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FACTORS AFFECTING BRAND CHOICE OF AUTOMOBILE BUYERS IN ADDIS ABABA

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Board of Examiner Approval Sheet

Factors affecting brand choice of automobile buyers in Addis Ababa

By
Denaneso Gemechu

Approved by the Examining Board

Advisor …….

Signature……..

Internal Examiner …….. Signature……..

External Examiner …… Signature……..

Declaration

I declare that this research paper entitled **"factors affecting brand choice of automobile car buyers in Addis Ababa, Ethiopia"** is my original work and has not been used by others for any other requirements in any other university and all sources of information in the study has been appropriately acknowledged.

Denaneso Gemechu: _____

Date: _____

Statement of Certification

This is to certify that I the undersigned **Denaneso Gemechu Gilu** has carried out her research work on the topic entitled **"Factors affecting brand choice of automobile buyers in Addis Ababa, Ethiopia".** The work is original in nature and is suitable for submission for the award of Master's Degree in Marketing Management.

Advisor: Getie Andualem (PhD) _____

Date: _____

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Abstract

Every customer in the market has his/her own brand choice. Customers consider certain attributes before purchasing products. The objective of this study was to identify factors affecting brand choice of automobile buyers in Addis Ababa. The variables included in this study are brand image, reliability, price, availability of spare part, safety, fuel consumption durability and social values of automobile. A sample of 400 automobile buyers was selected using convenience sampling technique with distributing structured questionnaire based on likert type scale was used to elicit information from the sampled respondents in the city of Addis Ababa. But 382 of them return correctly and within time. The data were analyzed using descriptive statistic to calculate general information of the respondent and inferential statistics to test like multiple regressions, normality, reliability, correlation and multicolinearity of data. The findings of the study showed that most of respondents were influenced by their brand image to choice the brands of automobile among available in the market. Particularly TOYOTA is found to be a top of mind and mostly preferred brands of all brands available in Ethiopia. The study revealed that brand image, reliability, price, availability of spare part and social values make a significant and positive contribution to automobile brand choice of consumers in Addis Ababa and the remaining variables like safety, fuel consumption and durability has no significant for brand choice of automobile in a city. Moreover, the study finding shows that, there is variation on brand choice based on respondent's income level.

***Key words**: brand choice, model of buying behavior, brand image, reliability, safety, availability of spare part, fuel consumption, durability, social value, durability*

CHAPTER ONE

1. INTRODUCTION

1.1Background of the Study

The production of cars and its trade in global market have impact on employment, the balance of payments, economic growth and valuable inward foreign direct investment. The car in the twentieth Century has been described "The machine that changed the world" (Womac, et al., 1990).

Due to its deep forward and backward linkages with several key segments of the economy, the automobile industry is having a strong multiplier effect on the growth of a country and hence is capable of being the driver of economic growth.

The rise of income levels in many African countries and the emergence of a middle class, the continent as the final frontier for the global automotive industry. Given Africa's population size and its positive economic outlook, automotive companies will be able to gain a competitive advantage by adopting a medium- to long-term view towards the continent."(Black, A.& McLennan, T. (2015). The Last Frontier: Prospects and Policies for the Automotive Industry in Africa).

Africa's automotive market is relatively small. In 2014, there were just over 42.5 million registered vehicles in use in Africa – a continent of approximately one billion people that time. As a result, the motorization rate on the continent is only 44 vehicles per 1 000 inhabitants. This is far below the global average of 180 vehicles per 1 000 inhabitants, and lower than other developing regions such as Latin America (176) and Developing Asia, Oceania and the Middle East (79). McLennan, T. (2015). The Last Frontier: Prospects and Policies for the Automotive Industry in Africa).

In 2015, approximately 1.55 million new vehicles were sold or registered across Africa. South Africa, Egypt, Algeria and Morocco – all countries with established and rapidly developing automotive industries – together accounted for more than 80% of total new vehicle sales in 2015. Based on recent sales trends, some sources estimate that Africa's passenger vehicle sales could reach up to 10 million units per annum within the next 15 years. McLennan, T. (2015). The Last Frontier: Prospects and Policies for the Automotive Industry in Africa).

Ethiopia was Africa's fastest growing economy in 2015 and has the continent's second largest population. Ethiopia's automotive potential is underpinned by the state-driven economy and a government that is geared toward industrialization, which makes it the African economy that is most similar and arguably likely to replicate the development successes of China of the mid-1980s onwards. (Ethiopian Investments Commission (2015). Invest in Ethiopia. Addis Ababa: EIC.)

Since Ethiopia doesn't or little manufacture automotive, construction machineries and agricultural equipments locally at present, it imports those from various countries of the world. Automotive importing companies in Ethiopia are importing different types of vehicles to the country's vehicle market. In doing so, a predictive study on the marketing trends of imported automotive is necessary to clearly see the demand supply gap and for the growth in sales of automotive in Ethiopia.(Ethiopian Investment Commission. (2015). Invest in Ethiopia. Addis Ababa: EIC)

1.2Statement of the problem

The automotive industry is an important segment of the economy in any country as it links industries and services. It is the key driver of any growing economy. It plays an important role in growing the economy in each country and one way to strengthen the industry is to improve consumer insight into vehicle buying behavior.

Besides, competitive pressure of automotive companies arising in Ethiopia has led the companies to look for an edge to be competitive in automotive industry. Both the local and foreign cars are competing to get attention from the consumers like Toyota ,Suzuki ,Mercedes , Hyundai ,lifan motors….etc ….etc Therefore, the objective of this study is to identify the factors influencing consumer buying behavior while buying automobile.

From different ground consumers 'choice is limited to few brands from a range of brands available in the market. As various studies explained, the brand preference of consumers might be affected by marketing strategy of firms. Moreover, consumers may have their own choice criteria in selection of a particular brand from a set of brands in a given product category.

Ethiopia's automotive potential is underpinned by the state-driven economy and a government that is geared toward industrialization, which makes an industry need an emphasis to study on.

Despite the current limited disposable income, Ethiopia's automotive market is dominated by second-hand imported vehicles – particularly commercial vehicles, there are many brands of automobile cars in the market.

This shows it is very critical for companies to understand the customer's requirement and provide the products that satisfy their needs. Consumers brand preference represents a fundamental step in understanding consumer choice.

In most product category, consumers have more choices, more information and higher expectations than ever before. To move consumer from trial to preference, brands need to deliver on their value preposition, as well as dislodge someone else from the consumer's existing preference set.

There are minimum number international journals and studies in Ethiopia that's try to show the customer preference regarding buying automobile car for their own purpose. Mr.Eskinder Desta study the automotive industry and trend Analysis and show trends in countries as general but still the specific case that show the determinant factor that influence the brand choice of buyers while buying automobiles are not addressed. Observed that is found to be an initiation to conduct the study is lack of theoretical evidence that can be used as an insight to understand customers' perception towards building a brand through the use of brand equity dimensions.

Thus from the above ground this study is conducted to identify the underlying factors of consumers brand choice it will lead them to formulate a better marketing programs. The main research question of the study is ―Determining factors that affect brand choice of automobile buyers in Addis Ababa? Under this main research question, the following specific research questions were addressed;

1.3 Basic research questions

The research questions that need to be addressed include the following:

1.3.1General research questions

- What are the factors that affect the brand choice of automobile car buyers?

1.3.2 Specific research questions

1. Which determinant factors more significantly affect choice of automobile brand?
2. What are the most preferred brands of automobile car in Addis Ababa?

1.4 Objectives of the Study

1.4.1 General objective

- The general objective of the study is to identify factors that affect brand choice of automobile buyers in Addis Ababa.

1.4.2 Specific objectives

The specific objectives of the study are:

- ✓ To identify the most preferred brand among the set of brands available in the city.
- ✓ To identify which determinants are more significantly affect choice of automobile brand.

1.5 Definition of terms

1.5.1 Conceptual Definition

- **Marketing Concept**; "The marketing concept is marketers can sell more if they produce the consumer needs and wants than to produce what they want to sell. In marketing concept consumer needs and wants became the firm's primary focus. Hence basically marketing concept is a philosophy of consumer oriented" (Leon G. Schiffman, 2007 pp.).
- **Consumers;**"Consumers are individuals and households that buy the firms product for personal consumption" (Sata, 2013 pp.).

- **Brand Awareness:** is related to the strength of the brand trace in memory as reflected by consumers' ability to recall or recognize the brand under different conditions. (Keller (2004).

- **Brand preference**: is the degree of brand loyalty in which a customer definitely prefers one brand over competitive offerings and will purchase this brand if it is available. (Dibb S., Simikin L., Pride W.M., and Ferrell O.C. (2006)).

- **Brand choice** is concerned with the selection and consumption of the brand (Bettman et al., 1998).
- **Purchasing behavior**; As Pikini Rani, tries to define purchasing behavior is the decision processes and acts of people involved in buying and using products (Rani, 2014).

1.4 Significance of the Study

Automobile market in Ethiopia is growing rapidly. Different automobile brands are introducing to the market and at the same time, demand is increasing. The introduction of various brands will lead to tight competition, which in turn make consumers to face brand choice decision in the market. In such a situation, it becomes necessary for manufacturers to understand the major factors attracting buyers to one's own brand, so that they can succeed in the market and win the

competition. A clear understanding of the factors that influence brand choice is critical to ensure that a company‘s branding and marketing efforts are matched with the needs of buyers. Therefore, this study can help marketers to design a better marketing strategy by identifying the factors that determine buyers brand choice Thus; the study will have a theoretical contribution in the area of product purchase decision and buyers brand choice criteria in the context of Ethiopian market specifically in Addis. Furthermore, the study will give insight for other researchers to explore and investigate more in the area, in a broader scope and wider context.

1.7 Scope of the Study

This study would try to show the main factors that determine the buyers brand choice in automobile cars. To achieve this aim, the scope of the study is to identify different factors, i.e. Brand image, Reliability, Price, Availability of spare parts, Safety, Fuel consumption, Durability and Social value that influence a brand choice of a particular automobile brand in the city.

The scope of the study is limited to Addis Ababa, capital city of Ethiopia. This geographical limitation is not only chosen because of time, access and cost restriction, but also it is believed that a considerable number of automobile users are available in Addis Ababa.

More specifically data were collected from the owners of automobile, may be they are self employee, different company’s employees or trader by distributing structured questioners that are related with the main variables the researcher wants to touch within convenient time for the respondents.

1.8 Organization of the Research Report

The content of this research would have five chapters. The first chapter includes the research background, problem statement and research questions, objective of the study, significance of the study, scope of the study and organization of the report and followed by the discussion of concepts and theories related to the area of study (chapter two, literature review). The third chapter describes the research design, participants of the study, the data source, data collection and analysis techniques and procedures. The fourth chapter deals with data analysis,

interpretation and discussion of the findings. Finally, in the last chapter; summery, conclusion and recommendations were being included.

CHAPTER TWO

Review of Related Literature

2.1 Introduction

This chapter provides an insight to readers about the theoretical reviews, empirical reviews and the conceptual framework of the study is presented at the end of this chapter.

2.2Theoretical reviews

Concept of Branding

Brands are not new to marketing. Historically, the concept of brand was first used by the ancient Egyptian brick-makers who drew symbols on bricks for identification (Farquhar, 1990). Other examples of the use of brands were found in Greek and Roman times; at this time, due to illiteracy shopkeepers identified their shops using symbols. Moreover, in the Middle-Ages, craftsmen marked their goods with stamps as a trademark by which to differentiate their skills. The next milestone of brand evolved in North America with the growth of cattle farming as a kind of legal protection, proof of ownership and quality signals (De Chernatony and McDonald, 2003).

Brand definitions are numerous; different authors provide their own explanation towards the meaning of a brand. The definitions are useful to understand a brand from different perspectives. Keller (2004), define brand as a perceptual entity rooted in reality, but it is also more than that reflecting the perceptions and perhaps even the idiosyncrasies of consumers. This definition states that brand is what resides in the minds of consumers and the ultimate goal of all efforts in creating a brand is creating a perceived value of products and services in the minds of consumers. Kapferer (2008), support Keller‘s definition by explaining a brand as a set of mental associations, held by the customer, which add to the perceived value of a product or service. These associations should be unique (exclusive), strong (salient), and positive

(desirable). The above definitions have something in common which explain what a brand is. Brand is an added value, which identify and differentiate a product from other brands/products. Moreover, brand will be meaningful when consumers able to create a mental association in their mind. DeChernatory and McDonald (2003) offer a definition that incorporates many scholars view. ―A successful brand is an identifiable product, service, person or place, augmented in such a way that the buyer or user perceives relevant, unique added values which match their needs most closely. Furthermore, its success results from being able to sustain those added values in the face of competition. According to Keller (2004), brands used to identify the source of a product and allow consumers to assign responsibility to a particular manufacturer or distributor. Brands play a significant role by signaling quality and other important characteristics of a product. In effect, they can reduce the risk associated with a product purchase decisions. Aaker (1991) defined brand equity as "a set of five categories of brand assets (liabilities) linked to a brand's name or symbol that add to (subtract from) the value provided by a product or service." He identified five brand equity constructs: brand awareness, brands perceived quality, brand associations, brand loyalty; and other proprietary brands assets, such as patents, trademarks, and channel relationships.

