

A Framework of Biker-Bike Personality Factors within the Social Culture of Biking in India

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Abstract: A motorbike (bike) and its biker together complete a biking experience. A significantly distinct and desired relationship between biker and his bike personality leads to an emotionally satisfying biking experience. The paper establishes a framework of biker and bike personality factors within the social culture of biking in India. The findings are based on the all India survey conducted with more than 3,000 bike owners belonging to different biking segments. The respondents rated their own personality and their bike's persona on fourteen personality variables developed by Das & Singh (2008). The data was statistically analyzed using factor analysis to cluster the correlated personality variables into factors on which sample population can be distinguished. A group of five bike and three biker personality factors were identified from the study. The developed framework of eight personality factors can be used to investigate the differentiation in the biker and bike personalities within the social culture of biking in India.

Keywords: *Design Tools, Design Methodology, Product Personality, and Personality Factors.*

1. Introduction

Literature on product personality (Edwin, 2006; Govers et al.; 2004, Janlert et al., 1997; Krippendorf, 2006; Mugge, 2007) supported the viewpoint that similar to human personality people perceive personality characteristics of products which helps them understand and relate to those products. But just as different people can experience diverse emotions with the same product, similarly the product's personality can also vary with individuals. The emotive quality of a product ownership experience therefore cannot be seen in isolation to the owner or the user of that product. The person-product personalities should be evaluated on similar attributes to assess the evolved personality of the related product ownership experience. This conjoint personality indicates the product's emotive ability to satisfy or dissatisfy a person's emotive needs and desires. It is this person-product personality relationship which gives an overall emotive quality to a product experience.

Figure 1 shows the image of Lord Krishna and Arjuna on the chariot from the famous epic story of Mahabharata. During the battle at Kurukshetra Krishna became Arjuna's charioteer (one who guides) and showed Arjuna the righteous way by revealing the Bhagavad Gita to him before the battle. The image illustrates the significance of the chariot as an emotional expression of its charioteer (rider). The emotive quality of the chariot therefore cannot be seen in isolation to its charioteer. The personality of the chariot and that of the charioteer together give an emotive quality to Arjuna's riding experience in the great battle of Mahabharata.



Figure 1: A vehicle cannot be seen in isolation to its rider

Similarly a vehicle like a motorbike cannot be seen in isolation with its biker. Motorbikes constitute a category of products which give a quantum jump to social mobility and professional reach of individuals by facilitating the projection of their self to the outside world. In the process, vehicles become an expression of users' emotions. Motorbikes, being one of the most popular vehicles in India (SIAM, 2008) reflect the emotions of millions of riders across the country.

In one of the studies Das and Singh (2008) developed a cluster of adjectives that can act as personality describing variables to characterize motorbikes in India. The study was based on an online word count investigation of 31,61,092 words identified from various motorbike related websites in India. The database of words was analyzed in multiple phases to identify a cluster of fourteen personality variables relevant to biking in India. The identified personality variables are shown in figure 2.

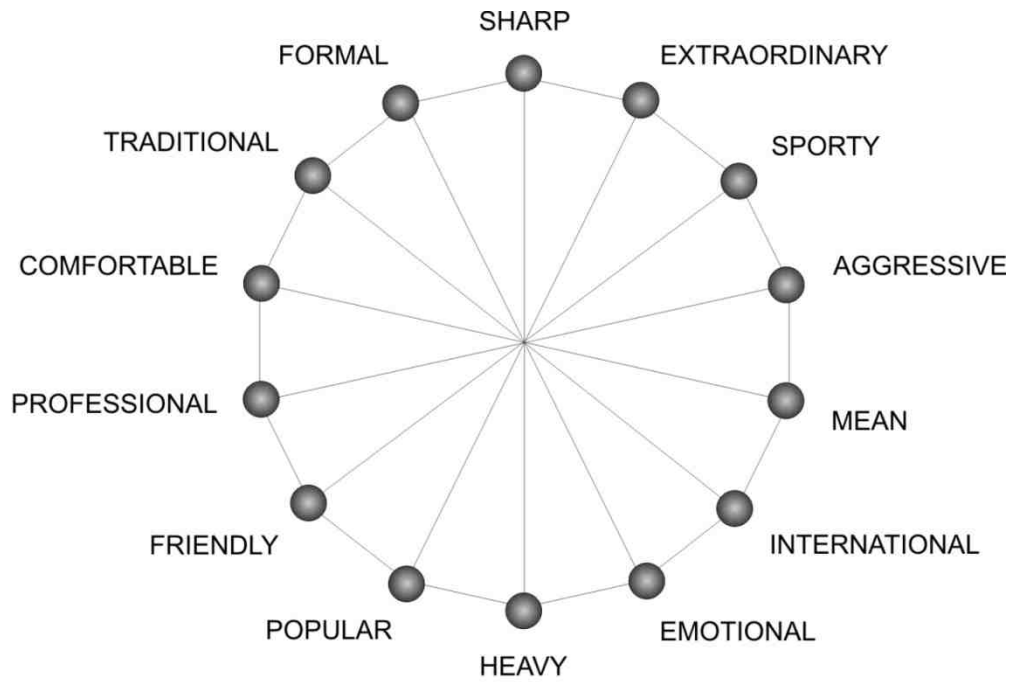


Figure 2: Cluster of fourteen personality variables that characterize motorbikes in India.

