

Review Article

# An Empirical Analysis of the Psychological Factors Influencing the Purchase Behaviour in the Automotive Market in India

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**Abstract** - This article throws light on various discriminant functions that will best discriminate between different segments of consumers regarding the psychological factors influencing the purchase behavior in India's automotive market. The paper further highlights the importance of various promotional tools in the purchase of cars in India. The car market in India is one of the largest segments of the domestic auto industry. From a luxury product for the urban middle class in the eighties and earlier, a car has now become the favorite mode of personal transport and the most coveted personal household durable possession among nearly all consumer classes. The commercial vehicle segment's leading vehicle is the stylish, fuel-efficient and sturdy 4-stroke car, the purchase of which is influenced by various psychological factors like motivation, perception, learning, beliefs, and attitudes. Descriptive research using a stratified random sampling method was undertaken, and the study was conducted using both primary and secondary data. It was concluded that the "Beliefs and Attitudes" factor was the most effective psychological factor in discriminating among the urban consumers and the 'Motivation' factor was the most effective psychological factor in discriminating among the rural consumers in the choice of a car brand.

**Keywords** - Car, Psychological factor, Rural area, Urban area, Discriminant analysis.

## I. INTRODUCTION

The automobile industry had witnessed an unprecedented scale of change since 1991, when liberalization took place in India for the first time. The wave of globalization has directly affected the international automobile industry and the buyer behavior in the car market. The promotional strategies associated with it have accelerated the global reorganization of it. The study of buyer behavior has assumed paramount importance in the automobile industry in general and in the car market. It has thrown open several challenges to the car manufacturers and its dealers in formulating effective and competitive

promotional strategies for growth and market acceptance. It fosters the process of understanding why a customer or a buyer makes a car purchase. Without such an understanding, the industry will find it very difficult to respond to the customers' needs and wants. It is challenging to understand how customers respond to the plethora of promotional tools used by marketers in cars' marketing. If the car manufacturers and their dealers could better understand these customer preferences and perceptions than their competitors, it is a potentially significant competitive advantage. Hence car makers spend considerable time, money, and effort to learn consumer behavior. We find a significant difference between developing and developed countries; young people in developed countries have less desire to purchase cars. Expectations of others appear an important determinant of purchase intentions, whereas income and the effective symbolic meaning of the car are less correlated with intention.<sup>1</sup> 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 and to strengthen the industry is to improve consumer insight into vehicle buying behavior.<sup>2</sup> To understand the automotive industry in an advanced perspective, there should be particular emphasis on issues that lie at the intersection of marketing and technology, such as how, when, and why marketers should use new digital media channels and the understanding of social media marketing and consumer behavior in digital markets.<sup>3</sup> At some point in its development, every industry can be considered a growth industry, based on its product's apparent superiority. But in case after case, industries have fallen under the shadow of mismanagement. What usually gets emphasized is selling, not marketing.

The term buyer behavior is defined as buyers' behavior in searching for, purchasing, using, evaluating, and disposing of products and services they expect to satisfy their needs.<sup>13</sup> Thus, buyer behavior focuses on how individuals spend their available resources like time, money, and effort on



consumption related items. The theory of “cognitive dissonance” is of great importance in consumer behavior and marketers have lots of interest in analyzing the post-purchase behavior of consumers experienced by them in the automobile market.<sup>5</sup> The effects of price, brand, and store information on buyers' perceptions of product quality and value and their willingness to buy are important factors to be considered in the automotive industry.

### **A. Automobile Industry: An Indian Scenario**

The evolution of the automobile industry sparked off from the rudimentary origins of transportation. Before the invention of automobiles, the main mode of man's travel was on foot. He had attempted to find out some mechanical device for his transport. The first of such attempts is recorded to be in 3500 BC. On record, the Sumerians who lived in the river basins of Tigris and Euphrates had traveled by a mode of transport made on wheels. Later on, Kings and others used palanquins borne by men; and chariots pulled by horses and other animals for their travel. Domestic animals like cows, donkeys, horses, and elephants were made use of for pulling cartloads. References to such vehicles are galore in the epic works of literature. The horse-carts and bullock-carts are still in force in certain places.<sup>1</sup>

