

## Assessment of factors affecting the customer Preferences / Purchase decision for motor cycle brands:

### An analysis of the motorcycle users of Hyderabad

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#### Abstract

In this study, we focus upon identifying the factors that influence customer decision to purchase particular brand of motorcycle in Hyderabad. This is a first research that has focused upon the market of Hyderabad to find out the factors that influence individual's decision to purchase particular brand motorcycle. The research was conducted using survey method. A structured questionnaire was developed and distributed among 236 respondents for collecting the data. The questionnaire contained both close ended and open ended questionnaires. The results indicate that both internal and external factors influence individual's decision to buy particular brand motorcycle. Price, quality and style are the major external factors that influence individual's decision of buying a particular brand motorcycle. Family (father and personal preferences) along with friend's advice also plays a vital role in individual's purchase decision. Other factors that have minor effect on individual decision are brand perception, better mileage, availability and less cost of spare parts.

**Keywords:** Customer Preferences, Purchase Decision, Motor Cycle Brands, Motorcycle Users

#### 1. Introduction

Customer can be defined as an individual who purchases any goods or services from a shop or any business. Customers make decisions regarding any purchase, on the basis of certain internal and external factors. Products that were once considered as just mere commodities have been given a tag of Brands now a days. People now, are more brands conscious and they always want to have best for them selected. New improvements, inventions, technological advancements as well as persuasive advertisements of different competitor brands have opened more options for people to select between brands, so to satisfy their needs and wants.

Moreover, the elements/factors that mostly affect people to prefer, select and take purchase decision regarding any product and become a customer of that organization have been changing with the passage of time, as the customer are influenced by both internal and external factors while making decision to purchase certain branded products. Hence it is important to identify both internal and external factors that influence individual customer decision to purchase certain products. Earlier empirical literature on consumer behavior has highlighted customer satisfaction as an important factor in customer purchase decision. However, recently both internal and external factors are considered important factors in making purchase decision.

This era is considered as a technological era where customers choose brand thoroughly and carefully. Same is the case with automobile/two wheeler industry where customers have to select from wide variety of motorcycle competitors. Moreover, It comes off rather an interesting to understand what variables persuade people to prefer certain motorcycle brand over the other.

Factors influencing individual's purchase decision is an empirical issue instead of settled fact and needs to be empirically explored.

We have grouped the factors which influence customer decision to purchase particular brand into two categories such as; internal factors and external factors. Internal factors include; family, personal consciousness for brand (brand perception), friends and peer advice, word of mouth, occupation and previous experience. External factors include price affordability, quality, mileage, maintenance cost, style and other attributes.

#### 2. Objectives of the Research

It has been strongly believed that any solution, any strategy, any implementation or even any decision is always taken by considering certain elements/factors. In fact even an immediate and impromptu decision is being made on the basis of sudden pressure from either internal or external factors.

Therefore, the main objective of this research is to find out what factors influence people's purchase of motorcycles in the Hyderabad city. There was time when only Honda motorcycles were common in Hyderabad. As time passed by, other names like Yamaha Suzuki have also entered the market. By seeing this, China's Jialing and Jinan have also taken this opportunity and started manufacturing motorcycles in Pakistan so to supply in all major cities including Hyderabad city as well. Furthermore, with the passage of time, Pakistani business giants have also seen that there is a need of affordable yet high quality bikes, so they started competing with Japanese and Chinese motorcycle brands. Mostly in Hyderabad, Hero motorcycles by Fateh Group of Industries (Hero Motors), Unique motorcycles by D.S Motors, Super Power motorcycles by Pirani Group of Companies, Hi speed

motorcycles by Raazy Motor Industries Pvt. Ltd. And Ravi and Ravi motorcycles by Ravi Automobile Pvt. Ltd. Due to availability of variety motorcycles, people of Hyderabad think wisely while choosing the brand for their use. Some may prefer internal factors like; family and friends' advice, personal status, word of mouth etc, while some may prefer external factors like; technology used in motorcycles, economical in terms of purchase price and fuel consumption, customer service, advertisement and even on the basis of company of origin (i.e. preferring Japanese bike over Pakistani or China bikes or vice versa) or even some people prefer on the basis of the combination of both, internal as well as external factors too.

Therefore, this is a broad and wide range study on how the mindsets of the people of Hyderabad are, while preferring a motorcycle brand, which would not only provide a synopsis to those strategists that are sitting behind their desks in the management and marketing departments and make guideline regarding their brand's motorcycle marketing, expansions and advertising but would also help such companies to improvise their methods, standards and technologies for gaining the major market share of Hyderabad.

### 3. Scope of Research

This research study has been done for academic purpose. This whole research encompasses around internal and external factors and also identifies the correlation of different internal and external factors affecting directly and indirectly customers purchasing decision over other brands available in the market. A good number of research studies have been conducted in other countries, like China and India regarding different factors influencing customers to choose one brand over other. According to our knowledge, this is the first time that research work on motorcycle preferences is being conducted in Hyderabad.

Moreover, this work also provides a framework related to the minds of customers as what are the expectations of customers and up to what level these expectations are being met by motorcycle companies. Therefore, this report is likely to provide a lot of knowledge and information to motorcycle manufacturers and sellers which will help them to understand the major factors that motivate customers to prefer motorcycle. And in this way, this proves to be a guideline to improve those factors, so to increase customer retention and ultimately customer loyalty towards their brand.

