

**IMPACT OF RISING PETROL PRICES ON PRIVATE CAR OWNERS IN PUNE CITY**  
**(AN EMPIRICAL STUDY BASED ON DEMOGRAPHIC AND PSYCHOGRAPHIC TRAITS)**

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**Abstract:**

In the contemporary phase of competition there is growing inquisitiveness to learn more and more about consumer behaviors. At the same time, with the inflationary pressures setting in, understanding consumer behavior is becoming bit complex. This paper makes an attempt to highlight one of the social issues existing due to inflationary pressures that is the impact of fuel price hike on vehicle owners. To quote, today be consumers are more mobile than they were earlier. The reasons for commuting are many. With more and more disposable income, consumers are tilting in favor of private vehicles. In India private vehicle owners are used to petrol as a primary fuel. With petrol prices moving northward there seems to be lot of anxiety and anger among the private vehicle owners. Considering the fact, an attempt is made here to understand the impact of rising petrol prices on different demographic segments (Gender, age, occupation etc) of vehicle owners. Relevant analysis has been done to find out association between findings and different psychographic and demographic traits. The research puts forward that the impact of fuel price hike is clearly evident and the vehicle owners confirm in different degrees about changes in their life style, adoption of coping strategy to mitigate the impact of inflationary pressure.

**Key words:** Impact of petrol price hike, Private car owners, Psychographic traits, Lifestyle, Pune city.

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**INTRODUCTION:**

In the era of consumerism, consumers more often than not seem to be confused about their purchase choices with reference to goods and services. This is more so because all other factors remaining constant, the income levels are not commensurate with the inflationary trends.

With industrialization and liberalization of the economy, now-a-days people have to travel more not only for work but also for recreation, dining, shopping so on and so forth. In India petrol and Diesel are primarily used as two major sources of fuel. The former being largely put to personal and private use and the latter for commercial use. On the one hand, owing a vehicle has become much easier than it was probably a decade ago; on the other hand, keeping aside a bigger budget for fuel is difficult because of stagnating income and ever increasing inflationary pressure (Jessica Lim, 2012). As people move out more and more for personal purpose, they spend more on petrol. As prices of petrol moves northward, the consumers clearly seem to be on the lookout for fuel efficient vehicles (Simon Gaymer, 2010, Rick Newman, 2012).

The above consumer preference is reflected in growing investment by companies in capacity for producing diesel cars. Today, we see more percentage of private diesel powered cars on the road than they were 10 years back. The demand for diesel powered cars has been growing steadily throughout the year 2011 as a result of hikes in petrol price (Nabanita Roy, 2012). The auto industry data indicates that the diesel car sales now contribute to more than 50 percent of the total cars sold in India. The diesel car sales have risen by 35 percent during the period April 2011 to February 2012 against the 15 percent drop in the petrol cars. (Motorbash.com, March 2012)

While the first time car buyers and replacement car buyers seem to be clearly moving for the diesel vehicles because of the distinct price advantage of diesel over petrol, the existing owners of not so old petrol cars are in a dilemma. Other than disposing the petrol vehicle in favor of a diesel one, do these customers have any other choice? With economy slowing down and individual incomes almost stagnating for a large chunk of middle class, do these classes of customers behave differently when it comes to coping with the rise in fuel prices?

**TREND OF PETROL PRICE HIKE:**

Price of petrol has more than doubled from Rs 33 per litre to Rs 77 per litre in the city of Mumbai in a span of little more than 10 years. The trend is more or less comparable to the city of Pune. The hike has been especially more steep in the last 4 years when it escalated from Rs 47

per litre to Rs 77 per litre (a rise of almost 60 percent). With the recent unfavorable rupee exchange rate the inflationary pressure on price of petrol is going to be more and more.

### **ROLE OF PSYCHOGRAPHICS IN CONSUMER BEHAVIOR:**

Psychographic or Lifestyle refers to consumers' Activities, Interests and Opinion (AIO). More specifically it focuses on what people like to do, what are their areas of interests, and what the opinions people hold on various matters are.

In other words, **Lifestyle** is a pattern of living that determines how people choose to spend their time, money, and energy and that reflects their values, tastes, and preferences. Lifestyle and personality of a person influences his or her attitude strongly. Hence lifestyle patterns provide broader views about the consumers. Analysis of consumer lifestyles is important in producing insights into consumer behavior or attitude.