### **B. Car Industry in India**

The automobile industry in India is one of the fastest-growing automobile industries in the world. There has been substantial growth in the passenger car industry in India. The car industry has received a huge fund of FDI (Foreign Direct Investment), and the government of India aims to make India a global manufacturing hub with sophisticated R&D facilities. India has the distinction of being the seventh-largest manufacturer of commercial vehicles in the world. The domestic automobile sale has been increasing substantially with an increase in the CAGR. The commercial vehicles have recorded the fastest pace of growth in domestic sales, followed by three-wheelers. India has set up a National Automotive Testing and R&D infrastructure project centers and a National Automotive Board to act as facilitators between the government and the industry. The Ministry of Heavy Industries, which comes under the Government of India, has selected eleven cities in the country for the introduction of electric vehicles (EVs) under the FAME (Faster Adoption and Manufacturing of (Hybrid) and Electric Vehicles in India) scheme.

### **C. The Two-Wheeler Industry**

This segment comprises the largest segment of the domestic auto industry in terms of absolute numbers.<sup>1</sup> From a semi-luxury product for the urban middle class in the eighties and earlier, the two-wheeler has now become not only the favorite mode of personal transport but also the most coveted personal (household durable) possession among nearly all consumer classes, except perhaps the most affluent. The two-wheeler segment is divided into 5 major product

classifications: (1) Mopeds; (2) Motorcycles; (3) Scooters; (4) Step thrus and (5) Ungeared scooters.

#### **a) Scooters**

A scooter is a vehicle with an engine and two small wheels like a small motorcycle. Scooters are perceived as more of a utility vehicle or a family vehicle than an entertained vehicle in India. It has more safety features than a motorcycle, e.g., the front metallic cover that prevents the rider's legs from an injury on collision or some accident.

#### **B) Motorcycles**

The major players in the motorcycle market are: (1) Bajaj Auto Ltd., (2) TVS (Tiru Venkata Sundaram Iyengar) Suzuki, (3) Hero Honda, (4) Escorts Yamaha, and (5) Royal Enfield. Motorcycles are mainly of two types: (1) 2-stroke motorcycle; (2) 4-stroke motorcycle: In a 2-stroke motorcycle, the engine works on a two-stroke cycle viz. 1) compression cum suction and (2) expansion cum exhaust. In a 4-stroke motorcycle, the engine works on a 4 stroke cycle viz (1) suction stroke, (2) compression stroke, (3) Expansion stroke, and (4) exhaust stroke.

#### **C) Mopeds**

The market for mopeds has not been witnessing much activity in the last few years, i.e., from 2000 to 2014. This is mainly because of the gradual shift in the demand pattern, which has seen consumers buying the other categories of two-wheelers, motorcycles segment gaining the most. This shift is mainly due to relatively stable prices of scooters and motorcycles and rising incomes at the rural level with the increasing number of households.

## **II. RESEARCH PROBLEM**

A car purchase is influenced by several psychological factors like ‘motivation,’ ‘perception,’ ‘learning, and ‘beliefs and attitudes.’ To be more competitive in marketing these cars, marketers have to consider these influencing factors. However, due to a lack of awareness about the psychological factors that influence a car purchase decision, an attempt has been made by the researcher to investigate those psychological factors that are responsible for influencing a car purchase decision and for examining those psychological factors which are effective in discriminating among the urban and rural groups of consumers in the choice of a car brand by applying discriminant analysis.

### **A. Research Question**

Buyer behavior with respect to the purchase of a car has the interplay of several psychological factors like ‘motivation,’ ‘perception,’ ‘learning,’ and ‘beliefs and attitudes.’ These independent variables like ‘motivation,’ ‘perception,’ ‘learning,’ and ‘beliefs and attitudes’ have a discriminating impact on buyers' purchase behavior. The primary research question in this study is to examine those psychological factors that effectively discriminate among the

urban and rural groups of buyers in the choice of a car brand by applying discriminant analysis.

### **B. Objectives of the Study**

1. To identify various psychological factors that influence the purchase of cars in the Malabar region of Kerala
2. To find out the most effective psychological factor in discriminating among the urban and rural groups of buyers in choosing a car brand.
3. To analyze the importance of various promotional tools in purchasing cars in the Malabar region of Kerala.

