

CONSUMER PERCEPTIONS AND BEHAVIOUR: A STUDY WITH SPECIAL REFERENCE TO CAR OWNERS IN NAMAKKAL DISTRICT

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Abstract

In recent days India is witnessing a change in consumerism. The market is now predominantly consumer driver. The focus is shifting for product based marketing to need based marketing. Consumer is given many options to decide. Passenger car segment is no exception to this general trend. An effective market communication is imperative for reaching the target audience. So it is important that we study the consumer perceptions and behaviour of the car owners which will give us feedback on how marketing strategies can be worked. Namakkal town in Tamil Nadu State, which is in the southern part of India, has a progressive and growing market for cars. This town was selected for this study. Pre-testing was done by an Interview schedule which was developed and administered to a convenient sample of twenty five car owners. A Simple Random sampling technique was adopted in the study to select the sample respondents. As the size of the universe is restricted, the study has been conducted on the respondents who are the owners of all the segments of passenger cars. A total of 350 Interview schedules were prepared and out of this, only 327 interview schedules were filled up and collected. Data were collected through an interview schedule regarding perception of the respondents on the usage of cars. The following tools were used in testing the hypotheses and in the analysis of the data. Descriptive statistical tools such as Percentage, Mean, Median and Standard deviation have been used to describe the profiles of consumers, preferred product attributes and level of satisfaction. ANOVA, t-Test and F-Test have been used to test the significant differences between the groups of respondents in their perception and satisfaction for selected independent variables like age, sex and income. Chi-Square test has been used to test the association between the consumer demographic characteristics and preferred product attributes and satisfaction. Multiple regression analysis has been used to study the influence of income and lifestyle on overall satisfaction level of the

respondents. Correlation analysis has been used to establish the relationship between 'the factors which influenced the purchase' and 'the factors which favoured the level of satisfaction'. Factor analysis is employed to identify the key factors responsible for the consumers' purchase of cars and level of satisfaction after purchase. Cluster analysis has been used to identify the consumers with similar tastes and preferences with respect to purchase of car. The study throws light on various features that the manufacturers should concentrate on to attract the prospective buyers. This study concludes that consumer behaviour plays a vital role in marketing cars and there is more scope for extensive research in this area.

Introduction

Human beings, in general, are complex creatures who often do not seem even to know their own minds. It is seldom easy, and sometimes impossible, to generalize about human behaviour. Each individual is a unique product of heredity, environment and experience. Predicting such a strange behaviour of people is a difficult and complicated task, filled with uncertainties, risks, and surprises. Accurate predictions can yield vast fortunes and inaccurate predictions can result in the loss of millions of rupees. Today, business around the world recognizes that 'the consumer is the king'. Knowing why and how people consume products helps marketers to understand how to improve existing products, what types of products are needed in the market place, or how to attract consumers to buy their products. The era of liberalization, privatization and globalization has brought changes in society and lifestyle of people.

Marketers can justify their existence only when they are able to understand consumers' wants and satisfy them. The modern marketing concept for successful management of a firm requires marketers to consider the consumer as the focal point of their business activity. Although it is important for the firm to understand the buyer and accordingly evolve its marketing strategy, the buyer or consumer continues to be an enigma - sometimes responding the way the marketer wants and on other occasions just refusing to buy the product from the same marketer. For this reason, the buyer's mind has been termed as a black box, which should be opened by the seller to be a successful marketer. The study of consumer behaviour also includes an analysis of factors that influence purchase decisions and product use. Understanding how consumers make purchase decisions can help marketing managers in several ways. For example, if a manager knows through research that fuel mileage is the most important attribute for a certain target market, the manufacturer can redesign the product to meet that criterion. If the firm cannot change the design in the short run, it can use promotion in an effort to change consumers' decision making criteria. For example, an automobile manufacturer can advertise a car's maintenance-free features while downplaying fuel mileage.

Passenger Car Industry in India and profile of the study area

The Indian Automobile Industry has got a tremendous market potential. With the growth of population and change in their pattern of life style 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 Automobile Industry in India and their role in economic development and to bring out the profile of the study area. The entire discussion has been divided into three main sections. The first section traces the growth of Automobile Industry. The second section discusses origin, growth and other aspects of Passenger Car Industry. The third section gives a brief profile of the study area.

The Indian Automobile Industry has flourished like never before in the recent years. This extraordinary growth that the Indian automobile industry has witnessed is a result of a major factor namely, the improvement in the living standard of the middle class and an increase in their disposable incomes. Moreover, the liberalization steps, such as, relaxation of the foreign exchange and equity regulations, reduction of tariffs on imports, and refining the banking policies initiated by the Government of India, have played an equally important role in bringing the Indian Automobile Industry to great heights. The increased demand for Indian automobiles has resulted in a large number of multinational auto companies, especially from Japan, the U.S.A., and Europe, entering the Indian market and working in collaboration with the Indian firms. Also, the institutionalization of automobile finance has further paved the way to sustain a long term high growth for the industry. The Future Growth Drivers like higher GDP Growth, India's huge geographic spread – mass transport system, increasing road development, increasing disposable income with the service sector, cheaper (declining interest rates) and easier finance schemes, replacement of aging four wheelers, graduating from two wheelers to four wheelers, increasing dispensable income of rural agricultural sector, growing concept of second vehicle in urban areas. India produced about eight million two-wheelers, three million passenger cars and utility vehicles in 2009 - 2010. It ranks second in the world in the production of the two-wheelers and thirteenth in the production of the passenger cars.