This paper uses the developed personality measurement instrument to study the personality of the biker and that of their bikes for a selected sample population in India. The prime objective of the study was to the subset of biker and bike personality factors (underlying variables) based on the correlations within the fourteen personality variables among the sample population. These biker and bike personality factors would therefore represent a set of biker and bike personality dimensions on which the bikers in India can be distinguished.

2. Method of Study

A questionnaire based survey was conducted with 3,106 bikers from different parts of the country. More than 10,000 motorbike owners of around 23 different motorbikes belonging to 24 different states of India constituted the sample population. The respondents were asked to rate their self as well as their bikes' personality on the 14 personality variables developed by Das and Singh (2008). The ratings were given on a five point scale (5-strongly agree, 4-agree, 3-can't say, 2-disagree, 1-strongly disagree).

The potential respondents that were identified for the study belonged to different parts of the country. Therefore, an online investigation was considered the most suitable data collection method in the context of the study. The survey questionnaire was uploaded on a registered web link on www.surveygizmo.com and circulated to the sample population by email. A set of phone messages were also sent to the bikers informing them about the survey. The registered web link was also used as the data collection tool.

The data generated from the survey was analyzed in two phases. In the first phase the ratings given by respondents for reporting their bike's personality was studied for all personality variables. And in the second phase of analysis, the ratings given by respondents for reporting their self personality was studied for all personality variables.

2.1 Phase 1: Bike personality factors

Describing data with mean scores

The reliability of the survey questionnaire was tested using the Cronbach's Alpha test (see table 1). The Cronbach Apla coefficient value of '0.823' establishes the reliability of the survey questionnaire. Table 1 shows the mean ratings for the bike personalities for the sample population of 3,106. Personality variables like 'friendly, comfortable, popular, formal and professional' have mean ratings above '4' and can therefore be seen as the dominant bike personality traits among the sample population. Whereas the personality variables 'sharp, sporty, international, aggressive, traditional, extraordinary, muscular, emotional and mean' have mean ratings between '3 and 4'. These can be seen as neutral bike personality traits among the sample population. The variable 'heavy' seems to be the weakest personality trait (mean rating is than '3').

Parametric test of correlation

Correlation matrix was prepared to study the correlation between the 14 personality variables (see table 2).

A correlation value (c) lies between -1 and +1. The following range of correlation values signifies:

$0 < c < 0.5$ - positive correlation

$0.5 < c < 1$ - strong positive correlation

$-0.5 < c < 0$ - negative correlation

$-1 < c < -0.5$ - strong negative correlation

The eight sets of opposite personality variables- 'formal-emotional, traditional-international, heavy-sharp, comfortable-aggressive, professional-sporty, popular-extraordinary and friendly-mean', were studied first. All sets had a positive correlation ($0 < c < 0.5$).

A strong positive correlation ($0.5 < c < 1$) was seen between 'extraordinary-international', 'sharp-sporty' and 'comfortable-friendly'. Strong positive correlation implied that respondents gave distinct congruent ratings to these personality variables. Similarly higher positive correlation ($0.4 < c < 0.5$) was also seen between 'professional and friendly/comfortable', 'sporty and aggressive/international/extraordinary' and 'sharp and aggressive/international/extraordinary'.

No strong negative correlation ($-0.5 < c < 0$) was observed. Some sets of personality variables which had negative correlation ($-0.5 < c < 0$) are: 'formal-heavy/aggressive/sporty' and 'heavy-popular'. Thus, while 'formal' had positive correlation value with its opposite personality variable 'emotional', it had negative correlation with 'heavy, aggressive and sporty'. This implies that those respondents who rate their bike as 'formal' may not rate their bike as 'heavy, aggressive and sporty' and vice versa.

The study of the correlation matrix indicates correlation between some personality variables. However, the nature and level of correlation was different for different personality variables. The study was therefore followed by a factor analysis (principal component analysis) to study the possibility of clustering personality variables into personality factors.

Factor Analysis (principal component analysis) with varimax rotation technique with Kaiser Normalization

Table 3 shows the results of the KMO and Bartlett test. A high Kaiser-Meyer-Olkin measure of sampling adequacy (0.88) ascertains the reliability of the factor score. The following three *bike personality factors* were identified:

Bike personality factor 1

My bike is INTERNATIONAL
My bike is EXTRAORDINARY
My bike is SHARP
My bike is SPORTY
My bike is AGGRESSIVE
My bike is HEAVY
My bike is MEAN
My bike is EMOTIONAL

Bike personality factor 2

My bike is FRIENDLY
My bike is COMFORTABLE
My bike is PROFESSIONAL
My bike is POPULAR

Bike personality factor 3

My bike is TRADITIONAL
My bike is FORMAL

These three *bike personality factors* can be seen as three personality dimensions on which the sample biker population can be distinguished. The personality variables associated with these factors are correlated. These *bike personality factors* represent a framework for classification of bike personality.

