

Influence of post purchase regrets on perceived brand image - A study with reference to premium car segment of automobile industry.

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Abstract: Customers are becoming more rational now a days and marketing strategies took a turn from product centric to customer centric. Information on potential consumptions are available from number of sources, and producers concentrate on future buyers with various means to attract them. Most of the time, producers are very successful in creating a meaningful picture of their brand in customers minds. The process of perception starts when a proposed buyer goes through an ad, promo or review given by the existing user in social media and reliable information from any other sources. At the end of the perception process an image or an impression may develop in the mind of the proposed buyers, which is known as ‘perceived brand image’. Post purchase dissonance is a psychological phenomenon which has certain impact on perceived brand image in the mind of a customer. When a product meets expectations of customers there will be a value addition in the perceived brand image. Customers real experiences sometimes may be entirely different and it may shatter all his expectations, regrets coming in the mind of these customers may ruin the brand image built in their mind. A brand will move only when customers believe in producers promise and develop a sufficiently positive perception to buy or rebuy. In this paper researcher tries to find the impact of customer experience and thoughts after the real use of the product on perceived brand image. Premium segment of Cars from automobile industry is selected for analyzing the changes happening in perceived brand image in customer mind.

Key word: Perception, perceived brand image, dissonance, brand loyalty, post purchase regrets, brand equity, marketing research.

1. Introduction

Since the marketing research has become consumer oriented, consumer feedback and satisfaction are the main criteria under focus. Analytical knowledge on consumer behaviour helps the marketers to get a detailed understanding of consumers decision process. Buying behaviour is affected by number of factors like cultural, social, economic, psychological and personal factors. But some of these factors are beyond the limit of marketers or producers. An in-depth analysis of buying behaviour will definitely help the producers to bypass most of the issues faced in the marketing.

The concept of brand image is a hot deal in the modern business world and it is a magical term which controls the entire business. Modern concept of branding process started initially after 1970's when producers attempted to associate some ideas with their products. Slowly it paved the way for the emergence of brand identity and brand loyalty. In the beginning of 1980s most of the big producers in the globe identified the leverage of brand in their turnover. Then the brand has got a place in the asset side of balance sheet and brand equity has become the emerging concept in marketing.

Consumer buying decision is a cyclical process which includes five different stages. Actual buying is happening in the fourth stage of this cyclical process. Consumers may go through some of the stages of this cycle but may not end up in a purchase decision. Buying decisions of all the products are not required to pass through all these stages as it is mainly determined by type and nature of product intended to procure. Consumer buying decision process is illustrated below in Fig.1

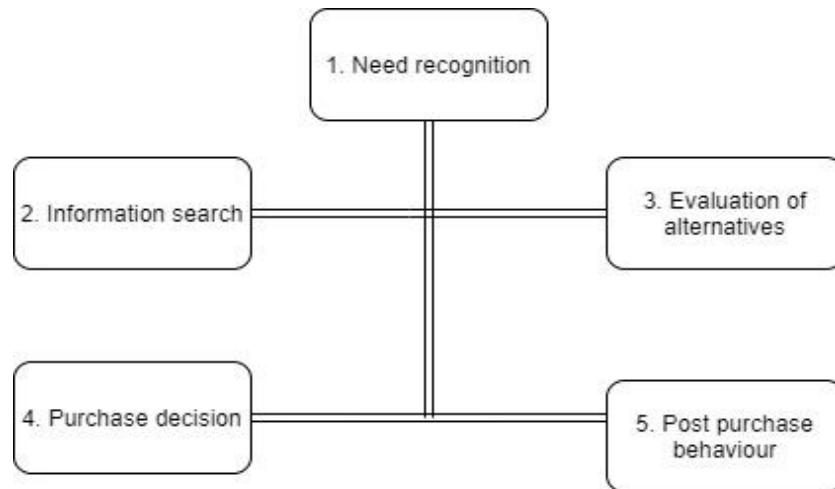


Fig.1, Source: Management Articles and Institutes

Experience gained by the consumer during the purchase and consumption have a great impact on perceived brand image and the level of satisfaction in his mind. That means post purchase experience is the only factor which generate frequent buying and new buyers in the market. In the case of premium segment cars, post purchase exposure consists all the encounters happened between owners and sellers after the purchase of a car. Purchase of a car involves high level mental and financial commitments of owners; and their assessments and evaluations are extremely significant as it decides the future of that particular brand of car. Possible behaviour of a customer before and after the purchase decision is explained in Fig.2 given below.

