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AN ANALYSIS OF ROLE OF MARKETPLACE INFLUENCE IN ADOPTION AND USAGE OF SYNTHETIC LUBRICANTS FOR TWO-WHEELERS

by

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ABSTRACT

This study focuses on adopters and users of a new product category – synthetic lubricants for two-wheelers. It provides an overview of the market for two-wheeler lubricants in India. An in-depth review of literature on adoption and diffusion of new innovative products is carried out. It attempts to identify and create a set of psychographic constructs of such adopters and establishes that they are significantly distinct from non-adopters. It also attempts to identify marketplace factors and demographic factors which influence adoption of this new product category and concludes that there is need for greater intervention by marketers to increase awareness, knowledge and involvement of customers through interactive BTL promotions to escalate the pace of adoption of new and innovative low involvement category products.

KEYWORDS: Synthetic Automotive Lubricants, New Product Adoption, Two-wheeler enthusiast, Customer Involvement, Opinion Leader, Market Maven, Innovative Consumer, Consumer Behavior, Marketing, Influence.

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I. INTRODUCTION

Marketers are unleashing all weapons in their arsenal to get a toehold in the consumers' mindshare to hope for a favorable attitude towards their products and services. One of the most prominent of these is differentiation in their offerings with launch of new technology, high performance products. However, new products are failing in the market to the extent of 41% of all commercialization's (Barczak, Griffin and Kahn, 2009). This paper attempts to study the impact of marketing efforts in adoption and usage of one such new product category.

The two-wheeler population in India, which includes motorcycles, scooters and mopeds, is estimated at 87.7 million units in 2015 (see Figure-1), with annual additions of 8 to 9 million units. Such rapid growth, fuelled by favorable demographic profile of a large young growing middle class population with improving living standards, increasing disposable incomes, convenient financing options and ever increasing aspirations will make India the largest market for two-wheelers in the world, surpassing China within the next 15 years. As lubricants are required for smooth functioning of two wheeler engines, the large and growing population of two-wheelers in India has opened up a huge market for two-wheeler lubricants.



Figure-1 Forecast of Two-wheeler vehicle population in India (million units)

http://cleanairinitiative.org/portal/sites/default/files/agenda/70656_finalreport.pdf

The lubricants market size of India, at approximately 2MMT, is estimated at 6% of the global market and is the third largest in the world after USA and China. Out of the total Indian lubricants market, 7% is estimated to be the share of two-wheeler lubricants. Automotive lubricants is a lucrative business with attractive margins for marketers, coupled with low entry barriers in terms of ease in availability of raw materials, process technology, packaging and modest investment. It has therefore attracted hordes of marketers. There are over 30 major lubricants marketers in India vying for an enhanced share of this rapidly growing market.

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Source: ADB (2006)



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Two wheeler manufacturers in India have been moving over to four stroke petrol engines from the earlier generation of two stroke petrol engines, in order to meet increasing emission standards. These engines require four stroke (4T) engine oils for lubrication. This study will therefore focus on usage of this product category. With introduction of latest generation and higher engine capacity two wheelers in the Indian market, lubricants marketers have also kept pace with changed requirements and have launched higher performance lubricants for motorcycles and specialized engine oils for scooters. Conventional lubricants for two-wheelers are mineral oil based, manufactured from lube base oils which are refined from natural crude oil. These lubricants are found wanting in meeting the exacting demands of latest generation of motorcycle engines. Synthetic lubricants for two-wheelers, on the other hand are made by synthesis of certain chemical compounds viz. poly alpha olefins, esters and also by chemical modification of mineral lubricant base oils and blending with performance enhancing chemical additives. Semi-synthetic lubricants are a blend of mineral oil with synthetic oil, designed to have many of the benefits of synthetic oil and marketed at somewhat lower price than that of pure synthetic oil. The term synthetic lubricant, used in lubricants industry parlance, commonly refers to and includes both pure synthetic lubricants and semi-synthetic lubricants. This study will also follow the same standard understanding while referring to the term synthetic lubricants.