Figure 3 shows the visual representation of the different *bike personality factors* in a radar chart arrangement. As clear from the chart all opposite personality variables other than 'heavy-sharp' are grouped in different factors. The previous correlation study showed that the opposite words had positive correlation but the results of the factor analysis showed that the level of correlation was not significant enough to group these words together.

Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	3106	100
	Excluded ^a	0	0
	Total	3106	100
ion based on all variables in the procedure.			
Reliability Statistics			
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items	
0.817	0.823	14	

Item Statistics			
	Mean	Std. Deviation	N
My bike is FRIENDLY	4.35	0.631	3106
My bike is COMFORTABLE	4.34	0.714	3106
My bike is POPULAR	4.25	0.828	3106
My bike is FORMAL	4.07	0.836	3106
My bike is PROFESSIONAL	4.07	0.819	3106
My bike is SHARP	3.71	0.947	3106
My bike is SPORTY	3.67	1.052	3106
My bike is INTERNATIONAL	3.57	1.01	3106
My bike is AGGRESSIVE	3.48	1.081	3106
My bike is TRADITIONAL	3.45	1.018	3106
My bike is EXTRAORDINARY	3.4	1.101	3106
My bike is EMOTIONAL	3.23	0.95	3106
My bike is MEAN	3.01	1.034	3106
My bike is HEAVY	2.75	1.088	3106

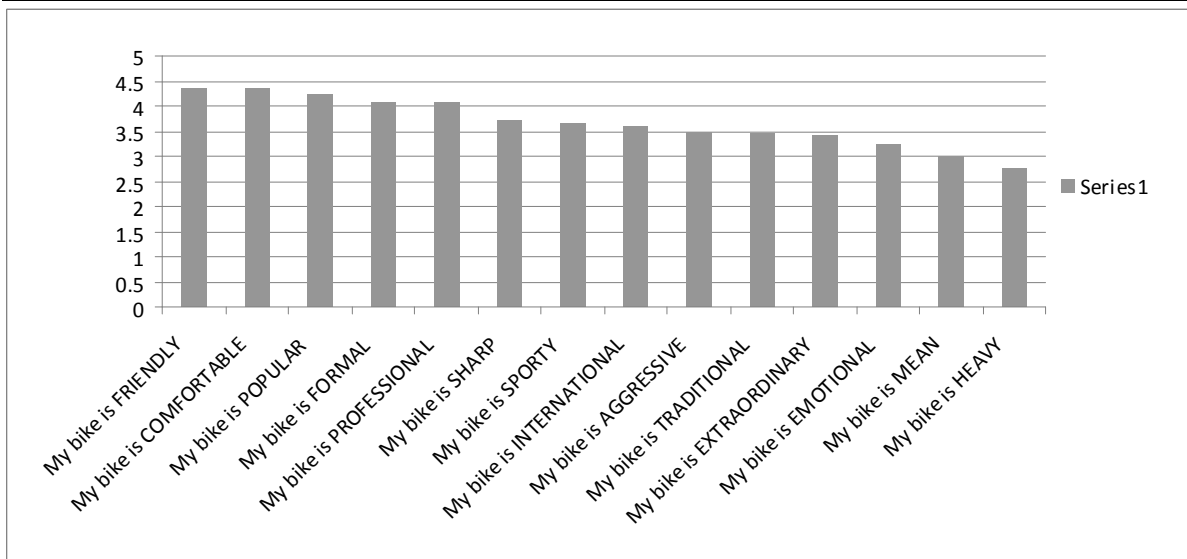


Table 1: Mean ratings for bike personalities on each personality variable

Inter-Item Correlation Matrix

	My bike is FORMAL	My bike is FRIENDLY	My bike is COMFORTABLE	My bike is PROFESSIONAL	My bike is HEAVY	My bike is TRADITIONAL	My bike is POPULAR	My bike is EMOTIONAL	My bike is MEAN	My bike is AGGRESSIVE	My bike is SPORTY	My bike is SHARP	My bike is INTERNATIONAL	My bike is EXTRAORDINARY
My bike is FORMAL	1	0.269	0.181	0.276	-0.052	0.382	0.209	0.093	0.071	-0.013	-0.021	0.066	0.121	0.109
My bike is FRIENDLY	0.269	1	0.557	0.484	0.038	0.159	0.307	0.196	0.077	0.268	0.308	0.315	0.339	0.323
My bike is COMFORTABLE	0.181	0.557	1	0.463	0.047	0.122	0.327	0.165	0.07	0.273	0.319	0.315	0.349	0.347
My bike is PROFESSIONAL	0.276	0.484	0.463	1	0.047	0.211	0.316	0.232	0.095	0.225	0.247	0.278	0.332	0.316
My bike is HEAVY	-0.052	0.038	0.047	0.047	1	0.063	-0.026	0.193	0.281	0.307	0.27	0.234	0.154	0.227
My bike is TRADITIONAL	0.382	0.159	0.122	0.211	0.063	1	0.203	0.174	0.18	0.078	0.025	0.107	0.17	0.152
My bike is POPULAR	0.209	0.307	0.327	0.316	-0.026	0.203	1	0.179	0.078	0.175	0.169	0.23	0.343	0.281
My bike is EMOTIONAL	0.093	0.196	0.165	0.232	0.193	0.174	0.179	1	0.312	0.278	0.203	0.238	0.244	0.281
My bike is MEAN	0.071	0.077	0.07	0.095	0.281	0.18	0.078	0.312	1	0.318	0.157	0.238	0.188	0.219
My bike is AGGRESSIVE	-0.013	0.268	0.273	0.225	0.307	0.078	0.175	0.278	0.318	1	0.452	0.447	0.336	0.384
My bike is SPORTY	-0.021	0.308	0.319	0.247	0.27	0.025	0.169	0.203	0.157	0.452	1	0.551	0.406	0.409
My bike is SHARP	0.066	0.315	0.315	0.278	0.234	0.107	0.23	0.238	0.238	0.447	0.551	1	0.442	0.458
My bike is INTERNATIONAL	0.121	0.339	0.349	0.332	0.154	0.17	0.343	0.244	0.188	0.336	0.406	0.442	1	0.544
My bike is EXTRAORDINARY	0.109	0.323	0.347	0.316	0.227	0.152	0.281	0.261	0.219	0.384	0.409	0.458	0.544	1