### **III. REVIEW OF LITERATURE**

1. Tan Owee Kowang, Siti Aisyah Samsudin, Lim Kim Yew, Ong Choon Hee, Goh Chin Fei, Choi Sang Long (2018), in their article titled 'Factors Affecting Car Purchase Intention among Undergraduates in Malaysia' attempted to assess the overall impact of car purchase factors toward car purchase intention among final year undergraduates in FM, UTM. This study reveals that the four-car purchase factors (pricing, aesthetic, features, and interpersonal influence) toward car purchase intention are significant. In addition, finding from the study also suggests that final year undergraduates in FM viewed aesthetic, i.e., the physical look configuration or visual characteristic of the car as the most important factor that influences car purchase intention. Meantime, finding from the study also reveals that car purchase intention by final year undergraduates is less influenced by the pricing factor. The study implies that the automobile industry shall place "aesthetic" as the marketing focus when dealing with young graduates' car marketing strategy.
2. Laurence (2008) investigated the importance of environmental awareness in the car purchase decision; it was useful to get an insight into car decision-making. From a consumer's point of view, it found that the LCC of a car is the total cost related to a car's life cycle. This LCC includes the purchase price, the fuel costs, the insurance costs, several taxes, and the maintenance cost. As the purchase price was the prime attribute in assessing a new car, a transition towards mass production and cheaper materials could lower the purchase price and thus increase the consideration of green cars in the car purchase decision.<sup>3 3</sup>
3. Gagandeep Singh and Rajinder Kapil (2018), in their article titled 'Analysis of Customer car Purchase Decision and brand choice: A Study of Panjab State, attempted to know the factors affecting purchase decisions brand choice of the small car. The present study used exploratory cum descriptive design. A sample of 536 respondents used for collecting the response through a well-structured questionnaire with the help of a Likert scale. The sample selected for this study includes the respondents of Punjab State. Data was collected with the help of a structured questionnaire. Secondary data was also collected from different previous research studies, including several journals, articles, books, etc. A set of simple techniques of statistical analysis such as mean, standard deviation has been used. Further, ANOVA and Factor analysis was used. A computerized package PASW 18.0 version was used. The results of the study also revealed that respondents do not differ significantly towards factors affecting car purchase decisions and brand choice, i.e., reliability, safety and comfort, creative design, cost and facility, trustworthiness, gracious, deluxe, handling conduct, and compatibility of small cars at 5 percent level of significance, therefore the null hypothesis is accepted. The study also recommended that manufacturers should also focus on the reliability factor, safety and comfort of customer, creative design, privacy and facility, the trustworthiness of the car and its brand, gracious product, handling the product with compatibility are the factors that affect car purchase decisions and brand choice.
4. Peters et al. (2011) identified psychological factors that are effective in measuring the change in behavior and helps in promoting fuel-efficient cars. The model was proposed, which integrated psychological variables that explained the purchase of fuel-efficient vehicles by private consumers. The data was collected from 302 Swiss respondents whose households have bought a new car since 2002. Structured equation modeling was used to confirm the factors. It was concluded that problem awareness, symbolic motives, and response efficacy influence the respective behavior indirectly via affecting the direct predictors. Results reflected the salience of the positively valued features of new technology and alternative fuels.
5. Ravi Ozaki et al. (2011) conducted an analysis of consumer purchase motivations. The paper reported a case study of consumer adoption of hybrid vehicles, a green innovation that had been in the market since the 1990s. The study was based on a primary survey conducted in 2009 to investigate the dimensions that constitute motivations to purchase the Prius and to examine how policy could encourage hybrid adoption. 1263 responses were used for analysis, and exploratory factor analysis was conducted. The financial benefits related to transport policy, social norms, technological interest, and consumer willingness to comply were important factors. It was recommended that affective

