

CHAPTER-6 Data Analysis, Discussion and Interpretations

6.1 Demographic Profile

Total 1000 respondents were approached in this study from four cities of Gujarat mainly Ahamedabad, Baroda, Bharuch and Anand. Their demographic details are given in the table below.

Demographic Profile

Table-6.1

(Data given in number and %)

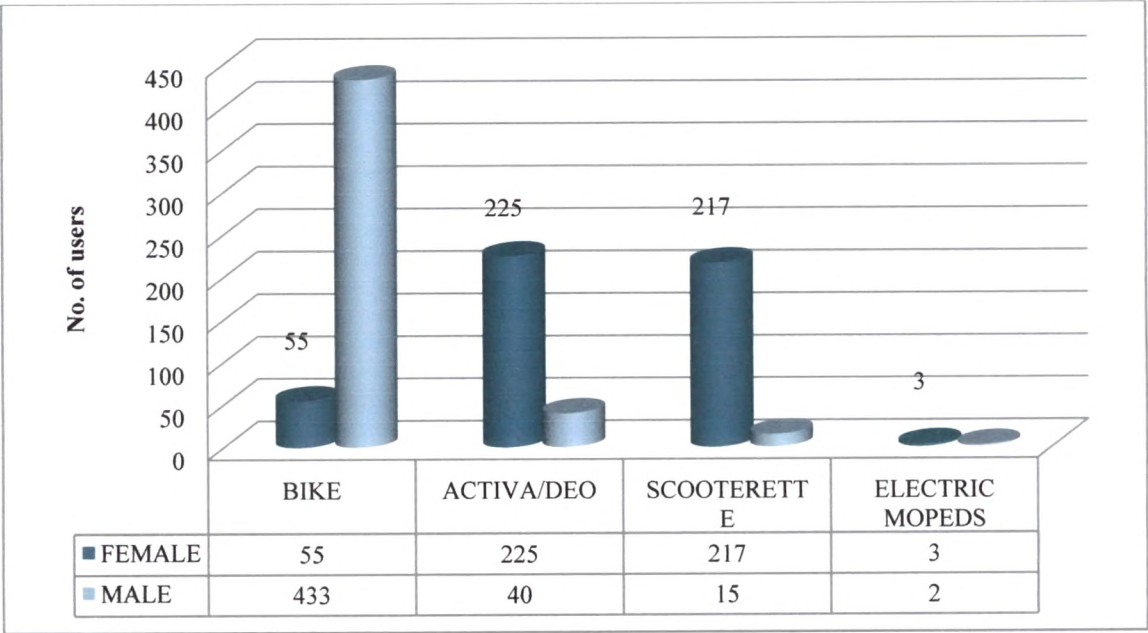
Age (years)	13-21	22-45	46-55	56 and above	-	Total
Frequency	368 (36.83%)	604(60.46%)	25(2.5%)	2(0.2%)	-	999
Education	Secondary	Higher Secondary	Graduation	Post-graduation	Any other	-
Frequency	41 (4.16%)	124 (12.5%)	555 (56.3%)	254 (25.78%)	11 (1.11%)	985
Occupation	Student	Service	Business	Professional Practice	Any other	-
Frequency	429 (43.20%)	428(43.10%)	89 (8.96%)	18 (1.81%)	29 (2.92%)	993
Income in Rs. monthly	Below 5000	6000 to 15000	16000 to 25000	26000 and above	-	-
Frequency	152 (25.04%)	338 (55.68%)	59 (9.71%)	58 (9.55%)	-	607
Gender	Male	Female	-	-	-	
Frequency	499(50.05%)	498(49.94%)	-			997
Family Members	1 to 2	3 to 4	5 and above	-	-	
Frequency	99 (11.26%)	538 (61.20%)	242 (27.53%)	-	-	879

Table-6.2 Two-wheeler Type used by respondents in %

TWO WHEELER TYPE USED BY – MALE				
NUMBER OF RESPONDENTS IN %	BIKE	ACTIVA /DEO	SCOOTTRETE	ELECTRIC MOPEDS
	88	8	3	1
TWO WHEELER TYPE USED BY – FEMALE				
NUMBER OF RESPONDENTS IN %	BIKE	ACTIVA /DEO	SCOOTTRETE	ELECTRIC MOPEDS
	11	45	43	1

Figure-6.1

Two-wheeler Type used by respondents



When asked whether they are satisfied with performance of their two-wheeler. 60% of the respondents revealed that they are very satisfied, 24% were somewhat satisfied, and 8% said they are neither satisfied nor dissatisfied, 5% were found somewhat dissatisfied and 3% were very dissatisfied.

Further, respondents were asked reasons for satisfaction or dissatisfaction with performance of two-wheeler. Details are given in the table below.

Reasons for Satisfaction with present Two-wheeler

Figure-6.2

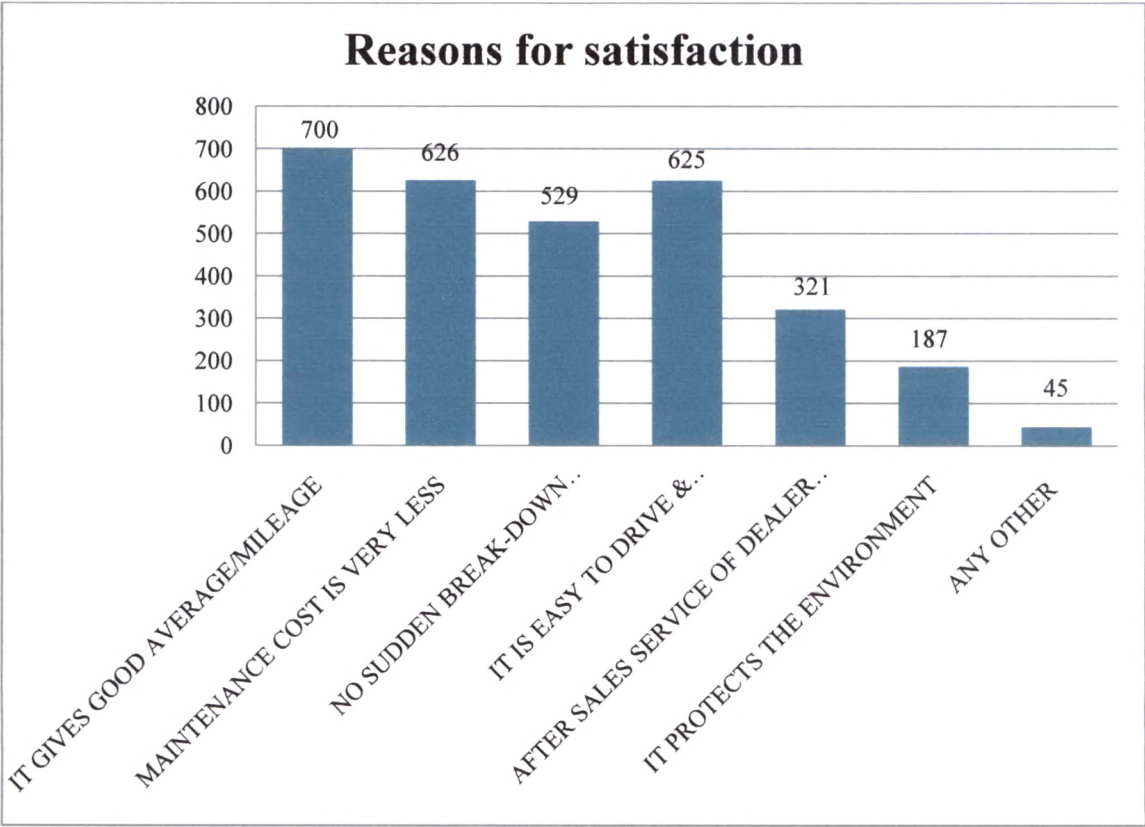


Table-6.3 Reasons for Satisfaction with present Two-wheeler

REASONS FOR SATISFACTION	Respondents in %
It gives good average/mileage	70
Maintenance cost is very less	62.6
No sudden break-down is experienced	52.9
It is easy to drive and comfortable	62.5
After sales service is good	32.1
It protects the environment	18.7
Any other reason	4.5

Figure-6.3 Reasons for dissatisfaction with present two-wheeler

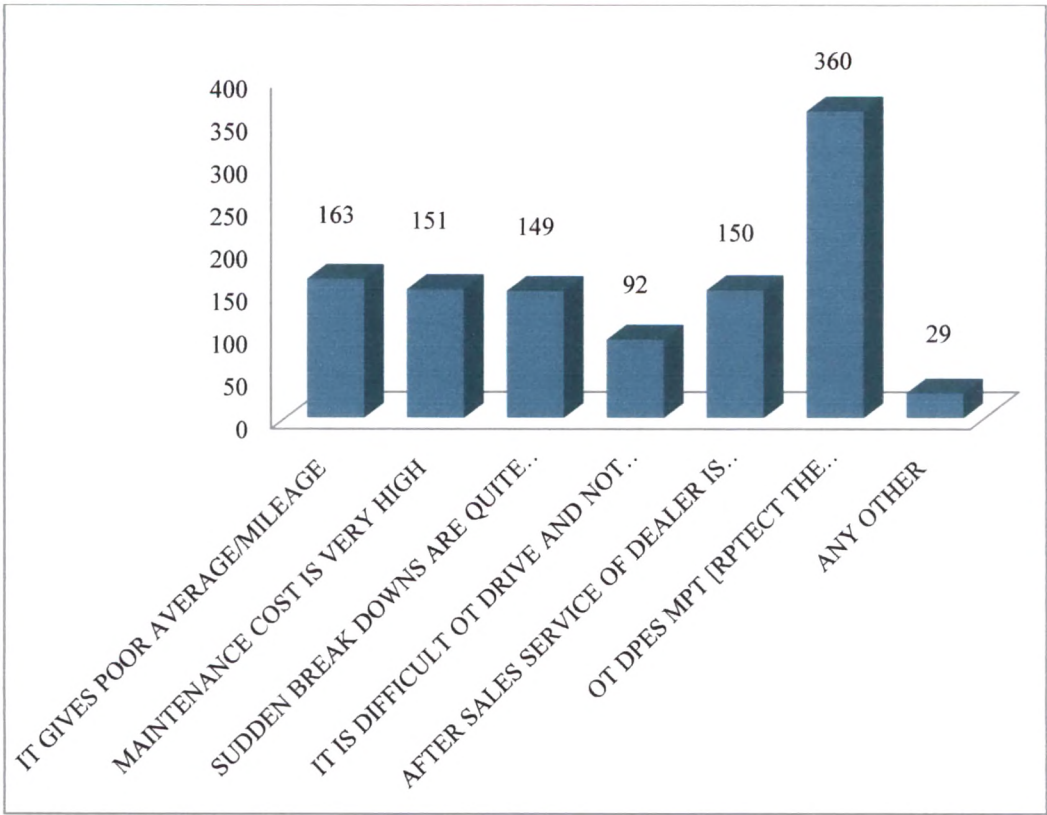


Table- 6.4 Reasons for dissatisfaction with present two-wheeler

	REASONS FOR DISSATISFACTION	RESPONDENTS IN %
1	It gives poor mileage	16.3
2	Maintenance cost is very high	15.1
3	Sudden break-downs are quite frequent	14.9
4	It is difficult to drive and not comfortable	9.2
5	After sales service of dealer is bad	15
6	It does not protect the environment	36
7	Any other reason	2.9

Furthermore, when asked, whether they will recommend their present two-wheeler brand to a friend/relative/colleague 59% said they will definitely recommend, 31% said they might or might not recommend and 10% said they would definitely not recommend.

In order to identify loyalty status of the customers, they were asked whether they will buy the same brand in future. In response to this question, 45% revealed that they will definitely buy, 34% said they might or might not buy again and 21% were having negative response i.e. they will not buy again.

It was also found that 31% respondents spend below 500 Rs. on fuel per month, 49% spend between Rs.500 and Rs.1000 on fuel p.m. and 20% spend Rs.1000 and above on fuel p.m.

It was found that 94% respondents were aware that air pollution causes illness. Only 6% were found unaware about air pollution and various illnesses. Further, as far as awareness about illness due to pollution is concerned, 15% respondents attributed disease like headache due to air pollution, 13% to eye/nose irritation, 12% to skin allergy, 11% to cold, 8% to breathing difficulty & cough, 7% to chest pain, asthma, and lung cancer, and 6% to bronchitis & drowsiness.

It was found that awareness about battery operated two-wheeler is quite high i.e. 73% respondents are already aware about this two-wheeler.

6.2 Most important Features while Buying a Two-wheeler

In this study one of the important objectives was to know which features are considered most important while buying a two-wheeler. Once it is known, right two-wheeler can be designed which has a power to perform as per customers' expectations. Respondents were asked to assign the rank of 1 to 8, in order of its importance to various features while buying a two wheeler. Here, rank 1 was assigned to the most important feature and rank 8 was assigned to the least important feature.

Following features of the two-wheeler were assigned rank by the respondents.

1. Engine/Battery capacity
2. Speed
3. Design
4. Mileage
5. Light weight and comfortable
6. Concern for environment
7. Price
8. Expenses on services

Here, chi-square test of homogeneity was performed with 5% level of significance.

This exercise revealed two important things:

1. Most important features while buying a two wheeler in order of its importance.
2. Whether ranking pattern for two wheeler features differ among various age groups, educational groups, occupational groups, income groups and gender.

Results are presented and discussed here in this chapter.



Ranking pattern for various features of two-wheeler

Cross tabulation

Table-6.5

			rank								
			1	2	3	4	5	6	7	8	Total
Features while buying a two-wheeler	Engine/Battery Capacity	Count % within Features while buying a two-wheeler	297	159	146	119	120	62	39	52	994
			29.9%	16.0%	14.7%	12.0%	12.1%	6.2%	3.9%	5.2%	100.0%
Speed	Count % within Features while buying a two-wheeler		221	240	167	113	79	72	61	40	993
			22.3%	24.2%	16.8%	11.4%	8.0%	7.3%	6.1%	4.0%	100.0%
Design	Count % within Features while buying a two-wheeler		243	213	151	113	86	68	67	55	996
			24.4%	21.4%	15.2%	11.3%	8.6%	6.8%	6.7%	5.5%	100.0%
Mileage	Count % within Features while buying a two-wheeler		220	249	143	134	96	59	46	44	991
			22.2%	25.1%	14.4%	13.5%	9.7%	6.0%	4.6%	4.4%	100.0%
Light weight & Comfortable	Count % within Features while buying a two-wheeler		162	158	124	134	89	152	103	72	994
			16.3%	15.9%	12.5%	13.5%	9.0%	15.3%	10.4%	7.2%	100.0%

Concern for environment	Count % within Features while buying a two- wheeler	48 4.8%	57 5.8%	89 9.0%	140 14.1%	112 11.3%	196 19.8%	154 15.5%	195 19.7%	991 100.0%
Price	Count % within Features while buying a two- wheeler	125 12.6%	90 9.1%	94 9.5%	129 13.0%	96 9.7%	185 18.6%	137 13.8%	137 13.8%	993 100.0%
Expenses on services	Count % within Features while buying a two- wheeler	33 3.3%	67 6.8%	46 4.6%	87 8.8%	84 8.5%	185 18.7%	173 17.5%	315 31.8%	990 100.0%
Total	Count % within Features while buying a two- wheeler	1349 17.0%	1233 15.5%	960 12.1%	969 12.2%	762 9.6%	979 12.3%	780 9.8%	910 11.5%	7942 100.0%

H_0 : All the features are equally important while buying a two-wheeler.

H_1 : All the features are not equally important while buying a two-wheeler.

Here, chi-square statistic was found to be 1.770 with 49 degrees of freedom and *p-value* .000 Hence, H_0 is rejected in favour of H_1 and we can infer that all the features are not equally important while buying a two-wheeler.

The feature "Engine/Battery capacity" was ranked as the most important feature 29.9% respondents gave 1st rank to this feature, followed by "Design" with 24.4%, "Speed" 22.3%, "Mileage" 22.2% and "Light Weight and Comfortable" 16.3%. Thus, these features emerged as the most important while buying two-wheeler. It was found that only 4.8%, respondent's assigned 1st rank to the feature "Concern for Environment" 5.8% respondents gave 2nd rank and 9% gave 3rd rank to it.

Further, only 12.6% respondents gave 1st rank to the “Price”. Thus it becomes evident that customers are not price conscious. Similarly service and maintenance was also found not so significant while buying a two-wheeler as only 3.3% gave 1st rank, 6.8% gave 2nd rank and 4.6% respondents gave 3rd rank to it. It was also of interest to know whether ranking pattern for two wheeler features differ among various age groups, educational groups, occupational groups, income groups and gender. Hence, to test this chi-square test of homogeneity was performed.

Ranking pattern of various age groups for the feature “Engine/Battery Capacity”

Cross tabulation

Table-6.6

			Engine/Battery Capacity								
			1	2	3	4	5	6	7	8	Total
Age 13 to 21	Count		65	53	62	59	52	31	18	28	368
	% within Age		17.7%	14.4%	16.8%	16.0%	14.1%	8.4%	4.9%	7.6%	100.0%
	% within Engine		22.0%	33.3%	42.5%	49.6%	43.7%	50.0%	46.2%	53.8%	37.1%
22 to 45	Count		228	98	79	56	65	29	21	24	600
	% within Age		38.0%	16.3%	13.2%	9.3%	10.8%	4.8%	3.5%	4.0%	100.0%
	% within Engine		77.0%	61.6%	54.1%	47.1%	54.6%	46.8%	53.8%	46.2%	60.5%
46 to 55	Count		3	8	5	4	2	2	0	0	24
	% within Age		12.5%	33.3%	20.8%	16.7%	8.3%	8.3%	.0%	.0%	100.0%
	% within Engine		1.0%	5.0%	3.4%	3.4%	1.7%	3.2%	.0%	.0%	2.4%
Total	Count		296	159	146	119	119	62	39	52	992
	% within Age		29.8%	16.0%	14.7%	12.0%	12.0%	6.2%	3.9%	5.2%	100.0%
	% within Engine		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

H_0 : Ranking pattern of various age groups is identical for the feature “Engine/Battery Capacity”

H_1 : Ranking pattern of various age groups is not identical for the feature “Engine/Battery Capacity”

Here, chi-square statistic was found to be 67.191 with 14 degrees of freedom and p -value .000. Here H_0 is rejected in favor of H_1 . Hence, we infer that ranking pattern differs among various age groups.

It was found that ranking pattern of teenagers (13-21 yrs) was divided & scattered between various ranks. Against this 38% respondents from the age group 22-45 years have assigned 1st rank to the engine/battery capacity. While 33.3% respondents of age group 46-55 years assigned 2nd rank to it.

Ranking pattern of various educational groups for the feature “Engine/Battery capacity”

Cross tabulation

Table-6.7

		Engine/Battery Capacity									
		1	2	3	4	5	6	7	8	Total	
Educational Group	Secondary	Count	9	7	5	7	6	2	1	2	39
		% within Educational group	23.1%	17.9%	12.8%	17.9%	15.4%	5.1%	2.6%	5.1%	100.0%
		% within Engine	3.1%	4.4%	3.5%	6.0%	5.1%	3.3%	2.7%	4.0%	4.0%
	Higher secondary	Count	37	15	14	24	15	9	5	4	123
		% within Educational group	30.1%	12.2%	11.4%	19.5%	12.2%	7.3%	4.1%	3.3%	100.0%
		% within Engine	12.5%	9.5%	9.7%	20.7%	12.7%	14.8%	13.5%	8.0%	12.6%
	Graduation	Count	163	92	86	61	60	39	24	29	554
		% within Educational group	29.4%	16.6%	15.5%	11.0%	10.8%	7.0%	4.3%	5.2%	100.0%
		% within Engine	55.3%	58.2%	59.7%	52.6%	50.8%	63.9%	64.9%	58.0%	56.6%
Post-Graduation	Count	83	39	37	23	37	11	7	15	252	
	% within Educational group	32.9%	15.5%	14.7%	9.1%	14.7%	4.4%	2.8%	6.0%	100.0%	
	% within Engine	28.1%	24.7%	25.7%	19.8%	31.4%	18.0%	18.9%	30.0%	25.7%	
Any other	Count	3	5	2	1	0	0	0	0	11	
	% within Educational group	27.3%	45.5%	18.2%	9.1%	.0%	.0%	.0%	.0%	100.0%	
	% within Engine	1.0%	3.2%	1.4%	.9%	.0%	.0%	.0%	.0%	1.1%	

Total	Count	295	158	144	116	118	61	37	50	979
	% within Education	30.1%	16.1%	14.7%	11.8%	12.1%	6.2%	3.8%	5.1%	100.0%
	% within Engine	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

H_0 : Ranking pattern of various educational groups is identical for the feature “Engine/Battery Capacity”

H_1 : Ranking pattern of various educational groups is not identical for the feature “Engine/Battery Capacity”

Here, chi-square statistic was found to be 29.622 with 28 degrees of freedom and p -value .382. Hence, H_0 cannot be rejected. So, we conclude that ranking pattern is identical among various educational groups.

As evident from the above table, in aggregate, 30.1% respondents assigned 1st rank, 16.1% 2nd rank, 14.7% 3rd rank, 11.8% 4th rank and 12.1% 5th rank. This shows that engine/battery capacity is important while buying a two-wheeler.

H_0 : Ranking pattern of various occupational groups is identical for the feature “Engine/Battery Capacity”

H_1 : Ranking pattern of various occupational groups is not identical for the feature “Engine/Battery Capacity”

Here chi-square statistic was found to be 1.31 with 28 degrees of freedom and p -value .000. Hence, H_0 is rejected in favour of H_1 which means ranking pattern is not identical among various occupational groups.

As evident from the above table, 17.8% students assigned 1st rank to the feature “Engine Capacity”. On the other hand 43% respondents from service class, 31% from business class, 26.7% professionals and 6.9% from “Others” assigned 1st rank to the same feature.

Ranking pattern of various income groups for the feature “Engine/Battery Capacity”

Cross tabulation

Table-6.9

		Engine/Battery Capacity								
		1	2	3	4	5	6	7	8	Total
Income Below 5000 Rs.	Count	42	25	22	19	19	10	4	10	151
	% within Income	27.8%	16.6%	14.6%	12.6%	12.6%	6.6%	2.6%	6.6%	100.0%
	% within Engine	18.4%	23.1%	27.5%	35.8%	29.2%	37.0%	20.0%	50.0%	25.1%
6000 to 15000 Rs.	Count	140	66	35	26	37	11	14	6	335
	% within Income	41.8%	19.7%	10.4%	7.8%	11.0%	3.3%	4.2%	1.8%	100.0%
	% within Engine	61.4%	61.1%	43.8%	49.1%	56.9%	40.7%	70.0%	30.0%	55.7%
16000 to 25000 Rs.	Count	14	8	16	6	3	5	2	4	58
	% within Income	24.1%	13.8%	27.6%	10.3%	5.2%	8.6%	3.4%	6.9%	100.0%
	% within Engine	6.1%	7.4%	20.0%	11.3%	4.6%	18.5%	10.0%	20.0%	9.7%

26000 & above	Count	32	9	7	2	6	1	0	0	57
	% within Income	56.1%	15.8%	12.3%	3.5%	10.5%	1.8%	.0%	.0%	100.0%
	% within Engine	14.0%	8.3%	8.8%	3.8%	9.2%	3.7%	.0%	.0%	9.5%
Total	Count	228	108	80	53	65	27	20	20	601
	% within Income	37.9%	18.0	13.3%	8.8%	10.8%	4.5%	3.3%	3.3%	100.0%
	% within Engine	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

H_0 : Ranking pattern of all the income groups is identical for the feature “Engine/Battery Capacity”

H_1 : Ranking pattern of various income groups is not identical for the feature “Engine/Battery Capacity”

Here, chi-square statistic was found to be 52.903 with 21 degrees of freedom and p -value .000 Hence, H_0 is rejected in favour of H_1 . It means ranking pattern differs for the feature engine/battery capacity among various income groups.