Synthetic lubricants are superior to conventional mineral based oils. Notable benefits of using synthetic lubricants compared to conventional mineral based lubricants include better low and high temperature viscosity performance, better chemical & shear stability, decreased evaporative loss, excellent cold starting and low temperature fluidity, high temperature oxidation resistance, extended drain oil intervals with the environmental benefit of less oil waste, improved fuel economy, longer engine life, superior protection against deposit formation in engine, reduced chances of damaging oil passageway clogging, increased horsepower and torque due to less initial drag on engine amongst others. A new generation of semi synthetic as well as fully synthetic lubricants for four stroke petrol engine two wheelers have been introduced in India over the past few years. These mark a quantum jump in technology, engine protection and performance. These are however, somewhat more expensive than normal mineral based lubricants and have not generated high sales volumes.

Marketers have undertaken various channel activation programs and promotional initiatives to create awareness of this new product category amongst their target customers to instigate a switch to these products. Apart from direct promotions initiated by marketers, information flow from other consumers and influencers contributes significantly in forming a favorable attitude towards new product introductions. Impact of advertisement, promotions and influence on consumers is moderated by the extent of consumer involvement in the product category. A vast range of types, specifications, packs, price points and brands of two-wheeler lubricants have

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been launched by marketers in India whereas customers perceive very low differentiation between brands, in terms of product attributes, technical specifications and performance. This study attempts to assess the level of awareness of two-wheeler users and impact created by marketing initiatives of lubricants marketers, whether directly or through various diffusion processes, moderated by low involvement in adoption and usage of a new product category like synthetic lubricants for two-wheelers, for different categories of two-wheeler users.

II. REVIEW OF LITERATURE AND HYPOTHESES

Consumer behavior with regard to new product adoption and diffusion has been keenly studied by researchers and a rich literature on the subject has been developed. Significant recent research studies in this area are discussed in this paper.

Involvement is positively related to active information search covering media and sales outlets, attitude towards and time spent on shopping (Beatty and Smith, 1987). It is generally perceived that automotive lubricants constitute a low involvement product category. Hence it can be construed that consumers would tend to ignore or fail to take note of promotional initiatives of lubricants marketers, amidst the clutter of a humungous number of brand communications that a consumer is exposed to on a regular basis. If this be the case, it would be difficult to promote awareness of the new product category. However, as adoption and usage of synthetic lubricants has commenced, it can be posited that consumers can be segmented on the basis of extent of their involvement with purchase decisions". Laurent and Kapferer (1985) created Consumer Involvement Profiles by studying various facets like perceived importance of the product, risk, pleasure and sign value and suggested segmentation of the market can be attempted based on involvement profile so that even for low involvement category products, consumer profiles can reveal consumers being high on certain facets, which can be identified and targeted. This leads us to the first hypothesis as follows:

H₁: Two Wheeler Motor Vehicle Users who use Synthetic Lubricants for their vehicle are highly involved in the purchase process compared to those who use mineral based lubricants.

Adoption of a new product is preceded by and is conditional on awareness and adoption occurs if the perceived risk adjusted value of the product exceeds selling price of the new product (Kalish, 1985). Further drilling down into awareness, Wee (2003) concluded that the most important factors in adoption of new consumer electronic durables are trial-ability, compatibility, relative advantage, observability, complexity, image and perceived risk of adoption. As awareness is a prime prerequisite to adoption, moderated by level of involvement, it can be hypothesized that the awareness level in adopters is higher than in non-adopters. The second hypothesis is therefore formed as:

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H₂: Two Wheeler Motor Vehicle Users who use Synthetic Lubricants for their vehicle have higher awareness of the product category compared to those who use mineral based lubricants.

Post awareness, price of new products is an important factor in adoption, as is evident from models introduced by Robinson and Lakhani (1975). Kalish (1985) provides a model of individual behavior incorporating price and advertising variables. Oren and Schwartz (1988) model includes risk aversion factor. Chatterjee and Eliashbert (1990) introduced price/performance parameter in their model. Lattin and Roberts (1989) considered perceived benefits in their model. For adoption of higher priced synthetic lubricants, it needs to be perceived as a higher value for money in terms of longer oil drain interval and superior benefits, which takes us to our third hypothesis:

H₃: Two Wheeler Motor Vehicle Users who use Synthetic Lubricants for their vehicle perceive the product category as providing more value for money compared to those who use mineral based lubricants.