### 4. Research Question

What are the internal and external factors which affect the customer purchase or buying decision of motorcycle?

### 5. Hypothesis

**H1:** External factors affect the customer purchase decision of motorcycle brand.

**H0:** External factors do not affect the customer purchase decision of motorcycle brand.

**H2:** Internal factors affect the customer purchase decision of motorcycle brand.

**H0:** Internal factors do not affect the customer purchase decision of motorcycle brand.

## 6. Literature Review

Here we review the earlier empirical literature identifying the factors that influenced individual's decision to purchase a particular brand of motorcycle.

Akbar and Bakar (2011) <sup>[1]</sup> focused on the factors that influenced Sians University Penang, Malaysia students to purchase a motorcycle. The survey was conducted and structured questionnaires were administered among 415 students of the very same university and the results were analyzed by using statistical techniques such as, standard deviation, percentage and mean. According to this study, price, place and product has been considered as 3 main factors that influenced students' purchase decision for motorcycles. Majority of the students would like to buy motorcycles that are not only economical in terms of fuel usage and spare parts, but also have better design and quality along with reasonable prices. However, when it comes to place factor, majority of the students liked to purchase the motorcycles from their own university fellows, who were about to finish the study and will be leaving the university.

Duann, *et al.* (2001) <sup>[2]</sup> focused on the factors which affecting the demand for electric motorcycle in Taiwan. Major objective of the study was to identify the factors that influenced customer's decision to buy electric motorcycles in Taiwan after the Executive Yuan (Republic of China) ratified the action plan for advancement of electric motorcycle so to reduce the emission created by two stroke motorcycles. Due to limited number of electric motor users, the authors instead of revealed preference<sup>1</sup> applied stated preference<sup>2</sup> for conducting the study. Sample of 124 50cc gasoline motorcycle users were being selected and questionnaires were divided into 3 parts; (i) opinion of respondents towards environment, (ii) what type of motorcycle is being preferred by the respondents either 50cc gasoline or electric motorcycles and (iii) Due to which attributes, respondents did prefer while selecting the motorcycle. The results, on the basis of binary logit models,<sup>3</sup> indicated that customer's demand for electric motorcycles is influenced majorly by top speed, purchasing price, driving mileage and easy recharging of motorcycle batteries, whereas they did not give more value on the variables like social merits in terms of air pollution control and promotional efforts for purchasing the electric motorcycles.

Gaskill (2004) <sup>[3]</sup> <sup>2</sup>conducted research on the influence of customer values on motorcycle brand choice. The purpose of this research was to identify brand choice moderator that influence the consumers to choose one brand from different brands available in the market, the factors which were selected are, psychology(perception, personality and motivation), marketing variables (4 P's<sup>4</sup> of marketing).The sample for research was taken from Auckland, New Zealand, people who were riding on bike on roads were randomly selected for research, and questionnaire were also filled through exhibitions and different libraries and clubs and data was

<sup>1</sup> Revealed preference theory seeks to study consumer behavior, and consumers while purchase, analyze the alternative available to them, and choose their best product to satisfy their need, keeping budget constraint <sup>2</sup> Stated preference approach, means the approach in which the ratings and choices are scaled to measure value. <sup>3</sup> Binary logit, also known as Binary Logistic Model, is used to envisage the binary or dual response which is based on one or more than one independent factors/variables.

<sup>2</sup> Ps of marketing are Product, Price, Place, Promotion,

collected through questionnaire; already developed. The authors found that marketing variables influence psychological factors, and hence create brand awareness, which leads to brand choice and that brand choice leads to greater brand equity and that brand equity again leads to greater values of brands in monetary terms.

Jayachitra Vijay and Jayachitra (2011) focused on the customer perception for Hero Honda as compared to Bajaj and TVS motorcycles. The data was collected by administering structured questionnaire among 300 respondents in Chennai. Using chi-square, weighted average<sup>3</sup> and ANOVA<sup>4</sup> method, the author found that Hero Honda is a leading player, with almost 48% of two wheeler motorcycle market, while Bajaj and TVS motorcycles have 20% and 17% of market share respectively. Furthermore, the results suggested that TVS should improve its mileage along with introducing safety measures for the riders

Maran and Anbazhagan (2014)<sup>[4]</sup> analyzed the factors which influenced customer satisfaction towards their two wheelers brand. The study was conducted on four leading manufacturers of 100cc motorcycle, which included TVS Suzuki, Bajaj, Hero Honda and Escort. Since Chennai is the most populous city, therefore the authors employed convenience<sup>5</sup> sampling technique and provided questionnaire to 525 customers and 50 dealers that makes a total of 575 respondents. However, for analyzing the responses, ANOVA, Chi-square<sup>6</sup> and Regression analysis<sup>7</sup> have been used. The results favored the Hero Honda, as customers ranked it as number 1 in terms of their satisfaction.