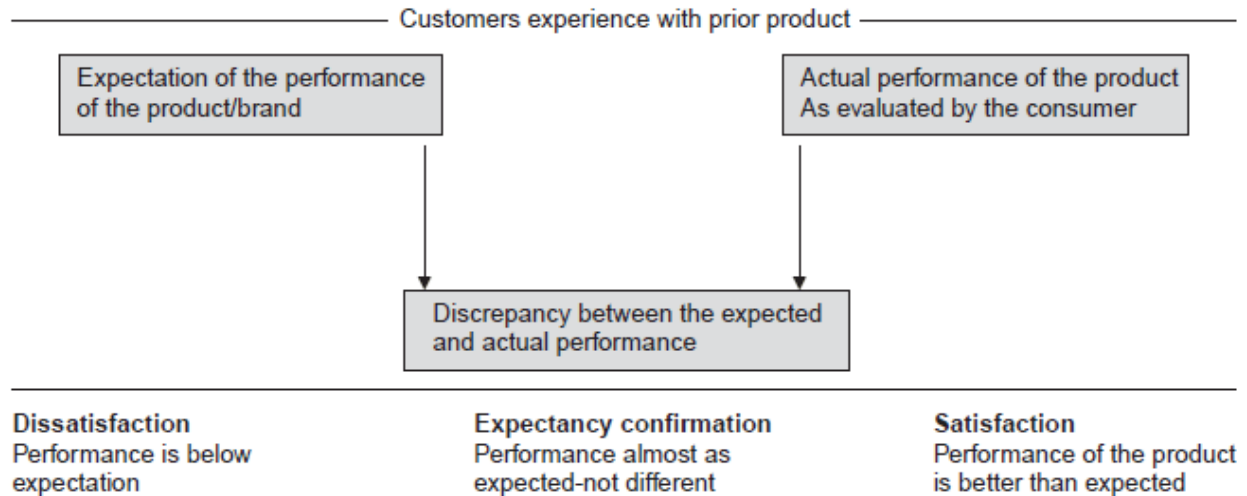


Fig.2, Source: www.wisdomejobs.com

Now-a-days, most of the purchases decisions are influenced by the review of existing customer particularly in the case of automobile industry. This study is an attempt to identify the impact of post purchase experience and thoughts in customers mind on the perceived brand image. Result of the study reveals that post purchase behaviour of customers has a significant influence in deciding the future of particular brand.

2. Objectives of the study

1. To analyze the demographic and personal feature of buyers of premium segment cars.
2. To identify impact of product feature in buying decision.
3. To compare the pre- purchase and post purchase experience.
4. To analyze the impact of post purchase regret on buyer behaviour.
5. To analyze impact of post purchase experience on perceived brand image.

3. Literature review

Gerald (1967) conducted a study to know the feelings of a brand new car buyer and also to examine the reactions of the car owner when he begins to live with his new car. Findings of the study suggest that cognitive dissonance of a customer has certain influence from his personality, self-confidence and quality of service he receives.

Park *et al.* (1986) explained that there are two prerequisites for the proper brand management namely construction of brand and maintenance of brand image. Brand image is established through functional, symbolic or experimental elements. Scholars have different opinion on definition of brand image. But the literature research reveals that definition of brand image has four perspectives. They are blankest definitions, meaning and messages, personification, cognitive or psychological elements.

Keller (1993) introduced a concept “customer based brand equity (CBBE), which explains customer’s responses towards the branding campaign. According to him two basic source of brand equity are the brand image and brand awareness. An intensive marketing campaign will help to establish a positive brand image by linking unique and strong brand association with memories of customers about the brand. There is a need of building good brand knowledge in the mind of potential buyers to create a positive response among them. It helps to reduce cost of brand extension while trying to achieve higher turnover and profit.