Above table clearly shows different ranking patterns. 56.1% from income group 25,000/ and above and 41.8% respondents from income group 6,000 to 15,000 Rs. assigned 1st rank to engine capacity. Against this, 27.8% from income below 5,000 and 24.1% from income 16,000 to 25,000 assigned 1st rank to “Engine/battery capacity”

Ranking pattern of both the gender for the feature “Engine/Battery Capacity”

Cross tabulation

Table-6.10

		Engine/Battery Capacity								
		1	2	3	4	5	6	7	8	Total
Gender Male	Count	160	82	74	60	59	27	11	26	499
	% within Gender	32.1%	16.4%	14.8%	12.0%	11.8%	5.4%	2.2%	5.2%	100.0%
	% within Engine	53.9%	51.6%	50.7%	50.4%	49.2%	43.5%	28.2%	50.0%	50.2%
Female	Count	137	77	72	59	61	35	28	26	495
	% within Gender	27.7%	15.6%	14.5%	11.9%	12.3%	7.1%	5.7%	5.3%	100.0%
	% within Engine	46.1%	48.4%	49.3%	49.6%	50.8%	56.5%	71.8%	50.0%	49.8%
Total	Count	297	159	146	119	120	62	39	52	994
	% within Gender	29.9%	16.0%	14.7%	12.0%	12.1%	6.2%	3.9%	5.2%	100.0%
	% within Engine	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

H_0 : Ranking pattern of both the gender is identical for the feature “Engine/Battery Capacity”.

H_1 : Ranking pattern of both the gender is not identical for the feature “Engine/Battery Capacity”.

Here, chi-square statistic was found to be 10.434 with 7 degrees of freedom and p -value .165. Hence, H_0 cannot be rejected. So, we conclude that ranking pattern of both the gender is similar for the feature engine/battery capacity.

Both male and female respondents have identical ranking pattern. 32.1% males and 27.7% females have assigned 1st rank to the “Engine/Battery capacity”.

Ranking pattern of various age groups for the feature “Speed”

Cross tabulation

Table-6.11

			Speed								
			1	2	3	4	5	6	7	8	Total
Age 13 to 21	Count		53	77	71	45	37	33	26	25	367
	% within Age		14.4%	21.0%	19.3%	12.3%	10.1%	9.0%	7.1%	6.8%	100.0%
22 to 45	Count		165	161	91	59	38	38	34	14	600
	% within Age		27.5%	26.8%	15.2%	9.8%	6.3%	6.3%	5.7%	2.3%	100.0%
46 to 55	Count		3	2	5	8	4	1	0	1	24
	% within Age		12.5%	8.3%	20.8%	33.3%	16.7%	4.2%	.0%	4.2%	100.0%
Total	Count		221	240	167	112	79	72	60	40	991
	% within Age		22.3%	24.2%	16.9%	11.3%	8.0%	7.3%	6.1%	4.0%	100.0%

H_0 : Ranking pattern of various age groups is identical for the feature “Speed”

H_1 : Ranking pattern of various age groups is not identical for the feature “Speed”

Here, chi-square statistic found to be 61.671 with 16 degrees of freedom and p -value .000. Hence, H_0 is rejected in favour of H_1 . It means ranking pattern differs among various age groups for the feature speed.

Here, huge variations were found with reference to the feature speed. 27.5% respondents from 22 to 45 years age group assigned 1st rank to speed, against this, respondents from 13 to 21 years and 46 to 55 years age group, 14.4% & 12.5% respectively assigned it 1st rank. Accordingly, different ranking pattern was found for remaining other ranks for the feature speed.

Ranking pattern of various educational groups for the feature “Speed”

Cross tabulation

Table-6.12

		Speed								
		1	2	3	4	5	6	7	8	Total
Education Secondary	Count	6	6	5	9	4	7	2	0	39
	% within Education	15.4%	15.4%	12.8%	23.1%	10.3%	17.9%	5.1%	.0%	100.0%
Higher secondary	Count	21	25	32	13	10	8	9	5	123
	% within Education	17.1%	20.3%	26.0%	10.6%	8.1%	6.5%	7.3%	4.1%	100.0%
Graduation	Count	128	148	81	58	46	33	32	27	553
	% within Education	23.1%	26.8%	14.6%	10.5%	8.3%	6.0%	5.8%	4.9%	100.0%
Post-Graduation	Count	64	58	41	31	17	19	15	8	253
	% within Education	25.3%	22.9%	16.2%	12.3%	6.7%	7.5%	5.9%	3.2%	100.0%
Any other	Count	1	1	6	1	0	1	1	0	11
	% within Education	9.1%	9.1%	54.5%	9.1%	.0%	9.1%	9.1%	.0%	100.0%
Total	Count	220	238	165	112	77	68	59	40	979
	% within Education	22.5%	24.3%	16.9%	11.4%	7.9%	6.9%	6.0%	4.1%	100.0%

H_0 : Ranking pattern of various educational groups is identical for the feature “Speed”

H_1 : Ranking pattern of various educational groups is not identical for the feature “Speed”

Here, chi-square statistic was found to be 45.861 with 32 degrees of freedom and p -value .053. Hence, H_0 cannot be rejected. So, we conclude that ranking pattern is identical among various educational groups.

In aggregate, 22.5% respondent’s assigned 1st rank to speed, 24.3% gave 2nd rank and 16.9% gave 3rd rank to it. So, speed plays a vital role while buying a two-wheeler.

Ranking pattern of various occupational groups for the feature “Speed”

Cross tabulation

Table-6.13

			Speed								
			1	2	3	4	5	6	7	8	Total
Occupational groups	Student	Count	67	90	72	57	43	40	35	23	427
		% within Occupational group	15.7%	21.1%	16.9%	13.3%	10.1%	9.4%	8.2%	5.4%	100.0%
	Service	Count	125	123	75	36	24	20	11	12	426
		% within Occupational group	29.3%	28.9%	17.6%	8.5%	5.6%	4.7%	2.6%	2.8%	100.0%
	Business	Count	19	21	9	14	8	7	6	3	87
		% within Occupational group	21.8%	24.1%	10.3%	16.1%	9.2%	8.0%	6.9%	3.4%	100.0%
	Professional Practice	Count	3	3	5	1	1	0	1	1	15
		% within Occupational group	20.0%	20.0%	33.3%	6.7%	6.7%	.0%	6.7%	6.7%	100.0%
	Any other	Count	5	2	3	4	3	5	6	1	29
		% within Occupational group	17.2%	6.9%	10.3%	13.8%	10.3%	17.2%	20.7%	3.4%	100.0%
	Total	Count	219	239	164	112	79	72	59	40	984
		% within Occupational group	22.3%	24.3%	16.7%	11.4%	8.0%	7.3%	6.0%	4.1%	100.0%

H₀: Ranking pattern of various occupational groups is identical for the feature “Speed”.
H₁: Ranking Pattern of various occupational groups is not identical for the feature “Speed”.

Here, chi-square statistic was found to be 83.849 with 32 degrees of freedom and p -value .000. Hence, H_0 is rejected in favour of H_1 . So we conclude that ranking pattern is not identical among various occupational groups.

It was found that 29.3% respondents from service class, 21.8% from business class and 20% professionals assigned importance and assigned 1st rank to the feature speed and against this only 15.7% students assigned 1st rank to the feature speed. However, in aggregate, 22.3% respondents assigned 1st rank, 24.3% 2nd rank and 16.7% assigned 3rd rank to speed. It shows that speed is important while buying a two-wheeler.

H_0 : Ranking pattern of various income groups is identical for the feature “Speed”.

H_1 : Ranking pattern of various income groups is not identical for the feature “Speed”.

Here, chi-square statistic was found to be 29.811 with 21 degrees of freedom, and p -value .096. Hence, H_0 cannot be rejected. So, we conclude that ranking pattern is identical among various income groups for the feature speed.

It was found that, 19.2% respondents from the income group below 5,000 assigned 1st rank to speed, 23.8% gave 2nd rank and 19.9% gave 3rd rank. Secondly, 29.9% respondents from the income group 6,000 to 15,000 assigned 1st rank to speed, 29% gave 2nd rank and 16.7% gave 3rd rank.

Further, 20.7% respondents from the income group of Rs. 16,000 to 25,000 p.m. assigned 1st rank to speed, 27.6% gave 2nd rank and 15.5% gave 3rd rank.

Lastly, 29.8% respondents from the income group of Rs.26, 000 & above p.m. assigned 1st rank to speed, 36.8% gave 2nd rank and 10.5% gave 3rd rank.

Ranking pattern of both the gender for the feature “Speed”

Cross tabulation

Table-6.15

		Speed								
		1	2	3	4	5	6	7	8	Total
Gender Male	Count	118	128	84	64	32	31	23	19	499
	% within Gender	23.6%	25.7%	16.8%	12.8%	6.4%	6.2%	4.6%	3.8%	100.0%
Female	Count	103	112	83	49	47	41	38	21	494
	% within Gender	20.9%	22.7%	16.8%	9.9%	9.5%	8.3%	7.7%	4.3%	100.0%
Total	Count	221	240	167	113	79	72	61	40	993
	% within Gender	22.3%	24.2%	16.8%	11.4%	8.0%	7.3%	6.1%	4.0%	100.0%

H_0 : Ranking pattern of various age groups is identical for the feature “Design”.

H_1 : Ranking pattern of various age groups is not identical for the feature “Design”.

Here, chi-square statistic was found to be 50.910 with 14 degrees of freedom and p -value .000. Hence, H_0 is rejected in favour of H_1 . So we infer that ranking pattern of various age groups differ for the feature Design.

As compared to other age groups respondents from 22 to 45 years age group assigned more importance to design. Further, 27.4% of them gave 1st rank to it. Against this only 19.8% from 13 to 21 years and 20.8% from 46 to 55 years group assigned 1st rank to design. Similarly, huge variations in ranking pattern were found in 2nd rank also. We can conclude that the age group 22 to 45 years is more design conscious.

H_0 : Ranking pattern of various educational groups is identical for the feature “Design”.

H_1 : Ranking pattern of various educational groups is not identical for the feature “Design”

Here, chi-square statistic was found to be 37.516 with 28 degrees of freedom and p -value .108. Hence, H_0 cannot be rejected. So we conclude that ranking pattern of various age groups is identical for the feature Design.

In aggregate, the feature “Design” is assigned 1st rank by 24.7% respondents, 2nd rank by 21.7% and 3rd rank by 15.1% respondents, which indicates its significance while buying a two-wheeler.

Ranking pattern of various occupational groups for the feature “Design”

Cross tabulation

Table-6.18

		Design								
		1	2	3	4	5	6	7	8	Total
Occupatio n Student	Count	86	67	72	53	44	38	37	31	428
	% within Occupatio n	20.1%	15.7%	16.8%	12.4%	10.3%	8.9%	8.6%	7.2%	100.0%
	% within Design	35.5%	31.8%	48.0%	46.9%	53.7%	56.7%	55.2%	56.4%	43.4%
Service	Count	126	118	63	44	23	18	20	16	428
	% within Occupatio n	29.4%	27.6%	14.7%	10.3%	5.4%	4.2%	4.7%	3.7%	100.0%
	% within Design	52.1%	55.9%	42.0%	38.9%	28.0%	26.9%	29.9%	29.1%	43.4%
Business	Count	21	22	11	9	6	6	4	8	87
	% within Occupatio n	24.1%	25.3%	12.6%	10.3%	6.9%	6.9%	4.6%	9.2%	100.0%
	% within Design	8.7%	10.4%	7.3%	8.0%	7.3%	9.0%	6.0%	14.5%	8.8%
Profession al Practice	Count	5	2	1	3	3	0	1	0	15
	% within Occupatio n	33.3%	13.3%	6.7%	20.0%	20.0%	.0%	6.7%	.0%	100.0%
	% within Design	2.1%	.9%	.7%	2.7%	3.7%	.0%	1.5%	.0%	1.5%

Any other	Count	4	2	3	4	6	5	5	0	29
	% within Occupation	13.8%	6.9%	10.3%	13.8%	20.7%	17.2%	17.2%	.0%	100.0%
	% within Design	1.7%	.9%	2.0%	3.5%	7.3%	7.5%	7.5%	.0%	2.9%
Total	Count	242	211	150	113	82	67	67	55	987
	% within Occupation	24.5%	21.4%	15.2%	11.4%	8.3%	6.8%	6.8%	5.6%	100.0%
	% within Design	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

H_0 : Ranking pattern of various occupational groups is identical for the feature “Design”.

H_1 : Ranking pattern of various occupational groups is not identical for the feature “Design”.

Here, chi-square statistic was found to be 78.640 with 28 degrees of freedom and p -value .000. Hence, H_0 is rejected in favour of H_1 . So we infer that ranking pattern for design differs among various occupational groups.

33.3% professionals, 29.4% from service class, 24.1% from business class, 20.1% students and 13.8% from “others” assigned 1st rank to the feature design. So, ranking pattern was quite different here. In aggregate, 24.5% respondents assigned 1st rank, 21.4% gave 2nd rank, and 15.2% gave 3rd rank to the feature design. This shows that design is one of the important features while buying a two-wheeler.

Ranking pattern of various income groups for the feature “Design”

Cross tabulation

Table-6.19

		Design								
		1	2	3	4	5	6	7	8	Total
Income Below 5000 Rs.	Count	36	40	21	18	8	14	8	7	152
	% within Income	23.7%	26.3%	13.8%	11.8%	5.3%	9.2%	5.3%	4.6%	100.0%
	% within Design	20.6%	25.8%	26.2%	27.3%	21.6%	40.0%	26.7%	28.0%	25.2%
6000 to 15000 Rs.	Count	93	90	46	38	20	17	18	13	335
	% within Income	27.8%	26.9%	13.7%	11.3%	6.0%	5.1%	5.4%	3.9%	100.0%
	% within Design	53.1%	58.1%	57.5%	57.6%	54.1%	48.6%	60.0%	52.0%	55.6%
16000 to 25000 Rs.	Count	14	15	7	7	6	3	4	3	59
	% within Income	23.7%	25.4%	11.9%	11.9%	10.2%	5.1%	6.8%	5.1%	100.0%
	% within Design	8.0%	9.7%	8.8%	10.6%	16.2%	8.6%	13.3%	12.0%	9.8%
26000 & above	Count	32	10	6	3	3	1	0	2	57
	% within Income	56.1%	17.5%	10.5%	5.3%	5.3%	1.8%	.0%	3.5%	100.0%
	% within Design	18.3%	6.5%	7.5%	4.5%	8.1%	2.9%	.0%	8.0%	9.5%
Total	Count	175	155	80	66	37	35	30	25	603
	% within Income	29.0%	25.7%	13.3%	10.9%	6.1%	5.8%	5.0%	4.1%	100.0%
	% within Design	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

H₀: Ranking pattern of various income groups is identical for the feature “Design”.

H₁: Ranking pattern of various income groups is not identical for the feature “Design”.

Here, chi-square statistic was found to be 31.269 with 21 degrees of freedom and p -value .069. Hence, H_0 cannot be rejected. So, we conclude that ranking pattern for design is identical among various income groups.

Above table shows identical ranking patterns among various income groups. In aggregate 29% respondents assigned 1st rank, 25.7% assigned 2nd rank and 13.3% respondents assigned 3rd rank to the feature design.

Ranking pattern of both the gender for the feature "Design"

Cross tabulation

Table-6.20

		Design								
		1	2	3	4	5	6	7	8	Total
Gender Male	Count	114	94	78	67	46	33	41	26	499
	% within Gender	22.8%	18.8%	15.6%	13.4%	9.2%	6.6%	8.2%	5.2%	100.0%
	% within Design	46.9%	44.1%	51.7%	59.3%	53.5%	48.5%	61.2%	47.3%	50.1%
Female	Count	129	119	73	46	40	35	26	29	497
	% within Gender	26.0%	23.9%	14.7%	9.3%	8.0%	7.0%	5.2%	5.8%	100.0%
	% within Design	53.1%	55.9%	48.3%	40.7%	46.5%	51.5%	38.8%	52.7%	49.9%
Total	Count	243	213	151	113	86	68	67	55	996
	% within Gender	24.4%	21.4%	15.2%	11.3%	8.6%	6.8%	6.7%	5.5%	100.0%
	% within Design	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

H_0 : Ranking pattern of both the gender is identical for the feature "Design".

H_1 : Ranking pattern of both the gender is not identical for the feature "Design".

Here, chi-square statistic was found to be 11.924 with 7 degrees of freedom and p -value .103 Hence, H_0 cannot be rejected. So, we conclude that ranking pattern of both the gender is identical for the feature design.

Above table shows identical ranking patterns of both the gender. In aggregate, 24.4% respondents assigned 1st rank, 21.4% assigned 2nd rank and 15.2% respondents assigned 3rd rank to the feature design.

Ranking pattern of various age groups for the feature “Mileage”

Cross tabulation

Table-6.21[illegible]

H_0 : Ranking pattern of various age groups is identical for the feature “Mileage”.

H_1 : Ranking pattern of various age groups is not identical for the feature “Mileage”.

Here, chi-square statistic was found to be 37.885 with 14 degrees of freedom and p -value .001. Hence, H_0 is rejected in favour of H_1 . So we conclude that ranking pattern of various age groups differ for the feature “Mileage”

Here variations in ranking pattern were found. Further, compared to other groups respondents from 22-45 years age are assigning more importance to mileage while buying a two-wheeler, as 23.1% of them assigned 1st rank to mileage and 28.6% gave 2nd rank to it. It was found that ranking pattern of age group 13 to 21 years is distributed among various ranks on 1 to 8.

Ranking pattern of various educational groups for the feature “Mileage”

Cross tabulation

Table-6.22

		Mileage									
		1	2	3	4	5	6	7	8	Total	
Education	Secondary	Count	3	5	10	4	8	3	4	2	39
		% within Education	7.7%	12.8%	25.6%	10.3%	20.5%	7.7%	10.3%	5.1%	100.0%
		% within Mileage	1.4%	2.0%	7.1%	3.0%	8.3%	5.4%	9.3%	4.5%	4.0%
	Higher secondary	Count	16	33	17	15	17	9	8	8	123
		% within Education	13.0%	26.8%	13.8%	12.2%	13.8%	7.3%	6.5%	6.5%	100.0%
		% within Mileage	7.3%	13.4%	12.1%	11.4%	17.7%	16.1%	18.6%	18.2%	12.6%

Here, it was found that importance of mileage differs among educational group. Only 7.7% secondary pass respondents & 13% from higher secondary class assigned 1st rank to the feature mileage. Against this 22.8% respondents who are graduates, 27.9% post graduates and 27.3% from “other” category assigned 1st rank to the feature mileage. Similarly, variations were found in other ranks. But if we take this analysis in aggregate, more importance was given to the feature mileage by respondents.

Ranking pattern of various occupational groups for the feature “Mileage”

Cross tabulation

Table-6.23

		Mileage									
		1	2	3	4	5	6	7	8	Total	
Occupation	Student	Count	91	91	54	62	49	34	18	27	426
		% within Occupation	21.4%	21.4%	12.7%	14.6%	11.5%	8.0%	4.2%	6.3%	100.0%
		% within Mileage	41.6%	36.7%	38.3%	47.0%	51.6%	57.6%	40.0%	62.8%	43.4%
Service		Count	103	127	66	54	31	21	15	8	425
		% within Occupation	24.2%	29.9%	15.5%	12.7%	7.3%	4.9%	3.5%	1.9%	100.0%
		% within Mileage	47.0%	51.2%	46.8%	40.9%	32.6%	35.6%	33.3%	18.6%	43.3%
Business		Count	20	25	9	13	9	2	4	5	87
		% within Occupation	23.0%	28.7%	10.3%	14.9%	10.3%	2.3%	4.6%	5.7%	100.0%
		% within Mileage	9.1%	10.1%	6.4%	9.8%	9.5%	3.4%	8.9%	11.6%	8.9%
Professional Practice		Count	3	2	3	1	3	0	3	0	15
		% within Occupation	20.0%	13.3%	20.0%	6.7%	20.0%	.0%	20.0%	.0%	100.0%
		% within Mileage	1.4%	.8%	2.1%	.8%	3.2%	.0%	6.7%	.0%	1.5%

Any other	Count	2	3	9	2	3	2	5	3	29
	% within Occupation	6.9%	10.3%	31.0%	6.9%	10.3%	6.9%	17.2%	10.3%	100.0%
	% within Mileage	.9%	1.2%	6.4%	1.5%	3.2%	3.4%	11.1%	7.0%	3.0%
Total	Count	219	248	141	132	95	59	45	43	982
	% within Occupation	22.3%	25.3%	14.4%	13.4%	9.7%	6.0%	4.6%	4.4%	100.0%
	% within Mileage	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

H_0 : Ranking pattern of various occupational groups is identical for the feature "Mileage".

H_1 : Ranking pattern of various occupational groups is not identical for the feature "Mileage".

Here, chi-square statistic was found to be 68.716 with 28 degrees of freedom and p -value .000. Hence, H_0 is rejected in favour of H_1 . So we conclude that ranking pattern among various occupational groups differs for the feature "Mileage".

Figures in the table show that in is aggregate 22.3% respondents assigned 1st rank, 25.3% 2nd rank, 14.4% gave 3rd rank to the feature mileage. It indicates that this feature is important.

H_0 : Ranking pattern of both the gender is identical for the feature "Mileage".

H_1 : Ranking pattern of both the gender is not identical for the feature "Mileage".

Here, chi-square statistic was found to be 16.405 with 7 degrees of freedom and p -value .022. Hence, H_0 is rejected in favour of H_1 . So we infer that ranking pattern of both the gender differs for the feature "Mileage".

26.3% males gave maximum importance to mileage against this; only 18.1% females gave importance to this feature and assigned 1st rank. Similarly 26.7% males gave 2nd rank to mileage and against this 23.6% females gave 2nd rank to it. Thus more importance was given to mileage while buying a two-wheeler.

Ranking pattern of various age groups for the feature "Light Weight & Comfortable"

Cross tabulation

Table-6.26

			Light weight & Comfortable								
			1	2	3	4	5	6	7	8	Total
Age 13 to 21	Count		40	42	29	57	41	75	48	36	368
	% within Age		10.9%	11.4%	7.9%	15.5%	11.1%	20.4%	13.0%	9.8%	100.0%
22 to 45	Count		120	112	90	72	48	74	49	35	600
	% within Age		20.0%	18.7%	15.0%	12.0%	8.0%	12.3%	8.2%	5.8%	100.0%
46 to 55	Count		2	3	4	5	0	3	5	2	24
	% within Age		8.3%	12.5%	16.7%	20.8%	.0%	12.5%	20.8%	8.3%	100.0%
Total	Count		162	157	123	134	89	152	102	73	992
	% within Age		16.3%	15.8%	12.4%	13.5%	9.0%	15.3%	10.3%	7.4%	100.0%

H_0 : Ranking pattern of various age groups is identical for the feature "Light Weight & Comfortable".

H_1 : Ranking pattern of various age groups is not identical for the feature "Light Weight & Comfortable".

Here, chi-square statistic was found to be 60.369 with 14 degrees of freedom and p -value .000. Hence, H_0 is rejected in favour of H_1 . So, we infer that ranking pattern for the feature “Light Weight & Comfortable” is not identical among various age groups. At the same time, this feature is not assigned much importance by all the age groups.