Nawaz (2012) evaluated consumer buying behavior and factors which affect the consumer buying decision process. The objective of this research was to analyze customer perception and satisfaction towards specific brands of bikes (i.e. Honda, Bajaj and TVS) on the basis of efficiency of fuel, comfort and style, brand name and price. The research was conducted in Gorakhpur District, India. The researcher used the cluster<sup>8</sup> sampling method for data collection, as Gorakhpur area is very big and there are many consumers. The sample of 200 was selected for this research, and it was found that advertising has more impact on customer's awareness of two wheeler. Social class and family were found as the factors which most influence them to purchase motorcycle. While buying motorcycle, economy was considered as main factor in form of fuel efficiency and maintenance cost.

Pandi and Balasubramanian (2014)<sup>[6]</sup> aimed at identifying the customer preference towards the newly launched model of Yamaha (i.e. Yamaha Ray-Z) in Trichy city of Tamil Nadu state. He developed the structured questionnaire and distributed it among 95 sample respondents who already have

purchased this model. The research tools used in the study included regression analysis, frequency analysis and correlation. The findings suggest that positioning<sup>9</sup> is one of the critical job in marketing strategy, so due to good brand positioning of Yamaha Ray-Z, Yamaha enjoys the good brand positioning in that particular market.

Ramana *et al.* (2013)<sup>[8, 9]</sup> conducted study on pre-purchase behavior of two wheeler motorcycle users in Nellore District, Andhra Pradesh, India. The study aimed at finding out internal and external factors that influence individual decision to buy particular brand motor bike. The variables included in this research were the time gap between intention and actual purchase, and the type of information sources explored by customer before making purchase. The research was descriptive in nature, and sample of 252 respondents was selected to collect primary data. Almost 64% of the respondents were young graduates with private jobs, having income between: 10,000-30,000 Indian Rupees. Time gap between intention to purchase and actual purchase is more in purchase decision because, they do not have time and they are busy, and they have fear of making wrong decision. Moreover, the reason to delay the purchase was mainly due to financial problem and waiting for special occasion, so companies must consider customer's financial issues.

Ramana and Subbaiah (2013) conducted study on consumer's perception towards the purchase decision of two wheeler motorcycles in Nellore District, Andhra Pradesh. They wanted to know the factors which customers valued more in the purchase of motorcycles. A sample of 252 respondents was selected for research. It was concluded that style was main factor at the time of buying decision, because respondents want stylish and new look, followed by promotional offers, which includes cash /price discounts, gifts, free accessories, free checkups and extended warranties were the main factors behind purchase decision of motorcycle and maintenance cost was least preferred factor at the time of purchase decision

Shinde and Khamkar<sup>[12]</sup> (2014) conducted the research on pre-purchase behavior amongst the youth for two wheelers-with special reference to Mumbai city. The core purpose of this research was to identify the factors which influence customer decision to purchase two wheeler motorcycles. The research was based on primary data and structured questionnaire was distributed among 500 respondents (including 400 males and 100 females) from Mumbai, who were below the age of 30. The sample included college students and employed people (either self-employed or working for others). It was found that, most of the young generation preferred sporty bikes with better mileage and reasonable price. However, when it comes to the brand factor, Yamaha R15, Yamaha FZ, Karizma and Pulsar have been rated high in terms of aesthetic appeal by the respondents. Female respondents showed that they prefer to have non geared bikes such as, Activa and Scooty because they bikes are not only easy to handle but also available in vibrant and bright shades of colors.

Shaikh (2012)<sup>[10]</sup> conducted research on consumer two wheeler buying behavior in Ahmadnagar city, Maharashtra. The object of this research was to find out the customer preferred company, the sellable model according to customer,

<sup>3</sup> Weighted average moving, is an average in which each quantity is assigned some weight, and that weight determines the value of each quantity relative to others

<sup>4</sup> ANOVA is statically method used for the analysis of variance, in which variation in set of observation is divided into distinct components (<http://www.memidex.com/analyses-of-variance>).

<sup>5</sup> Convenience sampling is non probabilistic method, in which the respondents are selected due to accessibility and proximity to researcher

<sup>6</sup> Chi square is a statistical test which is used to compare observed data with data which we expected to gain according to specific hypotheses

<sup>7</sup> Regression analysis is a statistical method used for estimating the relationship between variables

<sup>8</sup> Cluster sampling is type of sampling method, in which researcher divides the population into separate groups, known as cluster

<sup>9</sup> Positioning means where your products stands in front of other products in market place and in minds of consumers

and customer preferences and market demand of two wheelers. Sample of 60 respondents was selected for collecting primary data. Honda, Hero motors and scooters India Pvt. Ltd. were amongst most preferred two wheeler manufacturer, it was found that sales were strongly correlated to age group. And interestingly, it was found that purchase of two wheelers was independent of income of buyers. Major portions (about 49%) prefer to purchase the two wheeler bike ranging in Indian Rupees 41,000-50,000, with having fuel efficiency of 45-50 Km/liter. Moreover customer used to prefer servicing in 4 months, and finally it was found that the red color was the most preferred color by the customers followed by black and blue.