According to Kapferer, (2008) there are two perspectives from which brand equity can be viewed. One is customer-based, it focuses exclusively on the relationship customers have with the brand (from total indifference to attachment, loyalty, and willingness to buy and re-buy based on beliefs of superiority and evoked emotions). The other relates to suppliers, brand equity is viewed as a financial asset. It aims at producing measures in monetary values.

Both approaches have their own champions. Interestingly, regardless of one's perspective, literature appears to be consistent in the opinion that brand equity is generated by consumers, who base their (re)purchase behaviors on the judgment of a brand's value to themselves (Keller, 2004).

For example, as per Kotler and Keller (2006), brand equity is the customer's subjective and intangible assessment of the brand, beyond its objectively perceived value. Similarly, Kotler et al., (2005), define brand equity as the positive outcome that the customers show to the product or service. Moreover, as per the Official Marketing Science definition, brand equity is the set of associations and behavior on the part of a brand's customers, channel members and parent

corporation that permits the brand to earn greater volume or greater margins than it could without the brand name (Kapferer, 2008).

Brand Preference

Because brand preference is indispensable in highly competitive businesses, practitioners and researchers have long spotlighted the concept. The term brand preference refers to the degree of brand loyalty in which a customer definitely prefers one brand over competitive offerings and will purchase this brand if it is available (Dibb et al., 2006). However, if the brand is not available, the customer will accept a substitute brand rather than expending additional effort finding and purchasing the preferred brand (Dibb et al., 2006). Customers form brand preferences to reduce the complexity of the purchase decision process (Gensch, 1987). The process of forming brand preference involves, first, being exposed to many brands, followed by a complex purchase decision process. Customers often delete some product brands from their memory; then, among remaining brands of products, customers memorize the brands of products they would consider purchasing in the future (Roberts &Lattin, 1991).

Brand Identity

Brand identity is the representation of the company's reputation through the conveyance of attributes, values, purpose, strength and passion. It is the aggregation of what the organization does. Brand identity is an organization's mission, personality, promise to the consumers and competitive advantages. It is a basic means of consumer recognition and represents the brand's distinction from its competitors (Brand identity and brand building concept. 2010. Drypen.in internet site. Referred to10.10.2011. http://drypen.in/branding/brand-identity-a-brand-building-concept.html).

Consumer Buying Behavior

The modern market consists of a big variety and diversity of packages, designs, products, goods, and services. It develops and innovates daily and makes improvements in strategies permanently. However, it would not put so much effort into the development if the consumer and the overall society would not need and require new products, product ideas and functions. The market is the dependable sector of industry and the consumers are only one indispensable element of market performance which allows the industries to exist and grow. In order to create

an appropriate product or service, companies need to understand the consumers, their behavior and perception, and to meet their needs and requirements.

Consumer behavior is the process involved when individuals or groups of people select, purchase, use or dispose of products, services, ideas or experiences to satisfy their needs and desires (Solomon &Bamossy&Askegaard& Hogg 2010). There are different people with different roles who are involved in this process: the purchaser, whose function is to buy the product or service; the user who uses the actual product or service; and the influencer who provides information and recommendations for or against the product or service without buying or using it. Understanding consumer behavior is not simple. However, studying consumer behavior is crucial factor for companies 'success. Marketers, considering that, dedicate a lot of efforts in trying to specify the exact needs and wants for their customers and target markets, they also try to determine the best product characteristics that can satisfy the target market from the consumers own perspective. (Solomon &Bamossy&Askegaard & Hogg 2010, pp.6 - 7.)

2.3 Model of Consumer Behavior

The consumer market is not only large it is dynamic Etzel et al. (2006). Thus, buyer behavior within markets has to be understood before marketing strategies can be developed. However, constructing a standard model of consumer buyer behavior can be somewhat problematic. While the inputs and the outputs of decision-making can readily be identified and, to a certain extent, measured, the intangible element, which concerns buyer characteristics and choice determinants is often more elusive (McDonald and Christopher, 2003).

According to Kotler et al. (2005), often, consumers themselves do not know exactly what influence their purchase. The idea that the mind is a computer with storage compartments where brands or logos or recognizable packages are stored in clearly marked folders that can be accessed by cleverly written ads or commercials simply doesn't exist. Instead, the mind is a whirling, swirling, jumbled mass of neurons bouncing around, colliding and continuously creating new concepts and thoughts and relationships inside every single person's brain all over the world. Therefore, the central question for marketers is; how do consumers respond to various marketing efforts the company might use?

Even though, predicting consumer buyer behavior may be an imprecise science, some simple models have been created to assist marketers in gaining a deeper understanding of consumers in order to acquire and retain their customers (McDonald and Christopher, 2003).

2.4 Consumers' Brand Choice

Understanding and predicting brand choice decisions by consumers has been a topic of interest to both marketers and researchers. Brand choice investigation involves understanding consumer behaviors in their selection of brands among various product categories (Bentz andMerunka, 2000). In the past, brands have been perceived as products with different attributes; however, brands are now viewed as personalities, identities, and have special meanings intrinsic to consumers (Ballantyne et al. 2006). Much of brand choice research has been through probability models to test the impact of marketing mix variables as a predictor of brand choice (Wagner and Taudes, 1986; Chib et al.2004; Bentz and Merunka, 2000).When used in probability modeling, marketing mix variables are considered non stationary and heterogeneous among the population (Wagner and Taudes, 1986).

There are other areas that have been researched with brand choice as well. Researchers have examined the casual effects of brand related variables on brand choice. These variables include Situational factors, consumer personality, social benefits, emotions, quality, brand credibility, product attributes, seasonality, and trends. The studies used within brand choice researches have involved experiments and surveys of key marketing variables to measure impact on brand choice (Charlton and Ehrenberg, 1973; Simonson et al. 1994; Erdem and Swait, 2004;Wagner and Taudes, 1986; Orth, 2005).

Among specific marketing mix variables, pricing appears to have the most consistent impact in studies. Promotions such as sales promotions have shown influence on brand choice which ultimately effect bottom-line prices for consumers. For example, pricing promotions could involve coupons or simply a reduction of price within the product category (Singh et al. 2005; Papatla and Krishnamurthi, 1996; Wagner and Taudes, 1986; Orth, 2005). In probability modeling studies, it has been shown that displays and features have some impact on brand choice, but this evidence is not as overwhelming or as consistent as other factors among brand

choice research studies (Chib et al. 2004; Papatla and Krishnamurthi, 1996; Alvarez and Casielles, 2005).

Non-marketing mix variables have been researched in order to discover external factors that impact brand choice. Seasonality and trends have been researched with brand choice. However, their outcomes depend upon the product category. For example, a product such as laundry detergent will most likely have better sales figures in the summertime when the weather is more favorable and people are outside more (Wagner and Taudes, 1986). Personality factors have shown an impact based on what brands consumers buy. Brand credibility has shown significance in determining brand choice as well (Erdem and Swait, 2004; Fry, 1971).

2.5 Factors determine the brand choice of buyers

Although, many studies have been conducted in various product categories, literature on brand choice in the cars specifically automobiles in Ethiopia is relatively insignificant. Thus, considering different studies conducted in different product categories for the selection of relevant variables/factors for this research. Therefore, in this study, eight variables are considered; Brand image, Reliability, Price, availability of spare parts, Safety, Fuel consumption, Durability and Social value.

Reliability

In terms of value reliability, consumers consider a vehicle to be reliable if it is likely to have fewer problems than other vehicles (Consumer Report, 2010). Vehicle reliability has been found to have a positive impact on the consumers' likelihood of choosing a vehicle (Woods*et al*, 2010). Reliability and quality are interrelated, perceived quality has direct impact on customer purchase decision and brand loyalty especially during the time customers have less or no information of the products that they are going to purchase (Armstrong and Kotler,2003). Besides, reliability is one of the criteria to be considered for vehicle choice (destoop.com, 2010). Consumers want their vehicles to be both reliable, simple to maintain and to repair. The benefits that consumers see in buying a vehicle with high reliability include lower costs of repair and higher resale value (BuyingAdvice.com, 2007). Therefore, consumers are likely to be concerned about vehicle reliability when researching their upcoming vehicle purchase.

Safety

In terms of safety, consumers consider safety to be one of the most important considerations in buying a new or used vehicle. The vehicle safety performances are ratings before purchasing a vehicle (Harris, 2001). In addition, consumers are increasingly seeking safety features in their vehicles (Deloitte, 2010) and are willing to pay more for a vehicle to obtain improved safety levels (Harris, 2001). Furthermore, the Deloitte study also predicted that the current economic crisis will leave customers to value vehicle safety more than before and seek vehicles with enhanced safety features. Consumers' increasing demand for safety has led manufacturers to think and develop safety-related innovations and features (such as automatic crash notification, emergency assistance, and remote vehicle diagnostics) in their recent models (Deloitte, 2009; Dannenberg & Burgard, 2007).

Fuel Economy

Fuel economy is as important a factor in a consumer's choice of vehicle as are safety and reliability. The impact of volatile gasoline prices can be seen in all markets; Consumers across all markets expect to see greater emphasis on fuel efficiency and a significant shift to alternative-fuel vehicles in the coming decade. Electric/battery, water, hydrogen and solar were among the anticipated fuel sources for cars of the future (Car Online, 2009). Furthermore, Austin and Dinan (2005) assume that consumers fully value lifetime fuel savings when considering fuel economy in their vehicle choices. There is no doubt that consumers do care about fuel costs, do value fuel economy, and that their interest in fuel economy increases when fuel prices increase (Mahadi and Gallagher, 2009).

Price

Price is one of the most investigated elements of the traditional marketing mix largely because it generates revenue to organizations (Keller, 2003); represents what is sacrificed by consumers to obtain a product (Zeithaml, 1988). Dodds and Monroe (1985) found that price is an important cue to quality when other cues available are limited, when the product cannot be evaluated before purchase, and when there is some degree of risk inherent in making wrong choice; a key variable that influences consumers' purchase intention (Zeinab&Seyedeh, 2012).

Price is often viewed as a dominant factor in the guiding process when it comes to making a purchase decision. Price in general has always been a determinant factor on consumers' brand

choice when selecting a product or service. It is assumed that when a consumer is facing a buying decision in a product category, consumers observe a price to take into account on their current inventory position in the category. This helps them to maximize their immediate utility that they gain from the purchase. However, when consumer faces brand with varying prices and perceived quality levels, they would have to make a choice consistent with the relative importance attached to both attributes (Zeinab&Seyedeh, 2012).

According to Peter and Donnelly (2007), the price of products and services often influences, whether consumers will purchase them at all and if so, which competitive offering is selected. For some offerings, higher prices may not deter purchase because consumers believe that the products or services are highly quality or more prestigious. However, many of today‘s quality conscious consumers may buy products based on price than other attributes. Therefore, a better understanding of how customers use price information in choosing among alternative brands within frequently bought product categories helps to evaluate it and knowing the intensity as compared to other factors or reasons.

Social Value

Social value is described as “the perceived utility acquired by an alternative as a result of its association with one or more specific social groups. Social value relates to acceptability to other persons or a need to belong to groups and have a good reputation (Sánchez, 2006).

Brand image

A brand image is how the consumers perceive the brand (Aaker 1996, 69). Aaker (1991, 109-110) explains that brand image is a set of associations which might not even reflect the objective reality. Arnold (1998, 94) says that brand image refers to the way in which certain groups decode all of the signals resonating from the product or service. An online writing (Brand image, www.asiamarketresearch.com/glossary/brandimage. htm) explains the concept of brand image as follows: Brand image can be reinforced by brand communications such as packaging, advertising, promotion, customer service, word-of-mouth and other aspects of the brand experience. Brand images are usually evoked by asking consumers the first words/images that come to their mind when a certain brand is mentioned (sometimes called "top of mind"). When responses are highly variable, non-forthcoming, or refer to non-image

attributes such as cost, it is an indicator of a weak brand image. It is the key of how consumers make their choices after gathering information about the particular brand and the alternatives. (Brand image. Asia market research internet site. Referred to 10.10.2011. www.asiamarketresearch.com/glossary/brand-image.htm).

Durability

According to Dr. S. T. Foster, a professor at Boise State University it is one dimensions of quality. And like most of the other quality dimensions, durability is a transcendent, product based, user based, manufacturing based, and value based concept. Also he describes durability as "the degree to which a product tolerates stress or trauma without failing." (Foster P6).

