca, reinforcing the brand's competence and relevance.

By implementing these recommendations, AstraZeneca can strengthen its brand image, build greater consumer trust and loyalty, and ultimately drive more positive purchase decisions in the

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APPENDIX: QUESTIONNAIRE
Addis Ababa University School of Commerce
MA Program in Marketing Management

Dear Respondent, I am a Postgraduate student at Addis Ababa University. As partial fulfillment for the Masters of Arts in Marketing Management, I am conducting a research study with title of "The Effects of Brand Image on Consumer Purchase Decision: The Case of AstraZeneca Bio pharmaceutical company". Therefore, I would appreciate if you could spare a few minutes of your time to answer the following questions.

Instruction: After having accessed the questionnaire you may complete it by checking the dots/ the circle corresponding to your response.

Thank you!

Buying AstraZeneca products is a good decision.					
I think AstraZeneca pharmaceutical medications are reliable and credible brand.					
I think AstraZeneca company has good brand.					
E. Brand competence					
AstraZeneca Bio pharmaceutical company leading in the market.					
The company is successful in pharmaceutical market.					
Service and products of AstraZeneca are reliable.					
The company supplies good products and services to the market.					
Consumer purchase intention					
I will recommend AstraZeneca bio pharmaceutical products to other people.					
I am satisfied with the product of AstraZeneca Bio pharmaceutical medications.					
One of the reason that creates the intention of buying AstraZeneca Bio pharmaceutical company products 2is fair pricing.					
I have an intention that I will prescribe/take the brand of AstraZeneca company products.					