



## A study on the influence of reference groups affecting the purchase decision of a motorbike buyer

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### ABSTRACT

*Consumer decision making is never in isolation. He is influenced by many factors. Identifying the various reference groups, that influence the purchase decisions of the buyer, allows the marketer to fine tune his market strategy. The study aims to find out which reference group has a dominating influence at which stage in the purchase process. The study also aims to find out the key factors that influence the purchase of the motorbike buyer. The findings reveal that the buyers of the motorbikes can be classified into four groups – Need, Features and Pocket Driven Buyers, Primary Reference Groups Driven Buyers who seek to assure themselves through their family and friends, Secondary Reference Groups Driven Buyers who seek expert assurance and Emotions Driven Buyers, who are driven by their feelings while purchasing. Buyers are heavily influenced by parents when they analyse the need to buy a bike, decide about affordability and make the last minute choice at the point of purchase. They are heavily influenced by the salesmen when they want information about the features and life of the bike. They are also influenced by friends when they seek approval from them and when they share their feelings about their purchase decision. The findings of this study match with the studies done in the past and thus, proves that the reference groups have an influence on the purchase decision of the motorbike buyer.*

**Keywords**— Reference groups, Opinion leaders, Family, Peer groups, Motorbike

### 1. INTRODUCTION

Today, consumers have become highly rational in what they purchase and use. For the middle-class households, where the income is less and the elasticity is high, reference group influence for durable goods is the highest because the purchases are costly and made less frequently. The buyer takes the opinions of various people around him including parents, relatives, spouse, children, friends, neighbours, colleagues, salesmen etc. The influence of the family or friends is the highest among all the reference group influences. Motorbikes are usually high involvement purchases and buyers tend to exhibit complex buying behaviour. Reference groups exert influence on the purchase of a motorbike. So a thorough analysis of the type of reference groups influencing the buyers at different stages in the purchase journey is crucial in fine-tuning the promotional strategy. The marketers can channelize

their resources to influence the customers at different stages in the purchase journey. This study seeks to understand these influences.

#### 1.1 Objectives of the study

- To identify the different factors which influence the buyers in the motorbike segment of the two-wheeler market.
- To identify the various influencers in the bike segment of the two-wheeler industry.
- To explore the influence of various reference groups on the buyer in the purchase journey.
- To segment the bike market based on the influencers.

The study aims to meet these objectives by applying both quantitative and qualitative methods of research to understand the influence of the reference groups on the purchase of a bike. The study stresses on the reference group influence in the bike segment of the two-wheeler industry. The study has the following boundaries:

- Due to the limited time available, the study is restricted only to the identification of reference groups who influence the buyers at different stages in their purchase process.
- The sample is restricted to a convenient sample from Delhi-NCR, Bengaluru and Hyderabad.
- The study does not include all the influences on the motorbike purchaser. It limits itself to internal factors and external reference groups. Impact of digital media and other influencing sources are not considered.
- The study focuses only on the bike segment of the two-wheeler industry.

### 2. REVIEW OF LITERATURE

Influences on consumer behaviour is a much-researched area. However, since the research topic of this study is specifically on the reference group influence on the buyer decision-making process, the studies done in this specific area are included in this review.

Reference Group Influence is the highest form of influence on the buyer. Consumers get absorbed in such behaviours to get acceptance from the reference groups they belong to. (Bearden & Etzel, 2006)

Family acts as a major influence in the purchase decision of the buyer. The family of orientation i.e. the family where the buyer takes birth, influences him in terms of values, ability to buy and

need. Sometimes they too become a reason for purchase. The family of procreation i.e. spouse and children also have a heavy influence on the final decision making of the buyer. Full nest families including child influence act as a cause for major purchases. Studies done in the past have proved that family influence is the highest in the case of durables as they are used by all the members in the family. (Verma & Kapoor, 2009)