Like the other dimensions of quality, it is easier to plan durability into a products design and manufacturing process than it is to alter the finished product. There are many ways to increase a product's durability. You can increase it by using durable parts and modules in your product. Another way to increase durability is to use redundancy. Redundant parts can vastly increase durability; however, it will increase the products weight and cost as well. And finally another way to increase durability is to design a product for the most demanding user, that way to the average user the product appears to be very durable.

When designing a product and its durability, you should design with your product base, user base, manufacturing base, and value base in mind. Different product bases require different levels of durability. The difference can be seen in the two types of Ford vehicles, the Crown Victoria, which is a law enforcement vehicle, and the Focus, which is an economy car. Both vehicles are designed from the ground up to be different types of cars with different levels of durability. (Foster P6).

Availability of spare parts

The motor vehicle aftermarket covers all goods and services intended to maintain a vehicle in good condition after its purchase and throughout its useful life. The motor vehicle aftermarket generates turnover in terms of retail sales. When this expenditure is broken down, the largest item consists in maintenance and repair services and the purchase of spare parts followed by fuel and lubricants vehicle purchases and car insurance of expenditure corresponds to other individual vehicles-related services. Half of the turnover generated by vehicle repair and maintenance works corresponds to servicing, as specialist labor is increasingly required to

repair and maintain a vehicle, and also more commonly to diagnosing the causes of faults or breakdowns and to preventing future problems. The other half corresponds to the purchase of spare parts to replace damaged parts or, in the case of lubricants for example, to ensure that the vehicle's internal components such as the engine operate correctly.

Although the repair and maintenance sector brings together an offer by repairers and demand from private individuals, insurers and vehicle fleets, and is therefore situated downstream in the chain, an analysis of the spare parts distribution sector needs to look at the value chain as a whole, from the manufacture of the spare parts to their sale to the end consumer, usually as part of repair or maintenance works. Given that it is the repairers who generally select the spare parts, such parts tend to serve as an input for repair and maintenance activities rather than as the end product sold to and selected by consumers. Demand for spare parts therefore originates essentially from repairers. (GIPA Professional Survey 2009, page 102).

So, the easy availability of the spare parts to maintain the damaged parts of automobile is the factors to choose a particular brand of car.

2.6 Empirical review

Underlying factors of Customer Based Brand Equity and Brand Preference

Brands must be developed and maintained constantly in order to secure a set of loyal consumers. Keller et al. (1996) stated the loyalty of consumer's lies with brands, rather than the products. There were several researches done on the Customer Based Brand Equity of different products.

To name a few, Abad (2012) studied The Customer Based Brand Equity in the Banking sector of Iran aiming to conceptualize the customer based brand equity in the financial service sector with respect to its effect on perception of brand. After employing Aaker's (1996) CBBE model, they found out that Perceived quality, brand loyalty, brand awareness and brand association are influential criteria of brand equity that enhances perception of brand in financial service sector.

Among the four mentioned dimensions, brand association appears to have the most influence on brand equity.

Also Hossien (2012) studied The Customer Based Brand Equity in the Chocolate industry of Iran with the intention of identifying which factors are influential in building brand equity and also to measure the relationship among the dimensions of CBBE in the Iranian chocolate industry. After employing Aaker's CBBE model, the researcher found out that the brand equity of chocolate products is directly made up of two dimensions, namely brand loyalty and brand image. These two dimensions have a medium direct impact on brand equity. Other dimensions have a very small and indirect impact on brand equity that in chocolate industry of Iran.

To quote a third article, Tong and Hawley (2009), researched about measuring Customer Based Brand Equity in the Sportswear market in China. Based on Aaker's conceptual framework of brand equity, they employed structural equation modeling to investigate the causal relationships among the four dimensions of brand equity and overall brand equity in the sportswear industry.

The study used a sample of 304 actual consumers from China's two largest cities, Beijing and

Shanghai. The research's findings concluded that, brand association and brand loyalty are influential dimensions of brand equity and weak support was found for the perceived quality and brand awareness dimensions. Thus sportswear brand managers and marketing planners should consider the relative importance of brand equity in their overall brand equity evaluation, and should concentrate their efforts primarily on building brand loyalty and image.

In summary, although no significance literature was found with regards to the Ethiopian automobile industries that are related with brand choice;

2.7 Research Hypothesis

Based on the literature review and the hypothesized connections presented in the conceptual framework the following hypotheses were tested:

- **H1**: Brand image has no a significant effect on brand choice for automobile buyers.
- **H2:** Reliability has no a significant effect on brand choice for automobile buyers.
- **H3**: Price has no a significant effect on brand choice for automobile buyers.
- **H4:** Availability of spare parts has no a significant effect on brand choice for automobile buyers.
- **H5:** Safety has no a significant effect on brand choice for automobile buyers.

- **H6:** Fuel economy has no a significant effect on brand choice for automobile buyers
- **H7**: Durability has no a significant effect on brand choice for automobile buyers.
- **H8:** Social value has no a significant effect on brand choice for automobile buyers.

2.8 Conceptual Framework

Based on the related literature review the conceptual frame work was developed which includes Brand image,Reliability,Price, availability of spare parts, Safety,Fuel consumption, Durability andSocial value. as the independent variable that influence a brand choice(dependent variable) particular automobile brand.

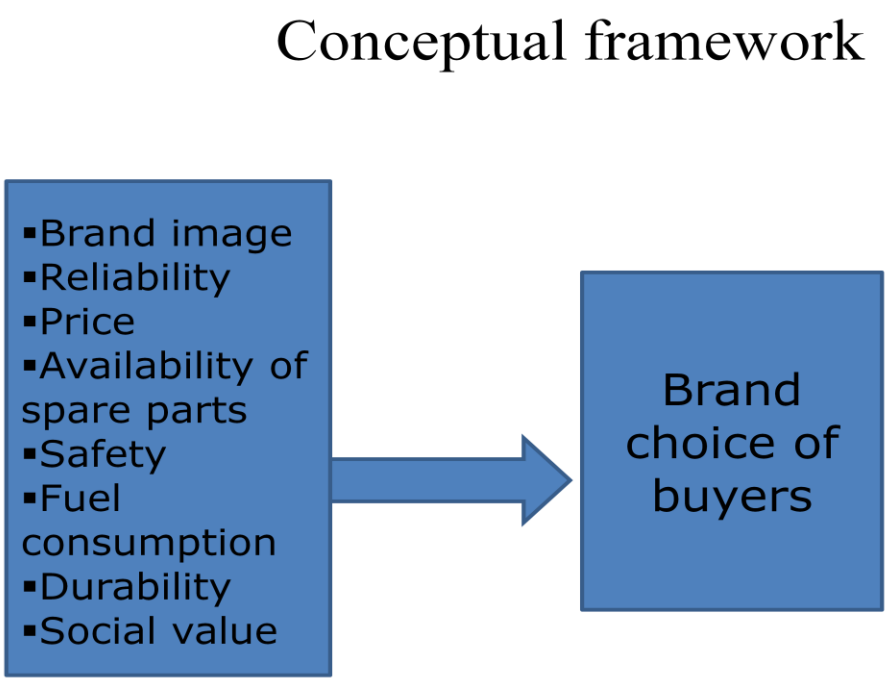

Fig 1.1 conceptual framework

CHAPTER THREE

Research design & methodology

3.1 Introduction

This chapter presented detailed discussion of the research methodology employed in the study. Hence, topics related to research design, data type and source, target population, sampling technique and sample size, data collection procedure and method of data analysis were covered. Explanation about the reliability and validity of the study is also included in this chapter.

3.2 Research Approach

There are three types of research approaches Quantitative, qualitative and mixed research approach

- **Quantitative research** involves studies that make use of statistical analyses to obtain their findings. Key features include formal and systematic measurement and the use of statistics. it is means of testing objective theories by examining the relationship among variables. This variables in turn can be measured typically on instruments so that numbered data can be analyzed using static procedures the final written report has a set structure consists of introduction literature and theory methods results and discussion.(creswell,2008)
- **Qualitative research** involves studies that do not attempt to quantify their results through statistical summary or analysis. Qualitative studies typically involve interviews and observations without formal measurement. A case study, which is an in-depth examination of one person, is a form of qualitative research. Qualitative research is often used as a source of hypotheses for later testing in quantitative research. It is a

means of exploring and understanding the meaning individuals or the group ascribe to a social or human problem. The process of research involves emerging questions and procedures. The final report has a flexible structure. (creswell,2008)

- **Mixed research** it has an approach to enquiry that combine or associate both qualitative and quantitative approaches. It involves philosophical assumption the use of qualitative and quantitative approach and the mixing of both studies. Thus it is more than simply collecting and analyzing both kinds of data it also involves the use of both approach in tandem so that the overall strength of the study is greater than qualitative or quantitative research (creswell & plano clark,2007)

3.3 Research design

- **Descriptive research** is aimed simply at describing phenomena and is not particularly concerned with understanding why behavior is the way it is regarding the average member of a group. (creswell & plano clark,2007)
- **Exploratory research** It is often the starting point of a research project into phenomena (known as an exploratory study) of which we know very little(creswell & plano clark,2007)
- **Explanatory research** is deeper in the sense that it describes phenomena and attempts to explain why behavior is the way it is(creswell & plano clark,2007)

Among the above research approach and research design represents the major methodology driving the study, being distinctive and specific research approaches which are best suited to answer the research question (Comack,1996).It explains and justifies the type and method of data collection,, source of information, sampling strategy and time-cost constraints. The research methodology can be classified using the variety of ways, such as methods of data collection, time dimensions, researcher participation and the purpose of the study (Blumberg, 2008).

Thus this study is trying to identify and explain factors that determine brand choice of buyers. Therefore for this purpose quantitative research approach would use by researcher because the researcher use different statistical tools to measure and quantify the report. Explanatory research design method is also used to understand about factors affecting consumer branch

choice among the alternative automobile cars and provide theoretical explanation so; this research uses explanatory research design. Each of these strategies plays a distinct but complementary role in order to get an answer on the research problem. Explanatory research is deeper in the sense that it describes phenomena and attempts to explain why behavior is the way it is. Thus this research would try to identify what are the determinant factors that are influence brand choice of automobile car buyers while buying. Therefore for this study the appropriate design is explanatory research design.

3.4 Sampling design

3.4.1 Target population

The target populations for this study are the residents of Addis Ababa who are owners of automobile car in a city. Since it is impossible to list all the people, the sample frame is the same as the population of concern. The sample frame is a set of items from which the sample is drawn.

More specifically data were collected from the owners of automobile, may be they are self employee, different company's employees or trader by distributing structured questioners that are related with the main variables the researcher wants to touch within convenient time for the respondents.

3.4.2. Sample Size and Sampling Techniques

Judgmental sampling would used to select some parts of the city in which the researcher believe to address the respondents. There is no specific place to access them.

The current study was depend on non-probability sampling; namely, convenience sampling because the sampling frame is unavailable (Saunders *et al.*, 2012).According to Kothari (2004) when the population element were selected for inclusion in the sample based on the easiest of access, in can be called convenience sampling .This is a technique in which a sample is drawn from that part of the population that is close to hand, readily available, or convenient (Bhattacherjee, 2012). It is an easy, quick, and cost-effective technique, thus, the two non-

probability techniques i.e. judgmental and convenience will be used to select the sample from the targeted population.

There is always the danger of bias entering into this type of sampling technique. But if the investigators are impartial, work without bias and have the necessary experience so as to take sound judgment, the results obtained from an analysis of deliberately selected sample may be tolerably reliable. However, in such a sampling, there is no assurance that every element has some specific chance of being included. Sampling error in this type of sampling cannot be estimated and the element of bias, great or small, is always there. As such this sampling design is rarely adopted in large inquires of importance .However, in small inquiries and researches by individuals, this design may be adopted because of the relative advantage of time and money inherent in this method of sampling (Kothari, 2004)

The sample size for this study was 400. The appropriateness of the 400 respondents is justified by Neuman (2007) who asserts that when it comes to sampling size selection the researcher should used his discretion. In addition, this decision is consistent with Tabacknick and Fidell (1996) who suggested that, for a regression analysis, the minimum sample size (N) should be N ***> 50 + 6M,*** where M is the number of predictors (independent variables).In this study, there are 8 main predictors of automobile brand choice as contained in the conceptual framework adapted for this study (i.e. Brand image, Reliability, Price, availability of spare parts, Safety, Fuel consumption, Durability and Social value**)**, thus the sample size based on their recommendation should be greater than 98.

Thus, the researcher consider available fund and time, sample size used by similar past studies and own judgment to determine the sample size. Hence, samples of 400 participants were participating from targeted population.