Cagla Hirschman (1995) stated that there is a sudden paradigm shift in purchase behaviour of customers from static model to dynamic model. Evidences are found to prove the significant impact of previous choices on current choice. Certainly purchases of a customer are influenced by choices and brand equity plays a prominent role in this process. Previous experiences in different brands have a gearing effect on the final selection among the choices.

Lassar *et al.* (1995) opined that customer’s confidence in a particular brand creates brand loyalty and brand equity. Customers may become ready to pay more if they are much confident on a specific brand. The confidence in the mind of a customer is built up on five pillars; they are: functioning as designed for, image in the society as an owner of a particular brand, recognition and emotional attachment towards the product, balanced brand value and its functionalities and customers trust on brand.

Rodula Tsotsou (2006) held an investigation to find the impact of perceived product quality on overall satisfaction of purchase intention. The study identified direct and indirect effects of perceived brand value and its involvement on purchase intention. Result of this investigation reveals that perceived quality has a direct and indirect influence on purchase decision. Overall satisfaction had a direct effect on purchase intentions and involvement had an indirect effect on purchase intentions.

Rahman (2012) conducted an exploratory study on Telecom Sector of Bangladesh to examine the preferences of consumers in selection of mobile phone service providers in the country. Study was conducted among randomly selected 450 customers of the capital city of the country to identify the most influencing factor on perceived brand image. Analysis of the study reveals that service quality of the cellular service providers has a significant influence on perceived brand image.

Marnik *et al.* (2013) had a study on customer’s brand loyalty and firm’s ability to retain a customer. He explains that loyal customers are very less price sensitive comparing to others in the market. This loyalty base of customers provides strength to firm in the competitive edge. Cost of searching and finding a new user is much higher than that of retaining an existing customer; sometimes it is six times higher than the last one.

Tenna Heesch Jorgensen (2013) has investigated in her study titled “The importance of brand equity in coffee shop chains- A comparative analysis of Tim Hortons and Starbucks in Canada”

about factors which influence brand equity. Study was included an indigenous brand and a multinational brand from the same industry. Result of the study reveals that there is no difference in brand equity of both local and global brand. Loyalty dimension shows customers of both brands have strong association and loyalty with their own brand.

Hosseini (2014) carried out a study to identify impact of store image on customer perception of retail outlets in Malaysia. He investigates influence of store image on customer's perceived value in the Malaysian context. Study was held among 225 customers randomly selected from shopping centers in Malaysia having variety of brands and concludes that there is a significant positive relationship between store ambience and customer perception.

Nusrat-Jahan Abubakar *et al.* (2017) had a study in University of Ghana on factors accounting for cognitive dissonance and developed a model for explaining post purchase regrets. According to them there are certain factors leading to regrets known as independent variables and often post purchase regrets is depended to these variable. The relationship is explained in fig.3 given below.