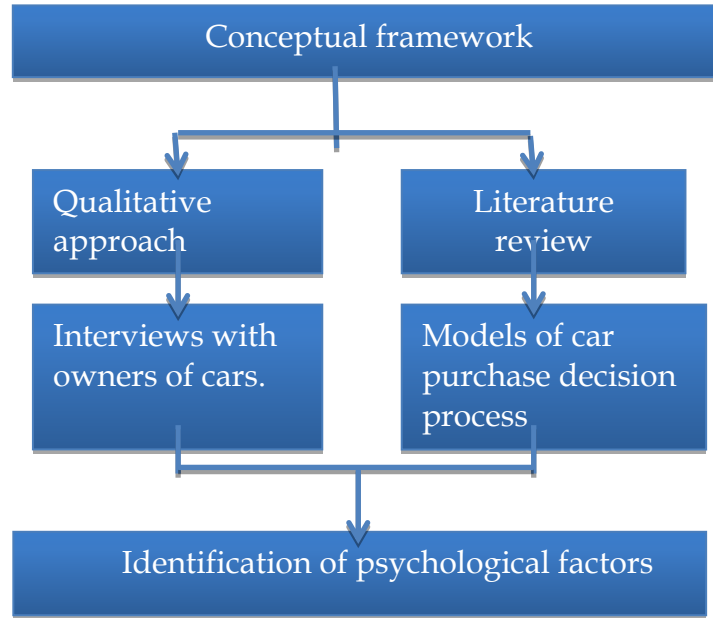
values need to be communicated to consumers in terms of value-added.

6. H. S. Adithya (Jan 2013): Automobile Industry is one of the fastest-growing sectors in our country. Cars were once considered as a luxury, and now it has become a necessity. They have become part and parcel of today's life, and most of the car manufacturers target the middle-class segment to a great extent. The introduction of small cars is a classic example of this. Today's consumer has plenty of options available to him. We are in a consumer market where the marketers do not merely satisfy a need but try to achieve consumer delight. The decision to purchase a car is not a one-man decision. The purchase is normally influenced by many, including their own perceptions and behavior. The author has clearly defined in this paper perception of consumers towards car owner and their behavior of purchasing decisions. Every consumer decision different, so they analyze then give an opinion.
7. Ketan Kamra (2015), in his paper 'Influence of Social Media on the Indian Automotive Consumers: Primary Study in National Capital Region', ventured to identify and investigate the extent of influence of social media in the Indian Automotive Consumers by conducting thorough primary research. The results reveal a strong influence of social media in influencing the consumers over multiple buying process parameters. The influence of social media on vehicular research, suggestions, vehicle technologies, finance calculator, and Facebook page marketing has shown a significant share in impacting a consumer before buying an automobile.
8. Elizabeth Chacko, Ms. Punnya Selvaraj (2014): The Automobile Industry is growing, and if compared, the sales and production of four-wheelers are more. Also, if we compare the four-wheeler models like the car which can be driven by females were least in the market because the market was male dominant. But now there is a drastic change. The earlier car which can be driven by a female was only Maruti 800, all other like Tata Sumo, Bolero, Ambassador, etc. In this new era, we can see segment for small four-wheeler car quite large. This research paper has the most innovative, and the author is analyzing only female consumer Patterns and how they were driving a new car and also the purchasing pattern of their brand, Services, quality, mileage, etc.
9. Gupta Bhuwan, Agarwal Nisha (2013): The Indian Automobile Industry has got an incredible market potential. With the growth of the population and change in their pattern of lifestyle as a result of urbanization, there has been a rapid increase in demand for Indian automobiles. The purpose of this chapter is to survey the growth of the Automobile Industry in India and its role in economic development and to bring out the profile of the study area. In recent days India is witnessing a change in consumerism. The market is now mainly a consumer driver. The focus is shifting from product-based marketing to need-based marketing. The consumer is given many options to make a decision. The passenger car segment is no omission to this general trend. In this paper, the author has indicated customer preferences for their car and how they behave for taking the decision to purchases a car.
10. Dhanbalan, Subha, Shanthi, and Satish, in their article titled 'Factors Influencing Consumer's Car Purchase Decision in Indian Automobile Industry,' attempted to study with an objective of studying the attributes which mostly affecting the purchase decision of the automobile consumer. Presently Indian automobile industry is rife in competition due to the availability of national and foreign brands and increasing pre and post-sales expectation among the customers. The study has been conducted in Tamilnadu. A total of 547 customers who have purchased the cars were contacted for data collection. The study is based on primary and secondary data. Structural Equation Model has been used to analyze data. It was found from the results of the research that the targeted research variable customer perceived value was positively influenced by brand, price, quality, design, utility, technical consideration. And all these factors have compelled the customer to select and buy the car.

#### **IV. CONCEPTUAL FRAMEWORK**

1. The conceptual framework has been developed with the help of major psychological factors that have been derived from the review of the literature and qualitative data. The framework consists of dependent and independent variables. The research aims to identify important psychological factors influencing the purchase of a car and to find out the most effective psychological factor in discriminating among the urban and rural groups of consumers in the choice of a car brand.