Another study was done by Linnet (2009) also states that family can influence the purchase decision of the buyer. According to the article, there are multiple needs in a family and a few consumption goods satisfy most of the needs. These consumption objects include automobiles, electronics etc. Since these objects are of intra-family consumption, the opinion of each family member is essential and can impact the final decision of the buyer. (Linnet, 2009)

Peer group influences too are high for a buyer as buying the similar or equally expensive and branded product, fetches acceptance in the peer group and brings delight to the buyer. Peer group influence is dominant when the buyer is unaware of the product or brand. (Griskevicius, et al., 2008). Peer influence is commonly defined as the amount to which peers apply influence on the attitudes, thoughts, and actions of an individual. The article by John and Christopher, (2013) proves that consumers belonging to the age group of 40-50 years get influenced by their peers while purchasing their two-wheelers. Buyers also get influenced by other buyer's directly at showrooms and indirectly through social media using 'likes' or "customers like you bought this appliance" setting given by marketers on websites. (Bughin, 2015)

According to research done in the past, 63% of social media users rely on consumer rating for their purchase decision. Their purchases are based on the ratings of buyers on company websites and other social networking sites. The article also states that 90% of the consumers relied on the brands recommended by their friends and 70% of the consumers trusted consumer opinion. (Srujana, et al., 2010)

Adding to this, consumers today are virtually connected and engaged in consumer groups and highly influence each other. They convey their feelings and experiences with a product to the world using social media and the prospective buyers get influenced heavily. (Rosenthal & Brito, 2017)(Zhu & Chen, 2010)

The consumers are exposed to over 50000 reviews of other consumers about different products on social media and eventually they too form an opinion about the products, they post questions on these websites and seek answers. They also join community discussions on brands or products on social media. Thus social media acts as a major influence for consumer decision making. (Wilcox & Black, 2010),(Divol, et al., 2012).

People focus on quality and features before purchase. On average, 3% of consumers go by advertisements having their favourite celebrity and buy the product. (Chhajer, et al., 2015). Thus it is important for marketers to understand the reactions of buyers towards celebrities and then use them in a very cost-effective manner. (Ruchi, et al., 2015).

Johnson, in his article (Johnson, May 2015) sums up the consumer decision journey states that the consumers reach out to peers and social media for product idea and information and then look at online resources and family members for further advice and assistance for final decision making.

**2.1 Research gap**

The studies done earlier are related to reference group influence on the two-wheeler industry as a whole. The study aims to find which reference group has a major influence on the motorbike buyer which has not been done earlier. Also, the study aims to find the dominant groups under which motorbike buyers can be classified depending upon the influence acting on them while buying a motorbike.

**3. RESEARCH METHODOLOGY**

This study uses the mixed methodology as it offsets the limitations of both the qualitative and quantitative methods of research and sheds more light on consumer behaviour. In this study, the major source of data collected for analysis is primary data. The data collected through the questionnaire from the respondents have been further analysed using the SPSS software.

The qualitative data has been collected using semi-structured interviews of consumers who own and use bikes in their various walks of life. The interviews were transcribed and further studied using the MAXQDA 12 software. The validity and reliability of the questionnaire have been measured using Cronbach's Alpha which has an acceptable range from 0.7 to 0.95 (Tavakol & Dennick, 2011).

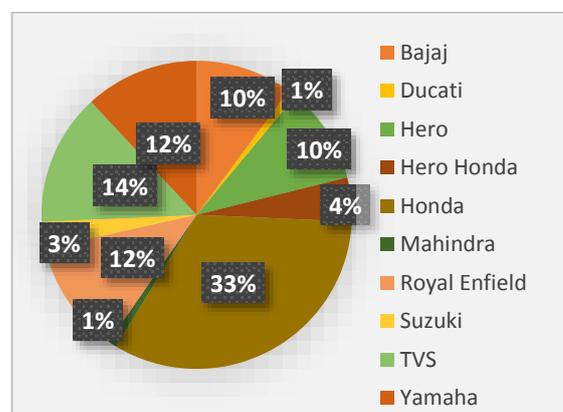
The Cronbach's Alpha of the self-developed questionnaire is 0.895 as generated on the SPSS which falls within the specified range and shows high credibility of the questionnaire.