	Item-Total Statistics				Cronbach's Alpha If Item Deleted
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	
My bike is FORMAL	53.43	60.88	0.209	0.237	0.819
My bike is FRIENDLY	53.15	59.347	0.469	0.41	0.807
My bike is COMFORTABLE	53.16	58.842	0.452	0.405	0.807
My bike is PROFESSIONAL	53.43	58.038	0.448	0.341	0.806
My bike is HEAVY	54.75	58.019	0.308	0.232	0.815
My bike is TRADITIONAL	54.05	58.859	0.282	0.217	0.816
My bike is POPULAR	53.25	58.972	0.366	0.225	0.81
My bike is EMOTIONAL	54.27	57.61	0.402	0.19	0.808
My bike is MEAN	54.49	57.469	0.368	0.226	0.811
My bike is AGGRESSIVE	54.02	54.622	0.533	0.373	0.799
My bike is SPORTY	53.83	55.2	0.512	0.435	0.801
My bike is SHARP	53.79	55.203	0.583	0.427	0.797
My bike is INTERNATIONAL	53.93	54.717	0.574	0.408	0.797
My bike is EXTRAORDINARY	54.1	53.377	0.604	0.441	0.794

Scale Statistics		
Variance	Std. Deviation	N of Items
64.305	8.019	14

Table 2: Inter-Item correlation matrix for bike personality ratings on each personality variable

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.88
Bartlett's Test of Sphericity	Approx. Chi-Square	13231.479
	df	120
	Sig.	0

Communalities		
	Initial	Extraction
My bike is FORMAL	1	0.538
My bike is FRIENDLY	1	0.58
My bike is COMFORTABLE	1	0.589
My bike is PROFESSIONAL	1	0.519
My bike is HEAVY	1	0.454
My bike is TRADITIONAL	1	0.549
My bike is POPULAR	1	0.375
My bike is EMOTIONAL	1	0.313
My bike is MEAN	1	0.491
My bike is AGGRESSIVE	1	0.516
My bike is SPORTY	1	0.583
My bike is SHARP	1	0.528
My bike is INTERNATIONAL	1	0.485
My bike is EXTRAORDINARY	1	0.519
Extraction Method: Principal Component Analysis.		

Table 3: Factor analysis (principal component analysis)

Component Matrixa			
	Component		
	1	2	3
My bike is EXTRAORDINARY	0.714		
My bike is SHARP	0.696		
My bike is INTERNATIONAL	0.69		
My bike is SPORTY	0.656		
My bike is AGGRESSIVE	0.64	-0.325	
My bike is FRIENDLY	0.596	0.396	
My bike is COMFORTABLE	0.596	0.342	-0.342
My bike is PROFESSIONAL	0.568	0.418	
My bike is EMOTIONAL	0.466		0.305
My bike is POPULAR	0.462	0.402	
My bike is FORMAL		0.614	0.32
My bike is HEAVY	0.37	-0.504	
My bike is TRADITIONAL		0.405	0.544
My bike is MEAN	0.402		0.515
Extraction Method: Principal Component Analysis.			
a. 3 components extracted.			

Rotated Component Matrixa			
	Component		
	1	2	3
My bike is AGGRESSIVE	0.694		
My bike is SPORTY	0.67	0.311	
My bike is SHARP	0.64	0.343	
My bike is HEAVY	0.623		
My bike is EXTRAORDINARY	0.586	0.408	
My bike is MEAN	0.496		0.48
My bike is INTERNATIONAL	0.495	0.483	
My bike is EMOTIONAL	0.4		0.366
My bike is FRIENDLY		0.742	
My bike is COMFORTABLE		0.736	
My bike is PROFESSIONAL		0.695	
My bike is POPULAR		0.573	
My bike is TRADITIONAL			0.697
My bike is FORMAL		0.445	0.546
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 8 iterations.			