**Attitude** influences emotions, knowledge or behavior with regard to the certain environmental aspects surrounding an individual or consumer. There could be different level of positive or negative attitudes. Attitude concentration is a trustworthiness level of an opinion about an object or how much a consumer is convinced in his virtue.

In a nutshell, the basic assertion of **psychographic** or lifestyle study is that the more the marketers know and understand their customers, the more effectively they can communicate to and serve them.

### **SIGNIFICANCE OF DEMOGRAPHIC FEATURES:**

**Gender** of the respondents is one of the important criteria influencing the opinion on any matters, for instance, price hike on the products, product quality, etc.

**Age** factor is important in determining the volume and item of purchase. In general, the young customers with lesser dependents and higher income concentrate on modern, new design products. The middle aged customers with more dependent family members are very much price consciousness. The aged customers buy traditional stuff as they have become accustomed for the same.

The **Occupation** of the customers' is the important factor in determining the opinion on the price hike. The purchasing power and the inclination of customers towards purchase differ depending upon their occupation.

### **OBJECTIVES OF THE STUDY:**

From the literature survey, we can witness most of the research studies are carried out to analyze the influence of lifestyle on the buyers' behavior of Indian consumers, but, there is less number of studies to analyze the pattern of living of vehicle owners due to rising petrol prices [Wells and Tigert, 1971; Doughlas and Urban, 1997; Savita and Verma (2000); Roy and Goswami(2007), etc].

Therefore an attempt is made in this paper to investigate the impact of rising petrol prices on demographic and psychographic traits of private car owners in Pune city.

However, to reach at the prime objective as viewed from the title itself, the following subsidiary objectives have been formulated:

- To study the vehicle usage pattern of petrol car owners.
- To assess the impact of petrol price hike on the lifestyle (pattern of living) of private car owners.
- To examine the relationship of psychographic traits on demographic variables especially gender, age and occupation.

#### **METHODOLOGY:**

The study is qualitative as well as exploratory in nature interpreting social issues in a comprehensive way. The primary data were collected from the respondents through well-structured questionnaire. Necessary secondary information on the issue have been gathered on the basis of reviewing relevant literature from different published and unpublished sources of information.

Sample size: 104 samples were selected from Pune (PCMC) city. While locating respondents due care was taken to ensure they are from various cross sections of the car owners in terms of their gender, age groups and occupation.

Sample Design: Non-probability- Judgmental cum purposive sampling technique was used to reach easily to the appropriate respondents. Sample units identified were those who drove petrol cars on their own without having drivers. This was done to get the real feel of understanding of the impact and insight from the owners who directly face the brunt of petrol price hikes.

Research Design: The study done is based on descriptive cum empirical research design. The inference drawn is described based on the verified observations. To match the strength of

association of demographic and psychographic traits, chi-square-test has been applied on all the parameters defined<sup>1</sup>.

Period of Study: The study was conducted during January-April 2013.

Limitations of the Study: The study is based on 104 respondents only who belonged to middle class (educated) families of Pune City. Considering the limited geography and number of respondents the findings of the study may have their own limitations in their applicability to other parts of the country.

### **ANALYSIS AND INTERPRETATION:**

**ANALYSIS** is done in three parts:

- Analysis of the usage pattern of the vehicle.
- Analysis of the impact of fuel price hike on pattern of living (Lifestyle)
- Analysis of attitude changes due to rising fuel prices.

### **AVERAGE MONTHLY USAGE OF VEHICLE:**

- The average running of the petrol run private cars as reported by maximum respondents (33.7 percent) comes to less than 500 kms. Another 32.7 percent respondents confirmed the average usage is between 500-750 kms per month. Only 18.3 percent respondents reported usage beyond 1000 kms per month. (73 percent respondents were males and 31 percent respondents were females)
- The largest group of respondents in terms of occupation was from private sector, which is, 48 percent and the largest number of respondents (34.6 percent) age group wise, was from 31-40 years group.
- Among females 24 percent reported usage below 750 kms per month and among males the maximum responses were reported for 500-750 kms per month. Only 3.8 percent female respondents were found to be using their vehicles for more than 1000 kms against 14.4 percent of male respondents.

