AWARENESS AND ATTITUDES OF CONSUMERS IN BUYING DIFFERENT BRANDS OF CARS

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Abstract : The Indian Motor car industriousness has proliferation in Recent years like never before. This extraordinary emergence that the Indian motor car industry has witnessed is a resultant role of a major factor namely the improvement in the living sustenance of the middle division and an increase in their disposable income. Personal and social factors are influencing consumer buying decision. Sixty respondents were selected. In this paper we are going to analyse the awareness and attitudes of consumers in buying different brand of cars.

Keywords: Factors, Awareness and Attitudes, Consumers

I. Introduction

Man existence in superior general are building complex Wight who often do not seem even to know their own creative thinker. Each mortal is a unique product of genetic endowment, surround and experience. Prognosticating such an astonishing attitude of people is a difficult and complicated task filled with incertitude, risks and surprises. Accurate forecasting can yield enormous affluence and inaccurate prophecy can result in the loss of millions of rupees. Today, trade around the world perceives that the consumer is an emperor. Knowing why and how multitude consume products helps trafficker to understand how to improve current products, what types of products are needed in the retail place or how to attract consumers to buy their products. The era of liberalization , denationalisation and globalization has brought changes in the society and lifestyle of the people. Sellers can justify their presence only when they are able to understand consumers wants and satisfy them.

RESULTS AND DISCUSSION

Table 4.1

Factor Analysis on expectation on the technical features of new car compared to old car

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.620
Bartlett's Test of Sphericity	Approx. Chi-Square	289.590
	Df	28
	Sig.	0.000

To verify whether the data set is suitable for factor analysis it has to be checked whether the KMO measure of sampling is 0.6 or above and whether the Bartlett's test of Sphericity value is significant (i.e., the significant value should be 0.05 or smaller). In this analysis, the KMO value is 0.620 and Bartlett's test is significant (p=0.000).Therefore, this factor analysis is appropriate.

Table 4.2

Extraction method of Principal Component Analysis

Component/ Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.423	42.791	42.791	3.423	42.791	42.791
2	2.091	26.140	68.931	2.091	26.140	68.931
3	1.005	12.559	81.489	1.005	12.559	81.489
4	.649	8.107	89.596			
5	.359	4.485	94.082			
6	.236	2.952	97.034			
7	.138	1.724	98.757			
8	.099	1.243	100.000			

From the above table 4.2, the component Eigen value should be 1 or more in the total variance. In this study, only the first three components recorded Eigen value above 1(42.791,26.140 and 12.559). Overall, the model for 3factors account for 81.489 percent which is relatively a good model.

Table 4.3

Initial Factor Loading of each variables in different factors

Component Matrix	Component		
	1	2	3
Brake	.888		
Tyres and wheels	.830	-.134	-.361
Suspension	.705	-.421	.372
Power steering	.645	-.342	.600
Power window	.644	.543	.165
High engine power	.593	-.441	-.569
Mileage	.265	.931	
High fuel efficiency	.443	.651	-.114

The above table 4.3 indicates the initial factor loading of each variable in different factors. It shows that the 8 variables are reduced into 3 predominant factors.

Table 4.4

Rotation method Varimax with Kaiser Normalization

Rotated Component Matrix	Component		
	1	2	3
Mileage	0.949	-0.142	-0.133
Power window	0.787	0.145	0.312
High fuel efficiency	0.774	0.173	
High engine power	-0.146	0.916	
Tyres and wheels	0.245	0.835	0.282
Brake	0.411	0.644	0.461
Power steering		0.112	0.938
Suspension		0.333	0.837

This table 4.4 shows the rotated component matrix which represents the variables under different factors. The predominant factors include

Factor 1 can be named as

1. Mileage(0.949)

2. Power window(0.787)

3. High fuel efficiency(0.774)

.   Factor 2 can be named as

1. High engine power(0.916)

2. Tyres and wheels(0.835)

3. Brake(0.644)

Factor 3 can be named as

1. Power steering(0.938)

2. Suspension(0.837)

Table 4.5

One way ANOVA for Expectation for high fuel efficiency and Educational Qualification of respondents

Sources of variation	Sum of Squares	df	Mean Square	F value	Sig. value
Between Groups	0.264	2	0.132		
Within Groups	47.386	57	0.831	0.159	0.854*
Total	47.650	59			

*Significant at 5% level

Table 4.5 shows the oneway ANOVA that explores the influence of educational qualification on expectation for high fuel efficiency. There is no statistically significant difference between groups as disclosed by the value of $F (2, 57) = 0.159$ where the p value is 0.854 (p> 0.05). This indicates that the null hypothesis is accepted. Therefore, educational qualification of the respondents does not influence the expectation for high fuel efficiency as a technical feature of the new car. Hence, it is concluded that all the respondents expect high fuel efficiency, irrespective of their educational qualification.