3.5 Sources of Data

The sources of data used in this research comprised both primary and secondary data. According to Malhotra (2005), primary data are originated by the researcher for the specific purpose of addressing the problem at hand. Even if obtaining them can be expensive and time consuming, primary data, being the most significant were gathered through structured questionnaires.

Secondary data are data that are collected for some purpose other than the problem at hand (Malhotra, 2005). Secondary data are usually collected from journals, existing reports, and statistics by government agencies and authorities. The secondary data helped the student researcher as specific reference and explore different construct important to this study.

3.6 Method of Data Collection and procedure

Questionnaire design and administration

Firstly, all questions and formats were standardized so that all respondents face the same questionnaire.

Second, the questionnaire was designed comprehensively, in order to motivate respondents to cooperate and accurately complete it.

Specifying the data required

The first step in questionnaire design was to accurately determine the required information to achieve the research objectives. Based on the research questions, hypotheses and the explanatory research, the required question was designed for the independent variables that influence dependent variables.

Appropriate methods of data collection for quantitative study are experimental and survey. Experiments are used in different researches studying consumer preference (i.e., Nordgren and Djiksterhvis (2009)). However it is used to examine cause and effect between two variables in controlling setting. It is often conducted in laboratory settings with a limited number of variables which impedes the generalization of the result (Saunders, 2012).

A survey is used for descriptive study. Several studies in marketing research studying consumer brand choice use the survey method (i.e. Jamal and Al-Mari (2007)). Survey studies ask large numbers of people questions about their behaviors, attitudes, and opinions. Because the number of population is very large, cross sectional survey design with questionnaire technique is used

to collect data at a single point in order to collect quantitative data and examine the pattern of association of variables. There are many techniques used to conduct survey. However, questionnaire is common technique for survey (Saunders, 2012).

3.7 Validity & Reliability

3.7.1 Validity Analysis

Validity is the extent to which differences found with a measuring instrument reflect true differences among those being tested,(Kothari,2004).In other words, Validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure. In order to ensure the quality the research design the researcher will check content and construct validity of the research.

According to Kothari (2004), content validity is the extent to which a measuring instrument provides adequate coverage of the topic under study. If the instrument contains a representative sample of the universe, the content validity is good. Its determination is primarily judgmental and intuitive. It can also be determined by using panel of persons who judge how well the measuring instrument meets the standards, but there is no numerical way to express it.

A measure is said to possess construct validity to the degree that it confirms to predicted correlations with other theoretical propositions. Construct validity is the degree to which scores on a test can be accounted for by the explanatory construct of a sound theory. For determining construct validity, we associate a set of other propositions with the results received from using our measurement instrument. If measurement on our devised scale correlate in predicted way with those other propositions, we can conclude that there is some construct Validity (Kothari, 2004).Therefore, in order to test the construct validity, correlation coefficient for the independent and dependent variables will be calculated. Based on the result of the correlation analysis, since the independent variables are positively related with the dependent variables, the independent variable therefore can be considered as a good measure of brand choice.

3.7.2Reliability Analysis

In statistics, Cronbach's (alpha) is a coefficient of internal consistency. It is commonly used as an estimate of the reliability of a psychometric test for a sample of examinees. It was first name dalpha by Lee Cronbach in 1951.

Cronbach's alpha will generally increase as the inter correlations among test items increase, and is thus known as an internal consistency estimate of reliability of test scores. Because inter correlations among test items are maximized when all items measure the same construct, Cronbach's alpha is widely believed to indirectly indicate the degree to which a set of items measures a single one-dimensional latent construct. However, the averages inter correlation among test items is affected by skew just like any other average. (Revelle W Zinbarg R (2009)).

From the empirical review of different studies related with this industry they used this instrument in order to calculate the reliability of the variables.

Thus, In order to test the internal consistency of variables in the research instrument Cronbach'salpha coefficient will be calculated.

Reliability Analysis of the Variables

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Branding	29.5818	5.460	.626	.662	.689
Reliaility	29.6913	5.214	.309	.372	.756
Price	29.9642	5.483	.352	.388	.733
Sparepart	29.3445	5.218	.582	.763	.687
Safety	29.5264	5.213	.561	.776	.690
Feul	29.1939	5.742	.480	.529	.711
Durability	29.4688	5.415	.610	.627	.689
Socialvalue	30.0395	5.874	.218	.186	.759

Table1.1; reliability analysis of the variables

Source: survey 2017

3.8. Data Analysis

The data analysis would be made by using both descriptive and inferential statistics. Descriptive statistics such as frequencies, percentages, means and standard deviations would be used to summarize and present the data. In addition to this, Pearson correlation coefficient would also be used to show the interdependence between the independent and dependent variables. With regard to inferential statistics, multiple linear regression analysis would be used to test the significance contribution of each independent variable to the dependent variable (brand choice) and also the researcher would use milticollinearity test that is used to test if there is milticollinearity problem within the independent variables. Also the normality of the data is tested through (SPSS 16.0) statistical tool.

Regression equation for the problem is the following:

$Yi = a+\beta 1X1+\beta 2X2+\beta 3X3+\beta 4X4+ \beta 4x4+ \beta 5x5+ \beta 6x6+ \beta 7x7+ \beta 8x8+ \Sigma$

Where, Y=Overall brand equity

α= Y intercept/constant

$\beta 1$= the beta weight or regression coefficient of brand image

$\beta 2$= the beta weight or regression coefficient of reliability

$\beta 3$= the beta weight or regression coefficient of price

$\beta 4$= the beta weight or regression coefficient of spare part availability

$\beta 5$= the beta weight or regression coefficient of safety

$\beta 6$ = the beta weight or regression coefficient of fuel consumption

$\beta 7$= the beta weight or regression coefficient of durability

$\beta 8$= the beta weight or regression coefficient of social value

X1= brand image

X2= reliability

X3 = price

X4 = spare part availability

X5= safety

X6= fuel consumption

X7= durability

X8= social value

Σ = sum of residuals or error terms

3.9. Ethical Considerations

Ethics in business research refers to the set of behavioral principles and norms beginning with the research from the first phase of the study (Sekaran, 2003). The ethical code of conduct should reflect the behavior of everyone participating in the research project; researcher, participants or moderator (Sekaran, 2003). In this research, in order to keep the confidentiality of the data given by respondents, the respondents were not required to write their name and assured that their responses will be treated in strict confidentiality. The purpose of the study was disclosed in the introductory part of the questionnaire.

CHAPTER FOUR

ANALYSIS AND INTERPRITATION

The main focus of this chapter is on presentation of data analysis, empirical findings and results of the survey of the factors that affect brand choice of automobile buyers in Addis Ababa. The data analysis was made with the help of Statistical Package for Social Science (SPSSv.16).

4.1. Reliability Test

Cronbach's alpha is used in this study to assess the internal consistency of the research instrument, which is developed questionnaire. Cronbach's α (alpha) is a coefficient of reliability used to measure the internal consistency of a test or scale; it resulted as a number between 0 and 1. As the result approaches to 1 the more is the internal consistency of the items, which means all the items measure the same variable.

The result of the coefficient alpha for this study's instrument was found to be 0.789, as indication of acceptability of the scale for further analysis since all the eight items of brand choice dimensions (brand image, price, reliability, safety, availability of spare part, durability, fuel consumption and social value) measure the same variable, which is brand choice. Besides the overall reliability test, the items under each of the eight brand choice dimensions are also tested to check if they measure the same dimension or not. Most of the dimension consistency test result was acceptable meaning greater than 0.7 except for brand image, durability, safety and availability of spare part 0.689, 0.689, 0.690 and 0.687 respectively. The reliability measures of the dimensions are moderate. However, Cronbach (1951) describes that sometimes measurements with low reliability result might still influence the scale measure and the overall reliability tastes results indicate excellent internal consistency. Thus considering the results are acceptable further analysis is conducted (reliability test result result available on Appendix part).

Reliability Statistics

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.741	.780	8

Table1.2, Cronbach alpha; for brand choice dimension

Survey result, 2017

4.2 General information of the respondent

Out of the 400 questionnaires sent out, only 382 were returned during a period of two weeks' time. They were not fully completed, and the rest 382 representing a response rate of 95.5 %.

The first part of the questionnaire consists of the general profile of respondents. This part of the questionnaire requested a limited amount of information related to general and company status of the respondents.

Descriptive statistics (frequency distribution) is used to discuss the general demographic characteristics of respondents (Age, gender occupation) and general information of respondent which are suitable for study that are discussed in the table belo

Frequency Table

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	45	11.8	11.8	11.8
	26-35	169	44.2	44.2	56.0
	36-44	111	29.1	29.1	85.1
	45 and above	57	14.9	14.9	100.0
	Total	382	100.0	100.0	

Table1.3, age distribution of the respondent

Survey result, 2017

As the table shown above 11.8%of the respondent is aged between age 18-25 and 44.2% of the respondent is aged between 26-35 and 29% of the respondents are aged between 36-44 and the remaining respondents are 14.9% aged above 45.generally the above table shows that the largest no from the respondents are younger age (26-35).

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	109	28.5	28.5	28.5
	Male	273	71.5	71.5	100.0
	Total	382	100.0	100.0	

Table1.4; gender distribution of the respondents

Survey result, 2017

From the total 382 respondent 109 (28.5%) are females and 273(71.5%) of them are male this tell us largest respondents are male.

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	primary education	5	1.3	1.3	1.3
	secondary education	10	2.6	2.6	3.9
	Diploma	48	12.6	12.6	16.5
	first degree	272	71.2	71.2	87.7
	masters and above	47	12.3	12.3	100.0
	Total	382	100.0	100.0	

Table1.5; educational back ground of the respondents

Survey result, 2017

The above table shows that from the total respondents of 382 1.3% are under primary education and 2.6 % from the total respondents secondary education completes' and also 12.6% respondents are diploma graduates and totally the remaining respondents are first degree, masters and above 71.2% and 12.3% respectively. From this table we can conclude that most of the respondents are first degree graduates.

Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	private service business	232	60.7	60.7	60.7
	government service university teacher	21	5.5	5.5	66.2
	Doctor	1	.3	.3	66.5
	Lawyer	11	2.9	2.9	69.4
	Other	117	30.6	30.6	100.0
	Total	382	100.0	100.0	

Table1.6; occupation of the respondents

Survey result, 2017

The above table discusses the status of the respondents; from the total respondents 382 60% `s are categorized under private service business and 5.5% from government service university teachers also 3% from the total categorized under doctors and 2.9% are lawyers and the remaining respondents are categorized in different position which under other 30.6% .from the above table we conclude that most of the respondents are categorized under private service business.

Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 100,000	111	29.1	29.1	29.1
	101,000-200,000	122	31.9	31.9	61.0
	201,000-500,000	107	28.0	28.0	89.0
	500,000 and above	42	11.0	11.0	100.0
	Total	382	100.0	100.0	

Table1.7; income distribution of the respondents

Survey result, 2017

The above table shows us the income distribution of the respondents that is categorized us the income of the respondents per annum. From the total respondents 29.1% are under the categories of income less than ETB100, 000 and 31.9% of the respondents are categorized under of income ETB 101,000-200,000 also 28% of the respondents are categorized under annual income ETB 201,000-500,000 and the remaining respondents are under income of ETB 500,000 and above. This shows that from the total respondents the largest participants (31.9%) are categorized under annual income of ETB 101,000-200,000.

brand do you have

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Toyota	224	58.6	58.6	58.6

	Hyundai	18	4.7	4.7	63.4
	Suzuki	41	10.7	10.7	74.1
	Lifan	35	9.2	9.2	83.2
	Mercedis	16	4.2	4.2	87.4
	Other	48	12.6	12.6	100.0
	Total	382	100.0	100.0	

Table1.8; brand distribution of the respondents

Survey result, 2017

This tables show us from the total respondents382; 58.6% respondents are the owner of Toyota brand and 4.7 % from the total respondents have Hyundai brand automobile and the other brand is Suzuki from the total respondents cover10.7% the remaining brand that the respondents have are lifan, Mercedes and other brands its has coverage from the total respondents in percentile 9.2%, 4.2% and 12.6% respectively. Generally from the above table we can conclude that Toyota is more preferred brand in a city.

Information from

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	i did extensive information search among all available brand	194	50.8	50.8	50.8
	i compared only among the brands in my consideration	94	24.6	24.6	75.4
	it was jointly family decision	62	16.2	16.2	91.6
	it was friends decision	27	7.1	7.1	98.7

	Other	5	1.3	1.3	100.0
	Total	382	100.0	100.0	

Table.1.9; information of respondents while buying

Survey result, 2017

The above table describe about the respondents get information about how they decide to buy their automobile either from the above choices from the total respondents of 382 50.8% of the respondents search information among all available brands in a city and 24.6% of the respondents are compared only among the brands in their own consideration the other is that 16.2% are bought through the decision of family and 7.1%`s of the respondents are influenced by their friends and the remaining respondents are search from other sources of information. From the above table we conclude that most respondents are search information among all available brands.