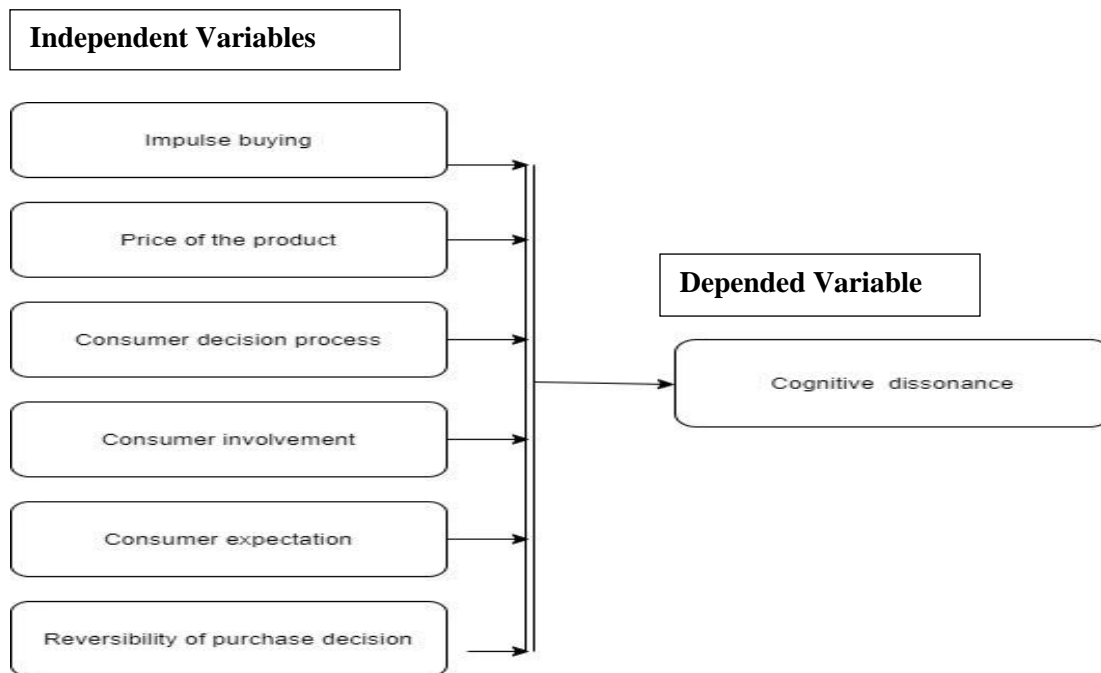


Fig. 3, Source: International Journal of Multidisciplinary Research and Development

4. Methodology

Population of the study consists of premium segment car users from randomly selected two Districts, Alappuzha and Kannur of Kerala. Premium segment car means cars having x-showroom price between Rs. 10 lakh and Rs. 20 lakh. Multistage random sampling method was used for selection of samples from the population. As per the opinion of dealers around 12 lakh cars in the said segment are on roads in Kerala. Toyota, Hyundai and Maruti Suzuki are the three

manufacturers selected on the basis of market share in the segment. Total 300 owners were selected randomly from the selected districts. Samples are distributed among manufacturers according to their market share in the premium segments- 45 % from Toyota and 32 % from Maruti Suzuki and 23 % from Hyundai. A well-structured questionnaire consisting items to measure owners satisfaction, post purchase experience and brand loyalty was prepared and used for data collection.

5. Data Analysis and Interpretation

5.1 Demographic features of sample respondents

Demographic Features	Category	No. of Sample Owners	Percentage
Age	20 – 40 Years	118	39.33
	41- 60 years	143	47.67
	More than 60 Years	39	13.00
	Total	300	100.00
Gender	Female	32	10.67
	Male	268	89.33
	Total	300	100.00
Educational Status	Up to 12 th Std.	131	43.67
	Graduate	156	52.00
	Post graduate	13	4.33
	Total	300	100.00
Occupation	Business	142	47.33
	Profession	61	20.33
	Employed	49	16.33
	Agriculture	17	5.67
	Home maker	14	4.67
	Retired	17	5.67
	Total	300	100.00
Annual Family Income	<10 lakh	87	29.00
	10 lakh to 20 lakh	173	57.67
	>20 lakh	40	13.33
	Total	300	100.00

Table.1, Source: Primary data

Analysis of the demographic profile reveals that 143 respondents are included in the age group of 41 to 60 years. A major portion of the premium segment car owners are males and only 10.67% of them are females. As far as educational qualifications of the respondents are concerned 52% of the sample respondents are graduates and 4.33% of them are post graduates. It is also observed that 47.33 % of the respondents are business people and 20.33% are

professionals. Out of 32 female respondents 14 are home makers and a considerable portion of the sample respondents are included in annual income class of 10 lakh to 20 lakh.

5.2 Relationship between Demographic features and brand Selection

Study analyzed the influence of demographic features on the selection of a particular brand. Demographic features like age, gender, education, occupation and annual family income of the respondents were associated with their brand selection. It is observed that some of the demographic features have a great impact on the selection of cars in the premium segment. Chi-square tests were conducted to identify the association between each demographic features and selection of car. Results of the tests are shown in the table.2 given below.

H_0 : “Demographic feature of the respondents have no significant impact on the selection of cars”.