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<sup>1</sup>The Chi Square ( $X^2$ ) test is undoubtedly the most important and most used member of the nonparametric family of statistical tests. Chi Square is used to test differences between two or more actual samples (OR) the chi square test for independence to determine the relationship between two variables of a sample.

- 7.7 percent respondents were in above 50 years group and the maximum response was for less than 500 kms a month. None of respondents of the above said group reported usage in more than 1000 kms. Similarly, the same observation was found (less than 500 kms) in 21-30 years group (13.5 percent) respondents.
- Employees in private sector were found to report higher usage of their vehicle as compared to their counterparts in government sector. 14.4 percent of respondents recorded their responses for 500-750 kms per month category and identical percent reported usage in less than 500 kms a month.

#### **USAGE PATTERN OF VEHICLE:**

- 47 percent of the total respondents' primary use of their cars is for commuting to and fro for work. After commuting, vacation and shopping are reported as the primary end use of the vehicle by 25 percent and 22 percent of the total respondents.
- Gender wise analysis reveals 26 percent of male and 21 percent of female respondents use their vehicles primarily for commuting to and fro for their work. While for male respondents the primary is split among different types, for females the use is strongly skewed towards commuting for the purpose of work.
- Similarly about 47 percent of the respondents across age groups (except > 50 years) report commuting to and fro for their work as the primary use. However 20 percent respondents in 31-40 and 41-50 years group put together appear to be primarily using their vehicle for shopping and only 10 percent respondents in this group report shopping as the main use of their vehicles.
- On occupation wise analysis of usage type it is understood that 46 percent of the total respondents worked in private sector and 27 percent of respondents working in this sector confirmed their primary usage of vehicles was for commuting to and fro for work. The second largest occupation category was self-employed people (27 percent) out of which about 14 percent seem to use their vehicles only for the above said purpose.

#### **ANALYSIS OF IMPACT ON PATTERN OF LIVING:**

Based on the literature survey, we identified basically three considerations which to a larger extent can be studied to understand the impact of petrol prices hike on pattern of living of the respondents who possess private petrol cars. [Rick Newman (2012); Yu Ma, Kusum and et.al (2011), etc]. They are as follows:

- Impact on Monthly expenditure budgets.

- Impact on frequency of shopping.
- Impact on Pleasure trips, family outings or Vacation plans.

#### **IMPACT ON MONTHLY EXPENDITURE BUDGETS:**

- 45.2 percent of respondents admitted the price hike of petrol has impacted them and resulted in tweaking of their budgeted expenditure for food. Out of total male respondents (70.2 percent) nearly 32.7 percent have felt the impact to their budgets, to say, budget is slightly altered now a days.
- Whereas 28.8 percent of male respondents expressed their opinion though price hike has an impact on them, they never compromised on their food budget come what may. Switching to less expensive brands or alternate food items were not their choice. 10.6 percent of total respondents confirmed to be switching to less expensive brands/alternate food items.
- On analysis of age group wise impact, in the age group of 41 to 50 years were the maximum (18.3 percent) that did not compromise on their standard of living. This observation also holds true for the age group 21 to 30 and 31 to 40 years at 13.5 percent and 8.7 percent respectively. Similarly for 31-40 years age group, 24 percent car owners confirmed to have slightly altered their budget as a result of spiraling petrol prices.
- Our interest was further to observe such occupation wise<sup>2</sup>. As per, the maximum 26.9 percent of the private sector respondents expressed their firmness to never compromise on food budgets due to the hike in petrol prices. Moreover 17.3 percent of respondents from the same occupation group seemed to have altered their budget due to fuel price hike. Nevertheless 13.5 percent car owners in self employed group expressed stickiness to their life style, that is, the pattern of living and lifestyle for them remain the same.

In order to see the strength of association and how well a statistical model fits a set of observations, chi-square test is applied on the analysis done<sup>3</sup>.

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<sup>2</sup> Among the surveyed respondents, 46.2 percent of them were belonging to private sector and next followed were the self-employed (26 percent) and government sector (12.5 percent) employees.

<sup>3</sup> Chi Square test is applied to test differences between two or more actual samples. Due care is taken in the analysis when observed frequencies were found to be smaller.