4.3 Test of normality of the Data

Among the others, one of the assumptions was normality of the data should be tested before running the analysis of the data using skwness and Kurtosis.

According to Fieled (2005), normally distributed data assumed that the data are from one or more normally distributed populations. The rationale behind hypotheses testing relies on having normally distributed populations and so if these assumptions are not met then the logic behind hypothesis testing is flawed.

Therefore, value of S (Skewness) and K (Kurtosis) and their respective standard errors were computed. An absolute value greater than 1.96 Z-score for Skewness and less than 3.29 for Kurtosis is expected to be significant at $p< 0.05$. Large sample will give rise to small standard errors and so when sample sizes are big, significant values arise from even small deviations from normality for both skewness and Kurtosis (Fieled, 2005).

Descriptive Statistics

	N	Mean	Std. Deviation	Skewness	Kurtosis

	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Brandimage	382	4.1746	.35766	-.466	.125	-.182	.249
Reliability	382	4.1387	.76100	-1.496	.125	3.414	.249
Price	382	3.8658	.61250	-.363	.125	1.074	.249
Durability	382	4.3613	.44247	-.737	.125	.316	.249
Socialvalue	382	3.7906	.59984	-.659	.125	.302	.249
Saftone	382	4.3037	.53432	-.842	.125	.814	.249
Fueloff	382	4.6361	.41438	-.683	.125	-.808	.249
avsp23	382	4.4856	.51911	-1.428	.125	3.510	.249
Valid N (listwise)	382						

Table 1.10 descriptive statics

Survey result, 2017

As we can see from table 1.10 above the absolute value of the Z-scores of all variables in this study were greater than1.96 in skwness and the absolute value of kurtosis was same- haw deviated from the standard of the Z –scores which means brand choice and overall brand choice of the variables scored less than 3.29 Z –sore value. Hence data was normally distributed I

Skwness Z-score however in Kurtosis have some deviations.

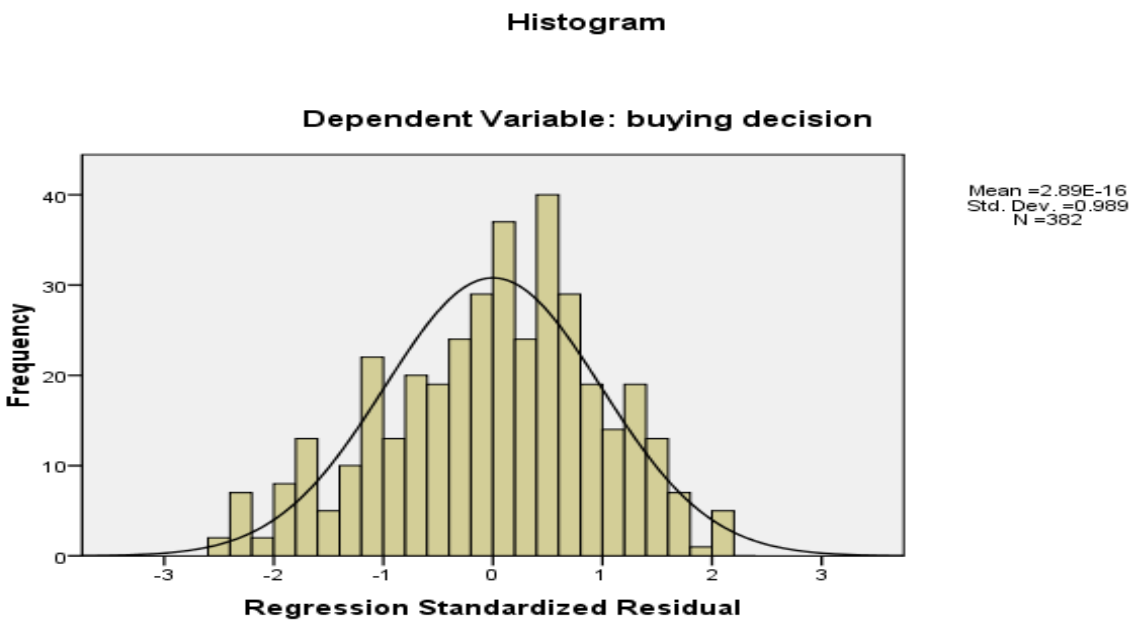

Fig 1.2 normality chart

Survey result, 2017

Normality of a data should be test before running the regression analysis because multiple regressions require that the independent variables in the analysis be normally distributed. According to Brooks (2008), as cited by Abate (2012) if the residuals are normally distributed, the histogram should be bell- shaped and thus this study implemented graphical methods to test the normality of data. From the Histogram figure, it can be noted that the distribution is normal curve, demonstrating that data witnesses to the normality assumption.

As the assumption holds as the histogram was a bell- shaped and the residuals were normally distributed around its mean of zero. Besides, the normal probability plots were also used to test the normality assumption as shown by the Normal P P-Plot Figure as you can see from the above.

As shown in the Figures from the above residuals were normally distributed around its mean of zero which indicates that the data were normally distributed and it was consistent with a normal distribution assumption. As the figures confirmed the normality assumption of the data, this implies that the inferences made about the population parameters from the sample statistics tend to be valid.

4.4 Inferential Statistics

4.4.1 Correlation Analysis

A correlation coefficient expresses quantitatively the magnitude and direction of the liner relationship between two variables, Pearson correlation coefficient reveal magnitude and direction of relationships (either positive or negative) and the intensity of the relationship (-1 to 1). In this section a correlations analysis were done to establish whether relationships do exist between variables conceptualized in the framework. The results would enable the researcher to determine the regression on the dependent variable. The researcher used one of the most commonly used types of correlation coefficient which is Pearson correlation coefficient methods because of the statistical accuracy that usually results from this method.

If there is a perfect linear relationship with negative slope between the two variables, we have a correlation coefficient of -1; if there is negative correlation, whenever one variable has a high (low) value; the other has a low (high) value. A correlation coefficient of 0 means there is no linear relationship between the variables (Valerie and McColl, 2005).

As per table above, the coefficients show that the five factors of automobile brand choice are all positively and significantly correlated with the buying decision within the range of 0.034 to 0.478; all were significant at P= 0.000 level. But the remaining variables like safety, fuel consumption and spare part availability have positive and insignificant relationship with the independent variable which is buying decision.

The results of the correlation analysis indicate that all of the marketing mix variables are positively related to the financial performance. According to Cohen (1998), strength of correlations can be interpreted as follows: Strength of correlation

- r = - + .10 to - + .29 small effect (weak)
- r = - + .30 to - + .49 medium effect (moderate)
- r = - + .50 to - + 1.0 large effect (strong)

Correlations

		Branding	Reliabili	Price	Sparepr	Safet	Feul	Durabili	Socialvalu	buying decisio n
Branding	Pearson Correlation	1.00								
Reliaility	Pearson Correlation	0.16	1.00							
Price	Pearson Correlation	0.12	0.59	1.00						
Sparepart	Pearson Correlation	0.63	0.04	0.03	1.00					
Safety	Pearson Correlation	0.74	0.05	0.04	0.79	1.00				
Feul	Pearson Correlation	0.53	0.05	0.10	0.67	0.46	1.00			
Durabilit y	Pearson Correlation	0.71	0.08	0.09	0.66	0.73	0.46	1.00		
Socialval ue	Pearson Correlation	0.02	0.29	0.35	0.03	(0.03)	0.05	0.14	1.00	
buying decision	Pearson Correlation	0.30	0.47	0.48	0.07	0.03	0.06	0.21	0.41	1.00

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

*. Correlation is significant at the 0.05 level (2-tailed).

Table 1.11 correlation table

Survey result, 2017

Brand image versus buying decision

As indicated in the table above brand image was positively and significantly correlated with buying decision(r=0.305**, p=0.000). In other words the value of (r=0.305) indicates that brand image and buying decision have moderate and positive relationship in the context of automobile brand choice in the market of Addis Ababa.

Reliability versus buying decision

As indicated in the table above reliability was positively and significantly correlated with buying decision(r=0.466**, p=0.000). In other words the value of (r=0.466) indicates that reliability and buying decision have moderate and positive relationship in the context of automobile brand choice in the market of Addis Ababa.

Price versus buying decision

As indicated in the table above price was positively and significantly correlated with buying decision(r=0.478**, p=0.000). In other words the value of (r=0.478) indicates that price and buying decision have moderate and positive relationship in the context of automobile brand choice in the market of Addis Ababa.

Availability of spare part versus buying decision

As indicated in the table above spare part availability was positively and insignificantly correlated with buying decision(r=0.072*, p, greater than 0.05 which is 0.159). In other words the value of (r=0.072) indicates that spare part availability and buying decision have weak and positive relationship in the context of automobile brand choice in the market of Addis Ababa.

Safety versus buying decision

As indicated in the table above automobile safety was positively and insignificantly correlated with buying decision(r=0.034*, p, greater than 0.05 which is 0.503). In other words the value of (r=0.034) indicates that safety and buying decision have weak and positive relationship with insignificant relationship us the respondents data in the context of automobile brand choice in the market of Addis Ababa.

Fuel consumption versus buying decision

As indicated in the table above fuel consumption was positively and insignificantly correlated with buying decision(r=0.061**, p, greater than 0.05 which is 0.231). In other words the value of (r=0.061) indicates that fuel consumption and buying decision have weak and positive relationship with insignificant relationship in the context of automobile brand choice in the market of Addis Ababa.

Durability versus buying decision

As indicated in the table above durability was positively and significantly correlated with buying decision(r=0.207**, p=0.000). In other words the value of (r=0.207) indicates that durability and buying decision have weak and positive relationship with significant enough relationship in the context of automobile brand choice in the market of Addis Ababa.

Social value versus buying decision

As indicated in the table above social value was positively and significantly correlated with buying decision(r=0.411**, p=0.000). In other words the value of (r=0.411) indicates that social value and buying decision have moderate and positive relationship with significant enough relationship in the context of automobile brand choice in the market of Addis Ababa.

The remaining data related to correlation and significance of buying decision dimensions are available in part of appendix.

4.4.2 Multicollnearity Test

In regression, multicollinearity occurs when independent variables in the regression model are more highly correlated with each other than with the dependent variable When the independent variables the regression model is highly correlated with one another; they are basically measuring the same thing. In other words, when two variables are highly correlated, they both communicate essentially similar information. One way to assess multicollinearity is to examine correlations among the independent variables. If a correlation matrix demonstrates correlations of 0.90 or higher among the independent variables, they may be a problem with multicollinearity. Hair et al. (2006) argued that correlation coefficient below 0.90 may not cause serious multicollinearity problem, cited by Muhammed (2012). Multicollinearity can also be detected using tolerance value and variance inflator factor (VIF) value. An insignificant tolerance value point to the variable under discussion is almost a perfect liner combination of the independent variables already in the equation and that it should be dropped out from to the equation. Multicollinearity does not exist among all the independent variables provided that the tolerance value of all the independent variables was greater than 0.1 and the VIF values of all the independent variables are also less than 10. As you can see from table below all independent variables are greater than 0.1 and the VIF value of all the independent variables are also less than 10.

Coefficients

Model		Collinearity Statistics	
		Tolerance	VIF
1	Branding	.338	2.960
	Reliaility	.628	1.592
	Price	.612	1.634
	Sparepart	.237	4.217
	Safety	.224	4.457
	Feul	.471	2.122
	Durability	.373	2.683
	Socialvalue	.814	1.228

a. Dependent Variable: buying decision

Table 1.12 multi co linearity table

Survey result, 2017

4.4.3 Regression Analysis

The above table shows that the tolerance values of all the independent variables were greater than 0.1 and the VIF values of all the independent variables were less than 10. This indicates that model I was free from multicollinearity. Hence, there was no problem of multicollinearity between the independent variables in the model. Therefore regression analysis was done.

As you can see the Model Summary from the appendix part the adjusted R Square statistic tells us the proportion of variance in the dependent variable that is accounted for by the independent variables. In this case the co- efficient of determination adjusted (R^2) was 0.456. This implies that about 45.6% of the dependent variable (i.e. brand choice) can be explained by the independent variables (i.e. brand image, reliability, price, availability of spare part, durability, fuel consumption, safety and social value), leaving about 54.4% to be explained by other exogenous factors. Adjusted R^2 values also indicate the overall effect size of all the independent variables on the dependent variable.