**3.1 Limitations and delimitations**

- The study is restricted to a convenient sample from Delhi-NCR, Hyderabad and Bengaluru, so it does not give a true picture of the entire population of the country and thus the findings from this study cannot be generalised.
- The sample is limited in size due to time constraint, so the findings are only indicative and not conclusive.
- This study is restricted to only the bike segment in the two-wheeler industry.
- The study is restricted to the influence of reference groups only.

**4. QUANTITATIVE ANALYSIS**

The data collected using the questionnaire is analysed using the SPSS software. The following table and the figure show the brands of the motorbikes preferred and owned by the respondents.



**Fig. 1: Brand choice of the sample**

The diagram shows that majority of the respondents own Honda bikes. A study was done in the past also shows that respondents belonging to the age group of below 30 years have

chosen Honda bikes as their first preference, and the respondents belonging to the age group of 30-50 years have preferred for Hero Honda bikes. These results coincide with the results of the study being done (Reddy, 2005).

(Pandey & Dalvi, 2018) states that “Honda is the biggest volume gainer in FY2018”. Honda Motorcycle & Scooter India (HMSI) has gained the largest market surpassing Hero MotoCorp. This industry report validates the results of this study. The following table shows the other people who influence the buyer during his purchase process:

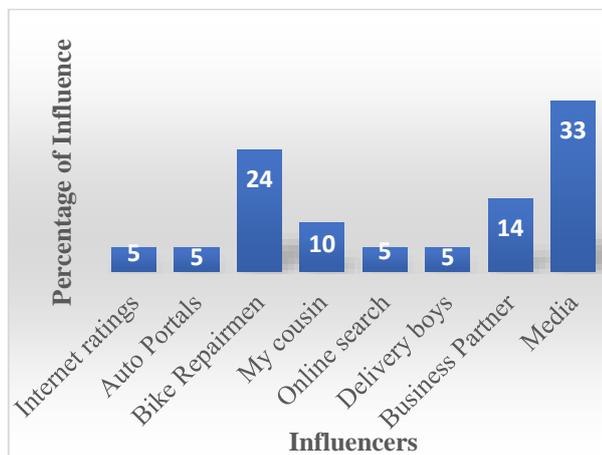


Fig. 2: People influencing the purchase decision of the buyer

The table shows that media, business partners and bike repairmen have the highest influence on the buyer.

**4.1 Purchase process**

The purchase process has five main stages and the reference groups influence each stage, though the degree of influence may vary. The stages in the purchase process have been discussed below.

**Stage 1: While deciding on purchasing a bike**

At this stage, the buyer analysis his need to buy a bike and looks for various bikes available. The following diagram shows the various reference groups influencing the buyer at this stage.

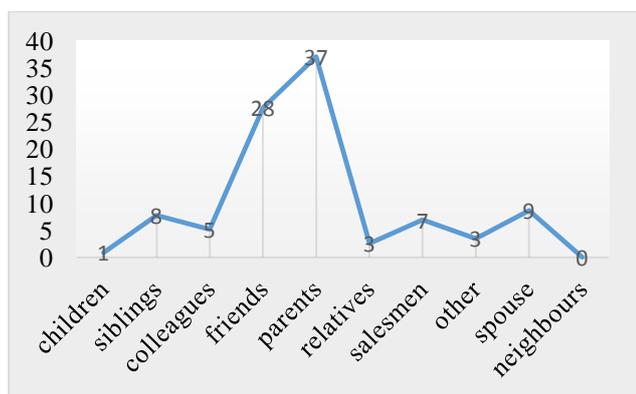


Fig. 3: While deciding on purchasing a bike

The graph shows that parents have the highest influence on the buyer in this stage, followed by friends and spouse.