Statement of the Problem

Due to the emergence of globalization and liberalization there is a stiff competition among the variety of car industries which are focusing attention in capturing the Indian markets. Cars though considered as luxury once, now occupies a part of day-to-day life and has become a necessity. Namakkal, which is selected for the study, is one of the main growing markets for car manufacturers. People who were not ready to spend their money on luxuries have now changed their attitude that 'yesterday's luxuries are today's necessities.' To be a successful marketer it is absolutely essential to read the minds and perceptions of the prospective buyers of cars. In addition to the above, the due weightage which is given by the Government for the growth of passenger car industry and the involvement of the consumers in the selection of a particular brand of car have also made the researcher to undertake a study on the passenger car industry with special reference to the perceptions, behaviour and satisfaction of owners of cars.

Review of Literature

Mandeep Kaur and Sandhu (2006) attempted to find out the important features which a customer considers while going for the purchase of a new car. The study covers the owners of passenger cars living in the major cities of the State of Punjab and the Union Territory of Chandigarh. The respondents perceive that safety and comfort are the most important features of the passenger car followed by luxuriousness. So the manufacturers must design the product giving maximum weightage to these factors.

Chidambaram and Alfreed (2007) postulates that there are certain factors which influence the brand preferences of the customers. Within this framework, the study reveals that customers give more importance to fuel efficiency than other factors. They believe that the brand name tells them something about product quality, utility, technology and they prefer to purchase the

passenger cars which offer high fuel efficiency, good quality, technology, durability and reasonable price.

Satya Sundaram (2008) analyzed how the competition makes the automobile manufacturer to launch at least one new model or a variant of the model every year. This survey also pointed out that diesel cars are becoming popular in India and the announcement of reductions in excise duties by the government has helped to some extent to boost the demand.

Clement Sudhakar and Venkatapathy (2009) studied the influence of peer group in the purchase of car with reference to Coimbatore District. It was also found that the influence of friends is higher for the purchase of small sized and mid sized cars.

Brown et al (2010) analyzed the consumers' attitude towards European, Japanese and the US cars. The country – of – origin plays a significant role in the consumers' behaviour. The brand name, lower price and distributor's reputation completely have a significant impact on the sale of passengers' car.

However, the present study differs from the above, in that, the buyer behaviour in Namakkal in Tamil Nadu is sought to be analyzed here. The scope and the area of the study are unique in nature.

Objectives of the Study

The purpose of this research is to study the behaviour of consumers, their importance in the aspects of life style, perception of product attributes and level of satisfaction. Hence, the study is aimed at the following objectives.

1. To evaluate car owners' perception and behaviour pertaining to the purchase and use of cars.
2. To identify and analyze the factors influencing the purchase of cars.
3. To analyze the level of satisfaction among the respondents and to identify the switch over brand option, if any and
4. To make suggestions in the light of the findings of the study.

Scope of the Study

Nowadays, car has become a necessity and forms a part of life. Therefore, there is a significant scope to examine the perception and purchase behaviour of the consumers of cars. The study is restricted to Namakkal District of Tamil Nadu, which is economically the richest district famous both for lorry body building and poultry farming. Due to their increasing purchasing power, the people of this district have started to buy cars for business or personal use or the prestige and maintenance of social status. Namakkal District with a population of 14, 95,661 is a potential market for all consumer products and services. Knowledge of the buying behaviour of the different market segments helps a seller to select their target segment and evolve marketing strategies to increase the sales. Advertisers and marketers have been trying to discover why consumers buy and what they buy. This study tries to analyze the influence of perception in the consumers' mind and how this information can be used successfully by marketers to gain entry into the minds of the consumers. The scope of this research has a very good future.

Methodology

Before beginning to carry out the present study, the researchers initially conducted a pilot study in order to find out the feasibility and the relevance of the study. The present study is based on the perceptions, behaviour and satisfaction of the consumers for passenger cars. Sources of the primary and the secondary data are discussed. The researchers has used Interview schedule for the purpose of collecting primary data. It took six months for the researchers to complete the process of collection in person. As the universe of the study is large, the researchers have decided to select sample respondents by adopting the Simple Random Sampling Technique. The secondary data have been collected from the companies' bulletins, annual reports and websites. Further, the researchers has used national and international journals in the field of management, as well as marketing, business magazines, business dailies, referred text books in marketing management as well as consumer behaviour and academic studies conducted in the related areas for the purpose of building a strong conceptual background including the review of literature for the study.