Researchers have provided models assuming heterogeneous population of susceptible individuals. Consumers actively consider, deliberate and solicit opinion of influential's in society, to decide on adoption and usage. Influential's have been categorized under various constructs like Lead Users (von Hippel, 1986), Heavy Users (Godes and Mayzlin, 2009; Iyengar et al., 2011), Market Mavens (Feick and Price, 1987), Social Connectors (Goldenberg et al., 2006), Social Hubs (Goldenberg et al., 2009), Experts (Goldenberg et al., 2006), Influential's (Watts and Dodds, 2007), Opinion Leaders (Katz and Lazarsfeld, 1955; King and Summers, 1970; Flynn, et al., 1996; Rogers, 2003) and Innovative Consumers (Goldsmith and Hofacker, 1991). These constructs have multiple overlapping dimensions but have distinct psychographic characteristics. In this paper we shall consider the three constructs of Innovative Consumers, Opinion Leaders and Market Mavens as their dimensions are quite distinct, encompass dimensions of most their constructs and more suited for this study. We have conceptualized a new construct, namely Two-wheeler Enthusiast, which we introduce in this paper.

Innovativeness is 'the degree to which an individual or other unit of adoption is relatively earlier in adopting new ideas than other members of a system' as defined by Rogers (2003). Dimensions of Innovators are that they are hungry for and gather information on their own, take greater risks, they not influenced by others, wish to own newest products and are somewhat price insensitive (Goldsmith, 2001) thus making them early adopters. Additionally dimensions of innovativeness are relatively affluence, self-confidence, self-respect, knowledge, logic, sensibleness and intelligence (Clark and Goldsmith, 2006). The construct of consumer susceptibility to interpersonal influence is the tendency to learn about products and services by

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observing or seeking information from others and willingness to conform to their expectations regarding purchase decisions (Bearden et. al., 1989). Susceptibility is dependent on cultural assimilation of interpersonal influence (D'Rozario, 2001). Susceptibility to interpersonal influence is measured, based on the dimensions of informational influence and utilitarian influence (Park and Lessig, 1977). There is an inverse relationship between susceptibility and innovativeness (Lalwani, 2002; Cho, Y.L.J., 1997; Manning, K.C. et al., 1995).

Opinion Leadership is characterized by domain specific interest and knowledge, eagerness to discuss and disseminate information with the intention to persuade others and influence their opinion (Katz and Lazarsfeld, 1955; King and Summers, 1970; Myers and Robertson, 1972; Flynn et al., 1996; Rogers, 2003).

The construct of Market Maven describes shopping behavior, dimensions of which are all aspects of marketplace information on various kinds of products, places to shop (Feick and Price, 1987), heavier users of coupons (Price et al., 1988), more interested in smart buying (Slama et al., 1992), have larger evoked sets (Elliot and Warfield, 1993), are attracted by informational offerings and are eager to share their expertise (Goldsmith et al., 2003).

Two-wheeler Enthusiast construct is conceptualized as a person who has a group of dimensions like keen interest in high performance, latest generation two-wheeler domain knowledge, who keeps himself abreast with the latest developments without too much on technicalities, but one who has tremendous emotional attachment with two wheelers, maintains the vehicle in mint condition and is thrilled to go for long rides.

These 4 constructs lead us to our next set of hypotheses:

H₄: Two Wheeler Motor Vehicle Users who use Synthetic Lubricants for their vehicle exhibit higher levels of consumer behavior characteristics viz. (a) Customer Innovativeness, (b) Opinion Leadership, (c) Market Mavenism and (d) Two Wheeler Enthusiasm compared to those who use mineral based lubricants.

