

## **A study on factors influencing the customer satisfaction towards passenger car in the automobile segment in Kerala**

VINOD M S

*Department of Commerce,  
Research Scholar (Part Time)  
PGP College of Arts & Science,  
Namakkal Dt, Tamil Nadu.*

*Dr. S.RAJA M.Com., MBA., M.Phil., Ph.D.,  
Assistant Professor,  
Department of Commerce,  
PGP College of Arts & Science,  
Namakkal Dt, Tamil Nadu.*

### **Abstract**

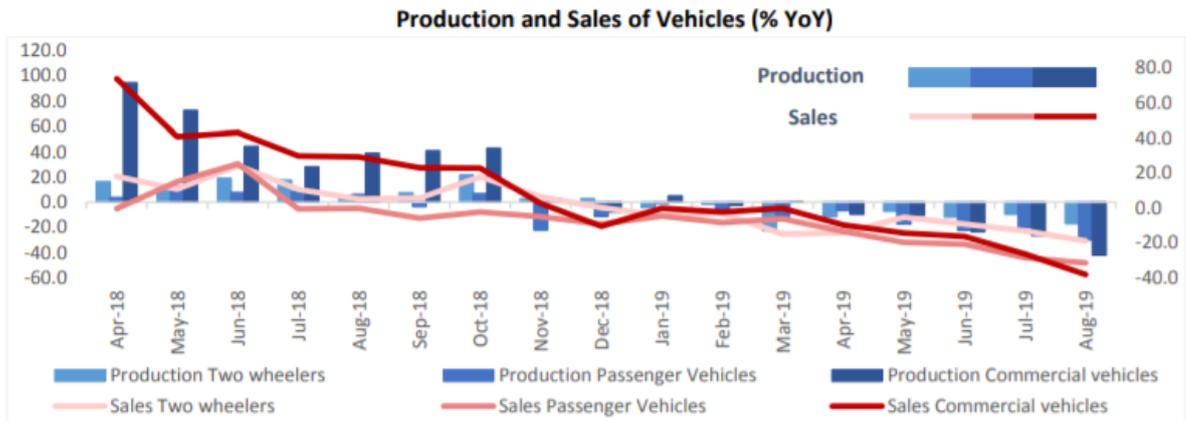
*The study aims to determine the attributes that influence the respondents to have satisfaction with a passenger car in Kerala. The researcher has framed the methodology based on descriptive studies. The study uses quantitative research in which survey techniques are adopted. Samples are derived out based on non-probability sampling methods. Among other non-probability sampling techniques, the researcher uses a convenience sampling method. Consequently, it supports to fix samples as the customers who are using passenger car in Trivandrum, Kerala. Findings of the study highlight that the product attributes like design followed by engine performance, safety and quality are essential attributes that determine the satisfaction of respondents on a passenger car in Kerala.*

*Keywords: satisfaction, passenger car, automobile segment.*

### **1. Introduction**

The automobile industry in India is contributing nearly four lakh crore, i.e., 7.5% to the Indian economy. It is one of the most significant industries which offer huge employment prospects to India. It is offering 37 million employments to people directly and indirectly. Hence the industry considers as the fourth largest industry in the world. India is a developing country that acts as a global hub for the automobile sector. Because the industry is not only offering cost advantages but also providing manufacturing infrastructure to the producers and the availability of low labor influences them to invest more in the automobile sector in India. As a result, the domestic sector gains benefits over it compared with other nations like Latin America and Europe. India is a global leader for passenger cars, and hence the production and sales are higher in the country. The emergence of higher sales of passenger cars is primarily because of rising income, growing middle-class income, increasing demand for passenger cars in rural and urban segments. All attributes to aid the industry to attain the growth in the sector. However, India recorded the worst production and sales in over two decades.

It is primarily because of the decrement in demand for the products in the market. Besides, the industry comes across various constraints like demonetization, GST, increment in corporate tax,



which altogether influence the country to face an economic slowdown (onmanorama.com 2019).



Passenger vehicle sales were higher in 2019, i.e., 0.3% increases compared with the previous year. Domestic sales of the segment are huge, i.e., 41.1% in 2019. The exports of cars had a growth of 13.9%. All these statistics influence the researcher to assess how factors are supported in influencing the purchasing of the passenger car segment.