Regression analysis of overall buying decision dimensions

1. Model	Unstandardized coefficient		Standardized coefficients		T	Sig
	B	Std error		Beta	-1.09	.278
(Constant)	-.484					
Branding	1.063	.446		.537	8.26	.000
Reliability	.199	.129		.183	3.83	.000
Price	.338	.052		.249	5.15	.000
Spare part	.295	.066		.184	2.37	.018
Safety	-.765	.124		-.492	-6.16	.000
Fuel	-.411	.124		-.205	-3.72	.000
Durability	.163	.110		.087	1.40	.163
Social value	.330	.116		.238	5.69	.000

Dependent Variable: buying decision

Table 1.13 regression analysis

(Source: Researcher's survey, 2017)

From the above table we can have the following general formula for the model under the study.

The regression equation was

BUD =α+β1x1+β2x2+β3x3+β4x4+ β5x+ Σ..... (1)

BUD =α+β1BI+ β2REL +β3PR+ β4AVSP+ β8SOV+ Σ …….. (2)

BUD=--484+0.537BI+0.183REL+0.249PR+0.184AVSP+238SOV+ Σ... (3)

The regression model from the above table result shows that keeping other variables constant 0.537 unit increases in brand image will bring a unit increase in the buying decision.0.183 unit increase in reliability will have a unit increase impact on buying decision of automobile market in Addis Ababa. 0.249 unit increase of price will have a unit increase impact on buying decision of automobile market in Addis Ababa. 0.184 unit increase of availability of spare parts of will have a unit increase of buying decision of automobile market in Addis Ababa. 0.238 unit increases in social value will bring a unit increase in the buying decision. 0.087 unit increases in durability will bring a unit increase in the buying decision but durability of automobile is insignificant for brand choice in the market since its p, is greater than 0.05 which is 0.163. the remaining two variable safety and fuel consumption have significant for brand choice when the value of $p<0.05$, while it have negative beta value which is -0.765 and -0.411

respectively this means that this two variables have inversely relation while buying decision in market of automobile in a city.

4.4 Hypothesis Testing and Interpretation of Results (Table 1.14) source survey2017

Hypotheses	**Result**	**Analysis Technique**
H1: Brand image has no a significant effect on brand choice for automobile buyers	Ho: Rejected	β =0.537, p<0.05
H2: Reliability has no a significant effect on brand choice for automobile buyers.	Ho: Rejected	β =0.183 p<0.05
H3: Price has no a significant effect on brand choice for automobile buyers.	Ho: Rejected	β =0.249 p<0.05
H4: Availability of spare parts has no a significant effect on brand choice for automobile buyers.	Ho: Rejected	β =0.184 p<0.05
H5: Safety has no a significant effect on brand choice for automobile buyers.	H5:Accepted	β =-0.492, p<0.05
H6: Fuel consumption has no a significant effect on brand choice for automobile buyers.	H6: Accepted	β =-0.205 p<0.05
H7: Durability has no a significant effect on brand choice for automobile buyers.	H7: Accepted	β =0.087 p>0.05
H8: Social value has no a significant effect on brand choice for automobile buyers	H8: Rejected	β =0.238, p<0.05

As the significance value of F statistics shows a value of (.000), which was less than $p<0.05$. Thus, the model was significant and fit. The strength of each predictor (independent variable) influencing the criterion (dependent variable) can be investigated via standardized Beta coefficient. The regression coefficient explains the average amount of change in the dependent variable that is caused by a unit change in the independent variable. The larger value of Beta coefficient an independent variable has, brings the more support to the independent variable as the more important determinant in predicting the dependent variable.

The adjusted R-square value only indicates the variance in the buying decision of automobile brands in Addis Ababa market as it was explained by the independent variables which means the result of regression for the five independent variables on buying decision of automobile brands as presented in Appendix part and the model explains the relationship between the independent variables and the dependent variables. Model I that obtained from the result of the regression analysis represents a multiple regression model which relates the dependent variable buying decision to the five independent variables brand image, price, reliability, availability of spare part and social value.

Generally the above table multiple linear regression (Beta Coefficient) analysis revealed that Brand image was the first most significant variable for buying decision followed by price, social value, reliability and spare part availability.

Brand image and buying decision

A brand image is how the consumers perceive the brand (Aaker 1996, 69). Aaker (1991, 109-110) explains that brand image is a set of associations which might not even reflect the objective reality. Arnold (1998, 94) says that brand image refers to the way in which certain groups decode all of the signals resonating from the product or service. So, the mind set up of buyers is the main issue in automobile market to make a choice among available brands.

Reliability and buying decision

In terms of value reliability, consumers consider a vehicle to be reliable if it is likely to have fewer problems than other vehicles (Consumer Report, 2010). Vehicle reliability has been found to have a positive impact on the consumers' likelihood of choosing a vehicle (Woods*et al*, 2010). Reliability and quality are interrelated, perceived quality has direct impact on customer purchase decision and brand loyalty especially during the time customers have less or no information of the products that they are going to purchase (Armstrong and Kotler, 2003).

Thus reliability is the second more significant variable in the market to choose brand among available brands in a city.

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Price and buying decision

Price is often viewed as a dominant factor in the guiding process when it comes to making a purchase decision. Price in general has always been a determinant factor on consumers' brand choice when selecting a product or service. It is assumed that when a consumer is facing a buying decision in a product category, consumers observe a price to take into account on their current inventory position in the category. This helps them to maximize their immediate utility that they gain from the purchase. However, when consumer faces brand with varying prices and perceived quality levels, they would have to make a choice consistent with the relative importance attached to both attributes (Zeinab&Seyedeh, 2012). Thus this study shows us price is the next significant and influential variable for brand choice of automobile car in the market to brand image and reliability respectively.

Social value and buying decision

Social value is described as "the perceived utility acquired by an alternative as a result of its association with one or more specific social groups. Social value relates to acceptability to other persons or a need to belong to groups and have a good reputation (Sánchez, 2006). The acceptability of others for automobile bought by the buyer is other influential variable for buying decision.

Availability of spare part and buying decision

The motor vehicle aftermarket covers all goods and services intended to maintain a vehicle in good condition after its purchase and throughout its useful life. The motor vehicle aftermarket generates turnover in terms of retail sales. Demand for spare parts therefore originates essentially from repairers. (GIPA Professional Survey 2009, page 102). So, the easy availability of the spare parts to maintain the damaged parts of automobile is the factors to choose a particular brand of car.

Safety and buying decision

The vehicle safety performances are ratings before purchasing a vehicle (Harris, 2001). Even if the theoretical back ground of the variable safety like this but this data show us its beta value is negative value -0.492 and significance relationship with buying decision with the value of 0.000 and the value of $p<0.05$ this show us safety is inversely significant for brand choice of buyers of automobile so we can accept the null hypothesis.

This indicates there is relationship between safety and automobile brand choice in a city but it's have a negative beta value while $p<0.05$. Bhattacherjee (2012) pointed out that, if $p>0.05$, then we do not have adequate statistical evidence to reject the null hypothesis or accept the alternative hypothesis.

Fuel consumption of automobile and buying decision

Furthermore, Austin and Dinan (2005) assume that consumers fully value lifetime fuel savings when considering fuel economy in their vehicle choices. There is no doubt that consumers do care about fuel costs, do value fuel economy, and that their interest in fuel economy increases when fuel prices increase (Mahadi and Gallagher, 2009). Although theoretical concept discuss this our result show us fuel consumption is significant and inverse relationship with buying decision with beta value of -0.205 and significance vale $p<0.05(0.000)$. so, we can accept the null hypothesis.

Durability of automobile and buying decision

Like the other dimensions of quality, it is easier to plan durability into a products design and manufacturing process than it is to alter the finished product. There are many ways to increase a product's durability.

According to Dr. S. T. Foster, a professor at Boise State University it is one dimensions of quality. And like most of the other quality dimensions, durability is a transcendent, product based, user based, manufacturing based, and value based concept. Also he describes durability as "the degree to which a product tolerates stress or trauma without failing." (Foster P6). The result show us it's have a positive beta value of 0.87 but its have insignificant relationship with dependent variable buying decision with value of $0.163(p>0.05)$ so we can accept the null hypothesis.

Bhattacherjee (2012) pointed out that, if $p>0.05$, then we do not have adequate statistical evidence to reject the null hypothesis or accept the alternative hypothesis.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter winds up the study undertaken so far by giving insights about summary, conclusions, recommendations and highlighting future research areas

5.1 Summary of the Major Findings

The primary objective of this study was to determine the factors that affect brand choice of automobile buyers in Addis Ababa. Nowadays the Ethiopian automobile market is getting in to stiff computation through providing different brand of automobile within almost similar purpose. This computation lead the firms to act as a flexible marketer and tiring to satisfy buyers need through answer the question like what, where, when, how, there buyers satisfy to take largest market share from similar automobile suppliers in a market Hence, this study tries to identify which determinant has the highest influence on the overall brand choice. In addition, this study also tries to answer the five research questions it started with in the introduction.

- All respondents of the questioner are automobile owners and live in a city.
- In order to determine the factors that influence the buyers of automobile in a city the researcher test eight independent variable like brand image, reliability, price, availability of spare parts, fuel consumption, durability, safety and social value. By distributing 400 questioners to selected respondent through judgmental and convenience sampled respondents. But from the total distributed questioner 382(95.5%) of them completed correctly and return within a time. Based on the conceptual frame work and objectives of the study 29 questions were provided in a 5 point Likert scale to the respondents. The gathered data has analyzed by means of descriptive and inferential statistics using SPSS version 16 soft ware.
- We can understand that among the total brands available in Addis Ababa automobile market the buyers choice is brand TOYOTA. From the total respondents of the questioner 58.6% of the respondents have the owners of TOYOTA automobiles.

- As we read from the result of questioner the largest portion of annual income distribution of the respondents are categorized under annual income of ETB 101,000-200,000. This show us most of them have medium income level annually.
- The other thing we read from responded questioner the occupation of the respondents have dominated by private service business among listed on the question with the result of 60.7% from the total respondents.

In the inferential statistics part the following results were achieved.

- The findings indicate that brand image was the first most significant variable than other by resulting beta value of 0.537 and significantly related with dependent with value of $p<0.05$.
- The results indicates that although all five variables(brand image, reliability, price, availability of spare parts, social value) had a positive and significant influence on the brand choice of automobile brands, the remaining variables like safety and fuel consumption resulted negative beta value -0.492 and -0.205 with significant relationship with dependent variable brand choice but its significance is inverse relation. The other is durability has resulted with positive beta value and insignificant relationship with dependent variable brand choice of automobile.
- The first hypothesis which states that brand image has no a significant effect on brand choice of automobile buyers, as a result we can reject the null hypothesis and accept alternative one.
- The next hypothesis which states that reliability has no a significant effects on brand choice of automobile buyers, as a result we can reject the null hypothesis and accept alternative one.
- The next hypothesis which states that price has no a significant effect on brand choice of automobile buyers, as a result we can reject the null hypothesis and accept alternative one.
- The next hypothesis which states that availability of spare parts has no a significant effects on brand choice of automobile buyers, as a result we can reject the null hypothesis and accept alternative one.
- The next hypothesis which states that safety has no a significant effects on brand choice of automobile buyers, as a result we can accept the null hypothesis and reject alternative one.

- The next hypothesis which states that fuel consumption has no a significant effects on brand choice of automobile buyers, as a result we can accept the null hypothesis and reject alternative one.
- The next hypothesis which states that durability has no a significant effects on brand choice of automobile buyers, as a result we can accept the null hypothesis and reject alternative one.
- The final hypothesis which states that social value has no a significant effects on brand choice of automobile buyers, as a result we can reject the null hypothesis and accept alternative one.
- Finally brand choice found to be positively explained by the sum of the five independent variables by 45.6% in this study and the reaming 54.4% of the dependent variable (i.e. brand choice) has explained by other exogenous variables.

5.2 Conclusion

The primary purpose of this study was to investigate the factors affecting brand choice of automobile buyers in Addis Ababa. More specifically, in this study the brand image level of consumers, most popular brand in a city and the most significant determinant would also identified in the study.

One of the objectives of this study was to find out which brand was more prefer in a city. The data we collected show us the most preferred automobile brand in Addis Ababa is TOYOTA brand among all brands that are available in the market which is 58.6%.

The results of regression analysis indicated that there is a positive effect of brand image, reliability, price, availability of spare parts and social values from this finding; we can conclude that all are influential factors for dependent variable that is brand choice.

The other main issue we read from the results of inferential statistics is that three variables like safety, durability and fuel consumption has no influential effects on dependent variable that is brand choice in automobile market so, we can conclude that this factors are no influences on automobile buyers in a city.

One of the objectives of this study was to find out which dimension has the most significant impacts on dependent variable. As indicated in the result among identified

and tested independent variables brand image has the largest value in its significance with dependent variable and beta value so, we can conclude that brand image has mostly influential factors that is the customer level of minding about the brand because of different reason.

From the result we can also see that the income of most respondent is not to high which is categorized under annual income of ETB 101,000-200,000 and they are not more attached their life style with their safety other than the purpose (reliability) and other factor of automobile they bought so, we can conclude that their annual income is more attached with the brand choice of automobile.