Sampling Design

This study was conducted among the car owners residing at Namakkal District, Tamil Nadu. A Simple Random sampling technique was adopted in the study to select the sample respondents. As the size of the universe is restricted, the study has been conducted on the respondents who are the owners of all the segments of passenger cars. A total of 350 Interview schedules were prepared and out of this, only 327 interview schedules were filled up and collected. A scrutiny of these schedules led to the rejection of 27 interview schedules on account of incomplete responses. Thus 300 completed interview schedules were used for the present study. Data were collected through an Interview Schedule regarding perception of the respondents on usage of cars. The collected data are analyzed through descriptive statistical tools such as Percentage, Mean, Median and Standard deviation have been used to describe the profiles of consumers, preferred product attributes and level of satisfaction. The ANOVA, t-Test and F-test have been used to test the significant differences between the groups of respondents in their perception and satisfaction for selected independent variables like age, sex and income. The Chi-Square test has been used to test the association between the consumer demographic characteristics and the preferred product attributes and satisfaction. Multiple regression analysis has been used to study the influence of income and lifestyle on the overall satisfaction level of the respondents. Correlation analysis has been used to establish the relationship between 'the factors which influenced the purchase' and 'the factors which favoured the level of satisfaction'. Factor analysis is employed to identify the key factors responsible for the consumers' purchase of cars and level of satisfaction after purchase. Cluster analysis has been used to identify the consumers with similar tastes and preferences with respect to purchase of car.

Analysis and Interpretation of Data

The results of the analysis of the collected data are presented below:

TABLE 1
AVERAGE RATINGS FOR THE INFLUENCING FACTORS

Sl. No.	Factors	Mean	Standard Deviation	Median	Rank
1.	Driving Comfort	3.5500	1.1247	4.0000	1
2.	Fuel Economy	3.3667	1.0275	3.0000	2
3.	Availability of Spare Parts	3.3167	1.1078	3.0000	3
4.	Price	3.3067	1.0816	3.0000	4
5.	Pick Up	3.3033	0.9562	3.0000	5
6.	Attractive Model	3.2867	1.2767	3.0000	6
7.	Road Grip	3.2733	1.0076	3.0000	7
8.	Brand Image	3.1733	1.2227	3.0000	8
9.	Internal Space	3.1033	1.1476	3.0000	9
10.	After Sales Service	3.0533	1.0492	3.0000	10
11.	Maintenance Cost	3.0333	1.0144	3.0000	11
12.	Status Symbol	2.9933	1.3111	3.0000	12
13.	Latest Technology	2.9100	1.2572	3.0000	13
14.	Resale Value	2.4100	1.0920	2.0000	14

Source: Calculated from Primary Data

‘Driving Comfort’ indicates that most of the respondents have given their responses in the category of ‘Moderate influence’ and ‘More influence’. The factors of fuel economy, availability of spare parts, price, pick up, attractive model, road grip, brand image, internal space, after sales service and maintenance cost with their obtained mean values indicate that most of them have favoured for ‘Moderate influence’. The obtained mean values of 2.9933, 2.9100 and 2.4100 for the factors status symbol, latest technology and resale value, which are close to the scale value of ‘Moderate influence’ indicating that these factors moderately influenced the respondents in their purchase decision.

Factor Analysis – Factors influencing purchase

The general purpose of factor analysis is to find a method of summarizing the information contained in a number of original variables into a smaller set of new composite dimensions (Factors) with minimum loss of information. It usually proceeds from the correlations matrix formed out of the selected variables included in the study. The appropriateness of the factor model can also be calculated from this. Next, Factor extraction, the number of factors necessary to represent the data and the method of calculating them must be determined. At this step, how well the chosen model fits the data is also ascertained. Rotation focuses on transforming the factors to make them more interpretable and following this, scores for each factor can be computed for each case. These scores are then used for further analysis. For our study, it is interesting to study the factors which can be derived out of several variables which contribute in influencing the purchase of a car. There are 14 variables under the heading ‘factors influencing purchase’. These variables were subject to correlation analysis first.

TABLE 2
CORRELATION MATRIX

VARIABLES	PRICE	FUEL ECONOMY	DRIVING COMFORT	MAINTENANCE COST	ATTRACTIVE MODEL	STATUS SYMBOL	RESALE VALUE	LATEST TECHNOLOGY	BRAND IMAGE	PICK UP	ROAD GRIP	INTERNAL SPACE	AFTER SALES SERVICE	AVAILABILITY OF SPARE PARTS
Price	---	.458	.260	.134	.021	-.116	.040	-.085	.048	.136	.190	-.168	.212	.097
Fuel Economy		---	.273	.248	.136	.076	.199	.119	.247	.220	.258	-.015	.118	.127
Driving Comfort			---	.239	.433	.261	.077	.283	.249	.361	.348	.238	.275	.080
Maintenance Cost				---	.222	.081	.169	.165	.184	.265	.250	.040	.196	.116
Attractive Model					---	.565	.182	.575	.424	.213	.217	.197	.166	.044
Status Symbol						---	.313	.407	.257	.140	.098	.245	.051	-.100
Resale Value							---	.310	.285	.159	.111	.092	.095	.003
Latest Technology								---	.524	.215	.199	.204	.092	.011
Brand Image									---	.381	.347	.223	.139	.137
Pick Up										---	.674	.313	.287	.228
Road Grip											---	.297	.321	.255
Internal Space												---	.304	.193
After Sales Service													---	.587
Availability of Spare Parts														---