**Passenger Vehicles: Domestic Sales & Exports – Growth in %**

	Mini & compact cars		Super compact and mid-size cars		Executive cars (4501-4700 mm)		Premium cars (4701- 5000 mm)		Vans	
	Domestic Sales	Exports	Domestic Sales	Exports	Domestic Sales	Exports	Domestic Sales	Exports	Domestic Sales	Exports
Aug-18	1.0	13.7	-13.0	32.1	-52.2	na	-45.7	na	2.4	392.9
Jul-19	-36.7	-17.5	-26.9	80.7	-6.4	na	-32.8	na	-45.7	4.8
Aug-19	-39.5	-4.6	-57.6	35.7	-32.3	na	-4.1	na	-47.4	-16.7

Source: CMIE  
 na: not available

Kerala has continuous growth in the small car segment, which increases to 11%, i.e., 27,499 units in 2019. Hence the researcher keeps on evaluating the attributes influence the consumers to have satisfaction on a passenger car in Trivandrum, Kerala.

### 1.1. Research objectives

The objective of the study is to find out the attributes which influence the customer satisfaction of passenger car in the market.

### 1.2. Need for the study

The findings of the study provide insights to the manufacturers to recognize the present situation on what the attributes influence them to choose the passenger car available in the market. Technology infusion has created a significant impact on consumer behavior of preferences of products. With the help of the study, the researcher assesses the exact requirement of customers to choose the passenger car segment in the market.

### 1.3. Limitations

The study restricts its sample size to Trivandrum in Kerala. The population of the entire Trivandrum is high, and hence the outcome did not portray the whole community. Irrespective of brands, the study gives more importance to a passenger car in the market. If the study provides a matter to various brands of passenger cars, then the generalization of outcome may emerge.

## 2. Review of literature

Praveenkumar (2020) stated that this study would evaluate and examine the factors that influence the choice of a particular car brand by the owners of Madurai City. Research shows that shoppers were pleased with the price, size, level of exercise, distances, indoor living rooms, and brand status. The study shows that the recent factors affecting the decision of car owners in the entire research field are prices, fuel quality, pick-up, and comfort are most significant.

Dua (2013) said that this research intends to specify customer satisfaction levels for Tata Motor Passenger Vehicles. The study shows that price levels, size, safety, miles, indoor space, prominent brand status, level of comfort, cellar, and post-sales service are crucial to customer satisfaction.

Yuvaraju (2014) noted that this study is to determine factors that affect the purchase of Honda motorcycles by customers. The results show that size, style, mileage, and pick-up variables are significant.

Mathankumar (2015) said that the research conducted before purchasing a car to take consumer preference into account. The results show consumers that look and style, travel, savings, and miles are very significant.

Sengupta (2018) said that this study is to provide satisfaction with the services provided by Hyundai. Research shows that useful knowledge also helps businesses assess satisfaction and enhance the efficiency of the product.

Jaganathan (2019) carried out an analysis to assess how pleased the two Honda wheeler customers. The results show that its participants for comfort and service prefer Honda.

Suganthi (2016) has prepared to investigate the influences affect consumer purchasing decisions and their level concerning Maruti Suzuki Swift cars in Udumalpet Taluk. The author followed Garrett's ranking to determine what influences customer purchase decisions. The results show that age, marital status, education, occupation, and satisfaction levels are strongly linked while mileage was first classifying as the primary vehicle market factor.

Chopra (2018) said the survey was conducted to compare Maruti Suzuki and Hyundai Motors' passenger cars in the Delhi Region with their preferred consumer approach. Independent T research was used by the author to determine the consumer preferences of Maruti Suzuki and Hyundai Motors passenger vehicles. The results show that the color, interior, and after-sales facilities of these two brands do not change the customer preferences. Consumers have different tastes, however, with factors such as market value and demand.

Mukkelli (2017) suggested that the study would investigate current levels of satisfaction between the consumer and the user and assess the impact of potential car enjoyment. So the study will also allow the Indian companies to identify possible differences in customer expectations from current market offerings.

Janani (2018) said that this research investigates the preference of customers for different car brands in Coimbatore City. It shows that the Maruti Suzuki model comes with more variants. Customers can easily choose the Tata Motors car for rental, and Hyundai vehicles for small and medium-sized families are very convenient.

### **2.1. Research gap**

With various studies, the researcher determines that no reviews have been done on the passenger car segment in Kerala. Hence the study gives more importance to the attributes which influence the respondents to purchase passenger car in Kerala. Thus, the study attempts to fill the gap in the existing literature by shedding light on the attributes that influence the selection of the passenger car segment in Kerala.

### **3. Research methodology**

The researcher has frame the methodology based on descriptive studies. The main objective of applying descriptive studies is to know the consumer opinion on how the attributes have an impact on the passenger car segment in Kerala. The study uses quantitative research in which survey techniques are adopted. The population of the study considers the customers who are using a passenger car in the market. Samples are derived out based on non-probability sampling methods. Among other non-probability sampling techniques, the researcher uses a convenience sampling method.