Marketers spread awareness of their new products through mass media advertisement and below the line promotions. Individuals may form attitudes directly from such communications or seek opinion of social influential. We therefore hypothesize:

H₅: Two Wheeler Motor Vehicle Users who use Synthetic Lubricants for their vehicle are more influenced by (a) Advertisements, (b) Below the Line Sales Promotion campaigns and (c) Social Influencers, compared to those who use mineral based lubricants.

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Susceptibility is likely to be contingent upon demographic profile of customers. Younger, educated and unmarried individuals are expected to exhibit greater risk taking and innovative consumer behavior in trying out new product. We therefore consider these demographic factors for our next set of hypotheses:

H₆: Two Wheeler Motor Vehicle Users who use Synthetic Lubricants for their vehicle are of a different Demographic Profile viz. (a) age, (b) formal education, (c) gender, (d) marital status, (e) profession and (f) monthly take-home income, compared to those who use mineral based lubricants.

Individuals develop emotional attachment with their vehicles, which is seen as a status symbol, an extension of their personality, aggression and creativity. It is imperative that these attitudes may undergo a gradual change, as their vehicle ages. Vehicle user usually follow the manufacturer's recommendations while choosing the type, specifications and brand of lubricant, but many users prefer to try out superior, newer products. However, vehicle characteristic is therefore likely to influence their choice of usage of synthetic lubricants, which results in our last set of hypotheses:

H₇: Two Wheeler Motor Vehicle Users who use Synthetic Lubricants for their vehicle have vehicles of different characteristics viz. (a) category, (b) age and (c) engine cubic capacity compared to vehicles of those who use mineral based lubricants.

The research methodology adopted to test these hypotheses, data analysis, findings, recommendations, conclusions, limitations and directions for further research are covered in the next sections of this research paper.

III. METHODOLOGY

The study is descriptive in nature and attempts to arrive at factors that influence purchase decisions of two-wheeler vehicle users, with regard to purchase of a particular brand, grade or type of lubricant for their vehicle.

Research Instrument: The survey instrument used was a well-structured questionnaire. The instrument consisted of 54 items, selected on the basis of in-depth pilot survey discussions with 15 two-wheeler vehicle users, covering their interests, attitudes, social relationships and purchase behavior. The questionnaire started with seeking declaration of the primary factor viz. purchase of synthetic lubricants or mineral based lubricants. Then, the first 7 questions pertained to emotional attachment of the respondents with their two-wheeler, to measure the construct of two-wheeler enthusiasm. This ensured that interest and inquisitiveness of respondents were captured early and that they were more willing and eager to proceed with their response. The next set of 19 questions related to the other six constructs by self-

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designation, to measure only those dimensions which were most pertinent for this study, as stated in hypotheses, 1 to 3 and 4a to 4d. The established scales were not used in entirety to restrain the overall questionnaire length. These were followed by 19 questions in 3 sets to assess their source of influence in choosing lubricants. The questionnaire listed all the common modes of advertisement, avenues of below the line promotions and social influencers. These items were used to test hypotheses 5a to 5c. Responses were obtained in five point Likert scale with "1" indicating "Strongly Disagree" and "5" indicating "Strongly Agree". In the last section, 5 items were used to assess demographic characteristics of respondents and 3 items were used to assess the characteristics of their two-wheeler, to test hypotheses 6a to 6f and 7a to 7c. The questionnaire items for the seven self-designated constructs are grouped for each construct and presented in Figure-2, wherein negative worded items are indicated as "(negative)".