Source: Calculated from Primary Data

Correlation matrix for the variables from 'price' to 'availability of spare parts' (totally 14 items) was analyzed initially for possible inclusion in Factor Analysis.

TABLE 3
KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.747
Bartlett's Test of Sphericity	Approx. Chi-Square	1211.497
	Degrees of Freedom	91
	Sig.	**

Bartlett's test of sphericity is used to test whether the correlation matrix is an identity matrix. The test value (1211.497) and the significance level ($P < .01$) which are given above indicate that the correlation matrix is not an identity matrix, i.e., there exists correlations between the variables. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy or KMO measure is closer to 1, and then it is good to use factor analysis. If the KMO is closer to 0, then the factor analysis is not a good idea for the variables and the data. The value of test statistics is given above as 0.747, which means the factor analysis for the selected variables is found to be appropriate to the data. The Principal Components Analysis (PCA) is used to extract factors. The PCA is a method used to transform a set of correlated variables into a set of uncorrelated variables (here factors) so that the factors are unrelated and the variables selected for each factor are related.

TABLE 4
COMPONENT MATRIX

VARIABLES	Component			
	1	2	3	4
Pick Up	.670	.255	-.133	-.481
Road Grip	.659	.327	-.113	-.451
Brand Image	.656	-.207	.043	-.067
Attractive Model	.653	-.444	.059	.161
Driving Comfort	.626	.057	.145	-.110
Latest Technology	.605	-.506	.022	.105
After Sales Service	.492	.472	-.359	.451
Maintenance Cost	.437	.149	.233	.030
Resale Value	.394	-.259	.203	.278
Status Symbol	.479	-.590	-.0007	.145
Availability of Spare Parts	.332	.534	-.412	.458
Price	.227	.522	.594	.108
Fuel Economy	.430	.294	.588	.070
Internal Space	.451	-.056	-.582	-.127

Source: Calculated from Primary Data

These are all coefficients used to express a standardized variable in terms of the factors. These coefficients are called factor loadings, since they indicate how much weight is assigned to each factor. Factors with large coefficients (in absolute value) for a variable are closely related to that variable. These are all the correlations between the factors and the variables, since all the factors are uncorrelated with each other. Hence the correlation between variable ‘Pick up’ and Factor 1 is 0.670. Thus the factor matrix is obtained and presented in the above table. Most factors are correlated with many variables. Since the idea of factor analysis is to identify the factors that meaningfully summarize the sets of closely related variables, the rotation phase of the factor analysis attempts to transfer initial matrix into one that is easier to interpret. It is called the rotation of the factor matrix.

Anova Technique age group and influencing factors

Table 5 & 6 give the results of the ANOVA conducted to test for significant difference if any, between the respondents of different age groups on the various influencing factors.

Null Hypothesis: The average scores of influencing factors among the respondents of the different age groups do not differ significantly.

TABLE 5

AVERAGE SCORES OF THE INFLUENCING FACTORS FOR DIFFERENT AGE GROUPS

Age Group	N	Influencing Factor							
		External		Technical		Cost		Service	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
< 25 years	31	15.48	4.18	12.39	3.84	9.87	2.43	6.23	2.29
25 – 35 years	63	15.00	4.28	13.13	2.84	9.67	2.24	6.57	1.88
36 – 45 years	103	14.60	4.50	13.34	2.95	9.78	2.29	6.27	1.79
46 – 55 years	65	14.74	4.41	13.49	3.09	9.55	2.19	6.35	2.01
> 55 years	38	14.34	4.72	13.34	2.99	9.71	2.25	6.45	1.93

Source: Calculated from Primary Data

TABLE 6

ANOVA ON THE INFLUENCING FACTORS FOR DIFFERENT AGE GROUPS

Factor	Sources of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F - Value	Table Value	Sig.
External	Between Groups	29.059	4	7.265	.370	2.402	NS
	Within Groups	5791.528	295	19.632			
	Total	5820.587	299				
Technical	Between Groups	28.885	4	7.221	.769	2.402	NS
	Within Groups	2770.245	295	9.391			
	Total	2799.130	299				
Cost	Between Groups	2.961	4	.740	.144	2.402	NS
	Within Groups	1517.225	295	5.143			
	Total	1520.187	299				
Service	Between Groups	4.437	4	1.109	.298	2.402	NS
	Within Groups	1099.493	295	3.727			
	Total	1103.930	299				

Source: Calculated from Primary Data

NS - Not Significant

The Analysis of Variance test is applied to test for significant difference among the different age groups for each influencing factor separately. The results of the ANOVA are given in the above table. It is found from the results of ANOVA that influencing factors – external, technical, cost and service do not differ significantly among the respondents of the different age groups. Hence, the null hypothesis with respect to all the four influencing factors is accepted.

