## **DESIGN RESEARCH SEMINAR**

# STUDY OF CONSUMER PERCEPTION TOWARDS OPEN FACE HELMET DESIGNS IN INDIA

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# **DECLARATION**

I declare that this written report represents my own idea in my own words, and where others, ideas or words have been included, I have mentioned the original source. I also declare that I have adhered to all principles of academic honesty and integrity and have not falsified, misinterpreted or fabricated any idea, data, facts or source in my submission.

I understood that any violation of the above will be cause for disciplinary action by the Institute and can also penal action from the source from which proper permission has not been taken, or improperly cited.

Name - Minal Agarwal

Roll No - 176130002 Date - 22-02-2019

Sign -

# **APPROVAL SHEET**

This Industrial Design project report entitled "Study of consumer perception towards Open face helmet designs in India ", by Minal Agarwal is approved in partial fulfillment of the requirement for Master of Design degree in Industrial De sign.

Project Guide -

Prof B K Chakravarthy

# **ACKNOWLEDGMENT**

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Minal Agarwal

Date: 22-02-2019

#### 1. ABSTRACT

Helmets are an essential safety precaution while riding a two wheeler. The appearance and aesthetics of helmets plays an important role to attract buyers, ie make them choose a certain helmet and also act as a way to communicate the language of a brand. The study focuses on how the elements of design in terms of appearance and aesthetics (form, material, finish, graphics and colors) affects the buyer's perception (attention and purchase). The type of helmets considered for this study were Open face helmets from different brands in Indian Market.

Keywords: Styling, Form, Graphics, Aesthetics, Buyer's perception

#### 2. INTRODUCTION

Motorcyclists constitute the largest (71%) of vehicle users in India (1). In a population based observational study, it was found that about 22.6 % of motorcycle drivers and only 1.1% of pillion riders were found wearing helmets (1).

The Indian buyer has undergone a remarkable change over the past decade, the buyer which used to spend just on bare necessities, now indulges him/herself in spending like never before. An exposure to western shopping culture and increased pay scales has drastically changed the shopping experience for an Indian consumer.

The Initial Study included the collection of the information about the existing and most sold open face helmet designs in the Indian market. The brands which were considered for the above study were **Vega, Studds, Steelbird, Royal Enfield, and TMK**. The specifications of the helmets were also noted down, the functional aspects of the helmets were not considered for the above study. The following variables were taken into consideration - Form, Material, Finish, Graphics, color of the helmets. Age, gender of the buyer.

## 3. OBJECTIVE OF THE STUDY

The objectives of the study are:

- To study and analyze the patterns of user behavior with the change in the styling of open faced helmets.
- Study and analysis of the change in preference of users according to age and gender.

### 4. RESEARCH METHODOLOGY

## **4.1 DATA SOURCES**

To study a real life scenario, it is important to collect appropriate data. To collect data for this study the following methods were followed:

**Primary data collection**: This data is the new data which was collected for the first time, by getting answers to structured questions.

**Secondary Data collection**: This data was collected from sources like the Internet and published papers and Books.

# 4.2 Population for the study

The study was conducted in Mumbai, Maharashta, India.

# 4.3 Sample Size

The total number of respondents for the following study were 28.

## 4.4 Sampling Technique

The method of random sampling was followed in the above study between the age group of 18-60 years of age.

# 4.5 Methods of Analysis

The data collected was entered into MS- Excel Spreadsheets. The data was further analyzed through the simple Graph and Chart tools and tabulation tools of Microsoft-Excel.

# 4.6 Questionnaire

A questionnaire was floated amongst 28 respondents. We asked the participants about demographic information like name, age, gender which were the stepping stones to the study. Out of 28, 9 were female respondents (32%) and 21 were male participants (68%). The respondents were between the ages 18-60 years. (a) The participants were asked to choose one helmet which they would like to buy each from 6 groups of open face helmets. The grouping was done on the basis of similar Design Languages. The groups are:





**(b)** The participants were then also asked to choose the most preferred group out of the 6 groups listed to them.

They were also inquired about their frame of mind while choosing a certain group or a certain helmet, which included questions like what attracts them initially towards a helmet, What kind of finishes and colors affect their decisions. Also about other factors which define their decisions.

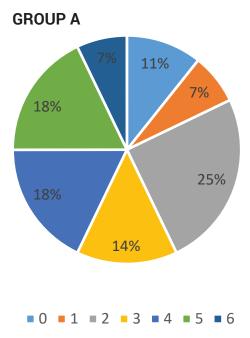
## **5.RESULTS AND DISCUSSION**

The data collected was analyzed in tabulated form and the patterns of consumer behavior were tried to be studied in the following process,