| | 1.8010 21 00115 | ruets and search terms | | | | | |
|---|--|---|----------------------------|--|--|--|--|
| Factor for hypothe | sis tests: Type of 4-stroke lubricant purchased | Synthetic (including semi-synthetic) | Normal (mineral oil based) | | | | |
| Construct | Scale Items | | | | | | |
| | 1. I am very particular about which 4T oil to use in my two wheeler. | | | | | | |
| Involvement (INV) | 2. I do not bother which 4T engine oil is being put in my two wheeler by my mechanic. "(negative)" 3. I myself decide the brand of 4T oil for oil change of my two wheeler. | | | | | | |
| (11(V)) | 4. I always follow my mechanic's recommendat | ion for choice of 4T engine oil. "(negative)" | | | | | |
| | 5. I take advice of the lubricants shop salesperse | | gative)" | | | | |
| | 1. Till today, I was not aware of synthetic 4T oil | l for two wheelers. "(negative)" | | | | | |
| Awareness | 2. I may have seen advertisements on synthetic | 4T oils, but I have not paid attention to them. " | (negative)" | | | | |
| (AWA_ | 3. I have come to know today that synthetic 4T | oils are available in my local market. "(negativ | e)" | | | | |
| | 4. I do not remember having seen synthetic 4T o | oils displayed in any shop or petrol pump. "(ne | gative)" | | | | |
| | I think that as oil change period for synthetic oils is far more than normal engine oils, I get an overall cost benefit advantage over a longer period of time by usage of synthetic lubricants. | | | | | | |
| Value for Money Perception (VFMP) | 2. I think that as oil change period for synthetic oils is far more than normal engine oils, I can save my money by lesser visits to mechanic (in a year) for oil change of my two wheeler. | | | | | | |
| (vrwi) | 3. I feel that using synthetic 4T oils instead of normal 4T oils is a waste of my money as synthetic oils do not provide me more benefits than normal 4T oils. "(negative)" | | | | | | |
| Customer | 1. I greatly enjoy being the first in my social circ | cle to buy new technology products. | | | | | |
| Innovativeness (CI) | 2. I enjoy taking calculated risks in buying new | technology products. | | | | | |
| Oninian | 1. When I discuss about two wheelers with my f | friends, I give them more information than wha | t they give me. | | | | |
| Opinion Leadership (OL) | 2. I often try to convince my friends to use the brand of engine oil for two-wheeler motor vehicle of my choice. | | | | | | |
| 1. | 3. My friends often take advice from me on which engine oil to use for their two-wheeler. | | | | | | |
| Market | 1. My friends consider me to be a good source o | | | | | | |
| Mavenism(MM) | 2. I enjoy providing information to my friends a | • | | | | | |
| | 1. I am emotionally very attached to my two-wh | | | | | | |
| Two-wheeler | 2. I derive great pleasure in riding my two-wheeler. 3. I take keen interest in knowing about latest developments on two-wheelers | | | | | | |
| Enthusiasm | 4. I like reading magazines on two-wheelers. | | | | | | |
| (TWE) | 5. I avoid looking at newspaper advertisements | | | | | | |
| | 6. I do not visit websites having information about two-wheelers "(negative)" | | | | | | |
| | 7. During the last six months, servicing of my ty | vo-wheeler has often been delayed. ''(negative) | 10 | | | | |

| Figure | 2: | Constructs | and | scale | items |
|--------|----|------------|-----|-------|-------|
| IIguit | 4. | Constructs | anu | scare | noms |

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Research Design and Data Collection: The questionnaires were personally administered by the researcher to 232 two wheeler users in the city of Pune in Maharashtra, in Jan and Feb 2014, out of which 7 were rejected as they indicated lack of seriousness and 225 were found usable.

Respondents were purposively chosen for this research from amongst those who themselves buy lubricant for their two-wheeler, of the brand, type and grade of their choice from shops and petrol pumps. Two-wheeler vehicle users who visit company authorized service stations and franchised workshops for maintenance, do not have liberty to exercise their choice of brand, type and grade of lubricant to be used. Hence they have not been included in this study. Respondents have been intercepted at 6 workshops, 4 lubricants shops, 6 lubricants cum spare parts shops and 2 petrol pumps, across Pune, with a request to respond to the questionnaire enticing them with a chance to win a lucky draw prize as compensation for their time and response. The study is therefore based on primary data collected by the researcher. The sampling design can be stated as convenient sampling. The data collected was edited, coded and analyzed using IBM SPSS Statistics 22.0 software.