Table 4.6

Kruskal-Wallis Test for Expectation for high fuel efficiency and Occupation of respondents

Factor	Chi-Square	df	Sig. value
High fuel efficiency	1.508	3	0.681*

*Significant at 5% level.

Table 4.6 shows the Kruskal-wallis test indicating the effect onexpectation for high fuel efficiency by the occupation of respondents. As per the acceptance of null hypothesis p=0.681(above 0.05),the occupation of respondents does not influence the expectation for high fuel efficiency as a technical feature of new car compared to the old car.Therefore, it is concluded that shortage of fuel is a crucial factor and it should be utilized efficiency. Hence, all the respondents expects high fuel efficiency from their four wheeler.

Table 4.7

Independent samples t test on Expectation for high fuel efficiency and

Marital status of respondents

Feature	Marital status	N	Mean	Std. Deviation	t value	Sig. value
High fuel efficiency	Married	52	3.90	0.846	1.187	0.240*
	Unmarried	8	3.50	1.195		

*Significant at 5% level

Table 4.7 shows theindependent samples t test that compares the expectation for high fuel efficiency and marital status of the respondents. There is no statistically significant differenceas determined by the value of t=1.187, where p value is 0.240 (p>0.05) and this indicates that the null hypothesis is accepted. Therefore, marital status does not influence the expectation for high fuel efficiency as a technical feature of new car compared to the old car. Hence, it is concluded that both married and unmarried respondents expect high fuel efficiency from their four wheeler.

Table 4.8

Kruskal-Wallis Test for Expectation for high fuel efficiency and

Monthly Income of the respondents

Factor	Chi-Square	df	Sig. value
High fuel efficiency	12.499	3	0.006*

*Significant at 5% level

Table 4.8 shows the Kruskal-wallis test indicating the effect on expectation for high fuel efficiency by the monthly income of respondents. As per the rejection of null hypothesis p=0.006 (below 0.05), monthly income of respondents influences the expectation for high fuel efficiency of new car compared to the old car. Hence, it is concluded that the customers expect high fuel efficiency in the new car irrespective of their monthly income.

Table 4.9

Knowledge about mileage and Educational Qualification of respondents

Educational Qualification	N	Mean	Std. Deviation
Up to higher secondary	21	4.24	0.831
Under graduate	13	3.15	1.345
Post graduate	26	3.54	1.272
Total	60	3.70	1.212

Source: Primary data

Table 4.9 shows the mean and standard score of the knowledge about mileage and educational qualification of respondents. The highest mean score value is Up to higher secondary (4.24)followed by Post graduate (3.54) and Under graduate (3.15).None of the respondents are Illiterate. Hence, majority of the respondents are upto higher secondary.

Table 4.10

One way ANOVA for Knowledge about mileage and Educational Qualification of the respondents

Sources of variation	Sum of Squares	Df	Mean Square	F Value	Sig. Value
Between Groups	10.637	2	5.318	3.991	0.024*
Within Groups	75.963	57	1.333		
Total	86.600	59			

*Significant at 5% level

Table 4.10 shows the oneway ANOVA that explores the influence of educational qualification onknowledge about mileage. There is a statistically significant difference between groups as disclosed by the value of F (2, 57) = 3.991 where the p value is 0.024 (p< 0.05). This indicates that the null hypothesis is rejected. Therefore, educational qualification of the respondents influences the knowledge about mileage. Hence, it is concluded that education is required to have enough knowledge about mileage of the new car.

Table 4.11

One way ANOVA for Knowledge about mileage andOccupation of respondents

Sources of variation	Sum of Squares	df	Mean Square	F Value	Sig. Value
Between Groups	2.726	3	0.909	0.607	0.613*
Within Groups	83.874	56	1.498		
Total	86.600	59			

*Significant at 5% level

Table 4.11 shows the oneway ANOVA that explores the influence of occupation on the knowledge about mileage of the new car. There is no statistically significant difference between groups

as disclosed by the value of $F_{(3, 56)} = 0.607$ where the p value is 0.613 (p>0.05) and this indicates that the null hypothesis is accepted. Therefore, occupation of respondents does not influence the knowledge about mileage of new car compared to the old car. Hence, it is concluded that occupation is not an influencing factor in determining the knowledge about mileage of the car and all car users have knowledge about mileage.