Consequently, it supports to fix samples as the customers who are using passenger car in Trivandrum, Kerala. The researcher gave a questionnaire to 130 respondents, in which 117 respondents responded adequately. Hence the response rate for the study is 90%. Therefore, with a reasonable response rate, the researcher executes the study by applying statistical tools like percentage analysis and linear regression.

### **4. Data analysis and interpretation**

The chapter outlines two sections of the findings. The first chapter uses a percentage model to assess the demographic results. The second section illustrates how variables communicate with the regression.

#### 4.1. Percentage analysis

The percentage method is one of the instruments used to determine the sample concerning demographic characteristics such as age, gender, education, and occupation. Distribution of samples shown in the below table.

Particulars	No of respondents	Percentage
<b>Age</b>		
Below 24 years	38	32.5
24 to 34 years	39	33.3
34 to 44 years	23	19.7
Above 44 years	17	14.5
<b>Gender</b>		
Male	62	53.0
Female	55	47.0
<b>Education</b>		
Graduates	36	30.8
Postgraduates	29	24.8
Professional	27	23.1
Others	25	21.4
<b>Occupation</b>		
Businessman	46	39.3
Government employee	39	33.3
Others	32	27.4
<b>Total</b>	<b>117</b>	<b>100</b>

Age: From the table, 32,5% of respondents are under 24, while 33,3% are under the age of 24 to 34, 19,7% 34 to 44 years, and 14,5% above 44 years. Thus, it concludes that the highest number of respondents are between the age category of 24-34 years.

Gender: From the table, it shows that 53% of respondents are male, and 47% are female. Thus it is evident that the majority of respondents are male.

Education: It found from the table that 30.8% of respondents are graduates, while 24.8% of postgraduates, 23.1% of professionals and 21.4% are others. Therefore it is concluded that the most significant number of respondents are graduates.

Occupation: It reveals that 39.3% of respondents are businessmen, while 33.3% of a government employee and 27.4% of others. Thus it is concluded that the highest number of respondents is a businessman.

#### 4.2. Linear regression

<b>Model Summary</b>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	<b>.319<sup>a</sup></b>	<b>.638</b>	<b>.017</b>	<b>.89740</b>

a. Predictors: (Constant), design, engine performance, safety, quality

It clarifies that R square represented that the extent of variance to be accounted for satisfaction as a dependent variable by components to be a predictor. The R-value represented the correlation coefficient to be 0.319, and the R square was 0.638. The predictor factor of elements of various factors (design, engine performance, safety, quality) multiplied by 100 represented that the 63.8% influence of satisfaction on factors.

<b>ANOVA</b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	<b>2.665</b>	1	<b>2.665</b>	<b>.644</b>	<b>.000<sup>b</sup></b>

	Residual	<b>257.295</b>	<b>116</b>	<b>.646</b>		
	Total	<b>259.960</b>	<b>117</b>			
a. Dependent Variable: satisfaction						
b. Predictors: (Constant), design, engine performance, safety, quality						

From the above table, it clearly stated that the analysis of variance of F statistic to be 0.644 and the significance level to be 0.000, which is less than 0.05 that shows a high level of significance. Thus null hypothesis stating "there is no impact of satisfaction on factors" rejected, and the alternate hypothesis accepted

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	<b>1.849</b>	<b>.265</b>		<b>6.975</b>	<b>.000</b>
	Design	<b>.044</b>	<b>.038</b>	<b>.068</b>	<b>1.445</b>	<b>.000</b>
	Engine performance	<b>.017</b>	<b>.081</b>	<b>.013</b>	<b>0.293</b>	<b>.000</b>
	Safety	<b>.193</b>	<b>.081</b>	<b>.114</b>	<b>2.512</b>	<b>.000</b>
	Quality	<b>.036</b>	<b>.038</b>	<b>.039</b>	<b>.964</b>	<b>.000</b>

As shown in the coefficient table, regression exhibits the impact of factors (design, engine performance, safety, quality) that significantly predict satisfaction ( $p < 0.05$ ).

It observed that the beta value to be 0.068, and the p-value is 0.000, which is lesser than a 5% level of significance. It concluded that there is a strong positive influence on the satisfaction of design.

It found that beta value to be 0.013, and the p-value is 0.000, which is lesser than a 5% level of significance. It evident that there is a strong positive influence of the satisfaction on engine performance.

It indicates that the beta value to be 0.114, and the p-value is 0.000, which is lesser than a 5% level of significance. It inferred that there is a strong positive influence of satisfaction on safety.