**Stage 2: Looking at Affordability of the buyer**

As the buyer decides to buy a bike, he makes his choice based on the price of the bike. For deciding on the bike to be purchased, he looks at his ability to pay for the bike. The following chart shows the reference group influence at this stage.

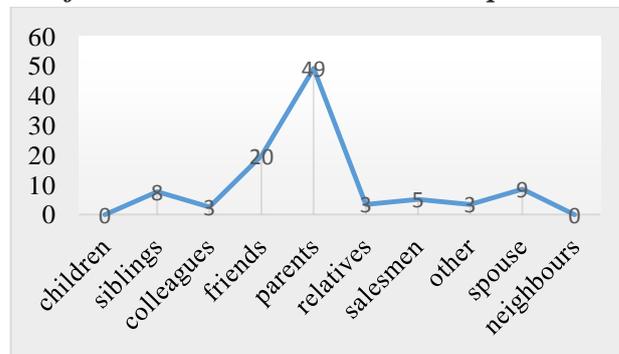


Fig. 4: Looking at Affordability of the buyer

It is shown that parents have the highest influence at this stage in the purchase process.

**Stage 3: Quality Assurance, Life of Bike and Safety**

Once the buyer decides on the bike to be purchased and his affordability for the bike, he seeks information, about the few bikes he selected, from various sources. The following chart shows the influence exerted by these sources, on the buyer.

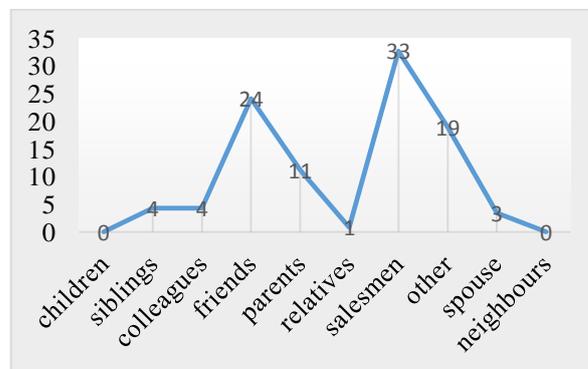


Fig. 5: Quality Assurance, Life of Bike and Safety

The following chart shows that the highest influence is salesmen followed by friends, at this stage in the purchase process.

**Stage 4: Last Minute Advice**

After looking at the features and quality of the few bikes selected, the buyer now has a few options in front of him to make the final choice. At this stage, he is influenced by various reference groups as shown below:

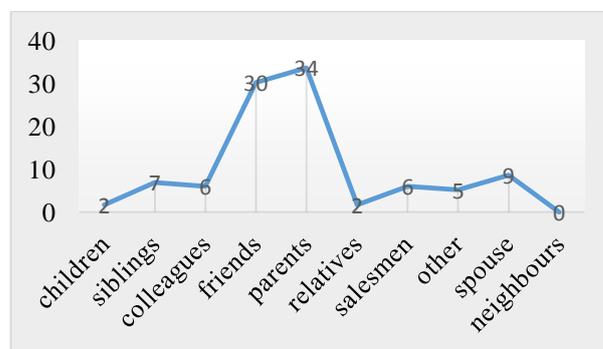


Fig. 6: Last Minute Advice

The chart shows that the buyer is highly influenced by parents at this stage, followed by friends and spouse.