Educational Qualification and influencing factors

Table 7 & 8 bring out the results of the ANOVA conducted to test for significant difference if any, between the respondents of the different educational qualifications on the various influencing factors.

Null Hypothesis: The average scores of the influencing factors among the respondents of the different educational qualifications do not differ significantly.

TABLE 7

AVERAGE SCORES OF THE INFLUENCING FACTORS FOR DIFFERENT EDUCATIONAL QUALIFICATION

Educational Qualification	N	Influencing Factor							
		External		Technical		Cost		Service	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
No Formal Education	24	14.71	5.22	14.04	3.24	8.88	1.65	7.04	1.65
School Level	60	15.58	3.90	13.60	2.85	9.55	2.11	5.98	1.78
Graduate Level	116	14.95	4.44	13.33	2.96	9.83	2.35	6.59	1.90
Post Graduate Level	46	13.65	4.21	12.41	3.09	9.87	2.46	6.20	2.01
Professional Qualification	54	14.48	4.61	12.94	3.31	9.85	2.24	6.17	2.07

Source: Calculated from Primary Data

TABLE 8

ANOVA ON THE INFLUENCING FACTORS FOR DIFFERENT EDUCATIONAL QUALIFICATION

Factor	Sources of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F - Value	Table Value	Sig.
External	Between Groups	105.439	4	26.360	1.361	2.402	NS
	Within Groups	5715.148	295	19.373			
	Total	5820.587	299				
Technical	Between Groups	60.234	4	15.059	1.622	2.402	NS
	Within Groups	2738.896	295	9.284			
	Total	2799.130	299				
Cost	Between Groups	22.128	4	5.532	1.089	2.402	NS
	Within Groups	1498.059	295	5.078			
	Total	1520.187	299				
Service	Between Groups	29.292	4	7.323	2.010	2.402	NS
	Within Groups	1074.638	295	3.643			
	Total	1103.930	299				

Source: Calculated from Primary Data

NS - Not Significant

From this ANOVA table, it is observed that the F ratios calculated are 1.361, 1.622, 1.089 and 2.010 for all the influencing factors which are less than the table value 2.402 and so it

is not significant. Hence, the hypothesis formulated is accepted and it is inferred that there is no significant difference among the different educational qualification of the respondents on the influencing factors.

Occupational status and influencing factors

Table 9 & 10 analyze for the existence of any significant difference between the various occupational status and the influencing factors.

Null Hypothesis: The average scores of influencing factors among the respondents of the different occupational status do not differ significantly.

TABLE 9

AVERAGE SCORES OF THE INFLUENCING FACTORS FOR DIFFERENT OCCUPATIONAL STATUS

Occupational Status	N	Influencing Factor							
		External		Technical		Cost		Service	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Agriculture	13	15.92	4.09	11.85	2.27	9.62	1.56	6.54	1.33
Business	159	14.91	4.55	13.57	3.09	9.40	2.07	6.42	1.89
Employed in Government Service	34	14.00	4.92	12.29	2.90	9.91	2.73	6.53	1.83
Employed in Private Organization	47	15.34	3.74	13.13	3.08	10.38	2.63	6.02	2.12
Professional	24	13.63	4.53	12.75	3.26	9.63	2.41	5.88	1.96
House Wife	16	14.44	4.27	13.75	2.38	10.81	1.52	6.69	2.12
Others	7	14.14	3.44	13.86	3.98	9.00	1.73	7.43	1.99

Source: Calculated from Primary Data

TABLE 10

ANOVA ON THE INFLUENCING FACTORS FOR DIFFERENT OCCUPATIONAL STATUS

Factor	Sources of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F - Value	Table Value	Sig.
External	Between Groups	91.923	6	15.321	.784	2.140	NS
	Within Groups	5728.663	293	19.552			
	Total	5820.587	299				
Technical	Between Groups	85.731	6	14.289	1.543	2.140	NS
	Within Groups	2713.399	293	9.261			
	Total	2799.130	299				
Cost	Between Groups	60.967	6	10.161	2.040	2.140	NS
	Within Groups	1459.220	293	4.980			
	Total	1520.187	299				
Service	Between Groups	22.706	6	3.784	1.026	2.140	NS
	Within Groups	1081.224	293	3.690			
	Total	1103.930	299				

Source: Calculated from Primary Data

NS - Not Significant

The above table highlights the results of the ANOVA for different occupational status of respondents on the influencing factors. The calculated F values of 0.784, 1.543, 2.040 and 1.026 for the External, Technical, Cost and Service factors are insignificant. Therefore, the stated hypothesis has been proved.