Component Transformation Matrix			
Component	1	2	3
1	0.75	0.625	0.219
2	-0.66	0.679	0.322
3	0.053	-0.386	0.921
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			

Table 3(continued): Factor analysis (principal component analysis)

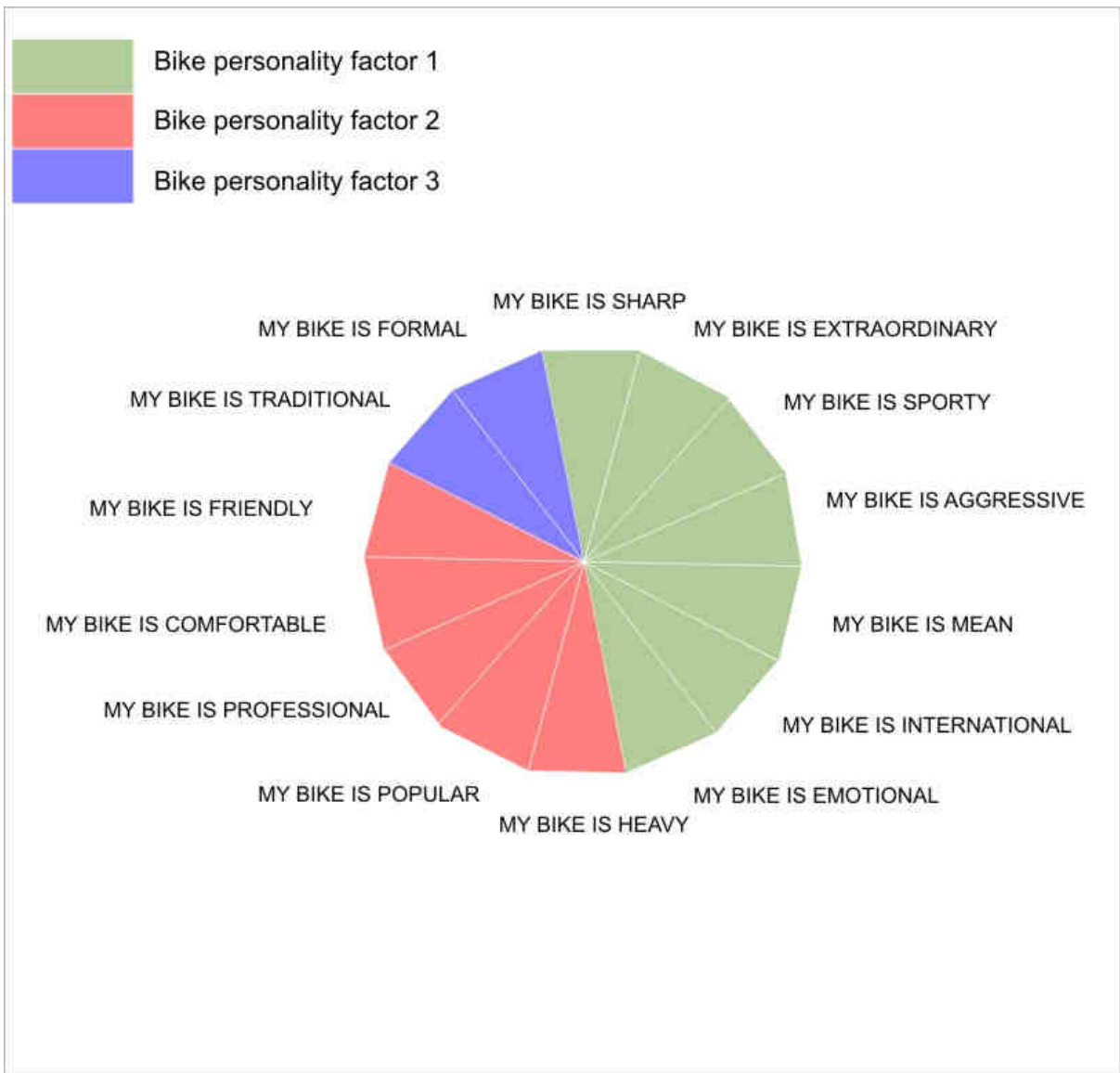


Figure 3: *Bike personality factors*

2.2 Phase 2: Biker personality factors

Describing data with mean scores

The reliability of the survey questionnaire was tested using the Cronbach's Alpha test. The Cronbach Alpha coefficient value of '0.0675' establishes the reliability of the survey questionnaire (see table 4). Table 4 shows the mean ratings for the biker personalities for the sample population of 3,106. Biker personality variables 'friendly, professional, comfortable and formal and professional' have mean ratings above '4' and can therefore be seen as the dominant bike personality traits among the sample population. Whereas, personality variables 'sharp, emotional, sporty, popular, traditional, aggressive, international and extraordinary' have mean ratings between '3 and 4' and can be seen as neutral personality traits of the sample population. 'Mean and heavy' seem to be the weak personality traits as their mean score is less than '3'.

Parametric test of correlation

Correlation matrix was prepared to study the correlation between the 14 personality variables (see table 5).

The eight sets of opposite personality variables 'formal-emotional, traditional-international, heavy-sharp, comfortable-aggressive, professional-sporty, popular-extraordinary and friendly-mean', were studied first. Negative correlation ($-0.5 < c < 0$) was observed between 'mean and friendly' and as well as between 'aggressive and comfortable'. All other sets have a positive correlation ($0 < c < 0.5$).