**Stage 5: Feelings about the Bike purchased**

After making the purchase, the buyer finally receives his bike. He shares his feelings about his bike with several people who can influence him. These influencers are shown below:

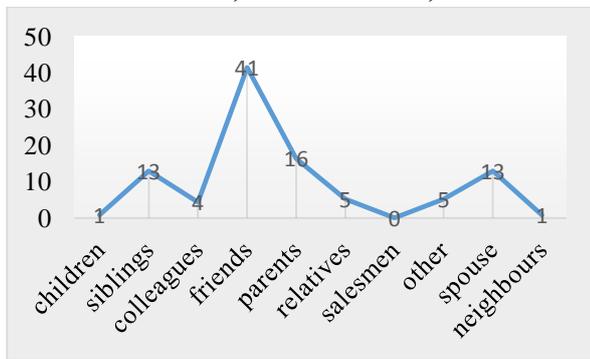


Fig. 7: Feelings about the Bike purchased

This chart shows that the buyer shares his feelings majorly with his friends, followed by parents. Thus, a buyer gets majorly influenced by his parents and friends in the entire purchase process.

4.2 SNAKE CHART

A snake chart is a tool used for presenting the data used to study the relative positioning of the brand on different attributes. In the study, the x-axis represents the various influences and the y-axis shows the Likert scale.

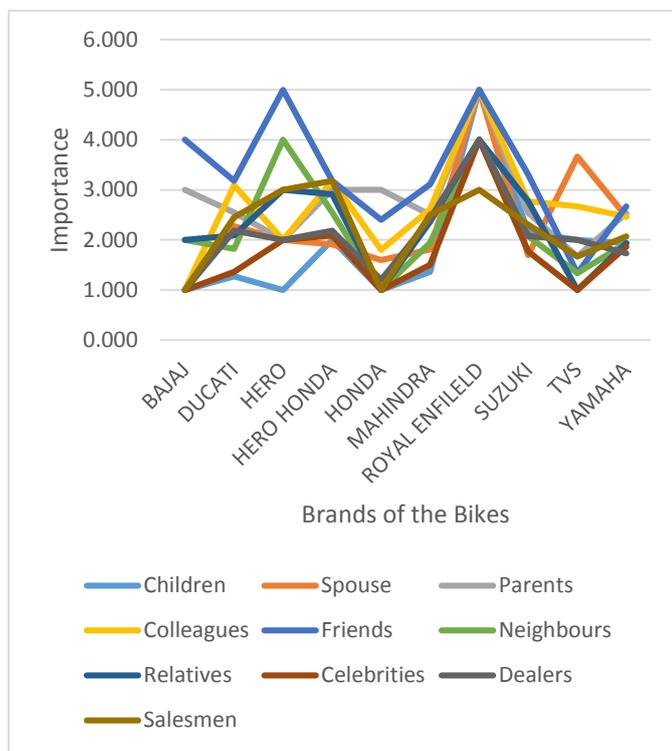


Fig. 8: Chart showing the various influencers and the degree of their influence

In the above chart, the attributes are the influences from different reference groups like children, spouse, parents, colleagues, friends, neighbours, relatives, celebrities (endorsement), dealers, and salesmen, whereas the features are the lines on the graph and are colour coded below the graph.

- For almost all brands, the influence of children is low.
- For Suzuki, influenced by a spouse is the highest and influence by relatives and celebrities is the least.
- For Bajaj, influenced by colleagues and friends is the highest.
- The highest influence for Royal Enfield is friends.
- The buyers of Ducati are influenced the most by friends and moderately by salesmen.
- Hero Honda has the highest influence on parents and the least influenced by neighbours, relatives and celebrities.

- TVS also shows the highest influence of friends.
- Mahindra also has friends as the highest influence on the buyer.
- The buyers of Yamaha have the highest influence by parents.

The following table lists the mean values of all the variables of the study.