**TEST 1:**

Null Hypothesis: There is no significant association amongst demographic features and the impact on monthly budgets.

Alternative Hypothesis: There is significant association amongst demographic features and the impact on monthly budgets.

## Demographic Features Vs. Impact on monthly budgets

Factor	N	Table Value (95%)	Calculated Value	Null Hypothesis Accepted/Rejected
Gender	104	5.99	1.35	Accepted
Age	104	12.6	16.6	Rejected
Occupation	104	12.6	21.3	Rejected

Source: Computed Data.

According to chi-square test results, among the three demographic features analyzed, only age and occupation of the respondents do have statistically significant association with impact on monthly budgets. Otherwise, we do not find noteworthy association linking gender and impact on monthly budgets.

**IMPACT ON FREQUENCY OF SHOPPING:**

Here the focus was to find out whether there has been any change in the frequency of brick and mortar shopping which involved the use of vehicle in terms of going to market, super market or for window shopping.

- A very large group of respondents confirmed that the hike in petrol prices has taken a toll on their frequency of shopping. While 16.3 percent of respondents seemed in drastically reduced category, 56.7 percent respondents were in slightly reduced category.
- Gender wise analysis reveals an interesting observation. 45.2 percent of males and 11.5 percent of females expressed their opinion that frequency of shopping has reduced slightly due to rise in petrol prices. For 26.9 percent of respondents the shopping frequency remained more or less the same which means there is no impact of price hike on the shopping behavior for such respondents.
- On age group wise analysis, we observed frequency of shopping slightly reduced for 31 to 40 years (23.1 percent) and 41 to 50 years respondents (21.2 percent). Whereas for the youngsters in the age group of 21-30 years, 10.6 percent reported that their frequency is affected and has gone



down like anything. This observation can be justified with the reason being the shopping behavior of youngsters is higher as compared to other groups.

- Occupation wise study reveals that the maximum number of respondents that admitted (26.9 percent) that frequency of shopping has slightly reduced unlike earlier belonged to private sector occupation (46.2 percent of the total sample size were private sector employees). A similar opinion (15.4 percent) was observed even in self-employed respondents.

#### TEST 2:

Null Hypothesis: There is no significant association amongst demographic features and the Impact on frequency of shopping.

Alternative Hypothesis: There is significant association amongst demographic features and Impact on frequency of shopping.

#### Demographic Features Vs. Impact on frequency of shopping

Factor	N	Table Value (95%)	Calculated Value	Null Hypothesis Accepted/Rejected
Gender	104	5.99	6.14	Rejected
Age	104	12.6	18.5	Rejected
Occupation	104	12.6	6.63	Accepted

Source: Computed Data.

From the chi-square test results, it is revealed that, only age and gender of respondents do have statistically significant relationship with the impact on frequency of shopping. Occupation wise classification of respondents and impact on frequency of shopping did not show any relationship<sup>4</sup>.

#### IMPACT ON PLEASURE TRIPS / VACATION PLAN:

In the modern stressful working environment, people go out on family outings or short pleasure trips in weekends as part of unwinding or rejuvenating themselves. We tried to analyze the impact of petrol prices hike on such pleasure trips.

- Gender wise classification showed that for 68.3 percent of car owners surveyed there is no impact of petrol price hike on pleasure trips/vacation plans. 51 percent of males and 17.3 percent

<sup>4</sup> The acceptance of Null Hypotheses implies that we have no evidence to believe otherwise and indicates that the difference is not significant is due to sampling fluctuations.

females are of the opinion that frequency and budget remains more or less the same. However about 25 percent of respondents confirmed that the rising fuel prices has taken a big toll on their vacation plans.

- Young respondents are not sacrificing their pleasure trips come what may be the fuel prices. This gets confirmed with age wise group analysis. Especially, the group of people in the age between 31 to 40 years had the highest opinion (23.1 percent) on the same. This reveals how desperate the young people are for a break out of their hectic schedule of the life.
- The young group (21 to 30 years) expressed the opinion (12.5 percent) that the impact on pleasure trips is badly affected. This probably is because this group's frequency of outing is relatively more than the other age groups. The older group (above 50 years of age) had a neutral opinion in this regard.
- On doing an occupation wise analysis, we observe that private sector employees (33.7 percent) and self-employed (21.2 percent) were the categories who gave the maximum response for following the same pattern of vacationing that is, their outing/vacation plan remain unchanged in the face of rising fuel prices.