The above conceptual framework summarizes the aim of this research in which it intends to study the psychological factors that influence the purchase of a car.



At this stage of research, the research hypothesis is evolved and clearly stated. The following research hypothesis was formulated and was subject to testing.

#### A. The hypothesis of the Study

**HO:** There is no significant relationship between the psychological factors and a car purchase decision among the urban and rural groups of buyers in the choice of a car brand.

**H1:** There is a significant relationship between the psychological factors and a car purchase decision among the urban and rural groups of buyers in the choice of a car brand.

#### B. Methodology

This is a descriptive study of the buyer behavior in the car market in the Malabar region of Kerala. The study is based on both primary and secondary data, which are analyzed using statistical tools like Percentage analysis, Chi-square analysis, and Discriminant analysis to draw conclusions. The research design adopted in this study is a descriptive research design.

#### C. Sources of primary and secondary data

Since most of the information necessary to fulfill the objectives of the study was not available from secondary sources, the researcher mainly based his study on relevant primary data, which were collected by conducting a field survey from the selected sample units in Kerala. The primary data were collected from 300 car owners through a structured interview schedule. Out of the 300 car owners, 190 were from the urban area, and 110 were from the rural area. The

secondary data necessary for the study were compiled from published and unpublished sources.

#### D. Sample Frame

The present study pertains to car manufacturers, car dealers, and car owners in Kerala. Thus, a sample comprising 300 car owners was selected from the sample frame of the study.

#### E. Sample Design

The study adopts a stratified random sampling method for sample selection. The Malabar region of Kerala was stratified into five districts viz., Malappuram, Kozhikode, Wayanad, Kannur, and Kasaragod. Out of the five districts in the Malabar region of Kerala, the researcher chose three districts viz., Malappuram, Kozhikode, and Kannur by way of the simple random sampling method. The researcher then selects 100 sample units (car owners) from each of these three districts, viz., Malappuram, Kozhikode, and Kannur, by way of a simple random sampling technique. Thus altogether, 300 sample units (car owners) were selected for the study. The type of study undertaken by the researcher is a descriptive study.

#### F. Area of the Study

The Malabar region of the state of Kerala in India has been chosen by the researcher as his area of study. The Malabar region of Kerala comprises the following five districts, viz., Malappuram, Kozhikode, Wayanad, Kannur, and Kasaragod.

## V. RESULTS OF THE ANALYSIS

### A. Brand of cars owned in the Malabar region of Kerala

The major players in the car market are Maruti Suzuki India, Hyundai Motor India, Mahindra & Mahindra, TATA Motors, Honda cars India, TOYOTA Kirloskar, FORD India, Renault India, and Nissan Motors India. There are several brands in the car market in Kerala viz., SWIFT DZire, Vitara Brezza, Wagon R, Alto, Ertiga, Elantra, Kona EV, Verna, Santro, Ciaz, CRETA, i20, i10, Bolero, Scorpio, Duster, Honda City, Accord, Civic, Jazz, Toyota Glanza, Fiesta, Fusion, Figo, Fluence, Koleos, and Kwid. The car market in Kerala is abundant in small cars, mid-segment cars, and premium cars with a wide variety of models and attractive features catering to the tastes and preferences of consumers in the Malabar region of Kerala. These cars are sold through dealer outlets at various places convenient to the public at large. As it could be seen from Table 1 below, 52% of the car owners own Maruti Suzuki cars, 16% own Hyundai cars, 8% own Mahindra & Mahindra cars, 7% own TATA Motors cars, 5% own Honda Cars, and 5% own TOYOTA cars 7% own other cars. Thus, the majority of the car buyers in the Malabar region of Kerala prefer the car brands of Maruti Suzuki, followed by Hyundai cars.

**Table 1. Brand of Cars owned in the Malabar region of Kerala**

Brand	Number of Respondents	Percentage
Maruti Suzuki	156	52
Hyundai Motors	48	16
M&M	24	8
TATA	21	7
Honda	15	5
TOYOTA	15	5
Others	21	7
Total	300	100.0

Source: Survey Data

### B. Promotional tools are influencing the Car purchase decision in the Malabar region of Kerala.

A purchase decision in the car market in the Malabar region of Kerala could be influenced by promotional tools like newspaper, television, radio, internet, social media, magazines, word of mouth, test drives, exchange melas, and others. The extent to which the promotional tools will influence the purchase decision will depend on the social, cultural, and economic environment around which buyers pivot themselves.