Table 1: Mean Values of the Variables

Descriptive Statistics			
	N	Mean	Std. Deviation
Commute to work	109	4.294	1.0567
Family transport	109	3.615	1.3738
Biker friends	109	2.440	1.3501
Celebrity Endorsement	109	1.817	1.0555
Suggestion from Close Acquaintances	109	2.541	1.3370
Colleague	109	2.523	1.3649
Traffic	109	3.459	1.2288
Unreliable Public Transport	109	3.312	1.3451
Price	109	3.780	1.1735
Brand	109	4.156	1.0986
Celebrity endorsement	109	1.972	1.1423
Needs	109	4.239	1.1698
Features	109	4.312	1.0775
Others reasons to buy a bike	109	3.138	1.0926
During Bike Purchase	109	4.486	1.8739
Affordability	109	4.651	1.7500
Quality and Life of bike	109	5.587	2.2575
Last Minute Decision	109	4.495	2.0486
Feelings after Bike Purchase	109	4.688	2.1930
Valid N (Listwise)	109		

The variables have been factored using factor analysis and the five key factors have been identified and listed below:

- Need-driven
- Personal assurance drove
- Expert assurance drove
- Pocket driven
- Family Driven

These five factors were further clustered into three major clusters. The clusters are listed below:

This table shows the clusters and distribution of variables in each cluster. The characteristics of each cluster are based on the dominant variable.

Table 2: Final Cluster Centers

	Cluster		
	1	2	3
Need driven	.41575	.34807	-1.64631
Personal assurance driven	.30624	-.58341	-.06750
Expert assurance driven	-.34381	.95776	-.33712
Pocket driven	.37157	-.55641	-.28842
Family driven	.02216	.18432	-.31379

In cluster 1, *Need To be Driven* and *Pocket Driven* is high. In cluster 2, *Expert Assurance Driven* is the highest. In cluster 3, *Personal Assurance Driven* is the highest.

Table 3: Number of Cases in Each Cluster

Cluster	1	60
	2	28
	3	21
Valid		109
Missing		0

The number of respondents in cluster 1 is 60, in cluster 2 are 28 and cluster 3 are 21.

**Cluster 1: Need Driven and Pocket Driven Buyers**

Cluster 1 is dominated by the need of the buyer and his ability to pay for the bike purchased. The buyers in this cluster are rational and are conscious of their purchase decisions. They look for the essential features, the brand and the price to be paid before purchase.

**Cluster 2: Expert Assurance Driven Buyers**

Cluster 2 is dominated by expert guidance and advice. Buyers in this cluster find the salesmen and the retailers highly reliable for their purchase decision. The buyers tend to even see the bikes bought by their neighbours before making the final purchase.

**Cluster 3: Personal Assurance Driven Buyers**

Cluster 3 is dominated by personal assurance from colleagues and close acquaintances. The buyers in this cluster are driven by the people they are close to. The buyers are conscious of social image and approval by their social circle.

These three clusters are further checked for independence using discriminant analysis. The groups are presented below:

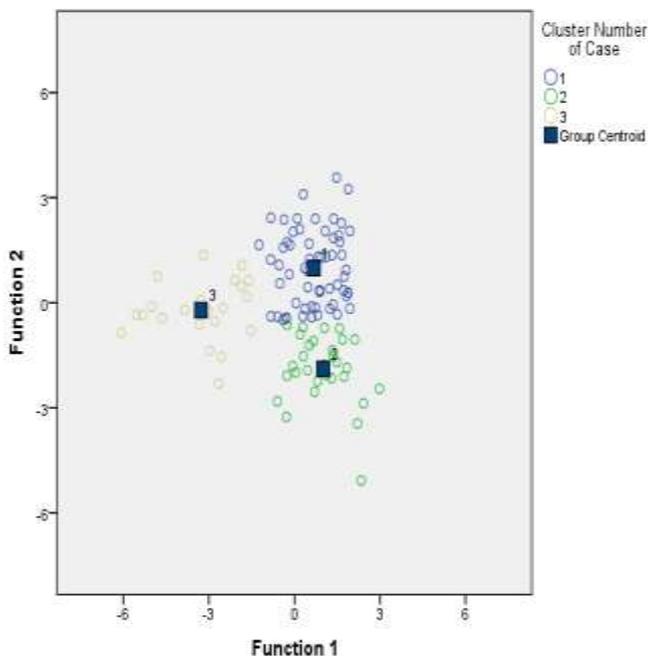


Fig. 9: Canonical Discriminant Functions

**5. QUALITATIVE ANALYSIS**

The data collected through interviews are transcribed and analysed using the MAXQDA 12 software. The brand choice of the sample is presented in the following table. The results show that 40% of the sample own Honda bikes, 15% own Hero Honda bikes, 10% own TVS bikes, 20% own Royal Enfield bikes and 15% own Bajaj bikes. A majority of the sample owns Honda bikes.