As evident from the table, in aggregate, 16.3% respondents assigned 1st rank to the feature “Light weight & comfortable”. Similarly 15.8% respondents assigned 2nd rank and 12.4% assigned 3rd rank to the feature. In short, moderate importance is assigned the feature “Light Weight & Comfortable”.

Ranking pattern of various educational groups for the feature “Light Weight & Comfortable”

Cross tabulation

Table-6.27

		Light weight & Comfortable								
		1	2	3	4	5	6	7	8	Total
Education Secondary	Count	9	5	6	4	2	5	4	4	39
	% within Education	23.1%	12.8%	15.4%	10.3%	5.1%	12.8%	10.3%	10.3%	100.0%
Higher secondary	Count	14	14	11	23	15	18	18	10	123
	% within Education	11.4%	11.4%	8.9%	18.7%	12.2%	14.6%	14.6%	8.1%	100.0%
Graduation	Count	89	104	67	76	44	92	48	34	554
	% within Education	16.1%	18.8%	12.1%	13.7%	7.9%	16.6%	8.7%	6.1%	100.0%
Post-Graduation	Count	45	33	36	26	25	35	30	22	252
	% within Education	17.9%	13.1%	14.3%	10.3%	9.9%	13.9%	11.9%	8.7%	100.0%
Any other	Count	2	1	1	2	1	2	1	1	11
	% within Education	18.2%	9.1%	9.1%	18.2%	9.1%	18.2%	9.1%	9.1%	100.0%
Total	Count	159	157	121	131	87	152	101	71	979
	% within Education	16.2%	16.0%	12.4%	13.4%	8.9%	15.5%	10.3%	7.3%	100.0%

H_0 : Ranking pattern of various educational groups is identical for the feature “Light Weight & Comfortable”.

H_1 : Ranking pattern of various educational groups is not identical for the feature “Light Weight & Comfortable”.

Here, chi-square statistic was found to be 27.603 with 28 degrees of freedom and p -value .486. Hence, H_0 cannot be rejected. So, we conclude that ranking pattern is identical among various educational groups for the feature “Light Weight & Comfortable”.

As evident from the table in aggregate, 16.2% respondents assigned 1st rank to the feature “Light weight & comfortable”. Similarly 16% respondents assigned 2nd rank to the feature. In short, moderate importance is assigned to the feature “Light Weight & Comfortable”.

Ranking pattern of various occupational groups for the feature “Light Weight & Comfortable”

Cross tabulation

Table-6.28

			Light weight & Comfortable								
			1	2	3	4	5	6	7	8	Total
Occupational Practice	Student	Count	46	53	36	59	46	87	59	42	428
		% within Occupation	10.7%	12.4%	8.4%	13.8%	10.7%	20.3%	13.8%	9.8%	100.0%
	Service	Count	94	82	68	59	31	50	24	18	426
		% within Occupation	22.1%	19.2%	16.0%	13.8%	7.3%	11.7%	5.6%	4.2%	100.0%
	Business	Count	13	15	12	9	6	12	13	7	87
		% within Occupation	14.9%	17.2%	13.8%	10.3%	6.9%	13.8%	14.9%	8.0%	100.0%
	Professional Practice	Count	3	2	3	3	0	0	1	3	15
		% within Occupation	20.0%	13.3%	20.0%	20.0%	.0%	.0%	6.7%	20.0%	100.0%

Any other	Count	2	5	4	3	5	2	5	3	29
	% within Occupation	6.9%	17.2%	13.8%	10.3%	17.2%	6.9%	17.2%	10.3%	100.0%
Total	Count	158	157	123	133	88	151	102	73	985
	% within Occupation	16.0%	15.9%	12.5%	13.5%	8.9%	15.3%	10.4%	7.4%	100.0%

H_0 : Ranking pattern of various occupational groups is identical for the feature “Light Weight & Comfortable”.

H_1 : Ranking pattern of various occupational groups is not identical for the feature “Light Weight & Comfortable”.

Here, chi-square statistic was found to be 88.680 with 28 degrees of freedom and p -value 000. Hence, H_0 is rejected in favour of H_1 . So we conclude that ranking pattern differs among various occupational groups for the feature “Light Weight & Comfortable”.

It was found that 10.7% students, 22.1% service class, 14.9% business class, 20% professionals and 6.9% from category “others” assigned 1st rank to this feature. In the similar fashion, different ranking pattern was found for this feature for various ranks among various occupational groups.

H_0 : Ranking pattern of various income groups is identical for the feature “Light Weight & Comfortable”.

H_1 : Ranking pattern of various income groups is not identical for the feature “Light Weight & Comfortable”.

Here, chi-square statistic was found to be 40.463 with 21 degrees of freedom and p -value .007. Hence, H_0 is rejected in favour of H_1 . So, we infer that ranking pattern differs among various income groups for the feature “Light Weight & Comfortable”.

Although opinions were found different, in aggregate 19.3% respondents assigned 1st rank to the feature, 17.8% assigned 2nd rank and 14.3% assigned 3rd rank to this feature.

Ranking pattern of both the gender for the feature “Light Weight & Comfortable”

Cross tabulation

Table-6.30

		Light weight & Comfortable								
		1	2	3	4	5	6	7	8	Total
Gender Male	Count	64	73	62	64	52	81	56	47	499
	% within Gender	12.8%	14.6%	12.4%	12.8%	10.4%	16.2%	11.2%	9.4%	100.0%
Female	Count	98	85	62	70	37	71	46	26	495
	% within Gender	19.8%	17.2%	12.5%	14.1%	7.5%	14.3%	9.3%	5.3%	100.0%
Total	Count	162	158	124	134	89	152	102	73	994
	% within Gender	16.3%	15.9%	12.5%	13.5%	9.0%	15.3%	10.3%	7.3%	100.0%

H_0 : Ranking pattern of both the gender is identical for the feature “Light Weight & Comfortable”.

H_1 : Ranking pattern of both the gender is not identical for the feature “Light Weight & Comfortable”.

Here, chi-square statistic was found to be 18.508 with 7 degrees of freedom and p -value .010 Hence, H_0 is rejected in favour of H_1 . So, we conclude that ranking pattern of both the gender differs for the feature “Light Weight & Comfortable”.

Moderate importance was assigned by both the gender, however, their opinions were found different. 12.8% males assigned 1st rank, 14.6% males assigned 2nd rank and 12.4% males assigned 3rd rank to this feature. Against this 19.8% female respondents assigned 1st rank, 17.2% females assigned 2nd rank and 12.5% females assigned 3rd rank to the feature “Light weight and Comfortable”

Ranking pattern of various age groups for the feature “Concern for Environment”

Cross tabulation

Table-6.31

			Concern for environment								
			1	2	3	4	5	6	7	8	Total
Age 13 to 21	Count		22	20	27	32	50	66	70	79	366
	% within Age		6.0%	5.5%	7.4%	8.7%	13.7%	18.0%	19.1%	21.6%	100.0%
22 to 45	Count		24	35	60	105	61	126	80	108	599
	% within Age		4.0%	5.8%	10.0%	17.5%	10.2%	21.0%	13.4%	18.0%	100.0%
46 to 55	Count		1	2	2	3	1	4	3	8	24
	% within Age		4.2%	8.3%	8.3%	12.5%	4.2%	16.7%	12.5%	33.3%	100.0%
Total	Count		47	57	89	140	112	196	153	195	989
	% within Age		4.8%	5.8%	9.0%	14.2%	11.3%	19.8%	15.5%	19.7%	100.0%

H_0 : Ranking pattern of various age groups is identical for the feature “Concern for Environment”.

H_1 : Ranking pattern of various age groups is not identical for the feature “Concern for Environment”.

Here, chi-square statistic was found to be 29.978 with 14 degrees of freedom and p -value .008 Hence, H_0 is rejected in favour of H_1 and we infer that ranking pattern varies among various age groups for the feature “Concern for Environment”.

This feature is not given much importance by various age groups as hardly 4 to 6% respondents assigned 1st rank to “Concern for Environment” and 5 to 8% assigned 2nd rank to the feature “Concern for Environment”. It seems that environmental concern is very less and it does not play a significant role while buying a two-wheeler. It means that consumers are looking for core functional benefit from a vehicle and market needs more time to emerge as an environmentally conscious market. It needs more developmental efforts in India.

Ranking pattern of various educational groups for the feature “Concern for Environment”

Cross tabulation

Table-6.32

		Concern for environment								
		1	2	3	4	5	6	7	8	Total
Education Secondary	Count	4	5	4	4	1	5	7	9	39
	% within Education	10.3%	12.8%	10.3%	10.3%	2.6%	12.8%	17.9%	23.1%	100.0%
Higher secondary	Count	9	6	16	14	12	22	12	31	122
	% within Education	7.4%	4.9%	13.1%	11.5%	9.8%	18.0%	9.8%	25.4%	100.0%
Graduation	Count	28	33	49	78	69	115	83	98	553
	% within Education	5.1%	6.0%	8.9%	14.1%	12.5%	20.8%	15.0%	17.7%	100.0%
Post-Graduation	Count	6	10	19	42	27	49	49	50	252
	% within Education	2.4%	4.0%	7.5%	16.7%	10.7%	19.4%	19.4%	19.8%	100.0%
Any other	Count	0	0	0	1	2	4	1	3	11
	% within Education	.0%	.0%	.0%	9.1%	18.2%	36.4%	9.1%	27.3%	100.0%
Total	Count	47	54	88	139	111	195	152	191	977
	% within Education	4.8%	5.5%	9.0%	14.2%	11.4%	20.0%	15.6%	19.5%	100.0%

H_0 : Ranking pattern of various educational groups is identical for the feature “Concern for Environment”.

H_1 : Ranking pattern of various educational groups is not identical for the feature “Concern for Environment”.

Here, chi-square statistic was found to be 36.052 with 28 degrees of freedom and p -value .141 Hence, H_0 cannot be rejected. So, we conclude that ranking pattern is identical among various educational groups for the feature “Concern for Environment”.

Here, 4% assigned 1st rank to environmental concern, 5% gave 2nd rank to it and 9% gave 3rd rank. By and large all educational groups give very less importance to this feature.

Ranking pattern of various occupational groups for the feature “Concern for Environment”

Cross tabulation

Table-6.33

			Concern for environment								Total
			1	2	3	4	5	6	7	8	
Occupational Student	Count		23	23	37	34	60	71	86	92	426
	% within Occupation		5.4%	5.4%	8.7%	8.0%	14.1%	16.7%	20.2%	21.6%	100.0%
	Service	Count	16	26	36	85	45	102	49	66	425
		% within Occupation	3.8%	6.1%	8.5%	20.0%	10.6%	24.0%	11.5%	15.5%	100.0%
	Business	Count	3	5	10	11	6	15	13	24	87
		% within Occupation	3.4%	5.7%	11.5%	12.6%	6.9%	17.2%	14.9%	27.6%	100.0%
	Professional Practice	Count	0	0	2	3	1	4	1	4	15
		% within Occupation	.0%	.0%	13.3%	20.0%	6.7%	26.7%	6.7%	26.7%	100.0%
	Any other	Count	5	3	4	6	0	2	2	7	29
		% within Occupation	17.2%	10.3%	13.8%	20.7%	.0%	6.9%	6.9%	24.1%	100.0%
	Total	Count	47	57	89	139	112	194	151	193	982
		% within Occupation	4.8%	5.8%	9.1%	14.2%	11.4%	19.8%	15.4%	19.7%	100.0%

H_0 : Ranking pattern of various occupational groups is identical for the feature “Concern for Environment”.

H_1 : Ranking pattern of various occupational groups is not identical for the feature “Concern for Environment”.

Here, chi-square statistic was found to be 76.369 with 28 degrees of freedom and p -value .000. Hence, H_0 is rejected in favour of H_1 . So we infer that ranking pattern differs among various occupational groups for the feature “Concern for Environment”

Here, although ranking pattern was found different among various occupational groups, in aggregate, only 4 to 9% respondents gave rank between 1 to 3 to the feature “concern for environment”.

Ranking pattern of various income groups for the feature “Concern for Environment”

Cross tabulation

Tabl-6.34

		Concern for environment								
		1	2	3	4	5	6	7	8	Total
Income Below 5000 Rs.	Count	10	4	18	19	17	32	13	38	151
	% within Income	6.6%	2.6%	11.9%	12.6%	11.3%	21.2%	8.6%	25.2%	100.0%
6000 to 15000 Rs	Count	14	18	34	65	27	86	32	59	335
	% within Income	4.2%	5.4%	10.1%	19.4%	8.1%	25.7%	9.6%	17.6%	100.0%
16000 to 25000 Rs.	Count	0	1	4	10	7	12	11	12	57
	% within Income	.0%	1.8%	7.0%	17.5%	12.3%	21.1%	19.3%	21.1%	100.0%
26000 & above	Count	1	6	3	11	7	10	12	7	57
	% within Income	1.8%	10.5%	5.3%	19.3%	12.3%	17.5%	21.1%	12.3%	100.0%
Total	Count	25	29	59	105	58	140	68	116	600
	% within Income	4.2%	4.8%	9.8%	17.5%	9.7%	23.3%	11.3%	19.3%	100.0%

H_0 : Ranking pattern of various income groups is identical for the feature “Concern for Environment”

H_1 : Ranking pattern of various income groups is not identical for the feature “Concern for Environment”

Here, chi-square statistic was found to be 35.964 with 21 degrees of freedom and p -value .022. Hence, H_0 cannot be rejected. So, we conclude that ranking pattern is identical among various income groups for the feature “Concern for Environment”.

Environmental concern was given very less importance by the respondents. In aggregate, only 4.2% assigned 1st rank, 4.8% gave 2nd rank and 9.8% gave 3rd rank. Similarly, 17.5% respondents gave 4th rank, while 9.7% gave 5th rank to “Concern for Environment”.

Ranking pattern of both the gender for the feature “Concern for Environment”

Cross tabulation

Table-6.35

		Concern for environment								
		1	2	3	4	5	6	7	8	Total
Gender Male	Count	20	24	44	75	65	103	72	96	499
	% within Gender	4.0%	4.8%	8.8%	15.0%	13.0%	20.6%	14.4%	19.2%	100.0%
Female	Count	28	33	45	65	47	93	81	100	492
	% within Gender	5.7%	6.7%	9.1%	13.2%	9.6%	18.9%	16.5%	20.3%	100.0%
Total	Count	48	57	89	140	112	196	153	196	991
	% within Gender	4.8%	5.8%	9.0%	14.1%	11.3%	19.8%	15.4%	19.8%	100.0%

H_0 : Ranking pattern of both the gender is identical for the feature “Concern for Environment”

H_1 : Ranking pattern of both the genders is not identical for the feature “Concern for Environment”

Here, chi-square statistic was found to be 7.445 with 7 degrees of freedom and p -value .384. Hence, H_0 cannot be rejected. So, we conclude that ranking pattern of both the gender is similar for the feature “Concern for Environment”.

In aggregate, only 4.8% male and female respondents gave 1st rank to “Concern for Environment”, 5.8% assigned 2nd rank while 9% assigned 3rd rank.

Ranking pattern of various age groups for the feature “price”

Cross tabulation

Table-6.36

			Price								
			1	2	3	4	5	6	7	8	Total
Age 13 to 21	Count		57	41	44	39	44	41	58	43	367
	% within Age		15.5%	11.2%	12.0%	10.6%	12.0%	11.2%	15.8%	11.7%	100.0%
22 to 45	Count		66	46	48	88	50	136	76	90	600
	% within Age		11.0%	7.7%	8.0%	14.7%	8.3%	22.7%	12.7%	15.0%	100.0%
46 to 55	Count		2	3	2	2	2	7	2	4	24
	% within Age		8.3%	12.5%	8.3%	8.3%	8.3%	29.2%	8.3%	16.7%	100.0%
Total	Count		125	90	94	129	96	184	136	137	991
	% within Age		12.6%	9.1%	9.5%	13.0%	9.7%	18.6%	13.7%	13.8%	100.0%

H_0 : Ranking pattern of various age groups is identical for the feature “price”.

H_1 : Ranking pattern of various age groups is not identical for the feature “price”.

Here, chi-square statistic was found to be 39.540 with 14 degrees of freedom and p -value .000. Hence, H_0 is rejected in favour of H_1 and we infer that ranking pattern differs among various age groups for the feature “price”.

Although ranking pattern varies among across various age groups. It was found that consumers are not really price conscious. In aggregate, only 12.6% respondents assigned 1st rank to “Price” while buying a two-wheeler, 9.1% gave 2nd rank to it, 9.5% gave 3rd rank, 13% gave 4th rank and 9.7% gave 5th rank.

Ranking pattern of various educational groups for the feature “price”

Cross tabulation

Table-6.37

		Price								
		1	2	3	4	5	6	7	8	Total
Education Secondary	Count	5	5	1	3	9	8	3	5	39
	% within Education	12.8%	12.8%	2.6%	7.7%	23.1%	20.5%	7.7%	12.8%	100.0%
Higher secondary	Count	22	9	7	10	20	27	17	11	123
	% within Education	17.9%	7.3%	5.7%	8.1%	16.3%	22.0%	13.8%	8.9%	100.0%
Graduation	Count	66	53	58	81	39	95	82	79	553
	% within Education	11.9%	9.6%	10.5%	14.6%	7.1%	17.2%	14.8%	14.3%	100.0%
Post-Graduation	Count	26	20	27	34	27	51	33	34	252
	% within Education	10.3%	7.9%	10.7%	13.5%	10.7%	20.2%	13.1%	13.5%	100.0%
Any other	Count	2	1	0	0	0	2	2	4	11
	% within Education	18.2%	9.1%	.0%	.0%	.0%	18.2%	18.2%	36.4%	100.0%
Total	Count	121	88	93	128	95	183	137	133	978
	% within Education	12.4%	9.0%	9.5%	13.1%	9.7%	18.7%	14.0%	13.6%	100.0%

H₀: Ranking pattern of various educational groups is identical for the feature “price”

H₁: Ranking pattern of various educational groups is not identical for the feature “price”

Here, chi-square statistic was found to be 45.103 with 28 degrees of freedom and p -value .022. Hence, H_0 is rejected in favour of H_1 and we infer that ranking pattern is not identical among various educational groups for the feature “price”.

It was found that in aggregate, 12.4% respondents assigned 1st rank to the feature “Price”. The highest % of respondents who assigned 1st rank to the price was from higher secondary class and the lowest 10.3% were post graduates. It means that price is not very important while buying a two-wheeler.

Ranking pattern of various occupational groups for the feature “price”

Cross tabulation

Table-6.38

			Price								
			1	2	3	4	5	6	7	8	Total
Occupational Groups	Student	Count	73	53	50	52	46	45	62	46	427
		% within Occupation	17.1%	12.4%	11.7%	12.2%	10.8%	10.5%	14.5%	10.8%	100.0%
	Service	Count	35	26	32	62	34	100	64	73	426
		% within Occupation	8.2%	6.1%	7.5%	14.6%	8.0%	23.5%	15.0%	17.1%	100.0%
	Business	Count	10	5	9	11	11	24	8	9	87
		% within Occupation	11.5%	5.7%	10.3%	12.6%	12.6%	27.6%	9.2%	10.3%	100.0%
	Professional Practice	Count	3	1	1	1	1	4	1	3	15
		% within Occupation	20.0%	6.7%	6.7%	6.7%	6.7%	26.7%	6.7%	20.0%	100.0%
	Any other	Count	3	3	2	2	4	9	2	4	29
		% within Occupation	10.3%	10.3%	6.9%	6.9%	13.8%	31.0%	6.9%	13.8%	100.0%
	Total	Count	124	88	94	128	96	182	137	135	984
		% within Occupation	12.6%	8.9%	9.6%	13.0%	9.8%	18.5%	13.9%	13.7%	100.0%

H_0 : Ranking pattern of various occupational groups is identical for the feature “price”

H_1 : Ranking pattern of various occupational groups is not identical for the feature “price”

Here, chi-square statistic was found to be 72.960 with 28 degrees of freedom and p -value .000. Hence, H_0 is rejected in favour of H_1 and we infer that ranking pattern differs among various occupational groups.

It is important to note here that 20% professionals gave 1st rank to price, while only 8.2% respondents from service class assigned 2nd rank to the feature. Further, students, business class and “others” gave moderate importance to this feature.

Ranking pattern of various income groups for the feature “price”

Cross tabulation

Table-6.39

		Price								
		1	2	3	4	5	6	7	8	Total
Income Below 5000 Rs.	Count	22	17	15	13	12	20	28	24	151
	% within Income	14.6%	11.3%	9.9%	8.6%	7.9%	13.2%	18.5%	15.9%	100.0%
6000 to 15000 Rs	Count	33	19	25	52	32	83	39	52	335
	% within Income	9.9%	5.7%	7.5%	15.5%	9.6%	24.8%	11.6%	15.5%	100.0%
16000 to 25000 Rs.	Count	5	3	7	11	5	11	8	8	58
	% within Income	8.6%	5.2%	12.1%	19.0%	8.6%	19.0%	13.8%	13.8%	100.0%
26000 & above	Count	3	1	4	8	3	18	5	15	57
	% within Income	5.3%	1.8%	7.0%	14.0%	5.3%	31.6%	8.8%	26.3%	100.0%
Total	Count	63	40	51	84	52	132	80	99	601
	% within Income	10.5%	6.7%	8.5%	14.0%	8.7%	22.0%	13.3%	16.5%	100.0%

H₀: Ranking pattern of various income groups is identical for the feature “price”

H₁: Ranking pattern of various income groups is not identical for the feature “price”

Here, chi-square statistic was found to be 37.021 with 21 degrees of freedom and *p*-value .017 Hence, H₀ is rejected in favour of H₁, so we conclude that ranking pattern differs among various income groups for the feature “price”.

It was found that respondents gave less importance to the feature price. 10.5% respondents in aggregate gave 1st rank, 6.7% gave 2nd rank, and 8.5% gave 3rd rank to price.

Ranking pattern of both the gender for the feature “price”

Cross tabulation

Table-6.40

		Price								
		1	2	3	4	5	6	7	8	Total
Gender Male	Count	62	53	45	64	52	90	73	60	499
	% within Gender	12.4%	10.6%	9.0%	12.8%	10.4%	18.0%	14.6%	12.0%	100.0%
	Female Count	63	37	49	65	44	95	64	77	494
	% within Gender	12.8%	7.5%	9.9%	13.2%	8.9%	19.2%	13.0%	15.6%	100.0%
Total	Count	125	90	94	129	96	185	137	137	993
	% within Gender	12.6%	9.1%	9.5%	13.0%	9.7%	18.6%	13.8%	13.8%	100.0%

H₀: Ranking pattern of both the gender is identical for the feature “price”

H₁: Ranking pattern of both the gender is not identical for the feature “price”

Here, chi-square statistic was found to be 6.508 with 7 degrees of freedom and *p*-value .482 Hence, H₀ cannot be rejected. So, we conclude that ranking pattern of both the gender is similar for the feature “price”. Here also price was given moderate importance.

In aggregate, 12.6% assigned 1st rank, 9.1% assigned 2nd rank and 9.5% respondents assigned 3rd rank to price.