Table 4.12

Independent samples t test on Knowledge about mileage and Marital status of respondents

Feature	Marital status	N	Mean	Std. Deviation	t value	Sig. value
Mileage	Married	52	3.79	1.109	1.456	0.151*
	Unmarried	8	3.13	1.727		

*Significant at 5% level

Table 4.12 shows the independent samples t test that compares the knowledge about mileage and Marital status of the respondents. There is no statistically significant difference determined the value of t=1.456 where p value is 0.151 (p>0.05) and this indicates that the null hypothesis is accepted. Therefore, marital status does not influence the knowledge about mileage of new car compared to the old car. Hence, it is concluded that each and every customer possesses knowledge about the mileage of their car.

Table 4.13

Kruskal-Wallis Test for Knowledge about mileage and Monthly Income of respondents

Factor	Chi-Square	df	Sig. value
Mileage	3.970	3	0.265*

*Significant at 5% level

Table 4.13 shows the Kruskal-wallis test indicating the effect on knowledge about mileage by the monthly income of respondents. As per the acceptance of null hypothesis p=0.265 (above 0.05), monthly income of respondents does not influence the knowledge about mileage of the new car. Hence, it is concluded that all customers are much concerned about the mileage of their car irrespective of their monthly income.

Table 4.14

Correlation on the reasons for preferring a particular brand of car

Reasons		Price	Offer	Loan	Service	Advertisement	Quality	Goodwill
Price	Pearson Correlation	1	.277*	.332**	.363**	.102	.267*	.309*
	Sig.value		.032	.009	.004	.438	.039	.016
	Respondents	60	60	60	60	60	60	60
Offer	Pearson Correlation	.277*	1	.555**	.297*	.119	.333**	.335**
	Sig.value	.032		.000	.021	.364	.009	.009
	Respondents	60	60	60	60	60	60	60
Loan	Pearson Correlation	.332**	.555**	1	.246	.020	.393**	.466**
	Sig.value	.009	.000		.058	.882	.002	.000
	Respondents	60	60	60	60	60	60	60
Service	Pearson Correlation	.363**	.297*	.246	1	-.329*	.351**	.291*
	Sig.value	.004	.021	.058		.010	.006	.024
	Respondents	60	60	60	60	60	60	60
Advertisement	Pearson Correlation	.102	.119	.020	-.329*	1	.186	.145
	Sig.value	.438	.364	.882	.010		.156	.270
	Respondents	60	60	60	60	60	60	60
Quality	Pearson Correlation	.267*	.333**	.393**	.351**	.186	1	.591**
	Sig.value	.039	.009	.002	.006	.156		.000
	Respondents	60	60	60	60	60	60	60
Goodwill	Pearson Correlation	.309*	.335**	.466**	.291*	.145	.591**	1
	Sig.value	.016	.009	.000	.024	.270	.000	
	Respondents	60	60	60	60	60	60	60
*. Correlation is significant at the 0.05 level (2-tailed).								
**. Correlation is significant at the 0.01 level (2-tailed).								

Table 4.14 shows the relationship between price, offer, loan, service, advertisement, quality and goodwill using Pearson product moment correlation co-efficient. In this analysis, there exists a relationship among all the variables. The result shows that there exists a strong positive relationship between the variables Quality and Goodwill ($r = 0.591$, $p > 0.01$).

The factors having inter correlation with positive values are

1) Quality positively correlates with Goodwill (0.591)

2) Offer positively correlates with Loan (0.555)

3) Loan positively correlates with Goodwill (0.466)

4) Loan positively correlates with Quality (0.393)

5) Price positively correlates with Service (0.363)

6) Service positively correlates with Quality(0.351)

7) Offer positively correlates with Quality(0.466)

Table 4.15

One way ANOVA for Preferring a particular brand for price and Educational Qualification of respondents

Sources of variation	Sum of Squares	Df	Mean Square	F Value	Sig. Value
Between Groups	1.480	2	0.740		
Within Groups	17.853	57	0.313	2.362	0.103*
Total	19.333	59			

*Significant at 5% level

Table 4.15 shows the oneway ANOVA that explores the influence of educational qualification on preferring a particular brand of car for price. There is no statistically significant difference between groups as disclosed by the value of F (2, 57) = 2.362where the p value is 0.103 (p>0.05) and this indicates that the null hypothesis is accepted. Therefore, educational qualification of respondents does not influence preferring a particular brand of car for price. Hence, it is concluded that price play a vital role in selecting a brand and a prospective buyer prefer a particular brand on the basis of its price.