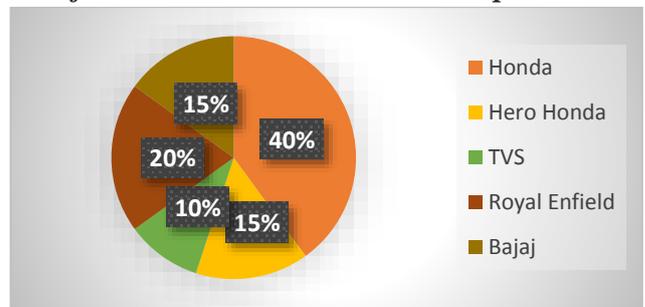


Fig. 10: Brand Choice of the Sample

The interviewees owning Honda bikes have the greatest percentage.

The data was coded and groups were formed. The groups formed after the coding are presented and discussed below:

**Group 1: Need and Features Driven Buyers**

These people look for the need to buy a bike before making a purchase. They are less driven by emotions. They focus on the bike features and do a thorough search before taking a decision. In this group, the need for the bike and its features are looked for the most. The following chart shows the characteristics of this group.

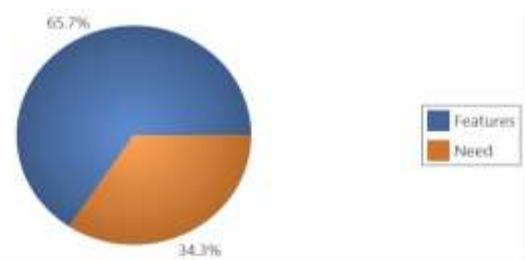


Fig. 11: Diagram showing the need and features driven buyers

**Group 2: Secondary Reference Groups Driven Buyers**

These buyers are people who need approval from an expert for a purchase. They seek advice from salesmen or retailers or from company websites to get reliable information from the experts. The buyers in this group are active on social media, they often visit company websites and focus on advertisements about the bikes they want to buy. The following diagram shows the characteristics of this group.

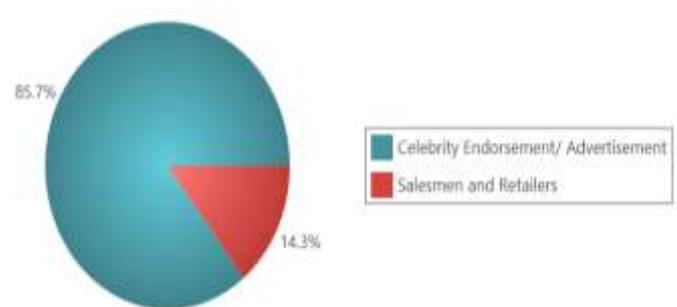
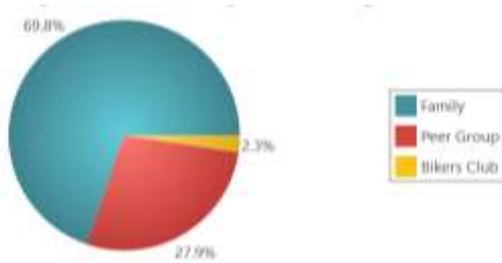