No strong positive correlation ($0.5 < c < 1$) neither strong negative correlation ($-0.5 < c < 0$) was seen between the biker personalities reported on the 14 personality variables. Most of the variables seem to have a positive correlation. Some set of personality variables which have a positive correlation value > 0.2 are as follows: 'professional with comfortable /friendly/ popular/ sharp, 'international with popular/sports/sharp/extraordinary', 'sharp with sports/ popular' and 'mean with aggressive'.

The study of the correlation matrix indicated correlation between some personality variables. However, the nature and level of correlation was different for different personality variables. The study was therefore followed by a factor analysis (principal component analysis) to study the possibility of clustering the personality variables into *biker personality factors*.

Factor Analysis (principal component analysis) with varimax rotation technique with Kaiser Normalization

Table 6 shows the results of the KMO and Bartlett test. A high Kaiser-Meyer-Olkin measure of sampling adequacy (0.772) ascertains the reliability of the factor score. The following five *biker personality factors* were identified:

Biker personality factor 1

I am INTERNATIONAL

I am EXTRAORDINARY

I am SHARP

I am SPORTY

I am POPULAR

Biker personality factor 2

I am MEAN

I am TRADITIONAL

I am HEAVY

I am AGGRESSIVE

Biker personality factor 3

I am COMFORTABLE

I am FRIENDLY

Biker personality factor 4

I am FORMAL

I am PROFESSIONAL

Biker personality factor 5

I am EMOTIONAL

These five *biker personality factors* can be seen as five personality dimensions on which the sample biker population can be distinguished. The variables associated with these factors are correlated. These *biker personality factors* (see figure 4) represent a framework for classification of biker personality.

Scale: ALL VARIABLES

Case Processing Summary			
Cases		N	%
	Valid	3106	100
	Excluded ^a	0	0
	Total	3106	100

^a Listwise deletion based on all variables in the procedure.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.675	0.683	14

Item Statistics			
	Mean	Std. Deviation	N
I am FRIENDLY	4.48	0.577	3106
I am PROFESSIONAL	4.27	0.718	3106
I am COMFORTABLE	4.2	0.684	3106
I am FORMAL	4.16	0.695	3106
I am SHARP	3.93	0.733	3106
I am EMOTIONAL	3.78	0.957	3106
I am SPORTY	3.74	0.943	3106
I am POPULAR	3.64	0.834	3106
I am TRADITIONAL	3.48	1.022	3106
I am AGGRESSIVE	3.21	1.127	3106
I am INTERNATIONAL	3.17	1.009	3106
I am EXTRAORDINARY	3.16	0.969	3106
I am MEAN	2.86	1.178	3106
I am HEAVY	2.56	1.104	3106