### TEST 3:

Null Hypothesis: There is no significant association amongst demographic features and Impact on pleasure trips/vacation plans.

Alternative Hypothesis: There is significant association amongst demographic features and Impact on pleasure trips/vacation plans.

Demographic Features vs. Impact on pleasure trips/vacation plans.

Factor	N	Table Value (95%)	Calculated Value	Null Hypothesis Accepted/Rejected
Gender	104	5.99	4.80	Accepted
Age	104	12.6	12.88	Rejected
Occupation	104	12.6	12.50	Accepted

Source: Computed Data.

According to the chi-square test result, only age of the respondents do have statistically significant association with impact on pleasure trips / vacation plans. Otherwise, the association with pleasure trips / vacation plans is not significant when observed on other demographic features - gender and occupation.

**ANALYSIS OF ATTITUDE CHANGES:**

Referring to various studies (introductory paragraphs), we basically identified three considerations which to a larger extent can be studied to understand the attitudinal changes taken place in the pattern of living of the respondents as a result of petrol prices hike. They are as follows:

- Switching to public /alternate mode of transport.
- Exploring online shopping.
- Switching in future on the type of vehicle.

**SWITCHING TO PUBLIC / ALTERNATE MODE OF TRANSPORT:**

- The analysis captures the changing approach of respondents to meet their commuting needs.
- We find the major attitudinal changes taking place in the pattern of living as a result of petrol prices hike. From the analysis, 23.1 percent of male respondents and 10.6 percent of female respondents preferred walking shorter distances or using bicycles. Nearly 20.2 percent of the total male respondents seemed to be doing carpooling. Switching to public transport is also observed for 23 percent of the respondents.
- Age group wise analysis respondents in their 20s' and 40s' preferred walking shorter distances/using bicycles. The age-group between 31 to 40 years has started shifting to carpooling and few of them have started sending their kids in school bus instead of their own vehicles.
- On occupation wise analysis, it is found private sector employees largely had an attitudinal change towards walking shorter distances (20.2 percent of the total private sector respondents had such changes). 9.6 percent of both private sector and self – employed respondents preferred to do carpooling. Government sector employees did not give reply for the same.

**TEST 4:**

Null Hypothesis: There is no significant association amongst demographic features and Switching to Public / alternate mode of transport.

Alternative Hypothesis: There is significant association amongst demographic features and Switching to Public / alternate mode of transport.

Demographic Features vs. Switching to Public / alternate mode of transport.

Factor	N	Table Value (95%)	Calculated Value	Null Hypothesis Accepted/Rejected
Gender	104	11.1	6.92	Accepted
Age	104	25.0	19.9	Accepted
Occupation	104	25.0	26.1	Rejected

Source: Computed Data.

From the chi-square test results, it is revealed that, only occupation of respondents do have statistically significant relationship with the Switching to Public / alternate mode of transport. Gender and Age of respondents did not show any significant relationship with Switching to Public / alternate mode of transport.

#### EXPLORING ONLINE SHOPPING:

- From the analysis, it is observed shopping behavior remained same for about one-third of the respondents. On the contrary 64.4 percent respondents said they are not exploring online shopping at the moment. From this it is clear that even against rising prices of petrol respondents still prefer brick and mortar stores over click and mortar stores. The preference for online shopping was found to be more among male respondents (26.9 percent)
- Age group wise preference analyses revealed a clear picture that the respondents who did not change their attitudes were in the age group 41 to 50 years (25 percent) and next were between 31 to 40 years (18.3 percent). Those who showed their preference for online shopping were only between 21 to 30 years (14.4 percent) and 31 to 40 years (16.3 percent). However how much online shopping is due to accompanying novelty value of it or due to rising cost of travelling to market can only be revealed by further research.
- Occupation wise observations for not preferring online shopping were 29.8 percent, 19.2 percent, 9.6 percent of private sector, self-employed and government sector respondents respectively. The highest magnitude of preference (16.3 percent) and non-preference (29.8 percent) were again reported by respondents working in private sector.
- These observations reveals people still look for the values, choices in shopping physically. Those few who preferred for online shopping were mainly from private sector (16.3 percent). The reason can be attributed to hectic work schedules or the easy going attitude of these respondents.