Soni and Abhishek (2012) <sup>[11]</sup> focused on consumer behavior of rural and urban areas of district Jodhpur, Rajasthan towards two wheeler bikes. Objective of the study was to identify the factors which influence the consumers buying behavior such as product quality, size, color, packaging, design, weight, credit facility, family, and advertisements. The sample of 100 respondents from rural and urban population was selected from Jodhpur for collecting primary data. It was found that consumer at the time of purchase prefer more to mileage factor: in rural with 38% and in urban 46% and amongst (price, mileage, life of vehicle, performance and style), and least preferred factors were style and performance. And price was important factor for 34% in urban, followed by 30% in rural. Furthermore, spouse was found as most important factor, which influences urban consumer's purchase decision, and in rural, friends have more influence on purchase decision. And advertising was considered as most powerful medium for marketing the two wheeler, and from the different medium that are used for advertising, television was the most effective in influencing consumers buying decision.

Shaharudi *et al.* (2011) <sup>[10]</sup> focused on the relationship between product quality and intention to purchase the product. Customers' perception about the value of product is based on four elements, price, image, quality, service quality. Furthermore elements like durability, serviceability, reliability, performance, aesthetics and special features influence the purchase intention of product. Sample of 116 customers was selected for this research and it was found that customers' perception has no significant impact on customers purchase decision. They do not rely only on quality perception alone, in driving intention to purchase or not to purchase any motorcycle; however, they are looking at other essentials beyond quality perception on their purchase decision as well.

Tripathy and Mani (2014) <sup>[13]</sup> focused on consumer perception towards two wheeler bikes in Allahabad, Uttar Pradesh. Since India is just next to Japan in terms of production and selling of two wheeler motorcycles, so to compete in the market, sellers have to position themselves in terms of prices, technology, designing, after sales services, efficiency and even distribution of motorcycles for getting the maximum number of market share. 600 existing customers were randomly selected from the Allahabad and were asked to fill out the questionnaires. While the secondary data sources consisted of magazines, publications of various books, websites and annual reports of certain motorcycle companies. The major two wheeler motorcycle companies that were selected are; Bajaj motors, Yamaha motors, TVS motors, Honda motors and Hero motocorp (formerly Hero Honda). After the analysis, it has been concluded that Bajaj and Honda have the highest

customer satisfaction in Allahabad, whereas TVs stood last. It has also been noticed that the design for Hero motorcycles should be changed and even Yamaha should reduce its prices so that market preference should be in favor of Hero and Yamaha.

Verma (2012) <sup>[14]</sup> evaluated consumer buying behavior in Indian motorcycle industry. The objective of the study was to study the consumer buying behavior and analyze the effect of 4 P's of marketing in the context of motorcycle purchase decision. Primary as well as secondary data was collected. The researcher used a questionnaire technique with a sample size of 150, a dealer survey was also used to gain the dealers perspective from TVS, Bajaj and Hero Honda. It was found that customers take advice from friends and family in high involvement purchase, and price sensitivity declines as the income increases, and brand choice become more important. Moreover the motorcycle market comprised of two segments, one is mileage and price sensitive and other is design and style oriented. The design sensitive segment was highly influenced by advertisement, than price and mileage sensitive customers.

Yeong *et al.* (2007) <sup>[17]</sup> conducted research to know the purchase preference of selected Malaysian Motorcycle Buyers. The core purpose of this research was to identify the influence of country of origin on customer purchasing behavior for motorcycles in Malaysia. They found that due to globalization of motorcycle industry since last few years Malaysian brands like; Comel, Modena, MZ, Nitro have strongly established themselves to compete in Malaysian market of motorcycles. The strategy which they used is to use the technology from Taiwan, China and Japan. So, the major objective was to scrutinize that whether country of origin of brand along with ethnocentrism of customer would affect the purchase preference of motorcycles' in Malaysia or not. A series of questionnaires was distributed among 223 sample respondents of Penang,

Malaysia, by using convenience non-probabilistic sampling technique as it is impossible to get the data of all the residents above the 18 years of age in Penang. Moreover, they used discriminant<sup>10</sup> analysis to find out if the model could predict the membership of groups that were involved in this research. The statistics, however, showed some interesting results as 72 of the respondents preferred Japanese brand, whereas the statistics showed the contradicting figures in which motorcycles of Malaysian brand (i.e. Modenas) secured 42.6% of the sales. This difference in results may be due to the reason that customers prefer to have Japanese motorcycles, but purchase Malaysian motorcycles as they are less expensive.

## 7. Research Methodology

We employ quantitative method for collecting data on internal and external factors that influence individual's decision to purchase particular brand of motorcycle. Questionnaire is the instrument that we have used for collecting primary data about the customer preference for motor cycle brand. To do the research on factors affecting the customer purchase decision for motorcycle brand, primary data has been used.

<sup>10</sup> Discriminant analysis is statistical technique which is used in determining the particular classification or a group, object or an item of data, belong to, on the basis of characteristics or essential features(Business dictionary.com)

**Sampling Technique**

The sample size for this research is 236 respondents. We got our questionnaire filled up by people from shops, educational institution, societies, roads, and sale and purchase market within the city. Convenient sampling technique is used for this research. By this technique respondents were selected based on accessibility to the researcher.

**8. Data analysis and interpretation**

**Please specify your Age**

It has been found that 60% of the respondents were aged between 18-25, 26% aged between 26-35, 7% were below the age of 18, and 6% of respondents were aged between 36-45 years.