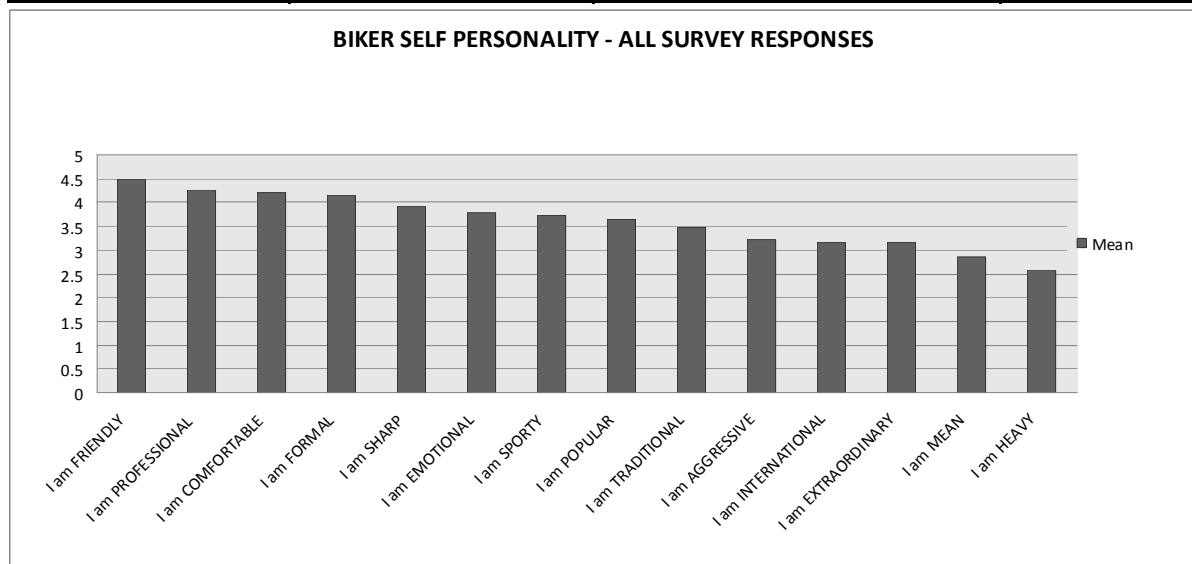


Table 4: Mean ratings for biker personalities on each personality variable

Inter-Item Correlation Matrix

	I am FORMAL	I am FRIENDLY	I am COMFORTABLE	I am PROFESSIONAL	I am HEAVY	I am TRADITIONAL	I am POPULAR	I am EMOTIONAL	I am MEAN	I am AGGRESSIVE	I am SPORTY	I am SHARP	I am INTERNATIONAL	I am EXTRAORDINARY
I am FORMAL	1	0.108	0.082	0.221	0.053	0.157	0.122	0.063	0.064	0.017	0.067	0.158	0.061	0.094
I am FRIENDLY		1	0.246	0.16	0.008	0.013	0.214	0.098	-0.037	0.001	0.183	0.188	0.09	0.094
I am COMFORTABLE			1	0.16	0.062	0.092	0.163	0.009	0.031	-0.026	0.178	0.122	0.13	0.13
I am PROFESSIONAL				1	0.075	0.075	0.202	0.025	0.019	0.034	0.121	0.234	0.193	0.143
I am HEAVY					1	0.198	0.063	0.072	0.195	0.161	0	0.031	0.103	0.124
I am TRADITIONAL						1	0.055	0.122	0.168	0.117	0.061	0.068	0.018	0.089
I am POPULAR							1	0.137	0.011	0.088	0.16	0.246	0.282	0.282
I am EMOTIONAL								1	0.035	0.16	0.049	0.105	0.077	0.099
I am MEAN									1	0.306	0.026	0.074	0.045	0.123
I am AGGRESSIVE										1	0.142	0.143	0.11	0.19
I am SPORTY											1	0.248	0.212	0.196
I am SHARP												1	0.247	0.29
I am INTERNATIONAL													1	0.389
I am EXTRAORDINARY														1

	Item-Total Statistics					Cronbach's Alpha if Item Deleted
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Item Variance	
I am FORMAL	52.17	35.739	0.213	0.092	0.667	0.667
I am FRIENDLY	51.85	36.373	0.185	0.13	0.67	0.67
I am COMFORTABLE	52.13	35.836	0.207	0.116	0.668	0.668
I am PROFESSIONAL	52.06	35.336	0.251	0.137	0.664	0.664
I am HEAVY	53.77	33.686	0.241	0.115	0.666	0.666
I am TRADITIONAL	52.85	33.904	0.256	0.116	0.663	0.663
I am POPULAR	52.69	34.037	0.335	0.196	0.654	0.654
I am EMOTIONAL	52.55	35.152	0.17	0.085	0.674	0.674
I am MEAN	53.47	32.974	0.289	0.179	0.663	0.663
I am AGGRESSIVE	53.12	32.757	0.308	0.168	0.656	0.656
I am SPORTY	52.59	33.824	0.29	0.168	0.656	0.656
I am SHARP	52.4	34.34	0.363	0.194	0.652	0.652
I am INTERNATIONAL	53.16	32.863	0.356	0.231	0.649	0.649
I am EXTRAORDINARY	53.17	32.214	0.44	0.268	0.638	0.638

Scale Statistics		
Mean	Variance	N of Items
56.33	37.696	14

Table 5: Inter-Item correlation matrix for biker personality ratings on each personality variable

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.772
Bartlett's Test of Sphericity	Approx. Chi-Square	5114.092
	df	120
	Sig.	0
Communalities		
	Initial	Extraction
I am FORMAL	1	0.611
I am FRIENDLY	1	0.473
I am COMFORTABLE	1	0.58
I am PROFESSIONAL	1	0.442
I am HEAVY	1	0.414
I am TRADITIONAL	1	0.485
I am POPULAR	1	0.397
I am EMOTIONAL	1	0.764
I am MEAN	1	0.501
I am AGGRESSIVE	1	0.483
I am SPORTY	1	0.362
I am SHARP	1	0.428
I am INTERNATIONAL	1	0.499
I am EXTRAORDINARY	1	0.521

Extraction Method: Principal Component Analysis.

Table 6: Factor analysis (principal component analysis)

Component Matrixa					
	Component				
	1	2	3	4	5
I am EXTRAORDINARY	0.628				
	0.585				
I am INTERNATIONAL	0.567				
I am SHARP	0.56				
I am POPULAR	0.536				
I am SPORTY	0.48				
I am PROFESSIONAL	0.423				
I am MEAN		0.62			
I am DELICATE		0.488			
I am AGGRESSIVE		0.465			
I am FRIENDLY		-0.426			
I am FORMAL			0.544		-0.426
I am TRADITIONAL			0.493		
I am EMOTIONAL				0.809	
I am COMFORTABLE					0.492
I am HEAVY					
Extraction Method: Principal Component Analysis.					
a. 5 components extracted.					

Rotated Component Matrixa					
	Component				
	1	2	3	4	5
I am INTERNATIONAL	0.704				
I am EXTRAORDINARY	0.7				
I am MUSCULAR	0.565				
I am SHARP	0.536				
I am SPORTY	0.5				
I am POPULAR	0.481				
I am MEAN		0.682			
I am TRADITIONAL		0.589			
I am HEAVY		0.588			
I am AGGRESSIVE		0.467			
I am DELICATE		0.423			
I am COMFORTABLE			0.703		
I am FRIENDLY			0.626		
I am FORMAL				0.773	
I am PROFESSIONAL				0.589	
I am EMOTIONAL					0.865
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.					
a. Rotation converged in 7 iterations.					