**TEST 5:**

Null Hypothesis: There is no significant association amongst demographic features and exploring online shopping.

Alternative Hypothesis: There is significant association amongst demographic features and exploring online shopping.

Demographic Features vs. exploring online shopping

Factor	N	Table Value (95%)	Calculated Value	Null Hypothesis Accepted/Rejected
Gender	104	3.84	0.82	Accepted
Age	104	7.81	13.1	Rejected
Occupation	104	7.81	7.04	Accepted

Source: Computed Data.

According to chi-square test results, among the three demographic features analyzed, only age of respondents do have significant association of exploring online shopping. Otherwise, the association is not statistically significant when observed gender-wise and as per occupations (the acceptance of null hypotheses implies that we have no evidence to believe the association).

### **PREFERENCE IN SWITCHING TO TYPE OF VEHICLE (AS A COPING STRATEGY):**

- To understand how far the respondents are adjusting to the hike in petrol prices, we tried to find out if option is given what type of vehicle they would prefer. These analyses strongly reveal the easy going attitude of the respondents. Only 9.6 percent of the respondents articulated that they are not thinking of switching to any other vehicle which means 80.4 percent are thinking of switching to some other form of fuel efficient vehicle as a response to rising prices of petrol.
- 24 percent of respondents revealed their desire for a fuel efficient petrol vehicle only where as 18.3 percent expressed their preference for a diesel run vehicle because of Diesel being more economical. 22.1 percent respondents were not thinking in terms of changing their vehicles but getting the LPG/CNG kit fitted in their vehicles.
- Gender-wise analysis reveals interesting observations when different options were given to them. Female respondents to a larger extent (15.4 percent) preferred petrol vehicles with better fuel

efficiency where as for the same option male respondents had lesser preference (8.7 percent). On the other hand, Maximum preferences (19.2 percent and 16.3 percent) came from male respondents for them to be considering fitting CNG/LPG kits in their vehicles or diesel vehicles respectively.

- On doing age group wise analysis, it is observed that 11.5 percent of the total respondents who were in age group 21 to 30 years preferred petrol vehicle with better fuel efficiency. Those in the age group of 40s' preferred CNG kits being fitted and the people in 30s' went for diesel vehicles.
- Occupation wise classification of responses shows maximum response for petrol vehicle with fuel efficiency came from respondents working in private sector. Self-employed people gave maximum response for diesel vehicle and also considered CNG/LPG kits, whereas government sector employees preferred to opt for CNG/LPG kits in vehicles.

#### TEST 6:

Null Hypothesis: There is no significant association amongst demographic features and Switching in future on the type of vehicle.

Alternative Hypothesis: There is significant association amongst demographic features and Switching in future on the type of vehicle.

Demographic Features vs. Switching in future on the type of vehicle.

Factor	N	Table Value (95%)	Calculated Value	Null Hypothesis Accepted/Rejected
Gender	104	15.5	30.9	Rejected
Age	104	36.4	37.1	Rejected
Occupation	104	36.4	40.8	Rejected

Source: Computed Data.

According to the chi-square test results, there is statistically noteworthy relationship of switching in future on the type of vehicle when respondents were classified based on the demographic features (gender, age and occupations). This shows that there is higher brunt of rising petrol prices on the consumers.

#### OVERALL IMPACT ON LIFESTYLE:

The study gives insight on the overall impact of fuel price hike on the life style of car owners. It is observed that the respondents are split in terms of their admission with reference to the impact of the rising fuel prices.

- In totality 37.5 percent respondents admitted that rising fuel prices has in fact thrown challenges to their present life style. Almost same numbers of respondents (36.5 percent) were unanimous in their opinion that their life style is intact.
- On gender wise analysis, maximum male respondents (26.9 percent) expressed their opinion that it is becoming difficult to sustain their current lifestyle as a result of petrol prices hike. There are others in the same category whose lifestyle is intact (23.1 percent) and for few respondents the impact is only temporary, and they will revive their lifestyle once prices get reduced. Unlike the majority male respondents (23.1 percent), only 13.5 percent of female respondents expressed that the life style is intact for them.
- On analysis of impact across different age groups, it is observed that the respondents in the age category above 30's and 40's confirmed that their life style is intact. It is interesting to observe those in the age group of 21 – 30 years (12 percent) met the maximum challenges of price hike. They would revive their lifestyle once the prices downcast.
- Occupation wise classification exhibits that those who gave maximum consensus (26 percent) for the option - 'life style is intact' against spiraling fuel prices belonged to private sector. For few respondents in self-employed and private sector categories (9.6 percent and 11.5 percent respectively) were of the opinion that it is difficult to sustain the current lifestyle. They plan for reviving there old lifestyle when the inflationary situation improves.