Demographic features	Calculated Value	Table value	Inference
Age	14.97	28.90	Not significant
Gender	12.83	12.60	Significant at 5% level
Education	29.40	36.40	Not significant
Occupation	59.40	58.70	Significant at 1% level
Annual Family Income	33.93	36.42	Significant at 5% level

Table.2, Source: Primary data (own calculation)

From the Chi-square results it is observed that demographic features like gender and annual family income of the respondents have significantly related at 5% level with selection of brand new cars. Occupation of the respondent is also significantly associated with selection of a particular brand of car at 1% level. Findings also pointed out that demographic features like age and education are not significant in the selection cars. So the hypothesis “demographic features of the respondents have no significant impact on the selection of cars” has been rejected with respect to features like age and education. It has been accepted in connection with gender, occupation and annual family income of the respondents.

5.3 Product Feature of the sample respondents

Specifications	Category	No. of Respondents	Percentage
Brand Owned	Toyota	135	45
	Maruti Suzuki	96	32
	Hyundai	69	23
	Total	300	100
	Five	102	34

Seating Capacity	Seven	198	66
	Total	300	100
Colour	White	109	36.33
	Black	12	4.00
	Red	17	5.67
	Silver	87	29.00
	Gray	32	10.67
	Brown	29	9.67
	Others	14	4.67
	Total	300	100.00
Fuel	Diesel	199	66.33
	Petrol	94	31.33
	Gas	7	2.34
	Total	300`	100.00
Period of Purchase	Before 2010	29	9.67
	2010 -2015	176	58.67
	After 2015	95	31.66
	Total	300	100.00
Actual Mileage	<10 KM	19	6.33
	11 to 15 KM	142	47.33
	16 to 20 KM	129	43.00
	>20 Km	10	3.33
	Total	300	100.00

Table.3, Source: Primary data

Above table explains the product features of cars in the premium segment owned by the sample respondents. Three brands namely Toyota, Maruti Suzuki and Hyundai have been selected based on their market share in the segment, 135 of the sample respondents own different cars from the manufacturer Toyota. Maruti Suzuki stands second with 96 respondents and balance 69 respondents own cars manufactured by Hyundai. 198 respondents are using seven seater vehicle and balance 102 respondents own five seater cars. Above table shows that white is most preferred colour in the premium segments and silver comes in the second position. From the table it is very clear that diesel cars are widely preferred in the premium segment and 66 % of the sample respondents own diesel vehicles. Majority of the vehicles owned by the respondents are 5 to 7 years old on an average. As far as mileage is concerned owners are not that much satisfied since most of the vehicles have low fuel efficiency.

5.4 Usage of car- multiple responses

Respondents have been requested to mention the intended purpose of the vehicle. Most of the respondents have multiple opinions on this question so that respondents were allowed to rank their uses according to their preferences. Frequent uses have been ranked as first (Rank 1) and

least important uses have been ranked as last (Rank 5). Then the mean scores of the five ranks were calculated as shown in the below given table.4. Given statistics in the table show that family purpose got highest rank with mean score 2.63 and taxi purpose got lowest rank with mean score of 3.50. Personal purpose with means score of 2.77 and business purpose with mean score of 2.97 ranked as second and third respectively.

Usage	Mean Score of Ranks
Business Purpose	2.97
Personal Purpose	2.77
Office Purpose	3.13
Family Purpose	2.63
Taxi	3.50

Table.4, Source: Primary data (Own calculation)

5.5 Factors influenced in selection of the brand- Multiple responses

Researcher approaches the respondents with predefined criteria which are usually considered for comparing different brands of vehicles before proceeding with a buying decision. These factors are considered as the most influencing factors in the buying process of automobile products. Proper evaluation of these factors is very significant in decision making because the volume of fund committed is very high and decision is an irreversible one with long-term impact. Respondents were asked to rank the criteria given in the questionnaire on the basis of the relevance of those factors in their buying decisions. It was also advised to rank most relevant factor as rank 1 and least relevant one as rank 15. Below given table explains the relevance of these factors in the purchase decision of premium segment car owners.