**Please specify your income/pocket money from the following income bracket**

It has been found out that 46% of the respondents were having income/ pocket money below PKR 10,000, 25% of the respondents were having income between PKR 10,000-20,000, respondents having income between PKR 21,000-30,000 were about 13%, whereas respondents with income between PKR 31,000-40,000 were 10%. However, each respective respondent that have income between PKR 41,000-50,000 and 50,000 or above were only 3%.

**What is your Occupation?**

It was found out that, most of the respondents were students (i.e.51%). Furthermore 19% of the respondents were privately

employed, 17% of the respondents were self-employed and 10% of the respondents were government employees.

**Which brand model motorcycle do you have?**

It was found out that, 46% of the respondents were having Honda motorcycle, followed by 23% of unique motorcycle users. However, High Speed, Jinan and Super Star users were 6% each respectively.

**Which type of motorcycle do you drive? (In terms of Engine Size in CC)**

It was found out that, 85% of the respondents preferred to ride 70cc motorcycle and 14% of the respondents were using motorcycle having engine size between 100cc to 150cc.

**Which type of motorcycle do you drive? (In terms of Style)**

From the data collected it was observed that, 85% of the respondents used to ride standard motorcycle followed by 12% of the respondents having customized motorcycles, which included silencer, handle or any other modification in show parts of motorcycle. The remaining 3% of the respondents preferred sport bike.

**Why do you prefer this brand, over others?**

It was found that, quality was most influential factor with 32%, low priced motorcycles were preferred by 29% and brand image along with stylish were preferred by 16% of respondents respectively.

**Table 1:** Multiple Options (124 responses)

Subsets	Respondents
Stylish + High Quality + Better Mileage	3
Less Price + Less Maintenance cost	4
High Quality + Less Fuel Consumption	4
Less Price + Less Maintenance cost + High Quality + Better Mileage	1
High Quality + Less Fuel Consumption + Better Mileage	4
Stylish + Brand Image/brand Perception + High Quality + Better Mileage	1
Availability of Spare parts + Less Maintenance Cost + Brand Image/brand Perception + High Quality + Less Fuel Consumption + Less Cost of Spare Parts+ Better Mileage	1
Availability of Spare parts + Less Maintenance Cost + Brand Image/brand Perception + High Quality + Less Fuel Consumption + Better Mileage	3
Brand Image/brand Perception + High Quality + Less Fuel Consumption + Better Mileage	1
Stylish + Better Mileage	2
Less Price + Availability of Spare parts + Less Maintenance Cost + Less Fuel Consumption + Less Cost of Spare Parts + Better Mileage	1
Less Price + Less Fuel Consumption + Better Mileage	4
Less Price + Less Maintenance Cost + Less Fuel Consumption + Better Mileage	1
Less Price + Less Cost of Spare Parts	2
Less Price + Less Maintenance Cost + Better Mileage + Sporty	2
Less Price + Availability of Spare parts + Less Maintenance Cost + Less Fuel Consumption + Better Mileage	3
Availability of Spare parts + High Quality	2
Less Price + Stylish + Less Fuel Consumption	3
Less Price + Less Fuel Consumption	1
Less Price + Availability of Spare parts	1
Less Fuel + Better Mileage	1
Less Maintenance Cost + Brand Image/brand Perception + High Quality + Less Fuel Consumption + Better Mileage	1
Stylish + Less Maintenance Cost + Brand Image/brand Perception	1
Stylish + High Quality + Better Mileage + Sporty	1
Availability of Spare parts +High Quality + Less Fuel Consumption + Better Mileage	2
High Quality + Better Mileage	6
High Quality + Less Fuel Consumption + Better Mileage	3
Less Price + Less Cost of Spare Parts	1
Less Price + Availability of Spare parts + Less Cost of Spare Parts	2
Stylish + Sporty	4
Stylish + Availability of Spare parts + Less Maintenance Cost + High Quality + Less Fuel Consumption	1