**TEST 7:**

Null Hypothesis: There is no significant association amongst demographic features and impact on lifestyle.

Alternative Hypothesis: There is significant association amongst demographic features and impact on lifestyle.

Demographic Features vs. impact on lifestyle.

Factor	N	Table Value (95%)	Calculated Value	Null Hypothesis Accepted/Rejected
Gender	104	5.99	1.68	Accepted
Age	104	12.6	7.18	Accepted
Occupation	104	12.6	18.9	Rejected

Source: Computed Data.

According to chi-square test results, among the three demographic features analyzed, only occupation of the respondents does have statistically significant relationship with impact on lifestyle. Otherwise, we do not find noteworthy relationship of gender and age of respondents with impact on lifestyle. (The acceptance of null hypotheses implies to we have no ample facts to believe the relationship).

#### **FINDINGS – A SUMMARY:**

**Vehicle usage pattern:** Maximum Private Car owners reported usage of car is up to 750 kms per month. Those in the age group of 50's report lesser running of vehicle as compared to other group of private car owners. Maximum usage of female car owners' is within 0 to 500 kms per month. Maximum running of car in per km basis was reported by respondents in 31-40 age groups. Respondents working in private sector reported maximum use of the vehicle in 0-500 kms. Quite a large chunk of respondents confirmed commuting for work as the primary use of vehicle and few others reported use for shopping and use for vacation as the primary use of vehicle respectively. By and large, most of the male respondents reported primary use across commuting for work, shopping, and vacation whereas maximum females reported primary use largely for the purpose of commuting to work. Respondents in 50's (age group) reported primary use largely for shopping.

**Impact on pattern of living:** Majority of the respondents confirmed the impact of rising petrol prices and this seems to have partially altered their monthly food budget. Few respondents seemed to have already started switching to less expensive brands. The largest chunks of respondents showing tenacity towards current life style were from private sector and self-employed category. Female respondents showed comparatively more tenacity with reference to the current food budget. Majority of respondents agreed that their shopping frequency has partially come down and at the same time few respondents confirmed that they are exploring online shopping. Very few respondents confirmed to have stopped going on vacation because of rising fuel prices.

**Changes in attitude:** As a coping strategy most of the respondents were split in their preference for public transport system and car pooling. Nevertheless few respondents seemed to have started walking short distances rather than taking their vehicles. By and large, carpooling was found to be done by the male respondents while female respondents coping strategy appeared spread across using school bus for kids, preference for public transports and walking short distances. As



a measure to mitigate the impact of rising fuel prices, very few male respondents were found to be exploring online. Maximum number of respondents articulated that they are already considering switching to some fuel efficient vehicles. While more respondents seemed to be inclined towards petrol run vehicle, very few respondents appeared to be considering diesel or CNG run vehicles. In few cases respondents were not so keen on changing their vehicles but they seemed to be seriously considering fitting LPG/CNG kits in their vehicles. Unlike males more female respondents expressed their desire to buy a two wheeler as a coping strategy. Maximum Private Sector employees gave preference (to switching) for petrol vehicles while those in public sector or are self-employed preferred diesel vehicles. A large number of respondents articulated that they are really feeling the impact of rising fuel prices and out of this few respondents seemed optimistic about reviving their life style once petrol prices come down.