Factors	Means Score of Ranks
Price	4.33
Fuel Efficiency	4.67
Maintenance cost	4.88
After sales service	5.33
Offers	6.67
Comfort of Journey	7.5
Engine performance	7.67
Interior design	7.99
Resale Value	8.33
Seating Capacity	8.5
Add on Accessories	9.25
Exterior Attraction	9.75
Review of owners	10.25
Brand name	11.5
Colour	13.38

Table.5, Source: Primary data (Own calculation)

Above analysis shows that price, with a mean score of 4.33 gets the highest score and hence is the most influencing factor in the purchase decision of a car in the premium segment. Fuel efficiency is the second highest ranked criteria used for the selection of a particular brand of cars. Maintenance cost and after sale services are the items having next priority and ranked as three and four. Factors like offers, comfort of journey, engine performance and interior designs also considered almost equally while taking decision to purchase of premium cars. Others like review from existing owners, brand name and colour got least considerations while making the purchase decision.

5.6 Relationship between post purchase experience and frequency in usage

Study also threw lights on the relationship between post purchase experience of a car owners and frequency of their usage. Respondents have selected cars with some specific features and also have certain expectations on performance in connection with mileage, comfort of journey and maintenance cost. Chi-square analyses have been conducted to find the association between these factors and frequency of usage of vehicle owned. The relationship is explained in the table.7 given below.

H₀: “Fuel type, mileage, comfort of journey and maintenance cost of the vehicle have no significant association with frequency of usage”

Owner’s Experience	Calculated Value	Table Value	Inference
Fuel used	40.237	30.639	Significant at 1% level
Mileage	22.017	21.731	Significant at 1% level
Comfort of journey	3.862	11.569	Not significant
Maintenance Cost	46.753	22.841	Significant at 1% level

Table.7, Source: Primary data (Own calculation)

Above analysis reveals that factors like fuel type, mileage per liter of the fuel and maintenance cost of the car have significant relationship at 1 % level with frequency of usage of car by the owner. Hence the hypothesis “fuel type, mileage, comfort of journey and maintenance cost of the vehicle have no significant association with frequency of usage” has been rejected in the cases of fuel type, mileage and maintenance cost; and has been accepted in the case of owners experience with comfort of journey, because it has no significant association with frequency of usage of the vehicle.

5.7 Comparison of pre-purchase opinion and post purchase opinion

A comparative analysis of pre-purchase opinion and post purchase opinion collected from the owners were conducted to identify the perceptual differences. Factors that may cause for differences in opinion among from the most influencing factors were considered for collecting owners opinion. Pre-purchase and post purchase opinion on factors which may have more chances for the variation in actual and expected performance have been used for analyzing situations.

Pre- Purchase and Post Purchase Opinion on:	Z score	p value
Mileage of the car	3.29	0.01
Maintenance Cost of the car	5.12	0.00
After sales service of the car	1.34	0.180
Engine performance the car	0.59	0.556
Comfort of journey	2.901	0.004
Resale value	2.89	0.004

Table. 8, Source: Primary data (Own calculation)

For analyzing the difference in expected mileage and actual mileage of the car Z value has been calculated. Z score is 3.29 with p 0.001 significance, it implies that there is significant difference in expected and actual mileage of the car ($p < 0.05$). The actual mileage of the vehicle is significantly lower than the mileage expected by the owners before purchasing the car. In the case of maintenance cost of cars Z score is 5.12 with p 0.00, which indicates that there is significant difference in expected maintenance cost and actual maintenance cost; and maintenance cost of the majority of cars are slightly higher than the expected cost of maintenance.

Comparison of expected and observed satisfaction level of after sales service gives a Z score of 1.34 with p 0.180, in this case Z score is less than 1.96, the significance is greater than 0.05 and it implies that there is no significant difference between expected and observed quality in after sales services provided by the manufacturer through dealers. Z score related to performance of engine is 0.59 with p 0.556, which implies that there is no significant difference in opinion of owners in the case of actual and expected engine performance. The Z value 2.901 with p 0.004 explains that there is a significant difference in opinion of the owners in the case of comfort of journey before and after purchase of vehicle. Actual comfort of journey is slightly lower than the expected comfort. As far as owners opinion is concerned Z score of resale value is calculated as 2.89 with p 0.004, which indicates that owners have different opinion before and after the purchase of the car. Expected resale value is significantly lower than the actual price quoted in the used car market.