FAMILY INCOME AND INFLUENCING FACTORS

The ANOVA table 11 & 12 given below the mean table tests for any significant difference between the different family income of the respondents and the influencing factors.

Null Hypothesis: The average scores of influencing factors among the respondents of the different family income do not differ significantly.

TABLE 11
AVERAGE SCORES OF THE INFLUENCING FACTORS FOR DIFFERENT INCOME GROUPS

Monthly family Income	N	Influencing Factor							
		External		Technical		Cost		Service	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
< Rs.10000	21	14.43	4.55	12.95	2.60	9.71	2.61	6.10	1.76
Rs.10000- Rs.15000	55	13.67	4.27	12.53	3.24	9.64	2.61	6.05	2.08
Rs.15001- Rs.20000	60	14.87	4.36	12.80	3.31	9.95	2.42	6.53	1.75
Rs.20001- Rs.25000	63	15.11	4.86	13.48	2.95	9.54	2.07	6.43	1.97
> Rs.25000	101	15.18	4.18	13.77	2.90	9.70	2.00	6.47	1.95

Source: Calculated from Primary Data

TABLE 12
ANOVA ON THE INFLUENCING FACTORS FOR DIFFERENT INCOME GROUPS

Factor	Sources of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	Table Value	Sig.
External	Between Groups	93.387	4	23.347	1.203	2.402	NS
	Within Groups	5727.200	295	19.414			
	Total	5820.587	299				
Technical	Between Groups	73.392	4	18.348	1.986	2.402	NS
	Within Groups	2725.738	295	9.240			
	Total	2799.130	299				
Cost	Between Groups	5.584	4	1.396	.272	2.402	NS
	Within Groups	1514.603	295	5.134			
	Total	1520.187	299				
Service	Between Groups	9.793	4	2.448	.660	2.402	NS
	Within Groups	1094.137	295	3.709			
	Total	1103.930	299				

Source: Calculated from Primary Data

NS - Not Significant

From the above table, it is observed that the obtained F values for the influencing factors are 1.203, 1.986, 0.272 and 0.660. These values are less than the table value of 2.402. Hence, they are insignificant and so the above stated null hypothesis has been accepted.

FAMILY SIZE AND INFLUENCING FACTORS

Table 13 & 14 describe the results of ANOVA for significant difference between the various family sizes of the respondents on their influencing factors.

Null Hypothesis: The average scores of influencing factors among respondents of different family sizes do not differ significantly.

TABLE 13

AVERAGE SCORES OF THE INFLUENCING FACTORS FOR DIFFERENT FAMILY SIZE

Size of the Family	N	Influencing Factor							
		External		Technical		Cost		Service	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
1 – 3 members	72	15.43	4.67	13.43	3.02	9.90	2.26	6.11	2.09
4 – 6 members	190	14.26	4.23	13.06	2.97	9.72	2.29	6.48	1.90
Above 6 members	38	16.11	4.46	13.71	3.54	9.29	2.05	6.32	1.68

Source: Calculated from Primary Data

TABLE 14

ANOVA ON THE INFLUENCING FACTORS FOR DIFFERENT FAMILY SIZE

Factor	Sources of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Value	Table Value	Sig.
External	Between Groups	148.992	2	74.496	3.901	3.026	*
	Within Groups	5671.595	297	19.096			
	Total	5820.587	299				
Technical	Between Groups	17.298	2	8.649	.923	3.026	NS
	Within Groups	2781.832	297	9.366			
	Total	2799.130	299				
Cost	Between Groups	9.399	2	4.699	.924	3.026	NS
	Within Groups	1510.788	297	5.087			

	Total	1520.187	299				
Service	Between Groups	7.193	2	3.596	.974	3.026	NS
	Within Groups	1096.737	297	3.693			
	Total	1103.930	299				

Source: Calculated from Primary Data

NS - Not Significant

(* Denotes 5% level of significance)

The above table represents the ANOVA for significant difference between the various family sizes of the respondents with respect to the influencing factors. From the analysis it is found that the F value of 3.901 with respect to the external factor differs significantly at 5% level of significance. Therefore the null hypothesis is rejected. Hence it is concluded that there is significant difference between the various family sizes and the influencing external factor. The F values of the other three influencing factors Technical, Cost and Service of 0.923, 0.924 and 0.974 respectively have no significant difference. Hence the hypothesis with respect to these three factors is accepted.

Life style Dimensions and influencing factors

The ANOVA tables 15 & 16 analyze for significant difference if any between respondents of different life style dimensions on various influencing factors. The following hypothesis is framed for this purpose:

Null Hypothesis: There is no significant difference among the groups of the respondents of the different life style dimensions in the average level of influence exhibited by the factors - external, technical, cost and service.