Ranking pattern of various age groups for the feature “Expenses on Services”

Cross tabulation

Table-6.41

			Expenses on services								
			1	2	3	4	5	6	7	8	Total
Age 13 to 21	Count		9	27	21	24	31	51	84	119	366
	% within Age		2.5%	7.4%	5.7%	6.6%	8.5%	13.9%	23.0%	32.5%	100.0%
22 to 45	Count		22	38	24	62	47	132	83	190	598
	% within Age		3.7%	6.4%	4.0%	10.4%	7.9%	22.1%	13.9%	31.8%	100.0%
46 to 55	Count		2	2	1	1	6	1	6	5	24
	% within Age		8.3%	8.3%	4.2%	4.2%	25.0%	4.2%	25.0%	20.8%	100.0%
Total	Count		33	67	46	87	84	184	173	314	988
	% within Age		3.3%	6.8%	4.7%	8.8%	8.5%	18.6%	17.5%	31.8%	100.0%

H_0 : Ranking pattern of various age groups is identical for the feature “Expenses on Services”

H_1 : Ranking pattern of various age groups is not identical for the feature “Expenses on Services”

Here, chi-square statistic was found to be 40.328 with 14 degrees of freedom and p -value .000 Hence, H_0 is rejected in favour of H_1 and we infer that ranking pattern varies among various age groups for the feature “Expenses on Services”.

Here data indicates that maintenance cost or expenses on services does not play significant role while buying a two-wheeler. Hardly 3 to 8% respondents in aggregate have assigned rank on scale of 1 to 5 to this feature. It means that the feature expenses on services is not significant factor/criteria while buying a two-wheeler.

Ranking pattern of various educational groups is identical for the feature “Expenses on services”

Cross tabulation

Table-6.42

		Expenses on services								
		1	2	3	4	5	6	7	8	Total
Education Secondary	Count	3	2	1	3	8	5	11	6	39
	% within Education	7.7%	5.1%	2.6%	7.7%	20.5%	12.8%	28.2%	15.4%	100.0%
Higher secondary	Count	2	13	11	13	10	18	22	33	122
	% within Education	1.6%	10.7%	9.0%	10.7%	8.2%	14.8%	18.0%	27.0%	100.0%
Graduation	Count	17	30	25	42	45	107	95	191	552
	% within Education	3.1%	5.4%	4.5%	7.6%	8.2%	19.4%	17.2%	34.6%	100.0%
Post-Graduation	Count	7	18	9	28	21	51	37	81	252
	% within Education	2.8%	7.1%	3.6%	11.1%	8.3%	20.2%	14.7%	32.1%	100.0%
Any other	Count	0	1	0	1	0	1	5	3	11
	% within Education	.0%	9.1%	.0%	9.1%	.0%	9.1%	45.5%	27.3%	100.0%
Total	Count	29	64	46	87	84	182	170	314	976
	% within Education	3.0%	6.6%	4.7%	8.9%	8.6%	18.6%	17.4%	32.2%	100.0%

H_0 : Ranking pattern of various educational groups is identical for the feature “Expenses on Services”

H_1 : Ranking pattern of various educational groups is not identical for the feature “Expenses on Services”

Here, chi-square statistic was found to be 42.403 with 28 degrees of freedom and p -value .040 Hence, H_0 is rejected in favour of H_1 and we infer that ranking pattern is not identical among various educational groups for the feature “Expenses on Services”.

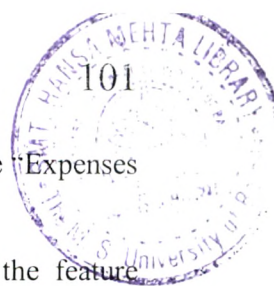
It was found that in aggregate, only 3% respondents from various educational groups assigned 1st rank to the feature “Expenses on Services”, 6.6% assigned 2nd rank while 4.7% gave 3rd rank to this feature.

Ranking pattern of various occupational groups for the feature “Expenses on Services”

Cross tabulation

Table-6.43

			Expenses on services								
			1	2	3	4	5	6	7	8	Total
Occupational Student	Count		13	30	27	32	43	61	88	132	426
		% within Occupation	3.1%	7.0%	6.3%	7.5%	10.1%	14.3%	20.7%	31.0%	100.0%
	Service	Count	13	23	12	37	25	100	58	156	424
		% within Occupation	3.1%	5.4%	2.8%	8.7%	5.9%	23.6%	13.7%	36.8%	100.0%
	Business	Count	0	6	6	15	8	17	18	17	87
		% within Occupation	.0%	6.9%	6.9%	17.2%	9.2%	19.5%	20.7%	19.5%	100.0%
	Professional Practice	Count	0	2	0	1	1	2	4	5	15
		% within Occupation	.0%	13.3%	.0%	6.7%	6.7%	13.3%	26.7%	33.3%	100.0%
	Any other	Count	6	6	1	2	5	4	2	3	29
		% within Occupation	20.7%	20.7%	3.4%	6.9%	17.2%	13.8%	6.9%	10.3%	100.0%
	Total	Count	32	67	46	87	82	184	170	313	981
		% within Occupation	3.3%	6.8%	4.7%	8.9%	8.4%	18.8%	17.3%	31.9%	100.0%



H₀: Ranking pattern of various occupational groups is identical for the feature “Expenses on Services”

H₁: Ranking pattern of various occupational groups is not identical for the feature “Expenses on Services”

Here, chi-square statistic was found to be 94.730 with 28 degrees of freedom and *p*-value .000. Hence, H₀ is rejected in favour of H₁ and we infer that ranking pattern differs among various occupational groups.

Very less importance is given to the feature “Expenses on Services”. As shown in the above table, only 3.3% respondents in aggregate assigned 1st rank, 6.8% gave 2nd rank and 4.7% gave 3rd rank.

Ranking pattern of various income groups for the feature “Expenses on Services”

Cross tabulation

Table-6.44

			Expenses on services								
			1	2	3	4	5	6	7	8	Total
Income Below 5000 Rs.	Count		7	13	10	15	8	24	32	42	151
	% within Income		4.6%	8.6%	6.6%	9.9%	5.3%	15.9%	21.2%	27.8%	100.0%
6000 to 15000 Rs	Count		6	18	13	35	23	71	49	119	334
	% within Income		1.8%	5.4%	3.9%	10.5%	6.9%	21.3%	14.7%	35.6%	100.0%
16000 to 25000 Rs.	Count		3	3	1	3	7	16	5	19	57
	% within Income		5.3%	5.3%	1.8%	5.3%	12.3%	28.1%	8.8%	33.3%	100.0%
26000 & above	Count		0	3	1	7	3	19	13	11	57
	% within Income		.0%	5.3%	1.8%	12.3%	5.3%	33.3%	22.8%	19.3%	100.0%
Total	Count		16	37	25	60	41	130	99	191	599
	% within Income		2.7%	6.2%	4.2%	10.0%	6.8%	21.7%	16.5%	31.9%	100.0%

H₀: Ranking pattern of various income groups is identical for the feature “Expenses on Services”

H₁: Ranking pattern of various income groups is not identical for the feature “Expenses on Services”

Here, chi-square statistic was found to be 34.947 with 21 degrees of freedom and p -value .029 Hence, H_0 cannot be rejected. So, we conclude that ranking pattern is identical among various income groups for the feature “Expenses on Services”.

Very less importance is given to the feature “Expenses on Services”. As shown in the above table, only 2.7% respondents in aggregate assigned 1st rank, 6.2% gave 2nd rank and 4.2% gave 3rd rank.

Ranking pattern of both the gender for the feature “Expenses on Services”

Cross tabulation

Table-6.45

		Expenses on services								
		1	2	3	4	5	6	7	8	Total
Gender Male	Count	13	35	30	45	48	99	92	137	499
	% within Gender	2.6%	7.0%	6.0%	9.0%	9.6%	19.8%	18.4%	27.5%	100.0%
Female	Count	20	32	16	42	36	86	81	178	491
	% within Gender	4.1%	6.5%	3.3%	8.6%	7.3%	17.5%	16.5%	36.3%	100.0%
Total	Count	33	67	46	87	84	185	173	315	990
	% within Gender	3.3%	6.8%	4.6%	8.8%	8.5%	18.7%	17.5%	31.8%	100.0%

H_0 : Ranking pattern of both the gender is identical for the feature “Expenses on Services”

H_1 : Ranking pattern of both the gender is not identical for the feature “Expenses on Services”

Here, chi-square statistic was found to be 14.584 with 7 degrees of freedom and p -value .042 Hence, H_0 is rejected in favour of H_1 and we infer that ranking pattern of both the gender is not identical for the feature “Expenses on Services”.

Very less importance is given to the feature “Expenses on Services”. As shown in the above table, only 3.3% respondents in aggregate assigned 1st rank, 6.8% gave 2nd rank and 4.6% gave 3rd rank.

6.3 Feedback on various features of concept of battery-operated two-wheeler

One of the important objectives of this study was to take feedback of customers on various features of the concept of battery-operated two-wheeler. The concept of electric/battery-operated two-wheeler is new in India and initial market response is not so encouraging here. Indian consumers differ in terms of their taste and preferences and socio-economic characteristics. Hence, it is important to know their feedback regarding various features of battery-operated two-wheeler so that this electric two-wheeler with right features can be designed.

To identify this information, a five point rating scale was developed ranging from very good to very poor and seven different features/information were put before the respondents and their feedback was taken. Analysis was performed as discussed in chapter-5 on research methodology. These seven features are listed below:

- (1) It costs 15 paisa/km.
- (2) Zero pollution to environment.
- (3) It can't go beyond 25 km. speed per hour.
- (4) It takes 6 to 8 hours to recharge battery.
- (5) It is light weight and comfortable.
- (6) It has a capacity to carry weight of 75 kg.
- (7) On road price is Rs.28, 500/- .

Furthermore, it was important to know whether opinions on various features/information of concept of battery operated two-wheeler are identical or they vary among various age groups, educational groups, occupational groups, income groups and of both the gender so that potential segments can be identified and targeted. To analyze the responses, chi-square test of homogeneity was performed with 5% of level of significance and results are discussed here.

Ranking of various features of battery operated two-wheeler

Cross tabulation

Table-6.46

		Ranking of features					
		Very Good	Good	Average	Poor	Very Poor	Total
Features of costs 15 paisa / Count battery operated km two-wheeler	% within Features of battery operated two-wheeler	660	260	52	13	5	990
		66.7%	26.3%	5.3%	1.3%	.5%	100.0%
Zero pollution to Count environment	% within Features of battery operated two-wheeler	658	237	62	23	12	992
		66.3%	23.9%	6.2%	2.3%	1.2%	100.0%
Can't go beyond Count 25 km speed	% within Features of battery operated two-wheeler	34	82	307	320	243	986
		3.4%	8.3%	31.1%	32.5%	24.6%	100.0%
Takes 6 to 8 Count hours to % within recharge battery Features of battery operated two-wheeler		36	86	215	449	197	983
		3.7%	8.7%	21.9%	45.7%	20.0%	100.0%
Light weight & Count Comfortable	% within Features of battery operated two-wheeler	213	327	310	98	38	986
		21.6%	33.2%	31.4%	9.9%	3.9%	100.0%
Capacity to Count carry weight is % within 75 kg Features of battery operated two-wheeler		48	106	218	374	237	983
		4.9%	10.8%	22.2%	38.0%	24.1%	100.0%
On road price is Count 28,500 Rs	% within Features of battery operated two-wheeler	328	143	265	164	87	987
		33.2%	14.5%	26.8%	16.6%	8.8%	100.0%
Total	Count	1977	1241	1429	1441	819	6907
	% within Features of battery operated two-wheeler	28.6%	18.0%	20.7%	20.9%	11.9%	100.0%

H_0 : All the features of battery operated two-wheeler are equally good.

H_1 : All the features of battery operated two-wheeler are not equally good.

Here, chi-square statistic was found to be 3.783 with 24 degrees of freedom and p -value .000 Hence, H_0 is rejected in favour of H_1 , and we conclude that all the features of battery operated two-wheeler are not equally good.

With reference to battery-operated two-wheeler out of the seven features on which feedback was asked to the respondents, three features were considered either average or poor or very poor.

1. It cannot go beyond 25 km speed per hour.
2. It takes 6 to 8 hours to recharge the battery.
3. Its capacity to carry weight is 75 kg.

Features like “operating cost is 15 paisa per km” and “zero pollution” are considered as very good by majority of the respondents.

Opinion of various age groups about the feature “it costs 15 paisa per km.”

Cross tabulation

Table-6.47

			Costs 15 paisa / km.					
			Very Good	Good	Average	Poor	Very Poor	Total
Age	13 to 21	Count	230	90	26	13	4	363
		% within Age	63.4%	24.8%	7.2%	3.6%	1.1%	100.0%
	22 to 45	Count	418	159	22	0	1	600
		% within Age	69.7%	26.5%	3.7%	.0%	.2%	100.0%
	46 to 55	Count	11	10	4	0	0	25
		% within Age	44.0%	40.0%	16.0%	.0%	.0%	100.0%
Total		Count	659	259	52	13	5	988
		% within Age	66.7%	26.2%	5.3%	1.3%	.5%	100.0%

H_0 : Opinion about the feature “it costs 15 paisa per km.” does not differ among various age groups.

H_1 : Opinion about the feature “it costs 15 paisa per km.” differs among various age groups.

Here, value of chi-square statistic was found to be 42.732 with 8 degrees of freedom and p -value .000 Hence, H_0 is rejected in favor of H_1 and we conclude that opinions differ with respect to various age groups for the feature “It costs 15 paisa per km”.

As it is evident from the above table 63% respondents in the age group of 13 to 21 years, 69.7% respondents of 22 to 45 years of age group and 44% from the age group 46 to 55 year rated the feature “it cost 15 paisa per km” as very good. In aggregate 66.7% of the respondents said very good about this feature. Similarly, 24.8 % from 13 to 21 age group, 26.5% from 22 to 45 years age group and 40% from 46 to 55 years age group tick marked this feature as good. In aggregate 26.2% of the respondents said good about this feature.

Against this, in aggregate only 5.3% said average, 1.3% said poor and .5% said very poor about this feature “It costs 15 paisa per km”.

Opinion of various educational groups about the feature “It costs 15 paisa per km”

Cross tabulation

Table-6.48

		Costs 15 paisa / km					
		Very Good	Good	Average	Poor	Very Poor	Total
Education	Secondary	Count	24	11	4	0	39
		% within Education	61.5%	28.2%	10.3%	.0%	100.0%
	Higher secondary	Count	77	34	10	2	123
		% within Education	62.6%	27.6%	8.1%	1.6%	100.0%
	Graduation	Count	366	150	25	9	554
		% within Education	66.1%	27.1%	4.5%	1.6%	100.0%
Post-Graduation		Count	177	60	10	1	249
		% within Education	71.1%	24.1%	4.0%	.4%	100.0%
	Any other	Count	7	3	1	0	11
		% within Education	63.6%	27.3%	9.1%	.0%	100.0%
	Total	Count	651	258	50	12	976
		% within Education	66.7%	26.4%	5.1%	1.2%	100.0%

H_0 : opinion about the feature “it costs 15 paisa per km” does not vary among different educational groups.

H_1 : opinion about the feature “it costs 15 paisa per km” varies among different educational groups.

Here value of chi-square statistic was found to be 11.749 with 16 degrees of freedom and p -value .761. Hence, H_0 cannot be rejected. So, we conclude that opinions of various educational groups are similar for the feature “It costs 15 paisa per km”.

It is found that respondents of all educational groups share similar opinion here. In aggregate, 66% revealed that the feature “it costs 15 paisa per km” is very good, 26.4% opined good and 5.1% said it is average. Only 1.2% said it is poor and .5% considered it as very poor. In short, this feature is quite strong to persuade the buyer.

Opinion of various occupational groups on the feature “It costs 15 paisa per km.”

Cross tabulation

Table-6.49

		Costs 15 paisa / km					
		Very Good	Good	Average	Poor	Very Poor	Total
Occupation Student	Count	268	108	30	12	5	423
	% within Occupation	63.4%	25.5%	7.1%	2.8%	1.2%	100.0%
Service	Count	301	116	9	1	0	427
	% within Occupation	70.5%	27.2%	2.1%	.2%	.0%	100.0%
Business	Count	56	27	4	0	0	87
	% within Occupation	64.4%	31.0%	4.6%	.0%	.0%	100.0%
Professional Practice	Count	12	2	1	0	0	15
	% within Occupation	80.0%	13.3%	6.7%	.0%	.0%	100.0%
Any other	Count	15	7	7	0	0	29
	% within Occupation	51.7%	24.1%	24.1%	.0%	.0%	100.0%
Total	Count	652	260	51	13	5	981
	% within Occupation	66.5%	26.5%	5.2%	1.3%	.5%	100.0%

H_0 : Opinion of respondents belong to various occupational groups about the feature “it costs 15 paisa per km” does not vary.

H_1 : Opinion of respondents belong to various occupational groups about the feature “it costs 15 paisa per km” vary.

Here value of chi-square statistic was found to be 55.371 with 16 degrees of freedom and p -value .000 Hence H_0 is rejected in favour of H_1 and we conclude that opinions differ among various occupational groups about the feature “It Costs 15 paisa per km.”

It was found that 80% professionals appreciated this feature the most, and considered it as very good. Against this, only 51.7% respondents from “others” category said “very good” about this feature. If we take a case of students, service class and business class 63.4%, 70.5%, 64.4% respectively called this feature as very good. In aggregate 66.5% called it as very good, however 5.2% called it as average 1.3% poor and .5% very poor.

Opinion of various income groups about the feature “It costs 15 paisa per km.”

Cross tabulation

Table-6.50

			Costs 15 paisa / km					
			Very Good	Good	Average	Poor	Very Poor	Total
Income Below 5000 Rs.	Count		104	35	5	6	1	151
	% within Income		68.9%	23.2%	3.3%	4.0%	.7%	100.0%
6000 to 15000 Rs.	Count		235	91	10	0	1	337
	% within Income		69.7%	27.0%	3.0%	.0%	.3%	100.0%
16000 to 25000 Rs.	Count		40	13	4	1	0	58
	% within Income		69.0%	22.4%	6.9%	1.7%	.0%	100.0%
26000 & above	Count		31	24	1	0	0	56
	% within Income		55.4%	42.9%	1.8%	.0%	.0%	100.0%
Total	Count		410	163	20	7	2	602
	% within Income		68.1%	27.1%	3.3%	1.2%	.3%	100.0%

H_0 : Opinion of various income groups on “It costs 15 paisa per km” does not differ.

H_1 : Opinion of various income groups on “It costs 15 paisa per km” differs among various income groups.

Here, chi-square statistic was found to be 26.580 with 12 degrees of freedom and p -value .009 Hence, H_0 is rejected in favour of H_1 and we conclude that opinion differs among various income groups about the feature “It costs 15 paisa per km.

As shown in the above table, except respondents in the income group 26,000 & above, other income groups share similar opinions. Only 55.4% respondents said very good about this feature. Against this in all other income groups, 68 to 69% said it as very good.

However, in aggregate, only 3.3% respondents considered this feature as average, 1.2% as poor and .3% as very poor.

Opinion of respondents of both the gender about the feature “it costs 15 paisa per km”

Cross tabulation

Table-6.51

			Costs 15 paisa / km					
			Very Good	Good	Average	Poor	Very Poor	Total
Gender	Male	Count	333	135	24	3	4	499
		% within Gender	66.7%	27.1%	4.8%	.6%	.8%	100.0%
	Female	Count	327	125	28	10	1	491
		% within Gender	66.6%	25.5%	5.7%	2.0%	.2%	100.0%
	Total	Count	660	260	52	13	5	990
		% within Gender	66.7%	26.3%	5.3%	1.3%	.5%	100.0%

H_0 : Opinion of male and female respondents with reference to the feature “it costs 15 paisa per km” does not vary.

H_1 : Opinion of male and female respondents with reference to the feature “it costs 15 paisa per km” does vary.

Here chi-square statistic was found to be 6.252 with 4 degrees of freedom and p -value .181. Hence, H_0 cannot be rejected. So, we conclude that male and female respondents share similar opinion about this feature.

As shown in the above table, 66.7% males and 66.6 % females called this feature as very good, 27.1% males and 25.5% females called it as good feature. In aggregate only 5.3% called it as average, 1.3% as poor and .5% as very poor.

Careful analysis of the above data shows that this feature is very strong, and must be communicated aggressively to the target market. It has the ability to drive the market in favour of battery-operated two-wheeler.

Opinion about the feature “zero pollution to environment”

Cross tabulation

Table-6.52

			Zero Pollution					
			Very Good	Good	Average	Poor	Very Poor	Total
Age	13 to 21	Count	216	86	37	16	8	363
		% within Age	59.5%	23.7%	10.2%	4.4%	2.2%	100.0%
	22 to 45	Count	430	143	20	5	4	602
		% within Age	71.4%	23.8%	3.3%	.8%	.7%	100.0%
	46 to 55	Count	10	8	5	2	0	25
		% within Age	40.0%	32.0%	20.0%	8.0%	.0%	100.0%
	Total	Count	656	237	62	23	12	990
		% within Age	66.3%	23.9%	6.3%	2.3%	1.2%	100.0%

H_0 : Opinion about the feature “zero pollution to environment” does not vary with respect to various age groups.

H_1 : Opinion about the feature “zero pollution to environment” varies with respect to various age groups.

Here, chi-square statistic was found to be 53.791 with 8 degrees of freedom and p -value .000. Hence, H_0 is rejected in favour of H_1 and we conclude that opinion about the feature “zero pollution” differs with age groups.

As shows in the table, 71.4% respondents from age group 22 to 45 years appreciated the feature “zero pollution” of battery operated two-wheeler. Against this, in the age group 46 to 55 years & 13 to 21 years only 40% and 59.5% respectively said very good about it. However, in aggregate, 66.3% of respondents called this feature as very good. At the same time, in aggregate only 1.2% of them said very poor about this feature.

Opinion of various educational groups about the feature “zero pollution to environment”

Cross tabulation

Table-6.53

		Zero Pollution					
		Very Good	Good	Average	Poor	Very Poor	Total
Education	Secondary	Count 15	16	5	2	1	39
	% within Education	38.5%	41.0%	12.8%	5.1%	2.6%	100.0%
	Higher secondary	Count 73	32	10	6	1	122
	% within Education	59.8%	26.2%	8.2%	4.9%	.8%	100.0%
	Graduation	Count 382	119	34	11	8	554
	% within Education	69.0%	21.5%	6.1%	2.0%	1.4%	100.0%
	Post-Graduation	Count 175	62	9	2	2	250
	% within Education	70.0%	24.8%	3.6%	.8%	.8%	100.0%
	Any other	Count 9	2	0	0	0	11
	% within Education	81.8%	18.2%	.0%	.0%	.0%	100.0%
Total		Count 654	231	58	21	12	976
		% within Education	67.0%	23.7%	5.9%	2.2%	100.0%

H_0 : There is no significant difference in opinion among various educational groups with respect to feature “zero pollution to environment”

H_1 : There is significant difference in opinion among various educational groups with respect to feature “zero pollution to environment”

Here, chi-square statistic was found to be 30.355 with 16 degrees of freedom and p -value .016. Hence H_0 is rejected in favour of H_1 . So we conclude that opinions differ among various educational groups.

Interestingly, it was found that well qualified respondents were more positive about the feature “zero pollution to environment”. 70% post graduates and 69% graduates said very good about this feature. Against this, 59.8% higher secondary pass and 38.5% secondary pass said very good about this feature. Further, 81.8% from “others” category said very good about this feature. In aggregate, 67% respondents said very good about this feature. Only 1.2% of the respondents said this feature as very poor.