Stylish + High Quality	2
Brand Image/brand Perception + Less Fuel Consumption + Better Mileage	1
Availability of Spare parts + Less Maintenance Cost + Less Fuel Consumption	1
Availability of Spare parts + Less Maintenance Cost + Brand Image/brand Perception + High Quality + Less Fuel Consumption	1
Brand Image/brand Perception + High Quality + Better Mileage	2
Stylish + Brand Image/brand Perception	1
Less Price + Less Maintenance Cost + High Quality + Less Fuel Consumption + Less Cost of Spare Parts + Better Mileage	1
Brand Image/brand Perception + High Quality	3
Availability of Spare parts + Less Maintenance Cost + High Quality + Less Cost of Spare Parts + Better Mileage + Sporty	1
Less Maintenance Cost + High Quality + Less Fuel Consumption + Less Cost of Spare Parts	1
Less Price + Stylish + Availability of Spare parts + Less Maintenance Cost + Brand Image/brand Perception	1
Availability of Spare parts + High Quality + Better Mileage	2
Stylish + Less Maintenance Cost + High Quality + Less Fuel Consumption	1
Stylish + High Quality + Less Fuel Consumption	1
Less Maintenance Cost + High Quality	1
Availability of Spare parts + Brand Image/brand Perception + High Quality + Better Mileage	1
High Quality + Less Fuel Consumption + Less Cost of Spare Parts + Better Mileage	1
Less Price + Stylish + Brand Image/brand Perception + High Quality	1
Less Price + Brand Image/brand Perception + Less Fuel Consumption + Better Mileage	1
Less Price + High Quality	3
Availability of Spare parts + Less Maintenance Cost + Better Mileage	1
Stylish + Brand Image/brand Perception + High Quality + Sporty	1
Stylish + Brand Image/brand Perception + High Quality + Better Mileage	1
High Quality + Better Mileage	1
Availability of Spare parts + Less Maintenance Cost + High Quality + Less Fuel Consumption + Less Cost of Spare Parts	1
High Quality + Less Fuel Consumption + Better Mileage + Sporty	1
High Quality + Less Fuel Consumption + Less Cost of Spare Parts	1
Less Maintenance Cost + Better Mileage	1
Less Price + Stylish + Availability of Spare parts + Less Maintenance Cost + Less Fuel Consumption + Less Cost of Spare Parts	1
Less Price + Availability of Spare parts + Less Maintenance Cost	1
Less Price + Stylish + High Quality + Less Cost of Spare Parts + Better Mileage	1
Less Price + Stylish + Availability of Spare parts + Less Maintenance Cost + Brand Image/brand Perception + Less Fuel Consumption + Less Cost of Spare Parts + Better Mileage	1
Less Price + Availability of Spare parts + Brand Image/brand Perception	1
Less Maintenance Cost + High Quality + Less Cost of Spare Parts	1
Stylish + Less Maintenance Cost	1
Less Price + Stylish + Availability of Spare parts	1
Stylish + Less Fuel Consumption + Less Cost of Spare Parts + Better Mileage	1
Less Price + Less Fuel Consumption	1
Less Price + Less Maintenance Cost + Less Cost of Spare Parts	1
Less Price + Stylish + Less Cost of Spare Parts	1
Less Price + Availability of Spare parts + High Quality + Better Mileage	1
Less Price + Less Maintenance Cost + High Quality + Less Fuel Consumption	1
Less Price + Stylish + Availability of Spare parts + Less Maintenance Cost + Less Cost of Spare Parts	1
Less Price + Less Maintenance Cost + Less Fuel Consumption + Less Cost of Spare Parts	1
Less Price + Stylish + Less Fuel Consumption + Less Cost of Spare Parts + Better Mileage	1
Less Price + Less Fuel Consumption + Less Cost of Spare Parts	1
Less Price + High Quality + Better Mileage	1

**Multiple options (calculations)**

Factors	Single option (112)		Multiple options (124)		Grand Total
Low price	26	23%	35	9.2%	11.04+4.784 = 15.824%
Stylish	14	12.5%	30	8%	6+4.16=10.16%
Availability of spare parts	3	2.678	21	5.56	1.285+2.89=4.175%
Less maintenance cost	6	5.357	28	7.4	2.571+3.848=6.365%
Brand image	14	12.5%	69	18.2%	6+9.464=15.464%
High quality	28	25%	62	16.46%	12+8.559=20.559%
Less fuel consumption	11	9.8%	39	10%	4.704+5.2=9.904%
Less cost of spare parts	1	0.89	60	15.8%	0.427+8.216=8.643%
Better mileage	8	7.8%	6	1.58	3.77+0.8216=4.5916%
Sporty	1	0.89	28	7.4	0.427+3.848=4.275%
Total Responses	112	(48% as 100%)	378 (124)	52% (as 100%)	100%=100%

In this multiple choice question, we divided 236 sample respondents into 2 parts. 1<sup>st</sup> part contains single responses whereas 2<sup>nd</sup> part contains multiple responses. It was found that there are 112 single responses (i.e. 48%) and 124 (i.e. 52%)

multiple responses. Furthermore, to know the major responses from single as well as multiple options, we have considered both 48% and 52% as 100% respectively.

In the grand total 15.824% of the respondents preferred low price, 10.16% preferred stylish, 4.175% preferred availability of spare parts, 6.365% preferred less maintenance cost, 15.464% preferred brand image, 20.559% preferred High quality, 9.904% preferred less fuel consumption, 8.643% preferred less cost of spare parts, 4.5916% preferred better mileage and 4.275% preferred sporty.

Therefore, the major factors identified, are high quality, low price and brand image, with having percentages of 20.559%, 15.824% and 15.464% respectively. It shows that these three characteristics influenced individual's choice to buy a particular brand motorcycle.

#### **How long have you been a motorcycle owner?**

According to the results obtained, it was observed that 38% of the respondents were highly loyal to their motorcycle, as they were using respective motorcycles for more than five years. 30% of the respondents were using motorcycles since last 1-3 years. Moreover it was also found that 21% of the motorcycle users were some extent loyal, as they were using motorcycle since last 3-5 years, and 11% of the respondents were using motorcycle since less than a year.

#### **For what purpose the vehicle is used?**

73% of respondents using motorcycle for their personal use, 11% of the respondents using motorcycle for purchasing items for their businesses or going for payment collection from their clients on motorcycle, and business related uses. Furthermore 8% of the respondents were using motorcycle for sole purpose of commuting between office and office related work.