5.8 Influence of post purchase regret on owners behaviour

Researcher has identified certain post purchase regrets among the owners as mentioned in the previous session of data analysis. It gives an insight to make a further analysis of the intensity of post purchase regrets and its impact on perceived brand image. Above analysis shows that a considerable portion of the owners have different opinion on mileage of the vehicle, maintenance cost, comfort of journey and resale value. Certainly customer expectations before the purchase of the car vary from the actual performance of the vehicle. However most of the owners are satisfied in the cases of quality of after sales service provided through dealers and engine performance of the cars.

Some relevant questions were included in the questionnaire to assess the post purchase regret or satisfaction of owners and to assess its impact on perceived brand image. Following hypotheses are framed and tested to identify the changes in consumer behaviour.

1. H_0 : *There is no significant relationship between post purchase experience and recommending the vehicle to other potential buyers.*

Test	Correlation Coefficient R
Karl Pearson's Correlation	0.5739

Table.9, Source: Own calculation

Calculated value of Pearson's correlation coefficient is 0.5739. As per the thumb rule, a value of r which is <0.6 , indicates a moderately strong correlation. A considerable portion of owners are not satisfied with some of the features of the car and they are not willing to suggest the same brand to others. Hence in this particular case the hypothesis "*There is no significant relationship between post purchase experience and recommending the vehicle to other potential buyers*" has been rejected.

2. H_0 : *There is no significant relationship between post purchase regret and frequency of usage.*

Test	Score
One Sample T test	p value = 0.3183

Table.10, Source: Own calculation

Above table shows that p value of the one sample T test is > 0.05 , hence the null hypothesis "*There is no significant relationship between post purchase regret and frequency of usage*" has been accepted and concluded that there is no significant association between frequency of usage and post purchase regret of owners.

3. H_0 : *There is no significant association between post purchase regrets and tendency of resale.*

Test	Score
One Sample T test	p value = 0.02164

Table.11, Source: Own calculation

In the above table p value of the one sample T test is <0.05 (0.02164), therefore the null hypothesis "*There is no significant association between post purchase regrets and tendency of resale*" is rejected and concluded that post purchase regrets and tendency of resale are significantly associated.

4. H_0 : There is no association between post purchase regrets and willingness to purchase car from the same manufacturer.

Test	Correlation Coefficient ®
Karl Pearson's Correlation	0.5378

Table.12, Source: Own calculation

The value (r) of Pearson's correlation coefficient is 0.5378, which is less than 0.6. Hence a moderately strong association exists between post purchase regrets and purchase of same brand of car. Most of the owners have different opinion on the performance of the vehicle and are not ready to purchase the same brand when they are exchanging the existing vehicle or when thinking of purchasing a second car.

6. Conclusion

In this study researcher made an attempt for comparing pre-purchase and observed experience of owners of selected premium segment cars. Study also tries to examine the role of disappointments and regrets of owners of these cars on their behaviour, and its influence on the perceived brand image in the minds of owners. The purpose of the study is to scientifically evaluate influence of psychological traits of owners on their behaviour after experiencing a product. Concerns arising after using the car provoke disparity and regret in the consumer causing post purchase regret. Post purchase regret is an area to be addressed properly because it has a big role in the existence of a brand

Post-purchase regret is an unfavourable term to marketers when consumers who already purchased their brands regret for the same. The consumer behaviour literature shows that post-purchase regret is accompanied by low-consumer satisfaction. Users of premium segment cars are not satisfied in all aspects, especially mileage, maintenance cost, comfort of journey and resale value of the vehicle. Their opinion indicates that cars purchased have failed to meet their expectations or its performance has not reached up to the promises by the manufacturer. These factors have caused for the changes in the perception level and have ultimately influenced the brand image of the vehicle. A considerable portion of sample respondents are not ready to recommend this vehicle or not thinking to purchase from the same manufacturer when they exchange their vehicle or when they plan to buy a second car.

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