Opinion of various occupational groups about the feature “zero pollution to environment”

Cross tabulation

Table-6.54

		Zero Pollution					
		Very Good	Good	Average	Poor	Very Poor	Total
Occupation Student	Count	253	106	40	16	8	423
	% within Occupation	59.8%	25.1%	9.5%	3.8%	1.9%	100.0%
Service	Count	325	87	13	1	2	428
	% within Occupation	75.9%	20.3%	3.0%	.2%	.5%	100.0%
Business	Count	56	24	4	1	2	87
	% within Occupation	64.4%	27.6%	4.6%	1.1%	2.3%	100.0%
Professional Practice	Count	9	4	2	1	0	16
	% within Occupation	56.2%	25.0%	12.5%	6.2%	.0%	100.0%
Any other	Count	11	12	2	4	0	29
	% within Occupation	37.9%	41.4%	6.9%	13.8%	.0%	100.0%
Total	Count	654	233	61	23	12	983
	% within Occupation	66.5%	23.7%	6.2%	2.3%	1.2%	100.0%

H_0 : opinion of various occupational groups does not vary about the feature “zero pollution to environment”

H_1 : opinion of various occupational groups vary about the feature “zero pollution to environment”

Here chi-square statistic was found to be 69.381 with 16 degrees of freedom and p -value .000. Hence, H_0 is rejected in favour of H_1 and we conclude that opinions of various occupational groups do vary about the feature “zero pollution to environment”

In this feedback variation was found as 75.9% of the service class considered “zero pollution to environment” as very good. On another extreme, 37.9% respondents from “other” category considered it as very good. Similarly, 59.8% students and 56.2% professionals called it as a very good feature. In aggregate, 66.5% said “zero pollution to environment” as a very good feature. 25.1% students, 20.3% service class, 27.6% businessmen, and 25% professionals considered it as a good feature. In aggregate, only 6.2% said the same feature as average, 2.3% as poor and 1.2% as very poor.

Opinion of various income groups about the feature “zero pollution to environment”

Cross tabulation

Table-6.55

		Zero Pollution					
		Very Good	Good	Average	Poor	Very Poor	Total
Income Below 5000 Rs.	Count	100	41	7	1	2	151
	% within Income	66.2%	27.2%	4.6%	.7%	1.3%	100.0%
6000 to 15000 Rs.	Count	251	73	12	1	1	338
	% within Income	74.3%	21.6%	3.6%	.3%	.3%	100.0%
16000 to 25000 Rs.	Count	40	13	3	2	1	59
	% within Income	67.8%	22.0%	5.1%	3.4%	1.7%	100.0%
26000 & above	Count	44	11	1	0	0	56
	% within Income	78.6%	19.6%	1.8%	.0%	.0%	100.0%
Total	Count	435	138	23	4	4	604
	% within Income	72.0%	22.8%	3.8%	.7%	.7%	100.0%

H_0 : Opinion of various income groups about the feature “zero pollution to environment” does not vary.

H_1 : Opinion of various income groups about the feature “zero pollution to environment” varies.

Here, chi-square statistic was found to be 15.019 with 12 degrees of freedom and p -value .240. Hence, H_0 cannot be rejected. So, we conclude that all income groups share similar opinions about the feature “zero pollution to environment.”

It was found that 66.2% respondents who earn below 5,000 Rs pm said very good about the feature zero pollution to environment and 78.6% respondents from 25,000 and above income pm considered it as a very good feature. In aggregate, 72% respondents considered this as a good feature while 22.8% respondents considered this feature as good.

In aggregate, only 3.8% said it as average feature, .7% said it as poor and .7% said it is very poor.

Opinion of respondents of both the gender about the feature “zero pollution to environment”

Cross tabulation

Table-6.56

			Zero Pollution					
			Very Good	Good	Average	Poor	Very Poor	Total
Gender	Male	Count	334	117	31	10	7	499
		% within Gender	66.9%	23.4%	6.2%	2.0%	1.4%	100.0%
	Female	Count	324	120	31	13	5	493
		% within Gender	65.7%	24.3%	6.3%	2.6%	1.0%	100.0%
	Total	Count	658	237	62	23	12	992
		% within Gender	66.3%	23.9%	6.2%	2.3%	1.2%	100.0%

H_0 : Opinion of male and female respondents do not differ on the feature “zero pollution to environment”

H_1 : Opinion of male and female respondents differs on the feature “zero pollution to environment”

Here chi-square statistic was found to be .878 with 4 degrees of freedom and p -value .928 Hence, H_0 cannot be rejected. So, we conclude that opinion of both the gender is similar.

As it is evident from the above table opinions of both the gender do not vary significantly. In aggregate, 66.3% respondents said very good, 23.9% said good, 6.2% said average about this feature. Only 2.3% said poor and 1.2 % said very poor about this feature.

Opinion of various age groups about the feature “it can’t go beyond 25 km speed”

Cross tabulation

Table-6.57

			Beyond 25 km speed					
			Very Good	2	3	4	5	Total
Age	13 to 21	Count	17	45	99	120	81	362
		% within Age	4.7%	12.4%	27.3%	33.1%	22.4%	100.0%
	22 to 45	Count	13	36	201	191	156	597
		% within Age	2.2%	6.0%	33.7%	32.0%	26.1%	100.0%
	46 to 55	Count	3	1	6	9	6	25
		% within Age	12.0%	4.0%	24.0%	36.0%	24.0%	100.0%
Total		Count	33	82	306	320	243	984
		% within Age	3.4%	8.3%	31.1%	32.5%	24.7%	100.0%

H_0 : Opinion of various age groups do not differ about the feature “it can’t go beyond 25 km speed”

H_1 : Opinion of various age groups differ about the feature “it can’t go beyond 25 km speed”

Here chi-square statistic was found to be 26.428 with 8 degrees of freedom and p -value .001. Hence, H_0 is rejected in favour of H_1 . So, we conclude that opinion of various age groups differ about this feature.

As it is shown in the above table in aggregate, only 3.4% of the respondents said very good and 8.3% said good about this feature. 31.1% considered it as average, 32.5% considered it as poor and 24.7% of them said very poor about it. So limited speed availability makes this two- wheeler a weak vehicle.

Opinion of various educational groups about the feature "it can't go beyond 25 km speed."

Cross tabulation

Table-6.58

		Beyond 25 km speed						
		Very Good	2	3	4	5	Total	
Education	Secondary	Count	1	4	13	14	6	38
		% within Education	2.6%	10.5%	34.2%	36.8%	15.8%	100.0%
	Higher secondary	Count	3	18	41	37	24	123
		% within Education	2.4%	14.6%	33.3%	30.1%	19.5%	100.0%
	Graduation	Count	19	45	168	179	140	551
		% within Education	3.4%	8.2%	30.5%	32.5%	25.4%	100.0%
Post-Graduation	Count	9	9	80	85	67	250	
	% within Education	3.6%	3.6%	32.0%	34.0%	26.8%	100.0%	
Any other	Count	1	2	2	3	3	11	
	% within Education	9.1%	18.2%	18.2%	27.3%	27.3%	100.0%	
Total	Count	33	78	304	318	240	973	
	% within Education	3.4%	8.0%	31.2%	32.7%	24.7%	100.0%	

H_0 : Opinion of various educational groups does not differ about the feature “it can’t go beyond 25 km speed.”

H_1 : Opinion of various educational groups differs about the feature “it can’t go beyond 25 km speed.”

Here, chi-square statistic found to be 20.892 with 16 degrees of freedom and p-value .183 Hence, H_0 cannot be rejected. So, we conclude that all educational groups share similar opinion about this feature.

As shown in the above table, in aggregate, only 3.4% of respondents considered it as a very good feature, and 8% said it as good. In fact, 31.2% called it as average, 32.7% said it poor and 24.7% said it is very poor.

Opinion of various occupational groups about the feature “it can’t go beyond 25 km speed”

Cross tabulation

Table-6.59

		Beyond 25 km speed					
		Very Good	2	3	4	5	Total
Occupation Student	Count	17	47	119	139	100	422
	% within Occupation	4.0%	11.1%	28.2%	32.9%	23.7%	100.0%
Service	Count	13	23	135	146	109	426
	% within Occupation	3.1%	5.4%	31.7%	34.3%	25.6%	100.0%
Business	Count	2	3	29	24	29	87
	% within Occupation	2.3%	3.4%	33.3%	27.6%	33.3%	100.0%
Professional Practice	Count	1	4	5	2	3	15
	% within Occupation	6.7%	26.7%	33.3%	13.3%	20.0%	100.0%
Any other	Count	1	4	15	6	2	28
	% within Occupation	3.6%	14.3%	53.6%	21.4%	7.1%	100.0%
Total	Count	34	81	303	317	243	978
	% within Occupation	3.5%	8.3%	31.0%	32.4%	24.8%	100.0%

H₀: Opinion of various occupational groups do not vary about the feature “it can’t go beyond 25 km speed”

H₁: Opinion of various occupational groups do vary about the feature “it can’t go beyond 25 km speed”

Here, chi-square statistic was found to be 35.876 with 16 degrees of freedom and *p*-value .003. Hence, H₀ is rejected in favour of H₁ and we infer that respondents of various occupational groups differ in their opinion about this feature.

As shown in the table, opinions of various occupational groups do vary about this feature. However, in aggregate 31% considered it as average, 32.4% as poor and 24.8% as very poor. To conclude, it indicates negative opinion about this feature.

Opinion of various income groups about the feature “it can’t g beyond 25 km speed”

Cross tabulation

Table-6.60

			Beyond 25 km speed					
			Very Good	2	3	4	5	Total
Income	Below 5000 Rs.	Count	9	15	50	50	26	150
		% within Income	6.0%	10.0%	33.3%	33.3%	17.3%	100.0%
	6000 to 15000 Rs.	Count	6	15	116	118	81	336
		% within Income	1.8%	4.5%	34.5%	35.1%	24.1%	100.0%
	16000 to 25000 Rs.	Count	3	6	15	19	15	58
		% within Income	5.2%	10.3%	25.9%	32.8%	25.9%	100.0%
	26000 & above	Count	2	1	16	7	30	56
		% within Income	3.6%	1.8%	28.6%	12.5%	53.6%	100.0%
Total		Count	20	37	197	194	152	600
		% within Income	3.3%	6.2%	32.8%	32.3%	25.3%	100.0%

H₀: Opinion of various income groups do not differ about the feature “it can’t g beyond 25 km speed”

H₁: Opinion of various income groups differ about the feature “it can’t g beyond 25 km speed”

Here, chi-square statistic was found to be 45.513 with 12 degrees of freedom and *p*-value .000. Hence, H₀ is rejected in favour of H₁ and we conclude that opinions do vary among various income groups.

It was found that in aggregate, hardly 3 to 6% respondents said either good or very good about this feature. Furthermore, 53.6% respondents from income group 25,000 and above said very poor about this feature. Against this, 25.9% respondents from income group 16,000 to 25,000, 24.1% with income 6,000 to 15,000 and 17.3% with income below 5,000 said very poor about this feature. Thus opinions were found different among various income groups about the feature “it can’t go beyond 25 km speed.”

Opinion of respondents of both the gender about the feature “it can’t go beyond 25 km speed.”

Cross tabulation

Table-6.61

			Beyond 25 km speed					
			Very Good	2	3	4	5	Total
Gender	Male	Count	20	30	131	160	156	497
		% within Gender	4.0%	6.0%	26.4%	32.2%	31.4%	100.0%
	Female	Count	14	52	176	160	87	489
		% within Gender	2.9%	10.6%	36.0%	32.7%	17.8%	100.0%
	Total	Count	34	82	307	320	243	986
		% within Gender	3.4%	8.3%	31.1%	32.5%	24.6%	100.0%

H_0 : Opinion of male and female respondents does not vary about the feature “it can’t go beyond 25 km speed.”

H_1 : Opinion of male and female respondents varies about the feature “it can’t go beyond 25 km speed.”

Here, chi-square statistic was found to be 33.087 with 4 degrees of freedom and p -value .000. Hence, H_0 is rejected in favour of H_1 and we conclude that opinion of male and female respondents do vary about this feature.

Above table shows that 36% females said the feature” It can’t go beyond 25 km. speed” as average while 26.4% males said it as average, 31.4% males said it is very poor while only 17.8% females considered it as very poor. However, in aggregate majority of them considered it either average or poor or very poor.

Opinion of various age groups about the feature “6 to 8 hours to recharge battery”

Cross tabulation

Table-6.62

			6 to 8 hrs to recharge battery					
			1	2	3	4	5	Total
Age	13 to 21	Count	14	51	108	124	62	359
		% within Age	3.9%	14.2%	30.1%	34.5%	17.3%	100.0%
	22 to 45	Count	22	32	101	317	125	597
		% within Age	3.7%	5.4%	16.9%	53.1%	20.9%	100.0%
	46 to 55	Count	0	3	6	7	9	25
		% within Age	.0%	12.0%	24.0%	28.0%	36.0%	100.0%
	Total	Count	36	86	215	448	196	981
		% within Age	3.7%	8.8%	21.9%	45.7%	20.0%	100.0%

H_0 : Opinion of various age groups do not differ about the feature “6 to 8 hours to recharge battery”

H_1 : Opinion of various age groups differ about the feature “6 to 8 hours to recharge battery”

Here, chi-square statistic was found to be 62.534 with 8 degrees of freedom and *p-value* .000. Hence H is rejected in favour of H₁ and we conclude that opinions do differ among various age groups.

Thus, in aggregate, 21.9% respondents said this feature as average 45.7% said it as poor and 20% said it as very poor, opinions within various age groups were different and gave negative feedback.

Opinion of various educational groups about the feature “6 to 8 hours to recharge battery”

Cross tabulation

Table-6.63

		6 to 8 hrs to recharge battery					
		1	2	3	4	5	Total
Education Secondary	Count	3	0	10	12	13	38
	% within Education	7.9%	.0%	26.3%	31.6%	34.2%	100.0%
Higher secondary	Count	8	16	27	56	16	123
	% within Education	6.5%	13.0%	22.0%	45.5%	13.0%	100.0%
Graduation	Count	15	56	130	247	101	549
	% within Education	2.7%	10.2%	23.7%	45.0%	18.4%	100.0%
Post-Graduation	Count	7	11	45	126	59	248
	% within Education	2.8%	4.4%	18.1%	50.8%	23.8%	100.0%
Any other	Count	0	2	2	4	3	11
	% within Education	.0%	18.2%	18.2%	36.4%	27.3%	100.0%
Total	Count	33	85	214	445	192	969
	% within Education	3.4%	8.8%	22.1%	45.9%	19.8%	100.0%

H_0 : Opinion of various educational groups do not differ about the feature “6 to 8 hours to recharge battery”

H_1 : Opinion of various educational groups differ about the feature “6 to 8 hours to recharge battery”

Here, chi-square statistic was found to be 36.394 with 16 degrees of freedom and p -value.003. Hence, H_0 is rejected in favour of H_1 and we conclude that opinions do differ among various educational groups.

It was found that in aggregate, 22.1% respondents considered this as average feature, 45.9% called it poor and 19.8% said very poor about this feature “it takes 6 to 8 hours to recharge battery.”

Opinion of various occupational groups about the feature “6 to 8 hours to recharge battery”

Cross tabulation

Table-6.64

		6 to 8 hrs to recharge battery					
		1	2	3	4	5	Total
Occupation Student	Count	17	56	122	155	69	419
	% within Occupation	4.1%	13.4%	29.1%	37.0%	16.5%	100.0%
Service	Count	13	21	66	229	97	426
	% within Occupation	3.1%	4.9%	15.5%	53.8%	22.8%	100.0%
Business	Count	3	5	13	48	18	87
	% within Occupation	3.4%	5.7%	14.9%	55.2%	20.7%	100.0%
Professional Practice	Count	0	0	6	4	5	15
	% within Occupation	.0%	.0%	40.0%	26.7%	33.3%	100.0%
Any other	Count	3	2	7	10	6	28
	% within Occupation	10.7%	7.1%	25.0%	35.7%	21.4%	100.0%
Total	Count	36	84	214	446	195	975
	% within Occupation	3.7%	8.6%	21.9%	45.7%	20.0%	100.0%

H₀: Opinion of various occupational groups do not differ about the feature “6 to 8 hours to recharge battery”

H₁: Opinion of various occupational groups differ about the feature “6 to 8 hours to recharge battery”

Here, chi-square statistic was found to be 69.127 with 16 degrees of freedom and *p-value* .003. Hence H₀ is rejected in favour of H₁ and we conclude that opinions do differ among various occupational groups.

It was found that as compared to students other occupational were more critical about it. In aggregate, 21.9% respondents considered this as average feature, 45.7% called it poor and 20% said very poor about this feature “it takes 6 to 8 hours to recharge battery.”

Opinion of various income groups about the feature “6 to 8 hours to recharge battery”

Cross tabulation

Table-6.65

			6 to 8 hrs to recharge battery					
			1	2	3	4	5	Total
Income Below 5000 Rs.	Count		5	6	45	69	25	150
	% within Income		3.3%	4.0%	30.0%	46.0%	16.7%	100.0%
6000 to 15000 Rs.	Count		8	20	44	185	79	336
	% within Income		2.4%	6.0%	13.1%	55.1%	23.5%	100.0%
16000 to 25000 Rs.	Count		2	5	16	29	7	59
	% within Income		3.4%	8.5%	27.1%	49.2%	11.9%	100.0%
26000 & above	Count		3	2	7	32	11	55
	% within Income		5.5%	3.6%	12.7%	58.2%	20.0%	100.0%
Total	Count		18	33	112	315	122	600
	% within Income		3.0%	5.5%	18.7%	52.5%	20.3%	100.0%

H₀: Opinion of various income groups do not differ about the feature “6 to 8 hours to recharge battery”

H₁: Opinion of various income groups differ about the feature “6 to 8 hours to recharge battery”

Here, chi-square statistic was found to be 29.696 with 12 degrees of freedom and *p*-value .003. Hence, H₀ is rejected in favour of H₁ and we infer that opinions do differ among various income groups.

It was found that as compared to other income groups, respondents from 6,000 to 15,000 Rs. p.m. income and Rs.26, 000 & above p.m. were more critical about it. In aggregate, 18.7% respondents considered this as average feature, 52.5% called it poor and 20.3% said very poor about this feature “it takes 6 to 8 hours to recharge battery.”

Opinion of male and female respondents about the feature “it takes 6 to 8 hours to recharge the battery”

Cross tabulation

Table-6.66

			6 to 8 hrs to recharge battery					
			1	2	3	4	5	Total
Gender	Male	Count	19	49	98	223	106	495
		% within Gender	3.8%	9.9%	19.8%	45.1%	21.4%	100.0%
	Female	Count	17	37	117	226	91	488
		% within Gender	3.5%	7.6%	24.0%	46.3%	18.6%	100.0%
	Total	Count	36	86	215	449	197	983
		% within Gender	3.7%	8.7%	21.9%	45.7%	20.0%	100.0%

H₀: Opinion of male and female respondents do not vary about the feature “it takes 6 to 8 hours to recharge the battery”

H₁: Opinion of male and female respondents vary about the feature “it takes 6 to 8 hours to recharge the battery”

Here, chi-square statistic was found to be 4.577 with 4 degrees of freedom and p -value .333. Hence, H_0 cannot be rejected. So, we conclude that opinion of both the gender does not vary.

In aggregate, 21.9% respondents considered this as average feature, 45.7% called it poor and 20.0% said very poor about this feature “it takes 6 to 8 hours to recharge battery.”

Opinion of various age groups about the feature “Light weight and comfortable”

Cross tabulation

Table-6.67

			Light weight & comfortable					
			1	2	3	4	5	Total
Age	13 to 21	Count	84	148	81	37	13	363
		% within Age	23.1%	40.8%	22.3%	10.2%	3.6%	100.0%
	22 to 45	Count	123	167	222	59	25	596
		% within Age	20.6%	28.0%	37.2%	9.9%	4.2%	100.0%
	46 to 55	Count	5	11	7	2	0	25
		% within Age	20.0%	44.0%	28.0%	8.0%	.0%	100.0%
	Total	Count	212	326	310	98	38	984
		% within Age	21.5%	33.1%	31.5%	10.0%	3.9%	100.0%

H_0 : Opinion of various age groups do not differ about the feature “Light weight and comfortable”

H_1 : Opinion of various age groups differ about the feature “Light weight and comfortable”

Here, chi-square statistic was found to be 30.071 with 8 degrees of freedom and p -value .000. Hence, H_0 is rejected in favour of H_1 and we conclude that opinions do differ among various age groups.

It was found that 44% respondents from 46 to 55 years age group, 40.8% from 13 to 21 said this feature as good. Against these only 28% respondents from 22 to 45 years said good about it. Similarly, 20 to 28% respondents from 13 to 21 years age group and of 46-

55 years age group said average about this feature, while 37.2% from 22-45 years age said average about it.

Opinion of various educational groups about the feature “Light weight and comfortable”

Cross tabulation

Table-6.68

		Light weight & comfortable					
		1	2	3	4	5	Total
Education Secondary	Count	5	20	8	5	1	39
	% within Education	12.8%	51.3%	20.5%	12.8%	2.6%	100.0%
Higher secondary	Count	33	36	30	20	4	123
	% within Education	26.8%	29.3%	24.4%	16.3%	3.3%	100.0%
Graduation	Count	120	198	165	47	21	551
	% within Education	21.8%	35.9%	29.9%	8.5%	3.8%	100.0%
Post-Graduation	Count	48	69	102	22	8	249
	% within Education	19.3%	27.7%	41.0%	8.8%	3.2%	100.0%
Any other	Count	4	2	2	2	1	11
	% within Education	36.4%	18.2%	18.2%	18.2%	9.1%	100.0%
Total	Count	210	325	307	96	35	973
	% within Education	21.6%	33.4%	31.6%	9.9%	3.6%	100.0%

H_0 : Opinion of various educational groups do not differ about the feature “Light weight and comfortable”

H_1 : Opinion of various educational groups differ about the feature “Light weight and comfortable”

Here, chi-square statistic was found to be 33.590 with 16 degrees of freedom and p -value .006. Hence, H_0 is rejected in favour of H_1 and we conclude that opinions do differ among various educational groups.

If we carefully analyze, 51.3% secondary pass said good about this feature. Against this, only 27.7% post graduates and 18.2% from “others” category said good about this feature. Similarly 41% post graduates called this feature as average. Against this 20.5% secondary pass and 18.2% from “others” called it as average. Thus, variations were quite high in their opinions. However, in aggregate, all respondents were positive about this feature.

Opinion of various occupational groups about the feature “Light weight and comfortable”

Cross tabulation

Table-6.69

		Light weight & comfortable					
		1	2	3	4	5	Total
Occupation Student	Count	89	165	102	48	19	423
	% within Occupation	21.0%	39.0%	24.1%	11.3%	4.5%	100.0%
Service	Count	95	118	161	35	16	425
	% within Occupation	22.4%	27.8%	37.9%	8.2%	3.8%	100.0%
Business	Count	20	23	35	8	1	87
	% within Occupation	23.0%	26.4%	40.2%	9.2%	1.1%	100.0%
Professional Practice	Count	0	5	4	5	2	16
	% within Occupation	.0%	31.2%	25.0%	31.2%	12.5%	100.0%
Any other	Count	7	14	5	2	0	28
	% within Occupation	25.0%	50.0%	17.9%	7.1%	.0%	100.0%
Total	Count	211	325	307	98	38	979
	% within Occupation	21.6%	33.2%	31.4%	10.0%	3.9%	100.0%

H_0 : Opinion of various occupational groups do not differ about the feature “Light weight and comfortable”

H_1 : Opinion of various occupational groups differ about the feature “Light weight and comfortable”

Here, chi-square statistic was found to be 48.241 with 16 degrees of freedom and p -value .000. Hence H_0 is rejected in favour of H_1 and we conclude that opinions do differ among various occupational groups.