Table 4.16

Kruskal-Wallis Test for Preferring a particular brand for price and

Occupation of the respondents

Factor	Chi-Square	df	Sig. value
Price	8.176	3	0.043*

*Significant at 5% level

Table 4.16 shows the Kruskal-wallis test indicating the effect of preferring a particular brand of car for price and occupation of respondents. As per the rejection of null hypothesis p=0.043(below 0.05), occupation of respondents influence the preference of a particular brand of car for price. Hence, it is concluded that price is an important factor to prefer a particular brand by the customers irrespective of their occupation.

Table 4.17

Independent samples t test on Preferring a particular brand for price and

Marital status of respondents

Reason	Marital status	N	Mean	Std. Deviation	t value	Sig. Value
Price	Married	52	4.69	0.579	0.883	0.381*
	Unmarried	8	4.50	0.535		

*Significant at 5% level

Table 4.17 shows the independent samples t test that compares preferring a particular brand of car for price and marital status of the respondents. There is no statistically significant difference as determined by the value of t=0.883 where p value is 0.381 (p>0.05) and this indicates that the null hypothesis is accepted. Therefore, marital status of the respondents does not influence preferring a particular brand of car for price. Hence, it is concluded that all the respondents give high priority to price irrespective of their marital status.

Table 4.18

Kruskal-Wallis Test for preferring particular brand for price and Monthly Income of the respondents

Factor	Chi-Square	df	Sig. value
Price	12.726	3	0.005*

*Significant at 5% level

Table4.18 shows the Kruskal-wallis test indicating the effect on preferring particular brand of car for price by the monthly Income of respondents. As per the rejectionof null hypothesis p=0.005(below 0.05), monthly income of respondents influence preferring a particular brand of car for price. Hence, it is concluded that customers of all income group consider price as a main reason for preferring a particular brand of car.

Table 4.19

Kruskal-Wallis Test for Influence of Advertisement on preferring particular brand and Educational Qualification of respondents

Factor	Chi-Square	df	Sig. Value
Advertisement	2.292	2	0.318*

*Significant at 5% level

Table 4.19 shows the Kruskal-wallis test indicating the effect of the influence of advertisement on preferring a particular brand and educational qualification of respondents. As per the acceptance of null hypothesis p=0.318(above 0.05),educational qualification of respondents does not influence the effect of advertisement on preferring a particular brand of car. Hence, it is concluded that advertisement is considered as a key factor in marketing a product. All respondents are influenced by the advertisement in selecting a brand.

Table 4.20

Kruskal-Wallis Test for Influence of Advertisement on preferring particular brand and Occupation of respondents

Factor	Chi-Square	df	Sig. value
Advertisement	2.959	3	0.398*

*Significant at 5% level

Table 4.20 shows the Kruskal-wallis test indicating the effect of the influence of advertisement on preferring a particular brand of car and occupation of respondents. As per the acceptance of null hypothesis p=0.398(above 0.05),occupation of respondents does not influence the influence of advertisement on preferring a particular brand of car. Hence, it is concluded that all respondents are influenced by the advertisement irrespective of their occupations.

Table 4.21

Kruskal-Wallis Test for Quality requirement for preferring particular brand and Educational Qualification of respondents

Factor	Chi-Square	df	Sig. value
Quality	2.779	2	0.249*

*Significant at 5% level

Table 4.21 shows the Kruskal-wallis test indicating the effect of quality requirement for preferring a particular brand of car and educational qualification of respondents. As per the acceptance of null hypothesis p=0.249 (above 0.05), educational qualification of respondents does not influence of the quality requirement for preferring a particular brand of car. Hence, it is concluded that a brand is preferred by its quality and all customer expect good quality in their four wheeler.

Table 4.22

One way ANOVA for Quality requirement for preferring particular brand and Occupation of respondents

Sources of variation	Sum of Squares	Df	Mean Square	F Value	Sig. Value
Between Groups	0.711	3	0.237		
Within Groups	22.623	56	0.404	0.586	0.626*
Total	23.333	59			

*Significant at 5% level

Table 4.22 shows the oneway ANOVA that explores the influence of occupation on the quality requirement for preferring a particular brand of car. There is no statistically significant difference between groups as disclosed by the value of F (3, 56) = 0.586 where the p value is 0.626 (p>0.05) and this indicates that the null hypothesis is accepted. Therefore, occupation of respondents does not influence the quality requirement for preferring a particular brand of car. Hence, irrespective of the level of occupation all customers prefer good quality in selecting a particular brand of car.