IV. DATA ANALYSIS AND RESULTS

The detailed sample characteristics or demographic profile of the respondents is given in Table-1 and profile of two-wheeler vehicles of the respondents are given in Table-2.

| Characteristics | Profile | Frequency | Percent |
|-----------------|----------------------------------|-----------|---------|
| Gender | Male | 206 | 91.6% |
| Gender | Female | 19 | 8.4% |
| | Less than 25 years | 53 | 23.6% |
| 1.50 | 25 years to less than 35 years | 113 | 50.2% |
| Age | 35 years to less than 45 years | 42 | 18.7% |
| | 45 years and above | 17 | 7.6% |
| Marital Status | Single | 106 | 47.1% |
| Wantar Status | Married | 119 | 52.9% |
| Educational | Under Graduate | 59 | 26.2% |
| Qualification | Graduate | 118 | 52.4% |
| Quanneation | Post Graduate and above | 48 | 21.3% |
| | Student | 34 | 15.1% |
| Profession | Service | 163 | 72.4% |
| FIGLESSION | Self Employed – Professional | 10 | 4.4% |
| | Self Employed – Business | 18 | 8.0% |
| | Less than INR 15000 | 25 | 11.1% |
| Family | INR 15000 to less than INR 30000 | 108 | 48.0% |
| Monthly Take | INR 30000 to less than INR 50000 | 62 | 27.6% |
| Home Income | INR 15000 to less than INR 30000 | 17 | 7.6% |
| | INR 75000 and above | 13 | 5.8% |

Table-1 Demographic Profile of Respondents

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Majority of the respondents were young (50.2% in age group of 25 years to less than 35 years) middle class (48% having a monthly family take home income of 15000 to 30000 per month) male (91.6%) graduates (52.4%) in service (72.4%).

| Table-2 Two-wheeler Venicle Trome of Respondents | | | | | | |
|--|----------------------------------|-----------|---------|--|--|--|
| Characteristics | Profile | Frequency | Percent | | | |
| Category | Motorcycle | 175 | 77.8% | | | |
| Category | Scooter | 50 | 22.2% | | | |
| | Less than 125 cc | 162 | 72.0% | | | |
| Engine cc | 125 cc to less than 175 cc | 51 | 22.7% | | | |
| Lingine CC | 175 cc to less than 250 cc | 9 | 4.0% | | | |
| | 250 cc and above | 3 | 1.7% | | | |
| | Upto 2 years old | 29 | 12.9% | | | |
| Vehicle Age | 2 years to less than 7 years old | 156 | 69.3% | | | |
| | More than 7 years old | 40 | 17.8% | | | |

Table-2 Two-wheeler Vehicle Profile of Respondents

Majority of the vehicles of respondents were low-end (72% having engine cubic capacity of less than 125cc) moderately old (69.3% being 2 years to less than 7 years old) motorcycles (77.8%).

All the constructs were measured by multi item scales developed on the basis of established scales to measure relevant dimensions constituting each construct. Reliability of scale items was tested by Cronbach's alpha test. The scores obtained for each construct exceeded the minimum requirement 0.70 (Bagozzi, 1994), as given in table 3. The items measuring each construct correlated with one another and showed convergent validity (Hair et. al., 2006).

| Table-3 Descriptive Statistics of Constructs |
|--|
|--|

| Construct | Mean (SD) | Cronbach's | Skewness | Kurtosis |
|----------------------------|-------------|-------------|----------|----------|
| Construct | | alpha score | | |
| Involvement | 3.036(.689) | 0.736 | .209 | -1.068 |
| Awareness | 2.604(.899) | 0.801 | .711 | .564 |
| Customer Innovativeness | 3.240(.861) | 0.776 | 378 | 987 |
| Opinion Leadership | 2.843(.808) | 0.737 | .384 | 202 |
| Market Mavenism | 3.484(.682) | 0.740 | 263 | 068 |
| Two-wheeler Enthusiasm | 3.440(.568) | 0.719 | 104 | .063 |
| Value for Money Perception | 3.434(.816) | 0.756 | 604 | 650 |