It was found that except professionals, respondents from other occupational class were relatively more positive about this feature. In aggregate, 21.6% respondents said very good about this feature, 33.2% said good and 31.4% considered it as average. Against this, only 10% said poor and 3.9% said very poor about this feature. Thus, variations were found among various occupational groups about their opinions. However, in aggregate, all respondents were positive about this feature.

Opinion of various income groups about the feature “Light weight and comfortable”

Cross tabulation

Table-6.70

			Light weight & comfortable					
			1	2	3	4	5	Total
Income	Below 5000 Rs.	Count	27	58	46	14	4	149
		% within Income	18.1%	38.9%	30.9%	9.4%	2.7%	100.0%
	6000 to 15000 Rs.	Count	71	68	149	35	14	337
		% within Income	21.1%	20.2%	44.2%	10.4%	4.2%	100.0%
	16000 to 25000 Rs.	Count	15	21	17	5	0	58
		% within Income	25.9%	36.2%	29.3%	8.6%	.0%	100.0%
	26000 & above	Count	17	17	13	6	3	56
		% within Income	30.4%	30.4%	23.2%	10.7%	5.4%	100.0%
Total		Count	130	164	225	60	21	600
		% within Income	21.7%	27.3%	37.5%	10.0%	3.5%	100.0%

H_0 : Opinion of various income groups do not differ about the feature “Light weight and comfortable”

H_1 : Opinion of various income groups differ about the feature “Light weight and comfortable”

Here, chi-square statistic was found to be 32.242 with 12 degrees of freedom and p -value .001. Hence, H_0 is rejected in favour of H_1 and we conclude that opinions do differ among various income groups.

Variations were found among various income groups about their opinion for this feature. More number of respondents from lower income groups rated this feature average compared to their counterparts from upper income groups. In aggregate, 21.7% respondents said very good about this feature, 27.3% said good and 37.5% considered it as average. Against this, only 10% said poor and 3.5% said very poor about this feature.

Opinion of both the gender about the feature “Light weight and comfortable”

Cross tabulation

Table-6.71

			Light weight & comfortable					
			1	2	3	4	5	Total
Gender	Male	Count	95	156	164	56	26	497
		% within Gender	19.1%	31.4%	33.0%	11.3%	5.2%	100.0%
	Female	Count	118	171	146	42	12	489
		% within Gender	24.1%	35.0%	29.9%	8.6%	2.5%	100.0%
	Total	Count	213	327	310	98	38	986
		% within Gender	21.6%	33.2%	31.4%	9.9%	3.9%	100.0%

H_0 : Opinion of both the gender do not differ about the feature “Light weight and comfortable”

H_1 : Opinion of both the gender differ about the feature “Light weight and comfortable”

Here, chi-square statistic was found to be 11.311 with 4 degrees of freedom and p -value .023. Hence, H_0 is rejected in favour of H_1 . So, we conclude that opinion of both the gender differ about the feature “Light weight and comfortable”.

More number of female respondents were positive compared to their male counterparts about this feature. 24.1% females said very good, 35% considered it good and 29.9% said average to this feature. Against this, 19.1% said very good, 31.4% said good and 33% male respondents considered it as average. However, in aggregate, both the genders were found positive about this feature.

Opinion of various age groups about the feature “Capacity to carry weight is 75 kg.”

Cross tabulation

Table-6.72

			Capacity to carry weight					
			1	2	3	4	5	Total
Age	13 to 21	Count	22	60	101	103	77	363
		% within Age	6.1%	16.5%	27.8%	28.4%	21.2%	100.0%
	22 to 45	Count	26	42	107	263	156	594
		% within Age	4.4%	7.1%	18.0%	44.3%	26.3%	100.0%
	46 to 55	Count	0	4	9	7	4	24
		% within Age	.0%	16.7%	37.5%	29.2%	16.7%	100.0%
	Total	Count	48	106	217	373	237	981
		% within Age	4.9%	10.8%	22.1%	38.0%	24.2%	100.0%

H_0 : Opinion of various age groups does not differ about the feature “Capacity to carry weight is 75 kg”.

H_1 : Opinion of various age groups differs about the feature “Capacity to carry weight is 75 kg”.

Here, chi-square statistic was found to be 52.82 with 8 degrees of freedom and p -value .000 Hence, H_0 is rejected in favour of H_1 and we infer that opinion of different age groups varies about the feature “Capacity to carry weight is 75 kg.”

Here, in aggregate, 22.1% respondents said average about this feature, 38% said poor and 24.2% said very poor about the feature.

Opinion of various educational groups about the feature “Capacity to carry weight is 75 kg.”

Cross tabulation

Table-6.73

		Capacity to carry weight					
		1	2	3	4	5	Total
Education Secondary	Count	1	1	16	13	6	37
	% within Education	2.7%	2.7%	43.2%	35.1%	16.2%	100.0%
Higher secondary	Count	10	15	42	34	21	122
	% within Education	8.2%	12.3%	34.4%	27.9%	17.2%	100.0%
Graduation	Count	29	62	108	213	139	551
	% within Education	5.3%	11.3%	19.6%	38.7%	25.2%	100.0%
Post-Graduation	Count	7	20	48	108	66	249
	% within Education	2.8%	8.0%	19.3%	43.4%	26.5%	100.0%
Any other	Count	0	3	3	4	1	11
	% within Education	.0%	27.3%	27.3%	36.4%	9.1%	100.0%
Total	Count	47	101	217	372	233	970
	% within Education	4.8%	10.4%	22.4%	38.4%	24.0%	100.0%

H₀: Opinion of various educational groups does not differ about the feature “Capacity to carry weight is 75 kg”.

H₁: Opinion of various educational groups differs about the feature “Capacity to carry weight is 75 kg”.

Here, chi-square statistic was found to be 42.044 with 16 degrees of freedom and *p*-value .000 Hence, H₀ is rejected in favour of H₁ and we infer that opinion of various educational groups varies about the feature “Capacity to carry weight is 75 kg.”

It was found that in aggregate 22.4% respondents said average, 38.4% said poor and 24% said very poor about this feature. Thus, respondents gave negative feedback about this feature.

Opinion of various occupational groups about the feature “Capacity to carry weight is 75 kg”

Cross tabulation

Table-6.74

			Capacity to carry weight					
			1	2	3	4	5	Total
Occupation	Student	Count	26	63	108	142	84	423
		% within Occupation	6.1%	14.9%	25.5%	33.6%	19.9%	100.0%
	Service	Count	17	28	75	183	121	424
		% within Occupation	4.0%	6.6%	17.7%	43.2%	28.5%	100.0%
	Business	Count	2	7	15	39	23	86
		% within Occupation	2.3%	8.1%	17.4%	45.3%	26.7%	100.0%
	Professional Practice	Count	0	2	6	2	4	14
		% within Occupation	.0%	14.3%	42.9%	14.3%	28.6%	100.0%
	Any other	Count	3	5	12	4	5	29
		% within Occupation	10.3%	17.2%	41.4%	13.8%	17.2%	100.0%
	Total	Count	48	105	216	370	237	976
		% within Occupation	4.9%	10.8%	22.1%	37.9%	24.3%	100.0%

H_0 : Opinion of various occupational groups does not differ about the feature “Capacity to carry weight is 75 kg”.

H_1 : Opinion of various occupational groups differs about the feature “Capacity to carry weight is 75 kg”.

Here, chi-square statistic was found to be 55.833 with 16 degrees of freedom and p -value .000 Hence, H_0 is rejected in favour of H_1 and we infer that opinion of various occupational groups varies about the feature “Capacity to carry weight is 75 kg.”

As compared to students respondents from other occupational groups were more negative about this feature. However, in aggregate, 22.1% respondents said average, 37.9% said poor and 24.3% said very poor about this feature.

Opinion of various income groups about the feature “Capacity to carry weight is 75 kg”

Cross tabulation

Table-6.75

			Capacity to carry weight					
			1	2	3	4	5	Total
Income Below 5000 Rs.	Count		5	13	38	56	37	149
	% within Income		3.4%	8.7%	25.5%	37.6%	24.8%	100.0%
6000 to 15000 Rs.	Count		14	21	55	141	102	333
	% within Income		4.2%	6.3%	16.5%	42.3%	30.6%	100.0%
16000 to 25000 Rs.	Count		3	8	12	19	16	58
	% within Income		5.2%	13.8%	20.7%	32.8%	27.6%	100.0%
26000 & above	Count		2	5	8	32	9	56
	% within Income		3.6%	8.9%	14.3%	57.1%	16.1%	100.0%
Total	Count		24	47	113	248	164	596
	% within Income		4.0%	7.9%	19.0%	41.6%	27.5%	100.0%

H₀: Opinion of various income groups does not differ about the feature “Capacity to carry weight is 75 kg”.

H₁: Opinion of various income groups differs about the feature “Capacity to carry weight is 75 kg”.

Here, chi-square statistic was found to be 18.583 with 12 degrees of freedom and *p*-value .099 Hence, H₀ cannot be rejected. So, we conclude that opinions of various income groups are similar about the feature “Capacity to carry weight is 75 kg.”

Only 4% respondents considered this feature as very good. 41.6% said poor and 27.5% said very poor about this feature.

Opinion of both the gender about the feature “Capacity to carry weight is 75 kg”

Cross tabulation

Table-6.76

			Capacity to carry weight					
			1	2	3	4	5	Total
Gender	Male	Count	22	53	104	195	123	497
		% within Gender	4.4%	10.7%	20.9%	39.2%	24.7%	100.0%
	Female	Count	26	53	114	179	114	486
		% within Gender	5.3%	10.9%	23.5%	36.8%	23.5%	100.0%
	Total	Count	48	106	218	374	237	983
		% within Gender	4.9%	10.8%	22.2%	38.0%	24.1%	100.0%

H₀: Opinion of both the gender does not differ about the feature “Capacity to carry weight is 75 kg”.

H₁: Opinion of both the gender differs about the feature “Capacity to carry weight is 75 kg”.

Here, chi-square statistic was found to be 1.695 with 4 degrees of freedom and p -value .792 Hence, H_0 cannot be rejected. So, we conclude that opinion of both the gender is similar about the feature “Capacity of carry weight is 75 kg.”

It was found that in aggregate 22.2% respondents said average about this feature, 38% considered it as poor and 24.1% said very poor about this feature.

Opinion of various age groups about the feature “Its on road price is 28,500”

Cross tabulation

Table-6.77

			On road price is 28500 Rs					
			1	2	3	4	5	Total
Age	13 to 21	Count	53	84	124	58	43	362
		% within Age	14.6%	23.2%	34.3%	16.0%	11.9%	100.0%
	22 to 45	Count	273	57	134	95	39	598
		% within Age	45.7%	9.5%	22.4%	15.9%	6.5%	100.0%
	46 to 55	Count	2	1	7	10	5	25
		% within Age	8.0%	4.0%	28.0%	40.0%	20.0%	100.0%
	Total	Count	328	142	265	163	87	985
		% within Age	33.3%	14.4%	26.9%	16.5%	8.8%	100.0%

H_0 : Opinion of various age groups do not differ about the feature it’s on road price is 28,500.

H_1 : Opinion of various age groups differ about the feature it’s on road price is 28,500.

Here, chi-square statistic was found to be 1.325 with 8 degrees of freedom and p -value .000 Hence, H_0 is rejected in favour of H_1 and we infer that opinions of various age groups differ about the feature it’s on road price is 28,500.

Here, huge variations were found in the opinions of various age groups about the feature “Its on road price is 28,500 Rs.” 45.7% respondents from the age group from 22 to 45 years said very good to this feature. Against this, only 14.6% respondents in the age

group from 13 to 21 years and 8% from the age group 46 to 55 years said very good about this feature. Respondents from 22 to 45 years age group were very positive about this feature. Against this, 46 to 55 years age group were found negative.

Opinion of various educational groups about the feature “its on road price is 28,500”

Cross tabulation

Table-6.78

		On road price is 28500 Rs					
		1	2	3	4	5	Total
Education Secondary	Count	5	5	12	15	2	39
	% within Education	12.8%	12.8%	30.8%	38.5%	5.1%	100.0%
Higher secondary	Count	32	25	34	22	10	123
	% within Education	26.0%	20.3%	27.6%	17.9%	8.1%	100.0%
Graduation	Count	196	84	139	80	54	553
	% within Education	35.4%	15.2%	25.1%	14.5%	9.8%	100.0%
Post-Graduation	Count	92	27	70	45	14	248
	% within Education	37.1%	10.9%	28.2%	18.1%	5.6%	100.0%
Any other	Count	2	1	5	1	2	11
	% within Education	18.2%	9.1%	45.5%	9.1%	18.2%	100.0%
Total	Count	327	142	260	163	82	974
	% within Education	33.6%	14.6%	26.7%	16.7%	8.4%	100.0%

H_0 : Opinion of various educational groups does not differ about the feature it's on road price is 28,500.

H_1 : Opinion of various educational groups differs about the feature it's on road price is 28,500.

Here, chi-square statistic was found to be 36.068 with 16 degrees of freedom and p -value .003 Hence, H_0 is rejected in favour of H_1 and we infer that opinions of various educational groups differ about the feature it's on road price is 28,500.

Here, mixed reactions were found. It was found that neither majority of the respondents said very good or good about this price, nor majority spoke negative about it. 33.6% in aggregate said very good about this price but 26.7% said it average and 16.7% said it is poor and 8.4% said very poor about it.

Opinion of various occupational groups about the feature "its on road price is 28,500"

Cross tabulation

Table-6.79

		On road price is 28500 Rs					
		1	2	3	4	5	Total
Occupation Student	Count	59	87	147	77	52	422
	% within Occupation	14.0%	20.6%	34.8%	18.2%	12.3%	100.0%
Service	Count	234	41	80	53	19	427
	% within Occupation	54.8%	9.6%	18.7%	12.4%	4.4%	100.0%
Business	Count	30	10	25	16	6	87
	% within Occupation	34.5%	11.5%	28.7%	18.4%	6.9%	100.0%
Professional Practice	Count	2	2	4	4	3	15
	% within Occupation	13.3%	13.3%	26.7%	26.7%	20.0%	100.0%
Any other	Count	3	2	7	12	5	29
	% within Occupation	10.3%	6.9%	24.1%	41.4%	17.2%	100.0%
Total	Count	328	142	263	162	85	980
	% within Occupation	33.5%	14.5%	26.8%	16.5%	8.7%	100.0%

H_0 : Opinion of various occupational groups does not differ about the feature it's on road price is 28,500.

H_1 : Opinion of various occupational groups differs about the feature it's on road price is 28,500.

Here, chi-square statistic was found to be 1.901 with 16 degrees of freedom and p -value .000 Hence, H_0 is rejected in favour of H_1 and we infer that opinion of various occupational groups differ about the feature it's on road price is 28,500

It was found that service class and business class considered it as fair price and said very good but students, professionals and others called this price as average or poor.

Opinion of various income groups about the feature "its on road price is 28,500"

Cross tabulation

Table-6.80

			On road price is 28500 Rs					
			1	2	3	4	5	Total
Income Below 5000 Rs.	Count		44	20	49	27	10	150
	% within Income		29.3%	13.3%	32.7%	18.0%	6.7%	100.0%
6000 to 15000 Rs.	Count		180	33	68	38	18	337
	% within Income		53.4%	9.8%	20.2%	11.3%	5.3%	100.0%
16000 to 25000 Rs.	Count		23	8	12	12	3	58
	% within Income		39.7%	13.8%	20.7%	20.7%	5.2%	100.0%
26000 & above	Count		32	4	8	6	6	56
	% within Income		57.1%	7.1%	14.3%	10.7%	10.7%	100.0%
Total	Count		279	65	137	83	37	601
	% within Income		46.4%	10.8%	22.8%	13.8%	6.2%	100.0%

H_0 : Opinion of various income groups does not differ about the feature it's on road price is 28,500.

H_1 : Opinion of various income groups differ about the feature it's on road price is 28,500

Here, chi-square statistic was found to be 34.896 with 12 degrees of freedom and p -value .000 Hence, H_0 is rejected in favour of H_1 and we conclude that opinion of various income groups differ about the feature it's on road price is 28,500

Respondents from income 6,000 to 15,000 and 25,000 and above p.m. considered this price as fair and said very good while comparatively less number of respondents from other income groups said very good about this price.

Opinion of both the gender about the feature "its on road price is 28,500"

Cross tabulation

Table-6.81

			On road price is 28500 Rs					
			1	2	3	4	5	Total
Gender	Male	Count	168	71	133	76	50	498
		% within Gender	33.7%	14.3%	26.7%	15.3%	10.0%	100.0%
	Female	Count	160	72	132	88	37	489
		% within Gender	32.7%	14.7%	27.0%	18.0%	7.6%	100.0%
	Total	Count	328	143	265	164	87	987
		% within Gender	33.2%	14.5%	26.8%	16.6%	8.8%	100.0%

H_0 : Opinion of both the gender does not differ about the feature it's on road price is 28,500.

H_1 : Opinion of various occupational groups differs about the feature it's on road price is 28,500

Here, chi-square statistic was found to be 2.945 with 4 degrees of freedom and p -value .567 Hence, H_0 cannot be rejected and we infer that opinion of both the gender is similar about the feature it's on road price is 28,500

It was found that in aggregate, 26.8% said average, 16.6% said poor and 8.8% said very poor about the feature “its on road price is 28,500Rs.” Against this, 33.2% said very good and 14.5% said good about this price. Hence, mixed reactions were observed regarding price of this battery-operated two-wheeler.

6.4 Opinions about willingness to make compromises in exchange for battery-operated two-wheeler

Respondents were asked their opinions about their willingness to make compromises for buying a battery-operated two wheeler and their responses were measured on Likert scale ranging from strongly agree to strongly disagree. Analysis was performed as discussed in chapter-5 on research methodology. Whether opinions differ with age, education, occupation, income and gender were analyzed with reference to statements given below.

1. Willingness to buy battery operated two-wheeler in exchange for improved ecological performance.
2. Willingness to pay somewhat more in exchange for improved ecological performance.
3. Willingness to compromise with speed in exchange for better ecological performance.
4. Willingness to compromise with speed in exchange for very less operating cost.
5. Opinion on whether govt. should offer subsidy in exchange for eco friendly performance of the two-wheeler.

These trade-offs were studied here using ONE-WAY ANOVA and two tailed t-test at 5% level of significance. Further, multiple comparisons were made using Fisher’s LSD (Least Significant Difference) Test and significant groups with reference to age, education, occupation, income and gender were identified using average opinion rating of various age groups as mentioned in the last column of the table.

Opinion of various age groups on “willingness to buy battery-operated two-wheeler as it is environmental friendly”

H_0 : Average opinion rating about “willingness to buy battery-operated two-wheeler as it is environmental friendly” is equal among various age groups.

H_1 : Average opinion rating about “willingness to buy battery-operated two-wheeler as it is environmental friendly” differs among various age groups.

ANOVA-age wise statement-1

Table-6.82

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10.054	2	5.027	5.248	.005
Within Groups	950.253	992	.958		
Total	960.308	994			

Here, p -value is $<.05$ Hence, H_0 is rejected in favour of H_1 and we infer that average opinion rating differs among various age groups.

Multiple Comparisons- age wise-statement-1

Table-6.83

(i)Age	(j) Age	Mean Difference (i-j)	Std Error	Sig		
					p -value	Opinions
13 to 21	22 to 45	.178	.065	.006	<0.05	Different
	46 to 55	-.232	.202	.252	>0.05	Similar
22 to 45	13 to 21	-.178	.065	.006	<0.05	Different
	46 to 55	-.409	.200	.041	<0.05	
46 to 55	13 to 21	.232	.202	.252	>0.05	
	22 to 45	.409	.200	.041	<0.05	

Descriptive Statistics- age wise- statement-1

Table-6.84

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
13 to 21	368	2.01	1.111	.058	1.89	2.12	1	12
22 to 45	602	1.83	.891	.036	1.76	1.90	1	5
46 to 55	25	2.24	.926	.185	1.86	2.62	1	4
Total	995	1.91	.983	.031	1.85	1.97	1	12

A careful study of the mean values reveals that age group of 22 to 45 years is the most critical segment. Here, mean value of this age group is 1.83. It means they are the most positive among the three age groups about the statement and agree to buy the two-wheeler as it is environmental friendly. In fact, this age group is the earning group, and therefore it is a key segment for battery-operated two-wheeler.

Teenagers are also positive about the two-wheeler as it is eco-friendly with mean value 2.01 and therefore, it emerges as a potential market. However, it is found that the last age group of 46 to 55 years is indifferent as the mean value is 2.24. They are close to the response “neither agree nor disagree”. Challenge for the green marketer is to persuade them to buy battery-operated two-wheeler as it is environmental friendly.

Here, promotional objective has to be providing customer education about environment protection, pollution due to two-wheelers and adverse impact of pollution. Second promotional objective must be to persuade the market to buy battery-operated two-wheeler.

Opinion of various educational groups on “willingness to buy battery-operated two-wheeler as it is environmental friendly”

H₀: Average opinion rating is equal among various educational groups on “willingness to buy battery-operated two-wheeler as it is eco-friendly”

H₁: Average opinion rating about “willingness to buy battery-operated two-wheeler as it is environmental friendly” differs among various educational groups.

ANOVA education wise statement-1

Table-6.85

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9.146	4	2.286	2.372	.051
Within Groups	941.856	977	.964		
Total	951.002	981			

Here, *p*-value is >.05, hence H₀ cannot be rejected and we infer that average opinion rating is equal among various educational groups.

Multiple comparisons education wise statement-1

Table-6.86

(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.	<i>p</i> -value	Opinion
Secondary	Higher secondary	.300	.180	.097	>.05	Different
	Graduation	.423*	.163	.009	<.05	Similar
	Post-Graduation	.474*	.169	.005	<.05	Similar
	Any other	.399	.335	.235	>.05	Different
Higher secondary	Secondary	-.300	.180	.097		
	Graduation	.123	.098	.206	>.05	Different
	Post-Graduation	.174	.108	.106	>.05	Different
	Any other	.099	.309	.749	>.05	Different

Graduation	Secondary	-.423*	.163	.009		
	Higher secondary	-.123	.098	.206		
	Post-Graduation	.051	.074	.496	>.05	Different
	Any other	-.024	.299	.935	>.05	Different
Post-Graduation	Secondary	-.474*	.169	.005		
	Higher secondary	-.174	.108	.106		
	Graduation	-.051	.074	.496		
	Any other	-.075	.302	.804	>.05	Different
Any other	Secondary	-.399	.335	.235		
	Higher secondary	-.099	.309	.749		
	Graduation	.024	.299	.935		
	Post-Graduation	.075	.302	.804		

Furthermore, mean values were identified which denotes how strongly various educational groups agree or disagree for buying a battery operated two-wheeler as it is environmental friendly.

Descriptive Statistics education wise statement -1

Table-6.87

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Secondary	39	2.31	1.104	.177	1.95	2.67	1	5
Higher secondary	124	2.01	.975	.088	1.83	2.18	1	5
Graduation	555	1.88	1.006	.043	1.80	1.97	1	12
Post-Graduation	253	1.83	.915	.058	1.72	1.95	1	5
Any other	11	1.91	.831	.251	1.35	2.47	1	3
Total	982	1.90	.985	.031	1.84	1.97	1	12

It is interesting to note that those respondents who are post graduates have mean value 1.83 & graduates with mean value 1.88. It means highly educated class agree to buy battery operated two wheeler as it is environmental friendly.

Those who are secondary pass have mean value 2.31 and they are indifferent about this two-wheeler. It simply indicates that educational efforts are indeed required about importance of environment protection and core benefits of using environmental friendly two-wheeler.