TABLE 15
AVERAGE SCORES OF THE INFLUENCING FACTORS FOR DIFFERENT LIFE STYLE DIMENSIONS

Life Style Dimensions	N	Influencing Factor							
		External		Technical		Cost		Service	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Compact Drivers	110	14.71	4.29	13.29	2.93	9.53	2.23	6.34	1.97
Travel Lovers	42	14.12	4.35	12.83	2.97	9.93	2.47	6.24	1.85
Reserved Affluent	69	15.30	4.42	13.14	2.91	9.67	2.17	6.43	1.94
Luxury Relishes	79	14.75	4.63	13.43	3.43	9.87	2.27	6.43	1.89

Source: Calculated from Primary Data

TABLE 16

ANOVA ON THE INFLUENCING FACTORS FOR DIFFERENT LIFE STYLE DIMENSIONS

FACTORS	Sources of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F - Value	Table Value	Sig.
External	Between Groups	37.946	3	12.649	0.647	2.635	NS
	Within Groups	5782.641	296	19.536			
	Total Groups	5820.587	299				
Technical	Between Groups	10.688	3	3.563	0.378	2.635	NS
	Within Groups	2788.442	296	9.420			
	Total Groups	2799.130	299				
Cost	Between Groups	7.915	3	2.638	0.516	2.635	NS
	Within Groups	1512.271	296	5.109			
	Total Groups	1520.187	299				
Service	Between Groups	1.433	3	0.478	0.128	2.635	NS
	Within Groups	1102.497	296	3.725			
	Total Groups	1103.930	299				

Source: Calculated from Primary Data

NS - Not Significant

The Analysis of Variance test is applied to test for the significant difference among the life style dimensions for each influencing factor separately. The results of the ANOVA are given in the above table. It is found from the results of the ANOVA that influencing factors - external, technical, cost and service do not differ significantly among the respondents of the different life style dimensions. Hence, the hypothesis with respect to all the four influencing factors is accepted.

Brand of car and influencing factors

Tables 17 & 18 bring out the ANOVA results for significant difference between the various brands of cars possessed by the respondents and the factors which influenced the purchase of those brands among the respondents.

Null Hypothesis: There is no significant difference between the different brands of cars owned by the respondents and the factors which influenced the purchase of that specific brand of car.

TABLE 17

AVERAGE SCORES OF THE INFLUENCING FACTORS FOR DIFFERENT BRAND OF CAR

Brand of Car	N	Influencing Factor							
		External		Technical		Cost		Service	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Hyundai	42	16.02	4.21	13.50	3.12	9.71	1.95	6.48	1.94
Maruti Udyog	108	13.11	3.96	12.71	2.98	10.42	2.53	6.71	2.26
Fiat	22	14.36	4.62	12.36	2.92	9.86	2.27	5.82	1.47
Tata	49	16.31	3.90	13.78	2.84	9.08	2.02	6.35	1.68
Hindustan Motors	44	15.30	4.58	13.18	3.13	9.18	1.83	5.93	1.59
Others	35	15.86	4.84	14.34	3.24	8.94	1.92	6.11	1.57

Source: Calculated from Primary Data

TABLE 18

ANOVA ON THE INFLUENCING FACTORS FOR DIFFERENT BRAND OF CAR

Satisfaction Factor	Sources of Variation	SS	Degrees of Freedom	Mean Square	F - Value	Table Value	Sig.
External	Between Groups	536.000	5	107.200	5.964	3.080	**
	Within Groups	5284.587	294	17.975			
	Total Groups	5820.587	299				
Technical	Between Groups	106.475	5		2.325	2.245	*
	Within Groups	2692.655	294	21.295			
	Total Groups	2799.130	299	9.159			
Cost	Between Groups	106.670	5		4.437	3.080	**
	Within Groups	1413.517	294	21.334			
	Total Groups	1520.187	299	4.808			
Service	Between Groups	30.639	5		1.679	2.245	NS
	Within Groups	1073.291	294	6.128			
	Total Groups	1103.930	299	3.651			

Source: Calculated from Primary Data NS - Not Significant

(* Denotes 5% level of significance)

(** Denotes 1% level of significance)

The above table outlines the brand of car possessed by the respondents namely Hyundai, Maruti Udyog, Fiat, Tata, Hindustan Motors and other including brands of General Motors, Skoda, Ford, Honda and Daewoo Motors. From the above table, it is clearly known that the calculated value of the influencing factor 'Service' of 1.679 is less than the table value of 2.245 at 5% level of significance. Therefore, the above formulated null hypothesis is accepted with respect to service only. It is inferred that there is no significant difference between the brand of car and the influencing factors with respect to Service.

It is seen that the 'F' values of 5.964 and 4.437 for the Influencing factors External and Cost are much higher than the table values. Therefore, the proposed null hypothesis is rejected at 1% level of significance and it is concluded that there is a highly significant difference between the brand of cars with respect to External feature of the car and the cost of car among the respondents.

It is also observed that the 'F' value of 2.325 for the influencing factor 'Technical' is higher than the table value of 2.245. Hence the above stated null hypothesis is rejected at 5% level of significance and it is concluded that there is significant difference between the brand of car and the influence of Technical features of car on the purchase of a particular brand.