Fig. 12: Diagram showing secondary reference groups driven buyers

**Group 3: Primary Reference Groups Driven Buyers**

These buyers are people who care about social image. They get highly influenced by the people around them. They get highly influenced by their family including parents, siblings, spouse, children and relatives, friends and close acquaintances. The people belonging to this group are loud and very passionate about bikes. They are majorly bike enthusiasts who are

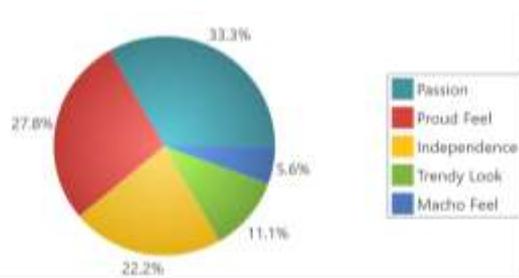
members of bikers clubs and they celebrate riding. The following diagram shows the characteristics of this group.



**Fig. 13: Diagram showing primary reference groups driven buyers**

#### **Group 4: Emotions Driven Buyers**

These buyers are heavily driven by their own emotions and feelings about owning a bike. They are emotional in nature and often exhibit their passion for bikes. They are influenced by the trend, the look of the bike, the feeling of being a man and being independent, which drives them to buy the bike. The following diagram shows the characteristics of this group.



**Fig. 14: Diagram showing emotions driven buyers**

Thus, there are three major groups formed out of Quantitative Analysis and four major Groups formed out of Qualitative Analysis.

#### **5.1 Findings of the study**

- Bike buyers can be segmented on the basis of the influences on them into four categories, with distinctive needs. They are Need and Features/Pocket Driven Buyers, Primary Reference Groups Driven Buyers/Personal Assurance Driven Buyers, Secondary Reference Groups Driven Buyers/Expert Assurance Driven Buyers and Emotions Driven Buyers.
- Approval of family and parents is crucial at the beginning of the purchase journey. The salesmen and retailers exert influence in the actual purchase stage only. This fact must be considered while designing the marketing strategy.
- The major influences on the buyer of the bike, through the stages of buying, come from family and friends. So the promotional content must be aimed at them too.
- Post-purchase reassurance is primarily from friends, the ads addressing this need or reducing post-purchase dissonance must feature friends approving the purchase.
- There is a high congruence between ad messages and customer responses, confirming that ads do influence the perception of buyers.
- Emotion is an important factor in the purchase of bikes. Promotional content must feature the factors that increase the emotional connect, like – self-worth, sense of independence etc.

#### **6. CONCLUSION**

The quantitative study was done on 109 respondents. The sample is predominantly young so the influence of parents is

high on the purchase decision of the motorbike buyer. This can be a reason why the affordability of the bike is high in this sample. Whereas there is a mixed sample the Qualitative study which was done on 20 interviewees. This can be a reason why the influences are different for different interviewees. Companies, thus, need to concentrate on the rising demand of the buyers. Marketers need to analyze the factors that affect the buyer in his purchase process. There are several factors and influences that influence the buyer at different stages in the buying process. In order to find the most influential factors and influences, this study involved the collection of data from the sample and analysis using SPSS software and MAXQDA 12 software. The findings showed that buyers of motorbikes can be grouped into four groups – Need and Features/Pocket Driven Buyers, Primary Reference Groups Driven Buyers/ Personal Assurance Driven Buyers, Secondary Reference Groups Driven Buyers/ Expert Assurance Driven Buyers and Emotions Driven Buyers. Questions in the survey regarding the factors that influence the purchase process showed that each buyer goes through five stages. The buyer is influenced by different people at different stages in the purchase process. This study found that the buyer is heavily influenced by parents when he has analyzed the need to buy a bike, his affordability and to make the last minute choice. He is heavily influenced by the salesmen when he wants information about the features and life of the bike. He is also influenced by his friends when he seeks approval from them and when he shares his feelings about his purchase decision. Thus marketers need to understand the influence of reference group on the buyer of the motorbike, need to tap on the most influential reference groups to increase sales.

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