Opinion of various occupational groups on “willingness to buy battery-operated two-wheeler as it is environmental friendly”

In the similar fashion ONE WAY ANOVA was used to analyze responses of various occupational groups as shown below in the table and p -value was identified. Here, objective was whether opinions among respondents of various occupational groups differ on preference to buy battery operated two-wheeler as it is environmental friendly.

H_0 : Average opinion rating is equal among various occupational groups on “willingness to buy battery-operated two wheeler as it is environmental friendly

H_1 : Average opinion rating about “willingness to buy battery-operated two-wheeler as it is environmental friendly” differs among various occupational groups.

ANOVA occupation wise statement -1

Table-6.88

		Sum of Squares	df	Mean Square	F	Sig.
Opinion abt Environment	Between Groups	28.076	4	7.019	7.437	.000
	Within Groups	927.790	983	.944		
	Total	955.865	987			

Here, p -value is $<.05$ hence, H_0 is rejected in favour of H_1 and we infer that average opinion rating differs among various occupational groups.

Multiple Comparisons occupation wise statement-1

Table-6.89

Dependent Variable	(I) Occupation	(J) Occupation	Mean Difference (I-J)	Std. Error	Sig.		
						p-value	Opinions
Opinion abt Environment	Student	Service	.297*	.066	.000	<.05	Different
		Business	-.085	.114	.458	>.05	Similar
		Professional Practice	.144	.247	.561	>.05	Similar
		Any other	-.292	.186	.118	>.05	Similar
	Service	Student	-.297*	.066	.000		
		Business	-.381*	.114	.001	<.05	Different
		Professional Practice	-.153	.247	.536	>.05	Similar
		Any other	-.588*	.186	.002	<.05	Different
	Business	Student	.085	.114	.458		
		Service	.381*	.114	.001		
		Professional Practice	.228	.264	.388	>.05	Similar
		Any other	-.207	.208	.321	>.05	Similar
	Professional Practice	Student	-.144	.247	.561		
		Service	.153	.247	.536		
		Business	-.228	.264	.388		
		Any other	-.435	.303	.150	>.05	Similar
	Any other	Student	.292	.186	.118		
		Service	.588*	.186	.002		
		Business	.207	.208	.321		
		Professional Practice	.435	.303	.150		

Furthermore, mean values were identified which denotes how strongly various occupational groups agree or disagree for buying a battery operated two- wheeler as it is environmental friendly.

Descriptive Statistics occupation wise statement -1

Table-6.90

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Opinion abt Environment	Student	428	2.02	1.095	.053	1.91	2.12	1	12
	Service	428	1.72	.813	.039	1.64	1.80	1	5
	Business	87	2.10	1.100	.118	1.87	2.34	1	5
	Professional Practice	16	1.88	.885	.221	1.40	2.35	1	4
	Any other	29	2.31	.806	.150	2.00	2.62	1	3
	Total	988	1.90	.984	.031	1.84	1.97	1	12

As it is mentioned in the above table mean values of respondents who belong to service class or who are professionals is 1.72 and 1.88 respectively which indicates their agreement on willingness to purchase battery operated two wheeler as it is environmental friendly. However, as compared to other occupational groups, students and business class respondents neither agree nor disagree about their willingness to buy battery-operated two wheeler as it is environmental friendly.

Opinion of various income groups on “willingness to buy battery-operated two-wheeler as it is environmental friendly”

H₀: Average opinion rating is equal among various income groups on “willingness to buy battery-operated two wheeler as it is environmental friendly”.

H₁: Average opinion rating differs among various income groups about “willingness to buy battery-operated two-wheeler as it is environmental friendly”.

ANOVA income wise statement -1

Table-6.91

		Sum of Squares	df	Mean Square	F	Sig.
Opinion abt Environment	Between Groups	5.617	3	1.872	2.526	.057
	Within Groups	444.679	600	.741		
	Total	450.296	603			

Here, p -value is $>.05$ hence, H_0 cannot be rejected and we infer that average opinion rating is equal among various income groups.

Multiple Comparisons income wise statement-1

Table-6.92

Dependent Variable	(I) Income	(J) Income	Mean Difference (I-J)	Std. Error	Sig.		
						p -value	Opinions
Opinion abt Environment	Below 5000 Rs.	6000 to 15000 Rs.	.202*	.084	.016	$<.05$	Different
		16000 to 25000 Rs.	-.018	.132	.893	$>.05$	Similar
		26000 & above	.147	.135	.276	$>.05$	Similar
	6000 to 15000 Rs.	Below 5000 Rs.	-.202*	.084	.016		
		16000 to 25000 Rs.	-.220	.121	.071	$>.05$	Similar
		26000 & above	-.056	.124	.654	$>.05$	Similar



Descriptive Statistics income wise statement-1

Table-6.93

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Opinion abt Environment	Below 5000 Rs.	152	1.91	.969	.079	1.76	2.07	1	5
	6000 to 15000 Rs	337	1.71	.826	.045	1.62	1.80	1	5
	16000 to 25000 Rs.	59	1.93	.944	.123	1.69	2.18	1	5
	26000 & above	56	1.77	.632	.084	1.60	1.94	1	3
	Total	604	1.79	.864	.035	1.72	1.86	1	5

Study shows that respondents of all income groups have shown interest in this two wheeler and are willing to buy it as it is eco friendly. Further, respondents from 5000 to 15000Rs. income groups have got lowest mean value i.e. 1.71. It means this group is the most positive to purchase battery operated two-wheeler as it is eco friendly.

Opinion of various age groups on “willingness to buy battery-operated two-wheeler even if it is somewhat expensive

H₀: Average opinion rating is equal among various age groups about “buying a battery-operated two-wheeler even if it is somewhat expensive”.

H₁: Average opinion rating about “willingness to buy battery-operated two-wheeler even if it is somewhat expensive” differs among various age groups.

ANOVA age wise statement-2

Table-6.94

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	72.273	2	36.136	31.019	.000
Within Groups	1152.178	989	1.165		
Total	1224.451	991			

Here, *p-value* is <.05 hence, H₀ is rejected in favour of H₁ and we infer that average opinion rating differs among various age groups.

Multiple Comparisons age wise statement-2

Table-6.95

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.		
					<i>p-value</i>	Opinion
13 to 21	22 to 45	.552 [*]	.071	.000	<.05	Different
	46 to 55	-.001	.223	.995	>.05	Similar
22 to 45	13 to 21	-.552 [*]	.071	.000		
	46 to 55	-.553 [*]	.220	.012	<.05	Different
46 to 55	13 to 21	.001	.223	.995		
	22 to 45	.553 [*]	.220	.012		

Now, to further investigate the degree of agreement or disagreement, mean values were computed as shown in the table below.

Descriptive Statistics age wise statement-2

Table-6.96

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
13 to 21	368	2.64	.972	.051	2.54	2.74	1	5
22 to 45	599	2.09	1.139	.047	2.00	2.18	1	5
46 to 55	25	2.64	1.114	.223	2.18	3.10	1	5
Total	992	2.31	1.112	.035	2.24	2.37	1	5

It is important to note that except the age group 22-45, respondents of 13-21 years and 46-55 years are not willing to buy battery-operated two-wheeler if it is somewhat expensive. This shows that how much price conscious our consumers are, and therefore, offering battery operated two-wheeler at the right price is indeed a challenge and most critical task for a marketer.

Opinion of various educational groups on “willingness to buy battery-operated two-wheeler even if it is somewhat expensive

H_0 : Average opinion rating is equal among various educational groups about “willingness to buy battery-operated two-wheeler even if it is somewhat expensive”.

H_1 : Average opinion rating about “willingness to buy battery-operated two-wheeler even if it is somewhat expensive” differs among various educational groups.

ANOVA education wise statement-2

Table-6.97

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	25.106	4	6.276	5.182	.000
Within Groups	1179.801	974	1.211		
Total	1204.907	978			

Here, p -value is $<.05$ Hence, H_0 is rejected in favour of H_1 and we infer that average opinion rating differs among various educational groups.

Multiple comparisons education wise statement-2

Table-6.98

(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.		
					p -value	Opinion
Secondary	Higher secondary	.589*	.202	.004	<.05	Different
	Graduation	.783*	.182	.000	<.05	Different
	Post-Graduation	.677*	.189	.000	<.05	Different
	Any other	.909*	.376	.016	<.05	Different
Higher secondary	Secondary	-.589*	.202	.004		
	Graduation	.195	.109	.075	>.05	Similar
	Post-Graduation	.089	.121	.464	>.05	Similar
	Any other	.320	.346	.355	>.05	Similar
Graduation	Secondary	-.783*	.182	.000		
	Higher secondary	-.195	.109	.075		
	Post-Graduation	-.106	.084	.205	>.05	Similar
	Any other	.126	.335	.708	>.05	Similar
Post-Graduation	Secondary	-.677*	.189	.000		
	Higher secondary	-.089	.121	.464		
	Graduation	.106	.084	.205		
	Any other	.232	.339	.494	>.05	Similar
Any other	Secondary	-.909*	.376	.016		
	Higher secondary	-.320	.346	.355		
	Graduation	-.126	.335	.708		
	Post-Graduation	-.232	.339	.494		

Descriptive Statistics education wise statement-2

Table-6.99

					95% Confidence Interval for Mean			
					Lower Bound	Upper Bound		
	N	Mean	Std. Deviation	Std. Error			Minimum	Maximum
Secondary	39	3.00	1.170	.187	2.62	3.38	1	5
Higher secondary	124	2.41	1.082	.097	2.22	2.60	1	5
Graduation	554	2.22	1.104	.047	2.12	2.31	1	5
Post- Graduation	251	2.32	1.097	.069	2.19	2.46	1	5
Any other	11	2.09	.944	.285	1.46	2.73	1	4
Total	979	2.30	1.110	.035	2.23	2.37	1	5

In aggregate, mean value of all educational groups is 2.30 i.e. they neither agree nor disagree to pay more for battery operated two-wheeler. Here it is important to note that consumers do not show willingness to pay somewhat more and do show strong desire to own a battery-operated two-wheeler even if it is environmental friendly.

Opinion of various occupational groups on “willingness to buy battery-operated two-wheeler even if it is somewhat expensive

H₀: Average opinion rating of various occupational groups is equal about “willingness to buy battery-operated two-wheeler even if it is somewhat expensive”.

H₁: Average opinion rating about “willingness to buy battery-operated two-wheeler even if it is somewhat expensive” differs among various occupational groups.

ANOVA occupation wise statement-2

Table-6.100

	Sum of Squares	df	Mean Square	F	Sig.
Opinion abt Expensive Between Groups	149.483	4	37.371	34.229	.000
Within Groups	1069.965	980	1.092		
Total	1219.448	984			

Here, p -value is $<.05$ hence, H_0 is rejected in favour of H_1 and we infer that average opinion rating differs among various occupational groups.

Multiple comparisons occupation wise statement-2

Table-6.101

(I)Occupation (J)Occupation			Mean Difference (I-J)	Std. Error	Sig.		
						p-value	Opinion
Opinion abt Expensive	Student	Service	.782*	.072	.000	<.05	Different
		Business	.263*	.124	.034	<.05	Different
		Professional Practice	.423	.258	.102	>.05	Similar
		Any other	-.411*	.201	.041	<.05	Different
	Service	Student	-.782*	.072	.000		
		Business	-.520*	.124	.000	<.05	Different
		Professional Practice	-.360	.258	.164	>.05	Similar
		Any other	-1.193*	.201	.000	<.05	Different
	Business	Student	-.263*	.124	.034		
		Service	.520*	.124	.000		
		Professional Practice	.160	.277	.564	>.05	Similar
		Any other	-.674*	.224	.003	<.05	Different
	Professional Practice	Student	-.423	.258	.102		
		Service	.360	.258	.164		
		Business	-.160	.277	.564		
		Any other	-.834*	.319	.009	<.05	Different

Descriptive Statistics occupation wise statement -2

Table-6.102

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Opinion abt Expensive	Student	427	2.66	.979	.047	2.56	2.75	1	5
	Service	426	1.88	1.072	.052	1.77	1.98	1	5
	Business	86	2.40	1.230	.133	2.13	2.66	1	5
	Professional Practice	17	2.24	1.147	.278	1.65	2.83	1	5
	Any other	29	3.07	.923	.171	2.72	3.42	1	5
	Total	985	2.30	1.113	.035	2.23	2.37	1	5

Respondents from service class are willing to pay more for environmental friendly two-wheeler. Except service class, respondents of other occupational groups neither agree nor disagree to buy this two-wheeler if, they need to pay somewhat more.

Opinion of various income groups on “willingness to buy battery-operated two-wheeler even if it is somewhat expensive

H₀: Average opinion rating of various income groups is equal about willingness to buy battery-operated two-wheeler even if it is somewhat expensive.

H₁: Average opinion rating about “willingness to buy battery-operated two-wheeler even if it is somewhat expensive” differs among various income groups.

ANOVA income wise statement-2

Table-6.103

	Sum of Squares	df	Mean Square	F	Sig.
Opinion abt Expensive Between Groups	37.538	3	12.513	10.831	.000
Within Groups	690.862	598	1.155		
Total	728.400	601			

Here, p-value is $<.05$ Hence, H_0 is rejected in favour of H_1 and we infer that average opinion rating differs among various income groups.

Multiple Comparisons income wise statement-2

Table-6.104

			Mean Difference (I-J)	Std. Error	Sig.		
(I) income	(J) income					p-value	Opinion
Opinion abt Expensive	Below 5000 Rs.	6000 to 15000 Rs	.482*	.105	.000	<.05	Different
		16000 to 25000 Rs.	.054	.168	.750	>.05	Similar
		26000 & above	.732*	.168	.000	<.05	Different
	6000 to 15000 Rs	Below 5000 Rs.	-.482*	.105	.000		
		16000 to 25000 Rs.	-.428*	.155	.006	<.05	Different
		26000 & above	.251	.155	.107	>.05	Similar
	16000 to 25000 Rs.	Below 5000 Rs.	-.054	.168	.750		
		6000 to 15000 Rs	.428*	.155	.006		
		26000 & above	.679*	.203	.001	<.05	Different
	25000 & above	Below 5000 Rs.	-.732*	.168	.000		
		6000 to 15000 Rs	-.251	.155	.107		
		16000 to 25000 Rs.	-.679*	.203	.001		

Descriptive Statistics income wise statement-2

Table-6.105

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Opinion abt Expensive	Below 5000 Rs.	152	2.38	1.072	.087	2.20	2.55	1	5
	6000 to 15000 Rs	338	1.89	1.098	.060	1.78	2.01	1	5
	16000 to 25000 Rs.	56	2.32	.993	.133	2.06	2.59	1	5
	26000 & above	56	1.64	1.017	.136	1.37	1.92	1	5
	Total	602	2.03	1.101	.045	1.94	2.12	1	5

Above table shows that respondents with income below 5,000 Rs p.m. revealed that they neither agree nor disagree on buying a battery operated two-wheeler as it is somewhat expensive. Same is the opinion of respondents with income of 15,000 to 25,000 Rs p.m.

However, surprisingly middle income class with 6,000 to 15,000 Rs p.m. and income class with Rs.25,000 and above p.m. have mean values 1.89 and 1.64 agree to buy battery -operated two-wheeler, even if it is somewhat expensive. In short, mixed reaction was found from various income groups.

Opinion of various age groups about willingness to compromise with the speed of battery-operated two wheeler as it protects the environment

H_0 : Average opinion rating is equal among various age groups about “willingness to compromise with the speed of battery-operated two wheeler as it protects the environment”.

H_1 : Average opinion rating of various age groups does not differ about “willingness to compromise with the speed of battery-operated two wheeler as it protects the environment”.

ANOVA age wise statement-3

Table-6.106

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	75.441	2	37.720	33.881	.000
Within Groups	1102.181	990	1.113		
Total	1177.621	992			

Here, p -value is $<.05$ hence, H_0 is rejected in favour of H_1 and we infer that average opinion rating differs among various age groups.

Multiple Comparisons age wise statement-3

Table-6.107

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.		
					p -value	Opinion
13 to 21	22 to 45	-.552*	.070	.000	$<.05$	Different
	46 to 55	.153	.218	.483	$>.05$	Similar
22 to 45	13 to 21	.552*	.070	.000		
	46 to 55	.705*	.215	.001	$<.05$	Different
46 to 55	13 to 21	-.153	.218	.483		
	22 to 45	-.705*	.215	.001		

Descriptive Statistics age wise statement-3

Table-6.108

					95% Confidence Interval for Mean			
					Lower Bound	Upper Bound		
	N	Mean	Std. Deviation	Std. Error			Minimum	Maximum
13 to 21	368	2.63	1.092	.057	2.52	2.75	1	5
22 to 45	600	3.18	1.032	.042	3.10	3.27	1	5
46 to 55	25	2.48	1.046	.209	2.05	2.91	1	5
Total	993	2.96	1.090	.035	2.89	3.03	1	5

Mean value of age group 22-45 is 3.18 which show disagreement for the statement. Here it is important to note that the age group of 22 to 45 years is highly evaluative and they disagree to compromise with speed even though battery-operated two-wheeler protects the environment.

Furthermore, respondents from 13 to 21 years and 46 to 55 have mean value of 2.63 & 2.48 respectively which indicates that they neither agree nor disagree with the statement. To conclude, these responses clearly indicate that none of them willing to compromise with speed all though it protects the environment.

Opinion of various educational groups about willingness to compromise with the speed of battery-operated two wheeler as it protects the environment

H_0 : Average opinion rating is equal among various educational groups about “willingness to compromise with the speed of battery-operated two wheeler as it protects the environment”.

H_1 : Average opinion rating among various educational groups differs about “willingness to compromise with the speed of battery-operated two wheeler as it protects the environment”.

ANOVA education wise statement-3

Table-6.109

		Sum of Squares	df	Mean Square	F	Sig.
Opinion abt Speed	Between Groups	6.946	4	1.737	1.475	.208
	Within Groups	1146.337	974	1.177		
	Total	1153.283	978			

Here, p -value is $>.05$ Hence, H_0 cannot be rejected and we infer that average opinion rating is equal among various educational groups.

Multiple comparisons education wise statement-3

Table-6.110

Dependent Variable	(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.		
						p-value	Opinion
Opinion abt Speed	Secondary	Higher secondary	-.214	.199	.283	>.05	Similar
		Graduation	-.332	.180	.065	>.05	Similar
		Post-Graduation	-.391*	.187	.037	<.05	Different
		Any other	-.177	.370	.633	>.05	Similar
	Higher secondary	Secondary	.214	.199	.283		
		Graduation	-.118	.108	.274	>.05	Similar
		Post-Graduation	-.177	.119	.137	>.05	Similar
		Any other	.037	.341	.914	>.05	Similar
	Graduation	Secondary	.332	.180	.065		
		Higher secondary	.118	.108	.274		
		Post-Graduation	-.059	.083	.475	>.05	Similar
		Any other	.155	.330	.640	>.05	Similar
	Post-Graduation	Secondary	.391*	.187	.037		
		Higher secondary	.177	.119	.137		
		Graduation	.059	.083	.475		
		Any other	.214	.334	.523	>.05	Similar

Any other	Secondary	.177	.370	.633		
	Higher secondary	-.037	.341	.914		
	Graduation	-.155	.330	.640		
	Post-Graduation	-.214	.334	.523		

Descriptive statistics education wise statement-3

Table-6.111

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Opinion abt Speed	Secondary	39	2.64	1.063	.170	2.30	2.99	1	4
	Higher secondary	124	2.85	1.124	.101	2.66	3.05	1	5
	Graduation	554	2.97	1.096	.047	2.88	3.06	1	5
	Post-Graduation	251	3.03	1.046	.066	2.90	3.16	1	5
	Any other	11	2.82	.982	.296	2.16	3.48	2	5
	Total	979	2.96	1.086	.035	2.89	3.03	1	5

As it is mentioned in this table, respondents who are post graduates have mean value of 3.03 which indicates their disagreement to compromise with speed of the battery-operated two-wheeler even if it protects the environment. Remaining other educational groups neither agree nor disagree about the same. These inputs are quite valuable for a marketer. Further, to ensure minimum speed availability is essential for the success of this two-wheeler in the market.

Opinion of various occupational groups about willingness to compromise with the speed of battery-operated two wheeler as it protects the environment

H₀: Average opinion rating is equal among various occupational groups about “willingness to compromise with the speed of battery-operated two wheeler as it protects the environment”.

H₁: Average opinion rating of various occupational groups differs about “willingness to compromise with the speed of battery-operated two wheeler as it protects the environment”.

ANOVA occupation wise statement-3

Table-6.112

		Sum of Squares	df	Mean Square	F	Sig.
Opinion abt Speed	Between Groups	62.035	4	15.509	13.725	.000
	Within Groups	1109.578	982	1.130		
	Total	1171.613	986			

Here, p-value is <.05 Hence, H₀ is rejected in favour of H₁ and we infer that average opinion rating differs among various occupational groups.

Multiple Comparisons occupation wise statement-3

Table-6.113

Dependent Variable	(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.		
						p-value	Opinion
Opinion abt Speed	Student	Service	-.515*	.073	.000	<.05	Different
		Business	-.384*	.125	.002	<.05	Different
		Professional Practice	.083	.271	.759	>.05	Similar
		Any other	.018	.204	.929	>.05	Similar
	Service	Student	.515*	.073	.000		
		Business	.131	.125	.297	>.05	Similar
		Professional Practice	.597*	.271	.028	<.05	Different
		Any other	.533*	.204	.009	<.05	Different
	Business	Student	.384*	.125	.002		
		Service	-.131	.125	.297		
		Professional Practice	.467	.289	.107	>.05	Similar
		Any other	.402	.228	.078	>.05	Similar
	Professional Practice	Student	-.083	.271	.759		
		Service	-.597*	.271	.028		
		Business	-.467	.289	.107		
		Any other	-.065	.331	.845	>.05	Similar
	Any other	Student	-.018	.204	.929		
		Service	-.533*	.204	.009		
		Business	-.402	.228	.078		
		Professional Practice	.065	.331	.845		

Descriptive Statistics occupation wise statement-3

Table-6.114

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Opinion abt Speed	Student	428	2.71	1.074	.052	2.61	2.81	1	5
	Service	427	3.22	1.009	.49	3.13	3.32	1	5
	Business	87	3.09	1.197	.128	2.84	3.35	1	5
	Professional Practice	16	2.62	1.088	.272	2.05	3.20	1	5
	Any other	29	2.69	1.228	.228	2.22	3.16	1	5
	Total	987	2.96	1.090	.035	2.89	3.03	1	5

When asked about their opinion on willingness to compromise with speed as battery-operated two wheeler protects the environment, opinions of service class and business class were significantly different from other occupational groups, with mean values 3.22 and 3.09. Both the groups disagree to compromise with speed. At the same time students with mean value 2.71, professionals with 2.62 mean value and others with 2.69 mean values were found on neither agree nor disagree scale. In a nut shell, respondents prefer element of speed as essential feature in a two-wheeler.

Opinion of various income groups about willingness to compromise with the speed of battery-operated two wheeler as it protects the environment

H₀: Average opinion rating is equal among various income groups about “willingness to compromise with the speed of battery-operated two wheeler as it protects the environment”.

H₁: Average opinion rating of various income groups differ about “willingness to compromise with the speed of battery-operated two wheeler as it protects the environment”.

ANOVA income wise statement-3

Table-6.115

		Sum of Squares	df	Mean Square	F	Sig.
Opinion abt Speed	Between Groups	27.563	3	9.188	8.637	.000
	Within Groups	636.151	598	1.064		
	Total	663.714	601			

Here, p-value is $<.05$ Hence, H_0 is rejected in favour of H_1 and we infer that average opinion rating differs among various income groups.