#### **What is the average mileage of your motorcycle? (Km per liter)**

37% of the respondents told consumption of average mileage of their motorcycle is about 40-50km/liter, while 15% respondent responded 50-60km/L and only 5% respondent reported 60 or more km/L mileage for their motorcycles.

Companies like Honda and others claim that their bikes are fuel efficient and give 70 km/liter<sup>11</sup>, but customer perceives it to be too low than their claims, as it was found that there were only 4% of respondents who believe that their motorcycle runs 60 km/L or above. Hence there is a big gap between what companies claim for their motorcycles in terms of fuel efficiency and what actual mileage is (as perceived by the motorcycle users).

#### **In your opinion, which brand of motorcycle has excellent mileage?**

77% of respondents believe that Honda has excellent mileage as compared to other motorcycles available in the market. And 12% of the respondents said that unique motorcycle has excellent mileage as compared to other brands

#### **What is average maintenance cost per month of your motorcycle (In PKR)?**

43% of the respondents said that on average they spend PKR 1,000 per month on their motorcycle as a maintenance cost, which includes oil change, tuning and repairing etc. 35% said that they spend PKR 500 or below per month, 17% said they are spending between PKR 1500 as a maintenance cost, also

5% of respondents said that monthly expenses of maintaining their motorcycles are around PKR 2000 or above.

#### **Have you ever faced any problem, while using motorcycle?**

It was found that 73% respondents have faced problems while driving motorcycle and 27% said that they have not faced any major problem so far.

The major problems that were faced by the respondents were: plug short, i.e. no power in motorcycle to start, magnet power issue, carburetor<sup>12</sup> issue, dust and rust in it, missing & choking issue and chain breakage or damaged most of the time

#### **Do you have any plan to change the vehicle?**

65% of respondents were not having any plan to change the motorcycle and 35% told that they intend to change their motorcycle in near future.

#### **If yes, then please mention the brand**

60 % (out of 35% of the respondents who intended to change their bike in near future) said they will switch to Honda, 15% said they will buy Unique, 19% respondents said they will purchase Yamaha, and 6% said they want to buy superstar and high speed.

#### **If yes, then why do you want to switch the brand?**

35% of the respondents told that they were changing their motorcycle to high quality, 19% said that they want to change due to brand image or perception of the brand, they said they like big brand and choose the brand which has high image in market, 18% said that they want to switch because of better or more mileage, as they perceive that their existing motorcycle consumes more fuel that is why they want to switch to other brands. Moreover, 15% of the respondents said that they want to change due to style, looks or external condition of motorcycle, 8% of the respondents said that they want to change due to maintenance cost per month of their motorcycle. What are the external factors that you normally look for while purchasing a motorcycle?

External factor which influence customer to buy the brand were tested in this question where 40% of the respondents said quality of the product influence them, 22% said price of the product influence them, 13% said style, 12% said mileage of the motorcycle, while 10% said that they prefer motorcycles that can have less maintenance cost and 3% said other attributes influence them to buy any brand.

#### **Which internal factors do you prefer while making decision of purchasing a motorcycle?**

In this respondent were exposed to the question that which internal factors influence them to purchase the brand. It was found that family was the most influential factor in purchase decision with 43%, 33% of respondent said they took suggestions from friends and peer advice, 17% said brand perception, which shows that brand image has some impact though not major on customer purchase decision

#### **If a family member is involved, then which one has the influence on your purchase decision?**

40% (out of 43% of respondents) who involved their family members in motorcycle purchase decision said that their father

<sup>11</sup> <http://www.bikes.com.pk/honda/honda-cd70-2016.php>

<sup>12</sup> A device used for mixing air and fine spray of fuel into engine

has important say in their purchase, 32% said entire family involves in deciding which brand to be purchased, 22% respondent says they make their decision on their own.

### Have you ever seen or heard about any advertisement of motorcycles?

It was found through the survey that majority of respondents who were using motorcycle were exposed to advertisement, and there were only 17% of the respondent who have not seen the advertisement of motorcycle.

Among these majority of respondents who were exposed to advertisement 51% said they have seen advertisement through TV, 31% respondent said they have seen ads of motorcycle through multiple sources which included TV, radio, newspaper, magazine and others, 13% respondent says that they have seen the ads in newspapers only and 5% of the respondent also said that they have seen the ads in magazine. It is clear that magazine is the most ineffective medium for advertising motorcycle brand.

### 9. Conclusion

People preferences and priorities have been changing with the passage of time. Technological advancements, personal experience, social circle and even brand image influence individual to choose from variety a particular brand of motorcycle. Today's customers are offered more assortments and features than the customers of past. Due to availability of variety, customers consider different factors while making decision to purchase motorcycles. These factors include internal factors such as family, personal consciousness of brand (brand perception), friends and peer advice, word of mouth, occupation and previous experience. External factors include price affordability, quality, mileage, maintenance cost, style and other attributes.