Component Transformation Matrix					
Component	1	2	3	4	5
1	0.791	0.39	0.275	0.341	0.176
2	-0.15	0.815	-0.531	-0.174	0.033
3	-0.575	0.284	0.387	0.659	0.073
4	-0.117	-0.051	0.093	-0.241	0.958
5	-0.092	0.317	0.696	-0.601	-0.214
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.					

Table 6(continued): Factor analysis (principal component analysis)

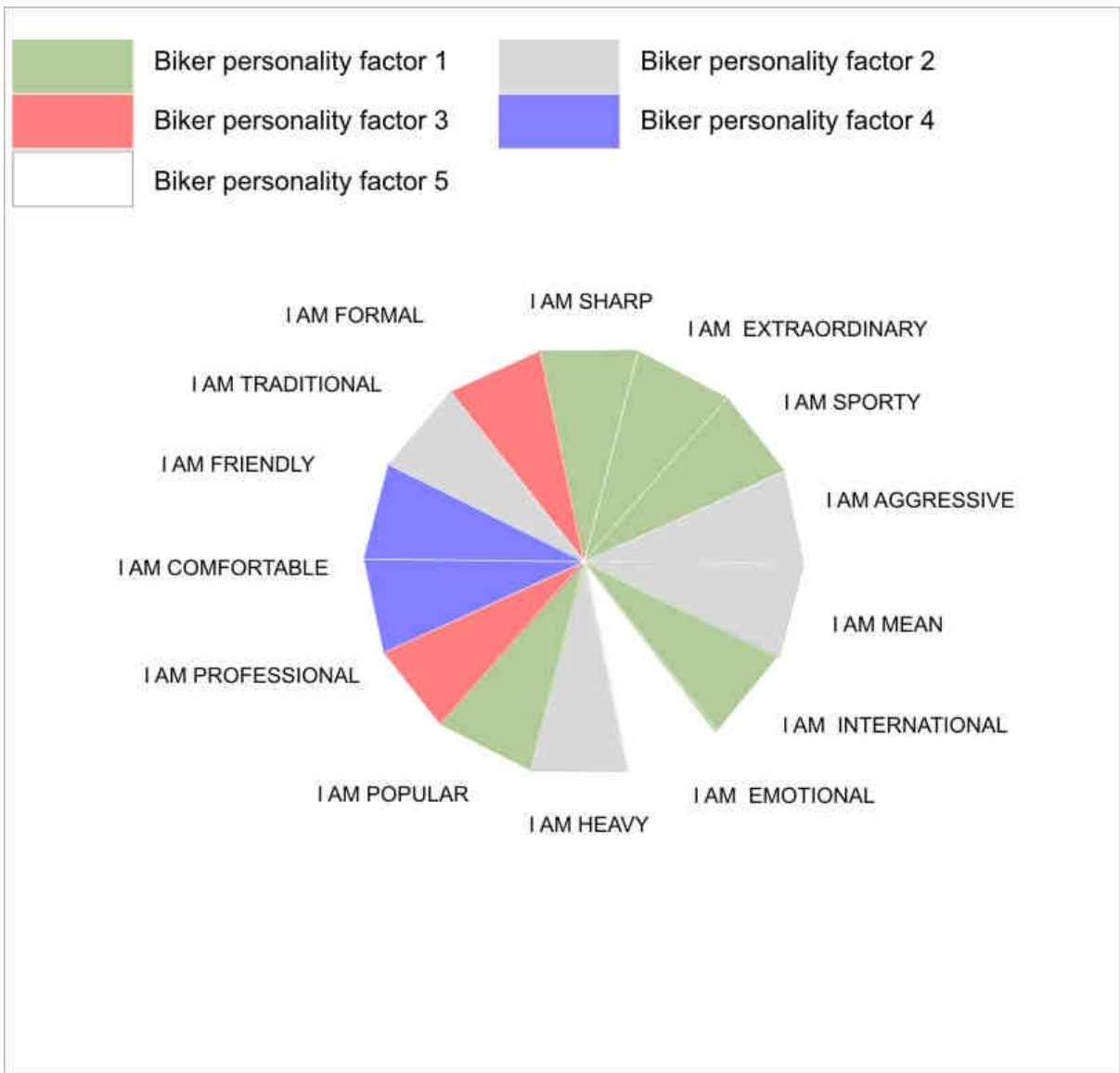


Figure 4: *Biker personality factors*

3. Conclusion

The results of the study lead to the identification of eight personality factors (three bike and five biker personality factors) for biking in India. The identified factors represent a framework of personality dimensions which can be used to investigate the difference in personalities of bikers and bikes within the social cultural precincts of biking in India. Furthermore, the assessment of biker and bike personalities would also allow designers to study the desired relationship between a biker and his bike. This information would enable designers to create new motorbike styles with enhanced desirability and certainty of success in the marketplace.

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