**Table 2. Ranking of promotional tools influencing the car purchase decision**

Promotional Tool	Ranking
Word of mouth	1
Social media	2
Internet	3
Magazine	4
TV	5
Newspaper	6
Test drive	7
Car shows & other melas	8
Radio	9
Exchange melas	10
Others	11

Source: Primary Data

As it could be seen from Table 2, among the different promotional tools that influence the purchase decision in the car market in the Malabar region of Kerala, 'word of mouth' is ranked the highest (1), followed by social media, internet, advertisement in magazine, TV, newspaper, test drive, car shows and other melas, radio, and the least ranked among them is exchange melas and other promotional tools.

### C. Influence of Psychological Factors

An attempt has been made to identify the underlying variables among various psychological factors in the study. The psychological factors identified are:

1. "Motivation" factor
2. "Perception" factor.
3. "Learning" factor
4. "Beliefs and Attitude" factor

Following are the underlying variables under each psychological factor:

Variables coming under the "Motivation" factor:

1. Physiological needs
2. Safety and security needs
3. Social needs
4. Esteem needs
5. Self-actualization needs

Variables under the “Perception” factor:

1. Selecting information
2. Organizing information
3. Interpreting information
4. Subliminal advertising

Variables under the “Learning” factor:

1. Reinforcement
2. Strong drives
3. Using motivating cues
4. Stimuli
5. Response

Variables under the “Beliefs and Attitude” factor:

1. Brand Image
2. A descriptive thought
3. Feelings towards an object
4. Relatively consistent evaluations toward an object
5. Tendencies toward an object

## VI. RESULTS AND DISCUSSIONS:

The data collected for responses to the dimensional scales of the study were coded and analyzed using SPSS 23.0 version. The following section presents the results of the following:

1. The Discriminant Analysis for ‘motivation’ factor influencing the choice of a car brand among the urban and rural groups of consumers.
2. The Discriminant Analysis for ‘perception’ factors influencing the choice of a car brand among the urban and rural groups of consumers.
3. The Discriminant Analysis for ‘learning’ factor influencing the choice of a car brand among the urban and rural groups of consumers.
4. The Discriminant Analysis for ‘beliefs and attitude’ factor influencing the choice of a car brand among the urban and rural groups of consumers.

### A. Discriminant Analysis for the psychological factors influencing the choice of a car brand among the urban and rural groups of consumers.

The following presents the Discriminant Analysis for the psychological factors influencing the choice of a car brand among the urban and rural groups of consumers.<sup>14</sup>

**Table 3. Wilk’s Lambda**

Test of Function	Wilk’s Lambda	Chi-square	df	Sig
1	0.3848	35.94	4	0.000

Source: SPSS Output File

The hypothesis was tested using Wilk’s Lambda using SPSS. Wilk’s Lambda statistic is the product of the univariate Lambda for each function. The significance level is estimated based on a Chi-square transformation of the statistic. In testing for significance, it may be noted that the Wilk’s Lambda associated with the function is 0.3848, which transforms to a Chi-square of 35.94, with 4 degrees

of freedom. This is significant beyond the 0.05 level of significance.

The following table gives the standardized canonical discriminate function coefficients for arriving at the Discriminant Function Equation for the urban and the rural respondents.

**Table 4. Standardized Canonical Discriminant Function Coefficients for psychological factors influencing the choice of a car brand among the urban and rural group of respondents.**

Respondents by their domicile		Function
Urban		1
	Motivation	0.629
	Perception	0.523
	Learning	0.731
	Beliefs and Attitudes	0.889
Rural	Motivation	0.932
	Perception	0.854
	Learning	-0.595
	Beliefs and Attitudes	-0.468

Source: SPSS Output File

From the structure of the standardized Discriminant Function (DF), the equation for the urban respondents is:

$$Y = a1 + b1 + c1 + d1$$

Where Y is the Discriminant Function Equation,

a1= Motivation factor

b1= Perception factor

c1 = Learning factor

d1= Beliefs and Attitude factor

The Discriminant function coefficient for 'Motivation' = 0.629, for 'Perception' = 0.523, for 'Learning'=0.731 and for 'Beliefs and Attitudes'= 0.889. Therefore, the Discriminant Function equation for the Urban Respondents =  $0.629+0.523+0.731+0.889$  Of the four Discriminant function variables for the urban respondents, 'Beliefs and Attitudes' had the highest coefficient value of 0.889 as compared to 0.731 for 'Learning,' 0.629 for 'Motivation' and 0.523 for 'Perception.'