#### **CONCLUSION:**

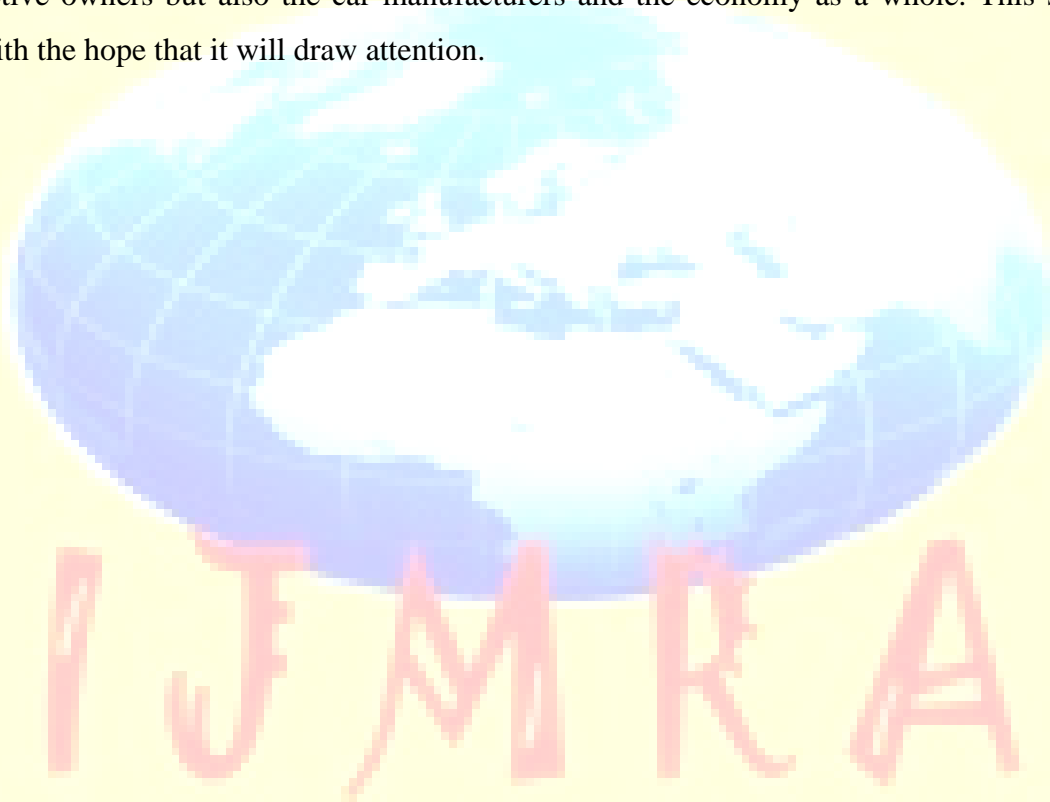
With prices of petrol being fully decontrolled by the government of India, the price now gets determined by the oil marketing companies on fortnightly basis. In the recent time the depreciating rupee has also taken a big toll on the price of petrol. When there was big disparity between the price of petrol and diesel, automobile manufacturers also committed large scale investment to leverage the growing consumer preference for diesel vehicles. Since diesel was economical and more efficient in terms of mileage there was huge customer shift from petrol to diesel vehicles. In recent times, the price gap between diesel and petrol getting narrower and narrower the situation has turned peculiar both for the manufacturer and the consumers.

The present study is an earnest effort to make out the usage pattern of vehicles across different demographic groups in Pune city. The impact of price hike was probed across various groups and an attempt was made to understand the coping strategy adopted by the car owners across different groups. Maximum car owners use their vehicles up to 500 kms in a month. The price rise of petrol has sensible negative impact for various groups of car owners. While few car owners could sustain the life style, few others could not and as a result have started switching to less expensive food brands. Quite a few car owners also appeared to be tweaking their plan for vacation and pleasure trips.

In the short run, as a coping strategy, some car owners have taken to car pooling and public transport system and while some others have started exploring online shopping system.

Interestingly, preferences for walking and possible switching to two wheelers were also reported by few car owners.

In the long run, there also seemed to be a clear preference by the car owners to switch to more fuel efficient cars or getting LPG/CNG kits fitted in their vehicles. Unlike the recent consumer trend more car owners are contemplating for switching to more fuel efficient petrol run cars. At the same time a small group of respondents appeared unperturbed about the price hike. But one thing emerges very clearly from the study. The impact of the rising petrol price is slowly getting visible and if the trend goes unabated it will have wider implication not only for the current and prospective owners but also the car manufacturers and the economy as a whole. This study is done with the hope that it will draw attention.



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