### 10. Accepting or Rejecting the Hypothesis

On the basis of above analysis, we accept the null hypothesis that external factors affect the customer purchase decision of motorcycle brand and reject the alternative hypothesis that external factors do not affect the customer purchase decision of motorcycle brand. Among the external factors, customers prefer mainly on quality, less price, style and better mileage. Similarly, we also accept the null hypothesis that internal factors also influence individual to buy particular brand motorcycle and reject the alternative hypothesis that internal factors do not affect the customer purchase decision for motorcycle brand. Among the internal factors, customers do prefer their father's choice, personal choice and even prefer on the basis of brand image for the motorcycle.

### Recommendations / Suggestions

Based on the findings of this research study, we recommend that motorcycle manufactures / sellers in Pakistan should:

- Increase their marketing budget, as many of the customers responded that they only see advertisements when the new model is launched once a year.
- Reduce the gap between claimed mileage and mileage actually observed by the customers to make their customers more loyal.
- Companies, other than Honda, should focus on fuel efficiency and should give more importance to better mileage.

- Introduce the motorcycle in vibrant colors, other than black and red, as some customers want stylish motorcycles at reasonable prices.
- Use digitalized speedometer to know their speed and fuel level exactly
- Offer promotional offers and offer some finance schemes to customers who cannot buy their motorcycles due to financial constraints.
- Start working on social media, especially Facebook, as most of the customers aged between 18-25 are very active on social media. Therefore social media campaign could be influential factor for purchasing specific brand.

### 11. References

1. Akbar S, Bakar AHA. Factors affecting the consumers decision on buying power. *Journal of Economics and Behavioral Studies*. 2011; 2(3):108-116.
2. Duann, Liang-Shyong, Chou, Hung-Yen Wang, Chin-Chi. The Factors affecting the demand for electric motorcycle. *Journal of the Eastren Asia Society for transportation Studies*, 2001; 1(1):41-49.
3. Gaskill A. Influence of consumption values on motorcycle brand choice. Auckland, New Zealand. Retrieved from: <http://www.researchgate.net/publication/30040342>. 2004.
4. Maran K, Anbazaghan V. Analysis of users satisfaction on two wheeler segment performance with reference to Chennai. *Proceeding of international conference on contemporary management*, 2014, 499-510.
5. Nawaz A. Buyer's Buying Behavior with special reference to two wheeler bikes. Retrieved from <http://www.scribd.com/doc/53666205/Buyer-s-Buying-Behaviour-Withhttp://www.scribd.com/doc/53666205/Buyer-s-Buying-Behaviour-With-Special-Refernce-to-Two-Wheeler-Bikes - page=36Special-Refernce-to-Two-Wheeler-Bikes#page=36>. 2011.
6. Pandi R, Balasubramaniam B. A study on customer brand preference towards Yamaha Ray-z two wheeler in Trichy, 2014.
7. <http://www.worldbookscentre.com/journ/pages/A%20study%20on%20customer%20brand%20preference%20towards%20Yamaha%20Rayz%20two%20wheeler%20in%20Trichy.pdf>
8. Ramana DV, Subbaiah P, Rao PVNL. A study on pre-purchase behavior of two wheeler motorcycle users in Nellore district, Andhra Pradesh, India. *International Journal of research in Commerce, Economics and Management*. 2013; 3(3):17-24.
9. Ramana V, Subaiah P. A study on consumers perception towards the purchase decision of two wheeler motorcycles in Nellore District, Andhra Pradesh. *International Journal of Research in Commerce, IT and Management*. 2013; 3(9):9-14.
10. Shaharudin MR, Mansor SW, Hasan AA, Omar MW, Harun EH. The relationship between product quality and purchase intention: A case of Malaysia's national manufacturer. *African Journal of Business Management*, Shaikh, F. A. A critical Analysis of Consumers Buying Behavior of two wheelers Observation pertinent to Ahmednagar city, Maharashtra. *Indian Streams Research Journal*. 2011; 5(20):8163-8176, 2012; 2(7):1-7.

11. Soni S, Soni A. Consumer behavior towards two-wheeler bikes-A comparative study of rural urban consumers of Jodhpur district of Rajasthan. *Global Research Analysis* 2012; 1(7):91-92.
12. Shinde Khamkar. Pre purchase behavior amongst the youth for two wheeler - with special reference to Mumbai city. *International Journal of Advanced research in Management and Social Sciences*. 2014; 3(8):104-109.
13. Tripathy D, Mani R. A consumer perception towards two wheeler bikes. *International Research Journal of Management Science and Technology*. 2014; 5(8):52-58.
14. Verma A. Consumer Buying Behavior in Indian Motorcycle Industry retrieved, 2012.  
<http://www.scribd.com/doc/102963689/Consumer-Buying-Behavior-in-Indian-Motorcycle>  
<http://www.scribd.com/doc/102963689/Consumer-Buying-Behavior-in-Indian-Motorcycle-Industry>
15. Vijay L, Jayachitra B. Customer perception with motorcycles. *International Journal of Marketing & Human Resource Management*, 2012; 2(1):1-6.
16. Yeong NC, Muhammad O, Ramayah T, Omar A. Purchase preference of selected Malaysian motorcycle buyers: the discriminating role of perception of country of origin of brand and ethnocentrism. *Asian Academy of Management Journal*. 2007; 12(1):1-22.
17. The News 2012.  
<http://www.thenews.com.pk/Todays-News-13-13637-Sindh-populationsurges-by-81.5-pc,-households-by-83.9-pc>.