Age	Gender	Group A	Group B	Group C	Group D	Group E	Group F	Prefer Group
18	male	1	4	4	2	1	3	С
19	male	6	4	1	3	2	3	Ċ
19	female	2	0	1	2	2	1	Ċ
19	male	6	4	4	3	2	1	H
20	male	5	4	3	1	2	2	C
22	male	5	4	3	3	2	4	Ā
22	female	2	0	0	2	0	1	D
24	male	5	1	3	1	2	2	F
24	female	2	2	0	2	0	2	D
24	female	2	3	3	4	2	1	D
27	female	4	2	1	2	1	3	D
29	male	0	4	3	3	2	4	С
30	male	3	1	2	3	2	4	Ε
30	male	4	4	2	3	1	4	F
34	male	5	0	1	0	2	3	F
36	male	2	3	3	1	2	0	Α
37	female	3	2	2	1	2	1	D
39	male	4	5	1	0	2	0	Α
41	male	1	3	3	3	2	4	С
42	female	0	2	0	1	0	0	Α
43	male	4	0	2	1	2	0	D
47	female	2	2	0	1	0	0	В
47	male	3	0	0	4	0	0	Α
49	male	4	2	2	0	2	0	В
50	male	0	5	2	0	2	0	В
52	male	2	3	2	0	0	0	В
54	male	5	5	4	1	1	0	В
55	female	3	3	0	1	0	0	Α

Table 1: List of Data in tabulated form

# **5.1 USER RESPONSE**



**Chart 1**: Pie chart for User response for Group A, 0 refers to none of these

The most preferred helmet amongst group A was Helmet 2, which has a clean and shiny finish.

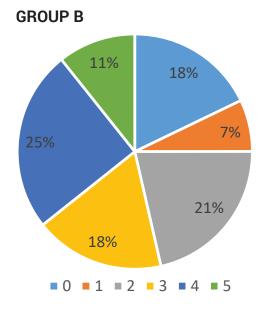


Chart 2:Pie chart for User response for Group B, 0 refers to none of these

The most preferred helmets amongst group B were Helmet 5 and 3, which were preferred due to their simple design language.

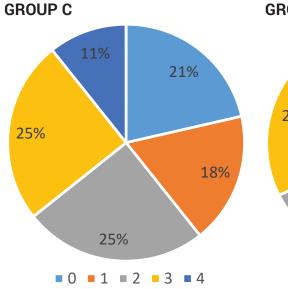
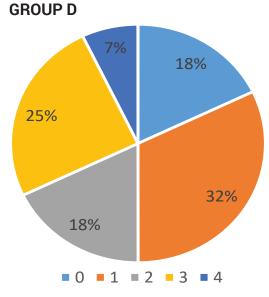


Chart 3: Pie chart for User Chart 4: Pie chart for User response none of these

The most preferred helmets amongst group C, were Helmet 2 and 3, which were preferred due to their texture and color.



response for Group C, O refers to for Group D, O refers to none of these

The most preferred helmets amongst group D were Helmet 1 which is preferred due to its trendy look and color especially amongst female respondents.

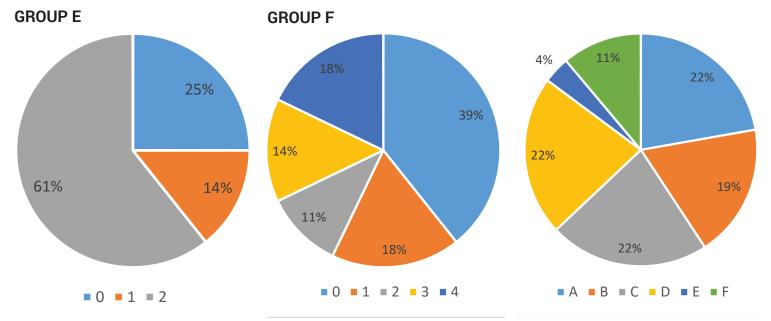


Chart 5: Pie chart for User Chart 6: Pie chart for User Chart 7: Pie chart for User response for Group E, 0 refers to response for Group F, 0 refers to response for the most preferred none of these

none of these

group. Groups A, C and D were equally preferred.

The most preferred helmets amongst group E was helmet 2.

# 5.2 AGE, GENDER AFFECT ON USER PERCEPTION

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AGE GROUP	NUMBER	MALE	FEMALE	USER PERCEPTION
18-24 yr	10	6	4	Group C amongst male respondents and group D amongst female.
25-30 yr	4	3	1	C,E,F, amongst males and D amongst females
31-40 yr	4	3	1	Group A amongst males and D amongst females
41-50 yr	7	5	2	Group B amongst males and A and B amongst females.
51-60 yr	3	2	1	Group B amongst males and A amongst females.

#### 6. CONCLUSION

There are multiple reasons for people to choose certain type of helmets for themselves, which can be graphics, styling, color, brand name apart from functional aspects and value for money. With the above study we realized that these decisions are can vary with the lifestyle and the kind of two wheeler the person owns as well. There is a certain pattern in between the choices made by an age group, through the study we realized that the older age group tends to make choices of helmets which appear more robust ,strong and have simpler styles whereas the younger age group has a choice which makes them stand out in the crowd.

## 7. REFERENCE

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