- At the beginning of the study it was hypothesized that all the eight determinants of brand choice had no significant impact on brand choice. After the analysis was done, the findings revealed that the major dimension which affects the brand choice of automobile buyers are discussed like brand image, reliability, price, availability of spare parts and social values. so we can conclude that null hypothesis is rejected and accepted alternative hypothesis. the other three variables did not strongly influence the brand choice, the hypotheses drawn were accepted because they had no a significant but positive effect on the automobile buying decision.

5.3 Recommendations

Based on the findings of the study and conclusions made, the following possible recommendations are drawn:

- From different prior researches we know that consumers are unable to identify their preferred automobile in blind. Perception of buyers therefore comes from the extrinsic marketing communication and suppliers should use different positioning strategies that put their brand unique in the eyes of the consumer or creates the point of difference.
- Keller (2009) posits that since consumers spend little time or effort on the buying decision of low involvement products, brand image alone is sufficient to decide consumer brand choice and determine purchase as consumers are willing to base their choices merely on familiar brands. Hence, it is recommended that automobile companies or sellers should embark on intensive campaign to create stronger brand image.

- The effort of companies on the creativity is much impressive. Regarding actively engaging in their customer pleasure.
- As the finding of the research there are five influential factors having influences on brand choice of automobile buyers. So the companies and suppliers of automobile must identify need of their customer related with the influential factors like brand image, reliability, price of automobile, availability of spare part and build the social acceptability of the brand through different method.

5.4 Recommendations for Future Research

- The present study was conducted to investigate the underlying factors of automobile brand choice in Addis Ababa, Ethiopia. Therefore, there is scope for other researchers to study consumers brand choice decision in other product categories and in the context of other cities in the country where consumers may have different characteristics. Similarly, future researcher may use more time, resource and sample size in order to make all-round assessment in this area. Besides that, this study used the eight variables that are brand image, reliabilities, price, availability of spare parts, durability, fuel consumption of automobile, social value and safety of a particular automobile brand, which explain or influence only 45.6% percent of the variance in buyers brand choice. Therefore, future researcher may investigate other variables which have a potential to influence the variance in automobile brand choice.

5.5 limitation of the study

There are insignificant empirical reviews in the country that support the problem of the thesis. So, to show detail gap and detail analysis is problem of researcher also there is some constraint for a researcher that's related to finance and time because the problem area is almost new for the scope of a city.

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Appendix 1

Consumer buying decision survey

Dear Respondents,

My name is Denaneso Gemechu studying Master Program at Addis Ababa University School of commerce in marketing program. I have designed the following questionnaire for the purpose of my thesis work, the objective of my study is to" **examine factors affect the brand choice automobile car in Addis Ababa.** This questionnaire consists of three sections: **section i** deals with the general information, **section ii, determinants of automobile buying** and **section iii,** buying decision.

The information you provide in this survey will be used for the stated purpose and it will be held confidential. I appreciate your voluntary and valuable participation in this survey. I really thank you in advance for sharing your valuable experience and time in completing the questionnaire. Would you please take some fifteen minutes to fill the questionnaire? Please do not write your name on the questionnaire.

Tel: +251909534815

E-mail Dgdenaso@gmail.com

Sincerely yours,

Denanso Gemechu

Part 1 General information

Instruction: please encircle the appropriate number that describes you best.

1. **Age: 1,** 18- 25 2, 26- 35 3, 36-44 4, 45 and above
2. **Gender:** 1, Female 2, Male
3. **Highest educational level obtained:**

   1, Primary education 2, Secondary education

   3, Diploma 4, First Degree 5, Masters and above
4. **What is your occupation?**

   1, Private Service Business 2, Government Service University teacher

   3, Doctor 4 , lawyer 5, others ----------
5. **What is your income per annum?**

   1, less than 100 000 2, 101 000 - 200 000

   3, 201 000-500 000 4, 500 000 & More than ----------
6. **Which brand car do you have?**

   1, Toyota 2, Hyundai 5, Mercedes

   3, Suzuki 4, lifan

   6, Others…….
7. **Did you do a lot of information search for buying a car or you just compared the car brands you are aware of?**

   1, I did extensive information search among all available brands

   2, I compared only among the brands in my considerations set

   3, it was a joint family decision

   4, it was my friend decision

   5, Others ----------

Part 2: determinants of automobile buying

Direction: Please indicate your degree of agreement/disagreement with the following statements by circling the appropriate number. (1-Strongly disagree; 2-Disagree; 3-Neutral; 4-Agree and 5-Strongly agree) Key: SDA= strongly disagree; DA= Disagree; N=Neutral; A= Agree, SA= strongly agree.

S.no.	Items	Strongly Dis agree	Dis Agree	Neutral	Agree	Strongly agree
Brand image						
1	I search so many information about the car brands that I was not previously aware of.	**1**	**2**	**3**	**4**	**5**
2	I consider any lesser-known brand car.	**1**	**2**	**3**	**4**	**5**
3	A well-known branded car is always better in quality than a lesser known brand	**1**	**2**	**3**	**4**	**5**
4	It is important that the brand name alongside your desired attributes.	**1**	**2**	**3**	**4**	**5**
5	I always go for the well known branded products.	**1**	**2**	**3**	**4**	**5**
6	"A lesser-known brand does not necessarily mean inferior quality"	**1**	**2**	**3**	**4**	**5**
7	I feel more secure when I buy automobile with a well-known brand	**1**	**2**	**3**	**4**	**5**
Reliability						
8	The quality of automobile car influences the brand choice.	**1**	**2**	**3**	**4**	**5**

9	`` Real service `` (purpose) of automobile car influence the brand you choice.	**1**	**2**	**3**	**4**	**5**
Price						
10	Price of automobile car influences the brand choice.	**1**	**2**	**3**	**4**	**5**
11	My monthly income affects my brand choice while buying.	**1**	**2**	**3**	**4**	**5**
12	Low price is one of my priorities when making a buying decision.	**1**	**2**	**3**	**4**	**5**
13	I prefer an automobile brand that is reasonably priced.	**1**	**2**	**3**	**4**	**5**
Availability of spare part						
14	Availability of my car spare part influences me while buying.	**1**	**2**	**3**	**4**	**5**
15	Availability of local auto spare parts influence my auto decision	**1**	**2**	**3**	**4**	**5**
Safety						
16	"It's safe to buy a branded product as they always come with better quality"	**1**	**2**	**3**	**4**	**5**
17	The design of automobile is determine the brand choice in the market	**1**	**2**	**3**	**4**	**5**
18	Medium safety is enough for me to buy automobile					
Fuel consumption						
19	Fuel consumption of my car is influence me while buying	**1**	**2**	**3**	**4**	**5**

20	Types of fuel consumed by my car influence my buying decision	**1**	**2**	**3**	**4**	**5**
Durability						
21	Durability of my car is influence me while buying.	**1**	**2**	**3**	**4**	**5**
22	I buy automobile that is produced as per acceptable quality standard	**1**	**2**	**3**	**4**	**5**
23	I buy automobile that I consider it has a consistence quality.	**1**	**2**	**3**	**4**	**5**
Social value						
24	A well-known branded car is a status symbol.	**1**	**2**	**3**	**4**	**5**
25	Using a branded product signifies social class	**1**	**2**	**3**	**4**	**5**
26	Social acceptability of the brand influence you while buying this car	**1**	**2**	**3**	**4**	**5**
27	Logo of a well-known brand is important as it tells who you are.	**1**	**2**	**3**	**4**	**5**
28	I seek any opinion as to which brand car to buy from others.	**1**	**2**	**3**	**4**	**5**
Part 3 buying decision						
29	The overall determinants are strongly influence the brand choice of automobile buyers.	**1**	**2**	**3**	**4**	**5**

APPENDIX 2
MEAN OF VARIABLES

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Socialvalue, Branding, Reliaility, Feul, Price, Durability, Sparepart, Safety[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: buying decision

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	Branding	.338	2.960
	Reliaility	.628	1.592
	Price	.612	1.634
	Sparepart	.237	4.217
	Safety	.224	4.457
	Feul	.471	2.122
	Durability	.373	2.683
	Socialvalue	.814	1.228

a. Dependent Variable: buying decision

APPENDIX 3

Co linearity Diagnostics(multicolinearity)

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions								
				(Constant)	Branding	Reliaility	Price	Sparepart	Safety	Feul	Durability	Socialvalue
1	1	8.905	1.000	.00	.00	.00	.00	.00	.00	.00	.00	.00
	2	.044	14.290	.00	.00	.16	.07	.01	.01	.00	.00	.04
	3	.020	20.887	.00	.00	.24	.01	.00	.00	.00	.00	.67
	4	.011	28.119	.00	.00	.56	.83	.00	.00	.00	.00	.09
	5	.007	34.824	.21	.00	.00	.07	.00	.11	.17	.02	.08
	6	.005	41.358	.17	.10	.01	.01	.23	.00	.09	.10	.03
	7	.003	52.329	.57	.19	.00	.00	.03	.17	.18	.10	.01
	8	.003	56.496	.00	.38	.01	.00	.03	.09	.01	.76	.08
	9	.002	77.008	.05	.32	.01	.01	.70	.62	.55	.01	.00

a. Dependent Variable: buying decision

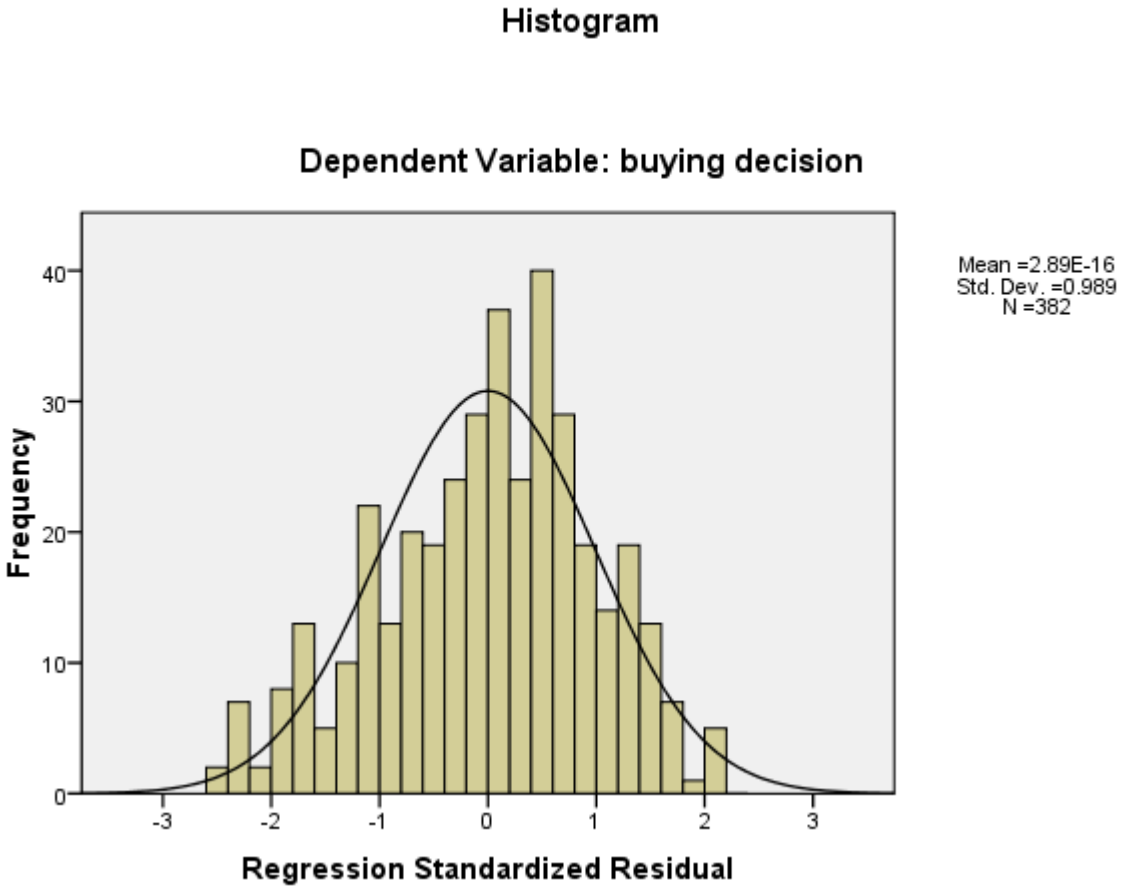
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.99	5.30	4.25	.568	382
Residual	-1.572	1.323	.000	.607	382
Std. Predicted Value	-3.977	1.853	.000	1.000	382
Std. Residual	-2.564	2.157	.000	.989	382