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The descriptive cross tabulation of demographic variables and vehicle characteristics with usage of synthetic or normal mineral based lubricants, which is the primary factor of this study, is given in Table-4.

| Variable | Description | Synthetic Lubricants | Mineral oil based Lubricants | Total |
|------------|---------------------------------------|--|--|-------|
| 0 1 | Male | 32 | 174 | 206 |
| Gender | Female | 1 | 18 | 19 |
| | Less than 25 yrs | 9 | 44 | 53 |
| A ~~ | 25 yrs to less than 35 yrs | 19 | 94 | 113 |
| Age | 35 yrs to less than 45 yrs | 5 | 37 | 42 |
| | 45 yrs and above | 0 | 17 | 17 |
| Marital | Single | 16 | 90 | 106 |
| Status | Married | 17 | 102 | 119 |
| Two- | Motorcycle | 32 | 143 | 175 |
| wheeler | Scooter | 1 | 49 | 50 |
| Category | Moped | 0 | 0 | 0 |
| Two- | Less than 2 yrs | 14 | 15 | 29 |
| wheeler | 2 years to less than 7 years | 15 | 141 | 156 |
| Age | 7 years and above | Lubricants Lubricants 32 174 1 18 9 44 19 94 5 37 0 17 16 90 32 143 1 49 0 0 14 15 | 40 | |
| Two- | Less than 125 cc | 7 | 155 | 162 |
| wheeler | 125 cc to less than 175 cc | 17 | 34 | 51 |
| engine cc | 175 cc to less than 250 cc | 6 | 3 | 9 |
| engine ce | 250 cc or more | 3 | 0 | 3 |
| | Student | 6 | 28 | 34 |
| Profession | Service | 18 | 145 | 163 |
| FIOLESSION | Self-employed – professional | 5 | 5 | 10 |
| | Self-employed – business | 4 | 14 | 18 |
| | Under Graduate | 5 | 54 | 59 |
| Education | Graduate | 11 | 107 | 118 |
| | Post Graduate and above. | 17 | $ \begin{array}{r} 174 \\ 18 \\ 44 \\ 94 \\ 37 \\ 17 \\ 90 \\ 102 \\ 143 \\ 49 \\ 0 \\ 15 \\ 141 \\ 36 \\ 155 \\ 34 \\ 36 \\ 155 \\ 34 \\ 36 \\ 155 \\ 34 \\ 30 \\ 0 \\ 28 \\ 145 \\ 51 \\ 145 \\ 55 \\ 144 \\ 54 \\ 107 \\ 31 \\ 22 \\ 98 \\ 58 \\ 10 \end{array} $ | 48 |
| | Less than Rs.15,000/- | 3 | 22 | 25 |
| Monthly | Rs.15,000/- to less than Rs.30,000/- | 10 | 98 | 108 |
| take home | Rs.30,000/- to less than Rs. 50,000/- | 4 | 58 | 62 |
| income | Rs.50,000/- to less than Rs.75,000/- | 7 | 10 | 17 |
| | More than Rs. 75,000/- | 9 | 4 | 13 |

Table-4 Descriptive Cross Tabulation of Demographic variables

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As the constructs have overlapping dimensions, correlation was significant at p<.05, as given in Table-5.

Table-5 Correlations

| Variables | INV | AWA | VFMP | CI | OL | MM | TWE |
|-----------|------|------|------|------|------|------|-----|
| INV | 1 | | | | | | |
| AWA | .449 | 1 | | | | | |
| VFMP | .135 | .236 | 1 | | | | |
| CI | .209 | .335 | .433 | 1 | | | |
| OL | .365 | .453 | .390 | .434 | 1 | | |
| MM | .300 | .233 | .431 | .314 | .526 | 1 | |
| TWE | .441 | .479 | .324 | .403 | .509 | .351 | 1 |

The hypotheses were tested and the results are summarised in Table-6.