* The analysis of influencing factor 'External' highlights the respondents of Tata Brand with the highest mean value of 16.31. They think that Tata Brand is a successful one in effectively influencing the respondents on the purchase with respect to External features of car. The car owners of Maruti with least mean value of 13.11 feel that external features is less successful than the other brands in creating interest in purchasing Maruti Brand.

* The analysis of influencing factor 'Technical' indicates the respondents of various brands of General Motors, Skoda, Honda and Daewoo with the highest mean value of 14.34. They feel that the above brands are successful in influencing the respondents on their purchase with respect to the technical features of car. The Fiat car owners with the least mean value of 12.36 perceive that the technical features are not successful in creating interest in the purchase with respect to Fiat owners.

* The analysis of influencing factor 'Cost' represents the respondents of Maruti Brand with the highest mean value of 10.42. They judge that Maruti brand is much successful in effectively influencing the respondents on the purchase of car based on Cost. It is also highlighted that the owners of other brands like General Motors, Skoda, Honda and Daewoo with least mean value of 8.94 think that 'Cost' is not successful in creating interest in the purchase of these brands.

* The analysis of Influencing factor 'Service' discloses the respondents of Maruti Brands with the highest mean value of 6.71. They perceive that Maruti brand is very much successful in effectively influencing the respondents on purchase with respect to the services available in the usage of cars. The car owners of Fiat with least mean value of 5.82 judge that Service factor is not encouraging the respondents in the purchase of Fiat brand.

Suggestions

1. To ensure that a product finds a place in the minds of consumers, the manufacturers should position their products through sales promotional activities such as advertisement through the media.
2. Indian youth / consumers are very strongly influenced by testimonials of sports personalities, film stars and celebrities. For positioning the consumer durables like cars, the manufacturers can utilize the endorsement of these celebrities.
3. Majority of the respondents reported that they formed their expectations through the statement made by friends and relatives and therefore it would be beneficial if the extent of influence of such groups is studied. It may be found through closely studying the social interactions of the consumers.
4. Experts believe the main driver of the Indian car market is the availability of car finance on easy installments and reasonable interest rates. Most of the respondents also reported that due to the easy availability of finance they buy cars. So the car dealers should have tie-up arrangements with the authorized financial institutions to boost sales.
5. The demand for small car segment is increasing because of the growing number of nuclear families as well as parking problems. Hence the manufacturers should find out the needs, wants, tastes and preferences of the consumers in order to design the products.
6. The respondents perceive that driving comfort and fuel economy are the most important features of the passenger car followed by availability of spare parts and price of the car, thus the manufacturers should design the product giving maximum weightage to these factors.
7. A large component of a passenger car's cost is taxes such as excise duties, central and state sales taxes which push up the ex-factory price of a car by around 50%. The governments, both the central and the state should come forward to reduce these tax levels to enhance the demand for cars in the country.
8. The study reveals that the middle class population has risen to 13 per cent of the total population. Hence the brand image and brand loyalty could be boosted by selling quality cars at a reasonable price to suit the needs of the middle income group.
9. India is witnessing significant changes in the economic and social status of women. Many women are now becoming educated and they pose challenge in employment, once reserved for men. According to the observations made, it is stated by most of the female respondents that the automobile manufacturers should study the behaviour of women and should produce a car exclusively for women as the two wheeler manufacturers are doing.
10. Car owners feel that the hospitality shown by the dealers is more during their visits to the places of dealers before and immediately after the purchase. But after some time they face a problem with their dealers regarding after sales service. Therefore, it is suggested that the services rendered or to be rendered should be properly explained, friendly approach and reliability in service are to be further improved.

11. Most of the respondents expressed that they have technical problems in their existing car and some of them opined that they switch over to another brand because they would like to buy a new technology car. Hence the government should announce a National Award for the automobile companies which adopt the Research and Development measures so that Indian cars can really become world class quality.

Conclusion

Consumer Behaviour consists of all human behaviour that goes in making purchase decisions. An understanding of the consumer behaviour enables a marketer to take marketing decisions which are compatible with its consumer needs. There are four major classes of consumer behaviour determinants and expectations, namely, cultural, socio-economic, personal and psychological. The socio-economic determinants of consumer behaviour consist of age, marital status, occupation, education, income, family size etc. Realizing the importance of passenger car industry in the present economic situation, the researcher has analyzed the perceptions, and behaviour of consumers related to this product. It is rightly said; yesterday's luxuries are today's necessities. Hence in this digital world, car is no longer a luxury. From the discussions made in the previous chapters, there are certain product attributes which are identified in the study as influencing the purchase decision and satisfying the consumers. The growth in the population of India and the increasing number of middle class consumers has attracted the attention of car manufacturers and marketers. The manufacturers and marketers who study the behaviour of consumers and cater to their needs will be successful. It may be concluded that consumer behaviour has a greater role to play in the LPG era of economic activities for which a necessary survey and research should be conducted in an efficient manner.

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