Table 4.23

Independent samples t test onQuality requirement for preferring particular brand and Marital status of respondents

Reason	Marital status	N	Mean	Std. Deviation	t value	Sig. value
Quality	Married	52	4.35	.623	0.400	0.691*
	Unmarried	8	4.25	.707		

*Significant at 5% level

Table 4.23 shows the independent samples t test that compares the quality requirement for preferring a particular brand of car and marital status of the respondents. There is no statistically significant difference determined by the value of t=0.400 where p value is 0.691 (p>0.05) and this indicates that the null hypothesis is accepted. Therefore, marital status of respondents does not influence the quality requirement for preferring a particular brand of car. Hence, it is concluded that both married and unmarried customer prefer a particular brand based on its quality.

Table 4.24

One way ANOVA for Quality requirement for preferring particular brand and Monthly Income of the respondents

Sources of variation	Sum of Squares	df	Mean Square	F Value	Sig. value
Between Groups	0.812	3	0.271	0.673	0.572*
Within Groups	22.521	56	0.402		
Total	23.333	59			

*Significant at 5% level

Table 4.24 shows the oneway ANOVA that explores the influence of monthly income on quality requirement for preferring a particular brand of car. There is no statistically significant difference between groups as disclosed by the value of F (3, 56) = 0.673 where the p value is 0.572 (p>0.05). This indicates that the null hypothesis is accepted. Therefore, monthly income of respondents does not influence quality requirement for preferring a particular brand of car. Hence, quality plays a vital role in selecting a particular brand and all customer give priority to quality before making purchase decision.

Table 4.25

Multiple Regression on the Quality of car and reasons for preferring particular brand

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig. value
	B	Std. Error	Beta		
(Constant)	2.282	.645		3.536	0.001*
Price	.075	.145	.069	0.521	0.604
Offer	.082	.116	.102	0.706	0.483
Loan	.181	.103	.256	1.761	0.084
Service	.169	.094	.233	1.795	0.078
Dependent Variable : Quality					
Independent variable: Service, Loan, Price, Offer					
Multiple R: 0.485					

| R square:0.235 |
| Adjusted R square:0.179 |
| F statistics(4,55): 4.223 |

*Significant at 5 % level

Table 4.25 reveals the multiple regression used to access the ability of four control measures (Price, Offer, Loan and Service) that predict its impact on the quality of car of a particular brand(Quality).

R^2 value (0.235) indicates the amount of variability explained by independent variables of Price, Offer, Loan and Service for 23% of variance in the dependent variable of Quality i.e., the remaining 77% is by some other unknown variable and the problem is not taken into account.

Adjusted R^2 indicates whether there any insignificant factor.It should always be less than or equal to R^2.Here R^2 (0.235) and adjusted R^2 (0.179) are close to each other. This indicates a good model.

p= 0.001 (below 0.05) shows that there is a statistically significant difference between variables and this indicates all the independent variables Price, Offer, Loan and Service have significance on the quality of car of a particular brand.

Findings

1. Expectation for high fuel efficiency as a technical feature of the new car is not influenced by the educational qualification, occupation, and marital status of the customers however the expectation for high fuel efficiency by the customers differs with the monthly income of the customers. Knowledge about mileage depends on educational qualification, occupation, and marital status of the customers.

2. In this analysis, there exists a relationship among all the variables. The result shows that there exists a strong positive relationship between the variables quality and goodwill. Quality depends on the price, offer, loan and service of a particular brand of car.

3. The customers perceive that driving comfort and fuel economy are the most important features of the passenger automobile. Preferring a particular brand for price is not affected by the educational qualification and marital status of the customers and it is affected by their occupation and monthly income. Preferring a particular brand for advertisement does not depend on the educational qualification and occupation of the customers. Quality requirement for preferring particular brand does not depend on educational qualification, occupation, marital status and monthly income of the customers.

Conclusion

The growth in the population of India and the increasing number of middle class consumers has attracted the attention of car manufacturers and marketers. In this research, the researcher concludes that the overall satisfaction of the customers regarding all car companies is at good. There are certain product attributes which are identified in the study as influencing the purchase decision and satisfying the consumers. Income, age, gender ar every important factors that influence the purchase decision.