| Two Wheeler Motor Vehicle Users who use Synthetic Lubricants for their vehicle: | | | | | |
|---|------------|------|------------|--|--|
| | ANOVA Test | | | | |
| | F | Sig. | Hypothesis | | |
| | 1 | Sig. | Supported | | |
| H1: are highly involved in the purchase process | 19.801 | .000 | Yes | | |
| H2: have higher awareness of the product category | 102.391 | .000 | Yes | | |
| H3: perceive the product category as providing | 12.461 | .001 | Yes | | |
| more value for money | 12.401 | .001 | 105 | | |
| H4a: exhibit higher levels of Customer | 4.326 | .039 | Yes | | |
| Innovativeness | 4.520 | .057 | 103 | | |
| H4b: exhibit higher levels of Opinion Leadership | 40.521 | .000 | Yes | | |
| H4c: exhibit higher levels of Market Mavenism | 13.296 | .000 | Yes | | |
| H4d: exhibit higher levels of Two-wheeler | 29.556 | .000 | Yes | | |
| Enthusiasm | 29.550 | .000 | 105 | | |
| H5a: are more influenced by Advertisement | 4.968 | .027 | Yes | | |
| H5b: are more influenced by Below the Line Sales | 1.513 | .220 | No | | |
| Promotion | 1.515 | .220 | NO | | |
| H5c: are more influenced by Social Influencers | 7.235 | .008 | Yes | | |

Table-6 Summary of Hypotheses Testing Results

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| | Pearson Chi-square Test | | | |
|--|-------------------------|----|------|-------------------------|
| | Value | DF | Sig. | Hypothesis Supported |
| H6a: are of a different age profile | 3.821 | 3 | .281 | No |
| H6b: are of a different formal education profile | 21.014 | 2 | .000 | Yes |
| H6c: are of a different gender profile | 1.466 | 1 | .226 | No |
| H6d: are of a different marital status profile | .029 | 1 | .864 | No |
| H6e: are of a different profession profile | 12.748 | 3 | .005 | Yes |
| H6f: are of a different monthly take home income profile | 46.479 | 4 | .000 | Yes |
| H7a: have vehicles of different category | 8.241 | 1 | .004 | Yes |
| H7b: have vehicles of different age | 30.050 | 2 | .000 | Yes |
| H7d: have vehicles of different engine cubic capacity | 64.952 | 3 | .000 | Yes |
| compared to those who use mineral based lub | oricants. | | | |

V. FINDINGS

Null hypothesis for all the 7 constructs were rejected and the alternative hypothesis was accepted revealing significant differences in users of synthetic lubricants for two-wheelers compared to users of normal mineral based lubricants, which indicates greater involvement and judicious evaluation in purchase of synthetic lubricants. Whereas the alternative hypothesis for influence of advertisement and social influence were supported, the same for below the line sales promotion was not supported, indicating susceptibility to adoption of synthetic lubricants. The alternative hypotheses of demographic factors of adoption of synthetic lubricants were accepted for all the factors except age, gender and marital status.

VI. RECOMMENDATION

Awareness and involvement levels of two-wheeler users are low. In the clutter of mass advertisement, low involvement category product advertisements often go unnoticed and therefore serve limited purpose. BTL promotions offer a viable scope to educate the target segment, increase awareness and instigate a switch towards adoption and usage of new and innovative products.

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VII. CONCLUSION

This research provides insight into the psychographic profile of users of the new and innovative product category. It highlights factors influencing adoption and usage. This research therefore highlights the need for greater intervention by marketers to increase awareness, knowledge and involvement of customers through interactive BTL promotions to escalate the pace of adoption of new and innovative low involvement category products.

VIII. LIMITATIONS AND FUTURE RESEARCH

This research is limited to domain specific psychographic constructs in consumer behavior and factors of influence on users in one product category viz. two-wheeler lubricants in one city of Maharashtra. The research lacks generalizability as it suffers from restricted scope. Researchers are invited to extend the research to rural and semi-urban markets in other areas covering wider product categories. Additional factors like expected increase in awareness of consumers over time, change in involvement due to increase in prices and wider access to social and online media could be included in future studies. New constructs may be developed to reflect change in lifestyle, affluence, brand exhibitionism etc.

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