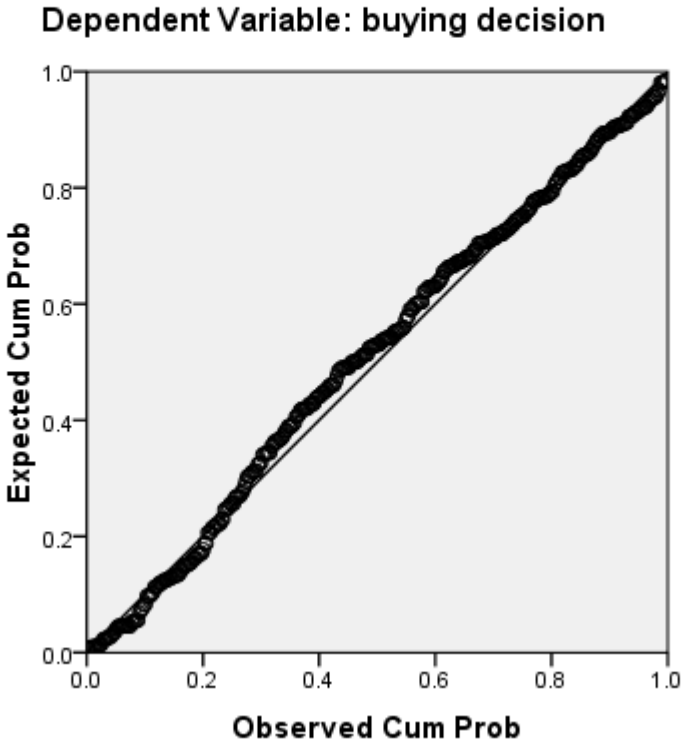
a. Dependent Variable: buying decision

APPENDIX 4

Charts (normality test)

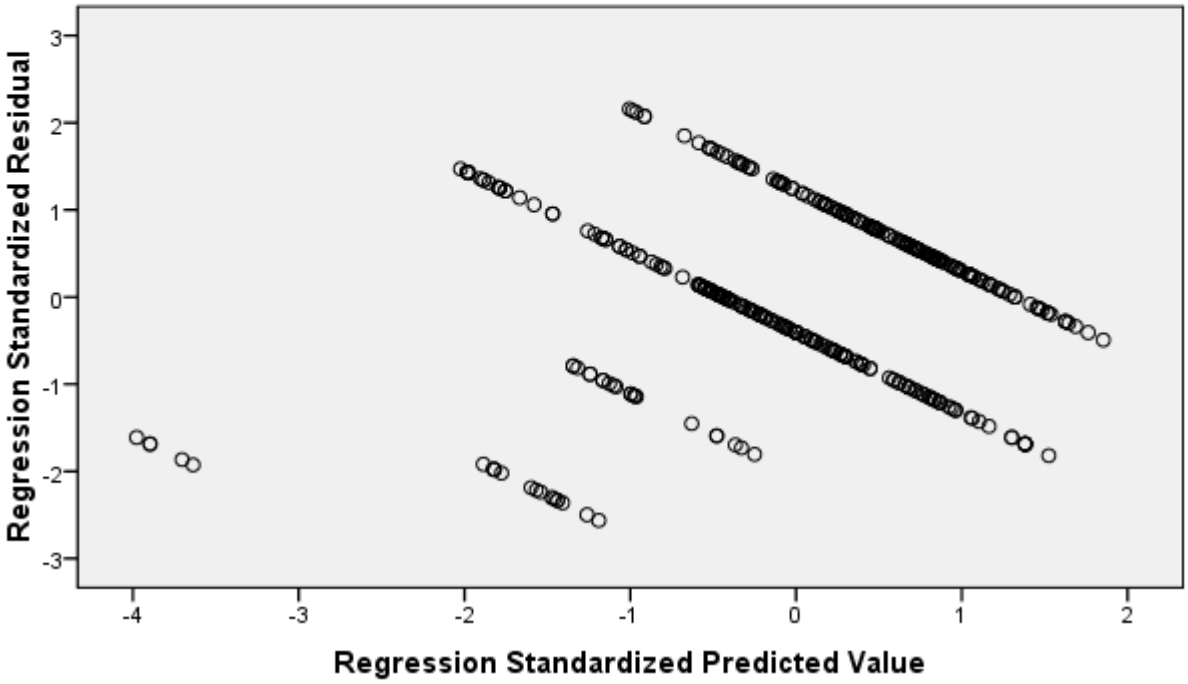


Normal P-P Plot of Regression Standardized Residual



Scatterplot

Dependent Variable: buying decision



Descriptives

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Branding	382	2.67	5.00	4.2483	.42034	-.554	.125	-.061	.249
Reliaility	382	1.00	5.00	4.1387	.76100	-1.496	.125	3.414	.249
Price	382	1.75	5.00	3.8658	.61250	-.363	.125	1.074	.249
Sparepart	382	2.00	5.00	4.4856	.51911	-1.428	.125	3.510	.249
Safety	382	2.67	5.00	4.3037	.53432	-.842	.125	.814	.249
Feul	382	3.50	5.00	4.6361	.41438	-.683	.125	-.808	.249
Durability	382	3.00	5.00	4.3613	.44247	-.737	.125	.316	.249
Socialvalue	382	2.00	4.80	3.7906	.59984	-.659	.125	.302	.249
Valid N (listwise)	382								

APPENDIX 5

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	382	100.0
	Excluded[a]	0	.0
	Total	382	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.741	.780	8

Item Statistics

	Mean	Std. Deviation	N
Branding	4.2483	.42034	382
Reliaility	4.1387	.76100	382
Price	3.8658	.61250	382
Sparepart	4.4856	.51911	382
Safety	4.3037	.53432	382
Feul	4.6361	.41438	382
Durability	4.3613	.44247	382
Socialvalue	3.7906	.59984	382

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Branding	29.5818	5.460	.626	.662	.689
Reliaility	29.6913	5.214	.309	.372	.756
Price	29.9642	5.483	.352	.388	.733
Sparepart	29.3445	5.218	.582	.763	.687
Safety	29.5264	5.213	.561	.776	.690
Feul	29.1939	5.742	.480	.529	.711
Durability	29.4688	5.415	.610	.627	.689
Socialvalue	30.0395	5.874	.218	.186	.759

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
33.8301	6.867	2.62057	8

Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	Sig
916.176	128.821	7	375	.000

Intraclass Correlation Coefficient

	Intraclass Correlation[a]	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.264[b]	.226	.305	3.865	381	2667	.000
Average Measures	.741[c]	.700	.779	3.865	381	2667	.000

Two-way mixed effects model where people effects are random and measures effects are fixed.

a. Type C intraclass correlation coefficients using a consistency definition-the between-measure variance is excluded from the denominator variance.

b. The estimator is the same, whether the interaction effect is present or not.

c. This estimate is computed assuming the interaction effect is absent, because it is not estimable otherwise.

APPENDIX 6
Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Socialvalue, Branding, Reliaility, Feul, Price, Durability, Sparepart, Safety[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: buying decision

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.684[a]	.467	.456	.613

a. Predictors: (Constant), Socialvalue, Branding, Reliaility, Feul, Price, Durability, Sparepart, Safety

b. Dependent Variable: buying decision

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	123.096	8	15.387	40.914	.000[a]
	Residual	140.278	373	.376		
	Total	263.374	381			

a. Predictors: (Constant), Socialvalue, Branding, Reliaility, Feul, Price, Durability, Sparepart, Safety

b. Dependent Variable: buying decision

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.484	.446		-1.086	.278	-1.361	.393
	Branding	1.063	.129	.537	8.264	.000	.810	1.315
	Reliaility	.199	.052	.183	3.830	.000	.097	.302
	Price	.338	.066	.249	5.148	.000	.209	.467
	Sparepart	.295	.124	.184	2.374	.018	.051	.539
	Safety	-.765	.124	-.492	-6.163	.000	-1.009	-.521
	Feul	-.411	.110	-.205	-3.719	.000	-.628	-.194
	Durability	.163	.116	.087	1.398	.163	-.066	.391
	Socialvalue	.330	.058	.238	5.693	.000	.216	.445

a. Dependent Variable: buying decision

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.99	5.30	4.25	.568	382
Residual	-1.572	1.323	.000	.607	382
Std. Predicted Value	-3.977	1.853	.000	1.000	382
Std. Residual	-2.564	2.157	.000	.989	382

a. Dependent Variable: buying decision

APPENDIX 7

Correlations

		Branding	Reliaility	Price	Sparepart	Safety	Feul	Durability	Socialvalue	buying decision
Branding	Pearson Correlation	1	.162**	.120*	.627**	.743**	.528**	.711**	.018	.305**
	Sig. (2-tailed)		.001	.019	.000	.000	.000	.000	.721	.000
	N	382	382	382	382	382	382	382	382	382
Reliaility	Pearson orrelation	.162**	1	.587**	.040	.047	.052	.081	.292**	.466**
	Sig. (2-tailed)	.001		.000	.436	.362	.308	.115	.000	.000
	N	382	382	382	382	382	382	382	382	382
Price	Pearson Correlation	.120*	.587**	1	.030	.041	.095	.087	.352**	.478**
	Sig. (2-tailed)	.019	.000		.559	.429	.062	.088	.000	.000
	N	382	382	382	382	382	382	382	382	382
Sparepart	Pearson Correlation	.627**	.040	.030	1	.795**	.674**	.663**	.033	.072
	Sig. (2-tailed)	.000	.436	.559		.000	.000	.000	.517	.159
	N	382	382	382	382	382	382	382	382	382
Safety	Pearson Correlation	.743**	.047	.041	.795**	1	.461**	.728**	-.029	.034
	Sig. (2-tailed)	.000	.362	.429	.000		.000	.000	.576	.503
	N	382	382	382	382	382	382	382	382	382
Feul	Pearson Correlation	.528**	.052	.095	.674**	.461**	1	.464**	.050	.061
	Sig. (2-tailed)	.000	.308	.062	.000	.000		.000	.334	.231
	N	382	382	382	382	382	382	382	382	382
Durability	Pearson Correlation	.711**	.081	.087	.663**	.728**	.464**	1	.136**	.207**
	Sig. (2-tailed)	.000	.115	.088	.000	.000	.000		.008	.000
	N	382	382	382	382	382	382	382	382	382
Socialvalue	Pearson Correlation	.018	.292**	.352**	.033	-.029	.050	.136**	1	.411**

	Sig. (2-tailed)	.721	.000	.000	.517	.576	.334	.008		.000
	N	382	382	382	382	382	382	382	382	382
buying decision	Pearson Correlation	.305**	.466**	.478**	.072	.034	.061	.207**	.411**	1
	Sig. (2-tailed)	.000	.000	.000	.159	.503	.231	.000	.000	
	N	382	382	382	382	382	382	382	382	382

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

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

Correlations

		Branding	Reliaility	Price	Sparepart	Safety	Feul	Durability	Socialvalue
Branding	Pearson Correlation	1	.162**	.120*	.627**	.743**	.528**	.711**	.018
	Sig. (2-tailed)		.001	.019	.000	.000	.000	.000	.721
	N	382	382	382	382	382	382	382	382
Reliaility	Pearson Correlation	.162**	1	.587**	.040	.047	.052	.081	.292**
	Sig. (2-tailed)	.001		.000	.436	.362	.308	.115	.000
	N	382	382	382	382	382	382	382	382
Price	Pearson Correlation	.120*	.587**	1	.030	.041	.095	.087	.352**
	Sig. (2-tailed)	.019	.000		.559	.429	.062	.088	.000
	N	382	382	382	382	382	382	382	382
Sparepart	Pearson Correlation	.627**	.040	.030	1	.795**	.674**	.663**	.033
	Sig. (2-tailed)	.000	.436	.559		.000	.000	.000	.517
	N	382	382	382	382	382	382	382	382
Safety	Pearson Correlation	.743**	.047	.041	.795**	1	.461**	.728**	-.029
	Sig. (2-tailed)	.000	.362	.429	.000		.000	.000	.576
	N	382	382	382	382	382	382	382	382
Feul	Pearson Correlation	.528**	.052	.095	.674**	.461**	1	.464**	.050

	Sig. (2-tailed)	.000	.308	.062	.000	.000		.000	.334
	N	382	382	382	382	382	382	382	382
Durability	Pearson Correlation	.711**	.081	.087	.663**	.728**	.464**	1	.136**
	Sig. (2-tailed)	.000	.115	.088	.000	.000	.000		.008
	N	382	382	382	382	382	382	382	382
Socialvalue	Pearson Correlation	.018	.292**	.352**	.033	-.029	.050	.136**	1
	Sig. (2-tailed)	.721	.000	.000	.517	.576	.334	.008	
	N	382	382	382	382	382	382	382	382

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

*. Correlation is significant at the 0.05 level (2-tailed).