It indicates that the beta value to be 0.039, and the p-value is 0.000, which is lesser than a 5% level of significance. It concludes that there is a strong positive influence of satisfaction on quality.

Finally, it found that all the variables on satisfaction are highly significant.

### Findings

From the percentage analysis, it indicates that

- The highest numbers of respondents are between the ages of 24 and 34 years (33.3%).
- The majority of respondents are male (53%)
- The most significant number of respondents is graduates (30.8%)
- The highest numbers of respondents are businessman (39.3%).

From the linear regression analysis, it makes clear that

- R-value represented the correlation coefficient to be 0.319, and the R square was 0.638.
- Analysis of variance of F statistic to be 0.644 and the significance level to be 0.000, which is less than 0.05 that shows a high level of significance.
- There is a strong positive influence on the satisfaction of design. (beta value = 0.068, p-value is 0.000)
- There is a strong positive influence on the satisfaction of engine performance. (beta value = 0.013, p-value is 0.000)
- There is a strong positive influence of the satisfaction on safety. (beta value = 0.114, the p-value is 0.000)

- There is a strong positive influence on satisfaction on quality. (beta value = 0.039, p-value is 0.000)

### **Suggestion**

In India, people between the age category of 24-34 years are giving more importance to a passenger car. Very less interest can notice among 34 years and above. Giving offers to a particular range of people can induce sales in the market.

It observes from the study that the educated people are giving higher importance to a passenger car. However, others are not showing concerning interest in it. Providing awareness through billboards, campaigns, and pamphlets and frequent advertisements on TV and radio can increase the knowledge of passenger cars among users in the market.

The study finds that safety is the primary attributes which influence the respondents to use passenger car in the market. Introducing new designs, accelerating the performance of engines, and boost the quality of vehicles can attract the users more to choose the products in the market. By doing so, word of mouth communication on electric vehicles increases, increasing the demand for the product in the market.

### **Conclusion**

The study aims to determine the attributes that influence the respondents to have satisfaction with a passenger car in Kerala. With the help of regression, the researcher finds that design followed by engine performance, safety ad quality is essential attributes that determine the satisfaction of respondents on a passenger car in Kerala. The study offers insights into the manufactures that giving more weightage to the attributes can improve the operating efficiency of vehicles in the market. In the present day, customers are having a wide array of vehicles that are available in the concerned sizes based on customer requirements. Giving more importance to product attributes increases the satisfaction level of users in Kerala.

### **Reference**

1. Praveenkumar, S. (2020) Customer Satisfaction Toward Select Automobile Industries In Madurai City, Tamil Nadu.
2. Dua, K., &Dua, S. (2013). A study of customer satisfaction with reference to tata motor passenger vehicles. *International Journal of Advanced Research in Management and Social Sciences*, 2(4), 68-83.
3. Yuvaraju, D., &Rao, S. D. (2014). Customer satisfaction towards honda two wheelers: A case study in Tirupati. *Journal of Business and Management*, 16(5), 65-74.
4. Mathankumar, M. V., &Velmurugan, R. (2015). Customers Preference towards Four Wheelers. *Safety*, 13(13.10), 7-69.
5. Sengupta, R., &Keerthi, H. K. (2018). A Study on Customer Satisfaction in Hyundai Service Centre at Libra Hyundai Cars Dealership, Dhanbad.
6. JAGANATHAN, A. A STUDY ON CUSTOMER SATISFACTION TOWARDS HONDA TWO-WHEELER WITH SPECIAL REFERENCE TO GUDALUR TALUK.
7. Suganthi, V., &Renuka, R. (2016). A study on customer satisfaction towards Maruti Suzuki Swift cars in UdumalpetTaluk. *International Journal Of Multidisciplinary Research And Development*, 3(2).
8. Chopra, G. Consumer Preference Towards Maruti Suzuki and Hyundai Motors: A Comparative Study of The Automobile Sector.
9. Mukkelli, V. (2017). A STUDY ON PREFERRED FOUR WHEELER FOR INDIAN CUSTOMER. *International Journal Of Science Technology And Management*, 6(3).
10. Janani, B. (2018). A study on customer preferences and expectations towards particular three car brands with special reference to Coimbatore city. *Journal of Emerging Technologies and Innovative Research (JETIR)*, 5(5).

11. *India's passenger vehicle sales drop for 11th straight month in September.* OnManorama. (2019). Retrieved 29 September 2020, from <https://www.onmanorama.com/business/news/2019/10/11/india-passanger-vehicle-sales-drop-september.html>.