***B. Therefore, in the case of the urban group of respondents, the most Discriminant Function Variable is the 'Beliefs and Attitudes' factor.***

With respect to the Discriminant Function Analysis for rural respondents from the structure of the standardized Discriminant Function (DF), the equation for the rural respondents is:

$$Y = a1 + b1 + c1 + d1$$

Where Y is the Discriminant Function Equation,

a1= Motivation

b1= Perception

c1 = Learning

d1= Beliefs and Attitudes

The Discriminant function coefficient for 'Motivation' = 0.932, for 'Perception' = 0.854, for 'Learning'= -0.595 and for 'Beliefs and Attitudes'= -0.468.

The Discriminant Function equation for the rural respondents =  $0.932+0.854-0.595-0.468$

Of the four Discriminant Function variables for the rural respondents, 'Motivation' factor had the highest coefficient value of 0.932 as compared to 0.854 for 'Perception,' -0.595 for 'Learning' and -0.468 for 'Beliefs and Attitudes.'

### ***C. Interpretation of Discriminant Function Analysis:***

The results of the Discriminant Function Analysis showed that there is a difference in the discriminant variable between the urban and the rural group of respondents. 'Beliefs and Attitudes' was the major discriminant variable for the urban consumers, whereas the 'Motivation' factor was the major discriminant variable for the rural consumers. This result indicated that the variables clearly discriminated between those of urban and rural groups of consumers in the choice of a car brand. Therefore, the marketers of cars should

focus more on the "Beliefs and Attitudes" factor in urban areas and the 'Motivation' factor in the rural areas.

***D. Therefore, in the case of the rural group of respondents, the most Discriminant Function Variable is the 'Motivation' factor.***

### ***a) Findings***

1. The most Discriminant Variable for influencing buyer behavior varied between the urban and the rural consumers of the car market. 'Beliefs and Attitudes' was the major discriminant variable for the urban consumers, whereas the 'Motivation' factor was the major discriminant variable for the rural respondents in the choice of a car brand.
2. The majority of the car buyers in the Malabar region of Kerala preferred the brand Maruti Suzuki. Out of the 300 respondents interviewed in the Malabar region of Kerala in the car market, it was found that 156, i.e., 52% of the respondents owned a Maruti Suzuki car, followed by Hyundai and M&M, respectively.
3. The various promotional tools that influenced the purchase decision in the car market in the Malabar region of Kerala are social media, newspaper, television, radio, internet, magazines, word of mouth, test drives, and exchange melas. Among them, 'word of mouth' was ranked first, which influenced the purchase decision the most in the car market in the Malabar region of Kerala, followed by social media, internet, TV, newspaper, test drive, radio, and exchange melas, respectively.

## **VII. CONCLUSION**

The paper presented the Discriminant Analysis for the four dimensions scales of the study. It is significant to highlight that the most discriminant variable for influencing buyer behavior varied between the urban and the rural consumers in the car market. 'Beliefs and Attitudes' was the major discriminant variable for the urban consumers, whereas the 'Motivation' factor was the major discriminant variable for the rural consumers in the choice of a car brand.

The majority of the two-wheeler buyers in the Malabar region of Kerala preferred the brand Maruti Suzuki. 'Word of mouth' was ranked first, which influenced the purchase decision the most in the car market in the Malabar region of Kerala, followed by social media, internet, TV, newspaper, test drive, radio, and exchange melas, respectively.

### ***A. Recommendations***

The car manufacturers and dealers may conduct causal marketing like a 'wellness programme' or a 'literacy campaign' for the people of a particular rural or urban area. This will not only improve the sales of the marketer but will also create a brand image of the company and will benefit



society at large. The marketing efforts should be for the cause of the potential customers and the existing customers, which should also render free training and health fitness activities for the relatives and friends of the existing customers.

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