Multiple Comparisons income wise statement-3

Table-6.116

(I) income	(J)income	Mean Difference (I-J)	Std. Error	Sig.		
					P- value	Opinion
Opinion abt Speed	Below 5000 Rs.	6000 to 15000 Rs.	-.299*	.101	.003	<.05 Different
		16000 to 25000 Rs.	.240	.159	.132	>.05 Similar
		26000 & above	-.553*	.161	.001	<.05 Different
	6000 to 15000 Rs.	Below 5000 Rs.	.299*	.101	.003	
		16000 to 25000 Rs.	.539*	.147	.000	<.05 Different
		26000 & above	-.254	.149	.089	>.05 Similar
	16000 to 25000 Rs.	Below 5000 Rs.	-.240	.159	.132	
		6000 to 15000 Rs.	-.539*	.147	.000	
		26000 & above	-.793*	.193	.000	<.05 Different
	26000 & above	Below 5000 Rs.	.553*	.161	.001	
		6000 to 15000 Rs.	.254	.149	.089	
		16000 to 25000 Rs.	.793*	.193	.000	

Descriptive Statistics income wise statement-3

Table-6.117

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Opinion abt Speed	Below 5000 Rs.	151	2.95	1.057	.086	2.78	3.12	1	5
	6000 to 15000 Rs	337	3.25	1.004	.055	3.14	3.35	1	5
	16000 to 25000 Rs.	58	2.71	1.124	.148	2.41	3.00	1	5
	26000 & above	56	3.50	1.027	.137	3.22	3.78	1	5
	Total	602	3.14	1.051	.043	3.06	3.23	1	5

As shown in the above table, respondents of income group 6,000 to 15,000 and 25,000 and above have mean values 3.25 and 3.50, which means respondents of both the income groups disagree to compromise with speed of the two-wheeler even if it protects the environment. At the same time respondents in the income below 5,000 and from 16,000 to 25,000Rs. have mean score of 2.95 and 2.71 respectively which indicates that they neither agree nor disagree to compromise with speed even if the battery-operated two-wheeler protects the environment.

Opinion of various age groups about willingness to compromise with the speed of battery-operated two wheeler as its operating cost is very less.

H₀: Average opinion rating is equal among various age groups about “willingness to compromise with the speed of battery-operated two wheeler as its operating cost is very less”.

H₁: Average opinion rating among various age groups differs about “willingness to compromise with the speed of battery-operated two wheeler as its operating cost is very less”.

ANOVA age wise statement -4

Table-6.118

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	63.342	2	31.671	26.284	.000
Within Groups	1191.681	989	1.205		
Total	1255.023	991			

Here, p -value $< .05$ Hence, H_0 is rejected in favour of H_1 and we infer that average opinion rating differs among various age groups.

Multiple comparisons age wise statement-4

Table-6.119

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.		
					p -value	Opinion
13 to 21	22 to 45	-.498*	.073	.000	<.05	Different
	46 to 55	.222	.227	.328	>.05	Similar
22 to 45	13 to 21	.498*	.073	.000		
	46 to 55	.720*	.224	.001	<.05	Different
46 to 55	13 to 21	-.222	.227	.328		
	22 to 45	-.720*	.224	.001		

ANOVA education wise statement-4

Table-6.121

	Sum of Squares	df	Mean Square	F	Sig.
Opinion abt Operating Cost	14.726	4	3.682	2.944	.020
Between Groups					
Within Groups	1217.899	974	1.250		
Total	1232.625	978			

Here, p -value $< .05$ Hence, H_0 is rejected in favour of H_1 and we infer that average opinion rating differs among various educational groups.

Multiple Comparisons education wise statement-4

Table-6.122

			Mean	Std.			
(I) Education	(J) Education		Difference (I-J)	Error	Sig.		
						p-value	Opinion
Opinion about Operating Cost	Secondary	Higher secondary	-.396	.205	.054	>.05	Similar
		Graduation	-.537*	.185	.004	<.05	Different
		Post- Graduation	-.603*	.192	.002	<.05	Different
		Any other	-.709	.382	.064	>.05	Similar
	Higher secondary	Secondary	.396	.205	.054		
		Graduation	-.142	.111	.203	>.05	Similar
		Post- Graduation	-.207	.123	.092	>.05	Similar
		Any other	-.313	.352	.374	>.05	Similar
	Graduation	Secondary	.537*	.185	.004		
		Higher secondary	.142	.111	.203		
		Post- Graduation	-.065	.085	.442	>.05	Similar
		Any other	-.171	.340	.615	>.05	Similar
	Post- Graduation	Secondary	.603*	.192	.002		
		Higher secondary	.207	.123	.092		
		Graduation	.065	.085	.442		
		Any other	-.106	.344	.758	>.05	Similar

Any other	Secondary	.709	.382	.064		
	Higher secondary	.313	.352	.374		
	Graduation	.171	.340	.615		
	Post-Graduation	.106	.344	.758		

Here opinions of respondents who were secondary pass differ from graduates and post graduates.

Descriptive Statistics education wise statement-4

Table-6.123

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Opinion about Operating Cost	Secondary	39	2.56	1.095	.175	2.21	2.92	1	5
	Higher secondary	124	2.96	1.150	.103	2.76	3.16	1	5
	Graduation	553	3.10	1.142	.049	3.01	3.20	1	5
	Post-Graduation	252	3.17	1.051	.066	3.04	3.30	1	5
	Any other	11	3.27	1.104	.333	2.53	4.01	1	5
	Total	979	3.08	1.123	.036	3.01	3.15	1	5

In aggregate, if we analyze, respondents of various educational groups have mean value 3.08 which states their disagreement on the statement. It reveals that they will not compromise with speed even if its operating cost is very low.

Opinion of various occupational groups about willingness to compromise with the speed of battery-operated two wheeler as its operating cost is very less

H_0 : Average opinion rating is equal among various occupational groups about “willingness to compromise with the speed of battery-operated two wheeler as its operating cost is very less”.

H_1 : Average opinion rating among various occupational groups differs about “willingness to compromise with the speed of battery-operated two wheeler as its operating cost is very less”.

ANOVA occupation wise statement-4

Table-6.124

	Sum of Squares	df	Mean Square	F	Sig.
Opinion abt Operating Cost					
Between Groups	90.025	4	22.506	19.094	.000
Within Groups	1155.149	980	1.179		
Total	1245.174	984			

Here, p -value $< .05$ Hence, H_0 is rejected in favour of H_1 and we infer that average opinion rating differs among various occupational groups.

Multiple Comparisons occupation wise statement-4

Table-6.125

			Mean				
			Difference	Std.			
(I) Occupation	(J) Occupation		(I-J)	Error	Sig.	p-value	Opinion
Opinion about Operating Cost	Student	Service	-.575*	.074	.000	<.05	Different
		Business	-.329*	.128	.010	<.05	Different
		Professional Practice	-.601*	.269	.025	<.05	Different
		Any other	.500*	.208	.017	<.05	Different
	Service	Student	.575*	.074	.000		
		Business	.245	.128	.056	>.05	Similar
		Professional Practice	-.027	.269	.921	>.05	Similar
		Any other	1.075*	.208	.000	<.05	Different
	Business	Student	.329*	.128	.010		
		Service	-.245	.128	.056		
		Professional Practice	-.272	.288	.345	>.05	Similar
		Any other	.829*	.233	.000	<.05	Different
	Professional Practice	Student	.601*	.269	.025		
		Service	.027	.269	.921		
		Business	.272	.288	.345		
		Any other	1.101*	.332	.001	<.05	Different
	Any other	Student	-.500*	.208	.017		
		Service	-1.075*	.208	.000		
		Business	-.829*	.233	.000		
		Professional Practice	-1.101*	.332	.001		

Descriptive Statistics occupation wise statement-4

Table-6.126

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Opinion about Operating Cost	Student	427	2.81	1.100	.053	2.71	2.91	1	5
	Service	426	3.38	1.064	.052	3.28	3.49	1	5
	Business	86	3.14	1.086	.117	2.91	3.37	1	5
	Professional Practice	17	3.41	1.228	.298	2.78	4.04	2	5
	Any other	29	2.31	1.105	.205	1.89	2.73	1	5
	Total	985	3.08	1.125	.036	3.01	3.15	1	5

Respondents of various occupational groups have on an average mean score 3.08 which means they disagree to compromise with speed even though its operating cost is very low.

Opinion of various income groups about willingness to compromise with the speed of battery-operated two wheeler as its operating cost is very less

H_0 : Average opinion rating is equal among various income groups about “willingness to compromise with the speed of battery-operated two wheeler as its operating cost is very less”.

H_1 : Average opinion rating among various income groups differ about “willingness to compromise with the speed of battery-operated two wheeler as its operating cost is very less”.

ANOVA income wise statement-4

Table-6.127

	Sum of Squares	df	Mean Square	F	Sig.
Opinion abt Operating Cost	25.677	3	8.559	7.184	.000
Between Groups					
Within Groups	712.450	598	1.191		
Total	738.128	601			

Here, p -value is $<.05$ Hence, H_0 is rejected in favour of H_1 and we infer that average opinion rating differs among various income groups.

Multiple Comparisons income wise statement-4

Table-6.128

			Mean Difference (I-J)	Std. Error	Sig.		
(I) Income	(J) Income					p-value	Opinion
Opinion abt Operating Cost	Below 5000 Rs.	6000 to 15000 Rs	-.379*	.107	.000	<.05	Different
		16000 to 25000 Rs.	.092	.170	.587	>.05	Similar
		26000 & above	-.514*	.171	.003	<.05	Different
	6000 to 15000 Rs	Below 5000 Rs.	.379*	.107	.000		
		16000 to 25000 Rs.	.471*	.156	.003	<.05	Different
		26000 & above	-.135	.158	.391	>.05	Similar
	16000 to 25000 Rs.	Below 5000 Rs.	-.092	.170	.587		
		6000 to 15000 Rs	-.471*	.156	.003		
		26000 & above	-.606*	.205	.003	<.05	Different
	26000 & above	Below 5000 Rs.	.514*	.171	.003		
		6000 to 15000 Rs	.135	.158	.391		
		16000 to 25000 Rs.	.606*	.205	.003		

Descriptive Statistics income wise statement-4

Table-6.129

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Opinion abt Operating Cost	Below 5000 Rs.	152	3.04	1.206	.098	2.85	3.23	1	5
	6000 to 15000 Rs	337	3.42	1.063	.058	3.30	3.53	1	5
	16000 to 25000 Rs.	57	2.95	1.109	.147	2.65	3.24	1	5
	26000 & above	56	3.55	.893	.119	3.31	3.79	1	5
	Total	602	3.29	1.108	.045	3.20	3.38	1	5

In case of opinion on willingness to compromise with speed as operating cost is very low, in aggregate, respondents of all income groups have mean score of 3.29 which means they disagree to compromise with speed even though it is eco-friendly vehicle.

Opinion of various age groups about “govt. should introduce special subsidy for battery-operated two wheeler”

H_0 : Average opinion rating is equal among various age groups about “govt. should introduce special subsidy for battery-operated two wheeler”.

H_1 : Average opinion rating differs among various age groups about “govt. should introduce special subsidy for battery-operated two wheeler”.

ANOVA age wise statement-5

Table-6.130

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	23.625	2	11.812	7.303	.001
Within Groups	1597.994	988	1.617		
Total	1621.619	990			

Here, p -value is $<.05$ Hence, H_0 is rejected in favour of H_1 and we infer that average opinion rating differs among various age groups.

Multiple Comparisons age wise statement-5

Table-6.131

(I) Age	(J) Age	Mean	Std. Error	Sig.		
		Difference (I-J)			p -value	Opinion
13 to 21	22 to 45	.322*	.084	.000	$<.05$	Different
	46 to 55	.197	.263	.454	$>.05$	Similar
22 to 45	13 to 21	-.322*	.084	.000		
	46 to 55	-.125	.260	.630	$>.05$	Similar
46 to 55	13 to 21	-.197	.263	.454		
	22 to 45	.125	.260	.630		

Descriptive statistics age wise statement-5

Table-6.132

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
13 to 21	367	2.24	1.268	.066	2.11	2.37	1	5
22 to 45	599	1.91	1.274	.052	1.81	2.02	1	5
46 to 55	25	2.04	1.274	.255	1.51	2.57	1	5
Total	991	2.04	1.280	.041	1.96	2.12	1	5

As shown in the table, respondents from age group 22 to 45 have indicated their agreement on govt. should introduce special subsidy for battery operated two-wheeler. On an average if we take total mean value of all age groups it is 2.04 which shows their agreement on providing special subsidies by govt. to such electric two-wheelers.

Opinion of various educational groups about “govt. should introduce special subsidy for battery-operated two wheeler”

H_0 : Average opinion rating is equal among various educational groups on “govt. should introduce special subsidy for battery-operated two wheeler”.

H_1 : Average opinion rating among various educational groups differs on “govt. should introduce special subsidy for battery-operated two wheeler”.

ANOVA education wise statement-5

Table-6.133

		Sum of Squares	Df	Mean Square	F	Sig.
Opinion abt special subsidy	Between Groups	7.829	4	1.957	1.209	.305
	Within Groups	1575.124	973	1.619		
	Total	1582.953	977			

Here, p -value is $>.05$ Hence, H_0 cannot be rejected and we infer that average opinion rating is equal among various age groups.

Multiple Comparisons education wise statement-5

Table-6.134

(I) Education	(J) Education		Mean Difference (I-J)	Std. Error	Sig.		
						p -value	Opinion
Opinion abt special subsidy	Secondary	Higher secondary	.115	.234	.623	$>.05$	Similar
		Graduation	.098	.211	.642	$>.05$	Similar
		Post- Graduation	.295	.219	.178	$>.05$	Similar
		Any other	.089	.434	.838	$>.05$	Similar
	Higher secondary	Secondary	-.115	.234	.623		
		Graduation	-.017	.126	.894	$>.05$	Similar
		Post- Graduation	.180	.140	.198	$>.05$	Similar
		Any other	-.026	.400	.947	$>.05$	Similar
	Graduation	Secondary	-.098	.211	.642		
		Higher secondary	.017	.126	.894		
		Post- Graduation	.197*	.097	.042	$<.05$	Different
		Any other	-.010	.387	.980	$>.05$	Similar

	Post-Graduation	Secondary	-.295	.219	.178	>.05	Similar
		Higher secondary	-.180	.140	.198		
		Graduation	-.197*	.097	.042		
		Any other	-.206	.392	.598		
	Any other	Secondary	-.089	.434	.838		
		Higher secondary	.026	.400	.947		
		Graduation	.010	.387	.980		
		Post-Graduation	.206	.392	.598		

Descriptive Statistics education wise statement-5

Table-6.135

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Opinion abt special subsidy	Secondary	39	2.18	1.412	.226	1.72	2.64	1	5
	Higher secondary	124	2.06	1.342	.121	1.83	2.30	1	5
	Graduation	553	2.08	1.268	.054	1.98	2.19	1	5
	Post-Graduation	251	1.88	1.216	.077	1.73	2.04	1	5
	Any other	11	2.09	1.446	.436	1.12	3.06	1	5
	Total	978	2.03	1.273	.041	1.95	2.11	1	5

If we take average mean value of all educational groups it is 2.03 So, we infer that all educational groups agree with the statement that govt. should introduce special subsidy for battery-operated two-wheeler.

Opinion of various occupational groups about “govt. should introduce special subsidy for battery-operated two wheeler”

H_0 : Average opinion rating is equal among various occupational groups about “govt. should introduce special subsidy for battery-operated two wheeler”.

H_1 : Average opinion rating among various occupational groups differs about “govt. should introduce special subsidy for battery-operated two wheeler”.

ANOVA occupation wise statement-5

Table-6.136

		Sum of Squares	Df	Mean Square	F	Sig.
Opinion abt special subsidy	Between Groups	58.795	4	14.699	9.296	.000
	Within Groups	1548.030	979	1.581		
	Total	1606.825	983			

Here, p -value is $<.05$ Hence, H_0 is rejected in favour of H_1 and we infer that average opinion rating differs among various occupational groups.

Multiple Comparisons occupation wise statement-5

Table-6.137

(I) Occupation	(J) Occupation		Mean Difference (I-J)	Std. Error	Sig.		
						p -value	Opinion
Opinion abt special subsidy	Student	Service	.486*	.086	.000	$<.05$	Different
		Business	.297*	.148	.045	$<.05$	Different
		Professional Practice	-.300	.320	.350	$>.05$	Similar
		Any other	-.116	.241	.630	$>.05$	Similar
	Service	Student	-.486*	.086	.000		
		Business	-.189	.148	.203	$>.05$	Similar
		Professional Practice	-.786*	.320	.014	$<.05$	Different
		Any other	-.602*	.241	.013	$<.05$	Different

	Business	Student	-.297*	.148	.045		
		Service	.189	.148	.203		
		Professional Practice	-.597	.342	.081	>.05	Similar
		Any other	-.414	.270	.125	>.05	Similar
	Professional Practice	Student	.300	.320	.350		
		Service	.786*	.320	.014		
		Business	.597	.342	.081		
		Any other	.183	.392	.640	>.05	Similar
	Any other	Student	.116	.241	.630		
		Service	.602*	.241	.013		
		Business	.414	.270	.125		
		Professional Practice	-.183	.392	.640		

Descriptive Statistics occupation wise statement-5

Table-6.138

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Opinion abt special subsidy	Student	426	2.26	1.286	.062	2.14	2.39	1	5
	Service	426	1.78	1.190	.058	1.66	1.89	1	5
	Business	87	1.97	1.351	.145	1.68	2.25	1	5
	Professional Practice	16	2.56	1.413	.353	1.81	3.32	1	5
	Any other	29	2.38	1.425	.265	1.84	2.92	1	5
	Total	984	2.03	1.279	.041	1.95	2.11	1	5

It was found in this occupation wise analysis that mean values of students, professionals and respondents from category “others’ have mean value between 2 to 3, which indicates their indifferent opinion about govt. should introduce special subsidy to promote battery operated two-wheeler. However, service class and business class agree with the statement.

Opinion of various income groups about “govt. should introduce special subsidy for battery-operated two wheeler”

H_0 : Average opinion rating is equal among various income groups about “govt. should introduce special subsidy for battery-operated two wheeler”.

H_1 : Average opinion rating among various income groups differ about “govt. should introduce special subsidy for battery-operated two wheeler”.

ANOVA income wise statement-5

Table-6.139

		Sum of Squares	df	Mean Square	F	Sig.
Opinion abt special subsidy	Between Groups	15.126	3	5.042	3.200	.023
	Within Groups	942.070	598	1.575		
	Total	957.196	601			

Here, p -value is $<.05$ Hence, H_0 is rejected in favour of H_1 . So, we infer that average opinion rating differs among various income groups.

Multiple Comparisons income wise statement-5

Table-6.140

			Mean Difference (I-J)	Std. Error	Sig.		
(I) Income	(J)Income					<i>p</i> -value	Opinion
Opinion abt special subsidy	Below 5000 Rs.	6000 to 15000 Rs	.326*	.123	.008	<.05	Different
		16000 to 25000 Rs.	.231	.194	.234	>.05	Similar
		26000 & above	.508*	.198	.010	<.05	Different
	6000 to 15000 Rs	Below 5000 Rs.	-.326*	.123	.008		
		16000 to 25000 Rs.	-.095	.178	.595	>.05	Similar
		26000 & above	.183	.183	.317	>.05	Similar

	16000 to 25000 Rs.	Below 5000 Rs.	-.231	.194	.234		Similar
		6000 to 15000 Rs	.095	.178	.595		
		26000 & above	.277	.236	.241		
	26000 & above	Below 5000 Rs.	-.508*	.198	.010		
		6000 to 15000 Rs	-.183	.183	.317		
		16000 to 25000 Rs.	-.277	.236	.241		

Descriptive Statistics income wise statement-5

Table-6.141

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Opinion abt special subsidy	Below 5000 Rs.	152	2.14	1.364	.111	1.93	2.36	1	5
	6000 to 15000 Rs	337	1.82	1.225	.067	1.69	1.95	1	5
	16000 to 25000 Rs.	58	1.91	1.218	.160	1.59	2.23	1	5
	26000 & above	55	1.64	1.161	.156	1.32	1.95	1	5
	Total	602	1.89	1.262	.051	1.79	1.99	1	5

Respondents of various income groups have mean value 1.89 which indicates that govt. should introduce special subsidy for battery-operated two-wheeler.

Gender & Opinions

Respondents were asked to rate their opinions on five statements about battery operated two-wheeler and Likert scale was used ranging from strongly agree to strongly disagree to measure the response.

- 1. I will prefer to buy this two-wheeler as it is environmental friendly.
- 2. I will buy it even if it is somewhat expensive.
- 3. I will compromise with speed of this two wheeler as it protects the environment.
- 4. I will compromise with speed as its operating cost is very low.
- 5. Govt. should introduce special subsidy for such two wheelers.

Two-tailed t-test was performed to analyze the data.

H₀: Average opinion rating of both the genders is equal for all five statements.

H₁: Average opinion rating of both the genders is not equal for all five statements.

Independent Samples Test

Table-6.142

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Opinion abt Environment	Equal variances assumed	.327	.568	-.255	995	.799	-.016	.062	-.138	.106
	Equal variances not assumed			-.255	986.656	.799	-.016	.062	-.138	.106
Opinion abt Expensive	Equal variances assumed	.208	.648	-.606	992	.545	-.043	.070	-.181	.096
	Equal variances not assumed			-.606	991.990	.545	-.043	.070	-.181	.096

Opinion abt Speed	Equal variances assumed	2.048	.153	3.571	993	.000	.245	.069	.111	.380
	Equal variances not assumed			3.571	988.204	.000	.245	.069	.111	.380
Opinion abt Operating Cost	Equal variances assumed	5.192	.023	2.913	992	.004	.207	.071	.068	.346
	Equal variances not assumed			2.913	988.729	.004	.207	.071	.068	.346
Opinion abt special subsidy	Equal variances assumed	26.320	.000	2.459	991	.014	.199	.081	.040	.358
	Equal variances not assumed			2.460	966.436	.014	.199	.081	.040	.358

Here for statement 1&2 p -value was .799 & .545 respectively which is $>.05$. Hence, H_0 cannot be rejected for statement 1 & 2. So we infer that average opinion rating of both the gender is identical for statements 1 & 2. Mean values were identified with reference to opinion rating of both the genders.

Group Statistics

Table-6.143

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Opinion abt Environment	Male	499	1.90	.938	.042
	Female	498	1.91	1.026	.046
Opinion abt Expensive	Male	499	2.28	1.117	.050
	Female	495	2.33	1.105	.050
Opinion abt Speed	Male	499	3.08	1.124	.050
	Female	496	2.84	1.042	.047
Opinion abt Operating Cost	Male	498	3.18	1.154	.052
	Female	496	2.97	1.085	.049
Opinion abt special subsidy	Male	498	2.14	1.377	.062
	Female	495	1.94	1.166	.052

For statement 1 mean value of male was 1.90 and in case of females it was 1.91. It means both the genders agree with the statement i.e. they will prefer to buy battery-operated two-wheeler as it is eco-friendly. For statement 2 mean value of males was 2.28 and of females it was 2.33. Although these mean values are close to 2, it does not give any strong indication of agreement for statement 2.

Hence, we infer that both the gender do not show strong agreement or disagreement for willingness to buy battery-operated two-wheeler even if it is somewhat expensive.

For statements 3, 4 & 5 p -value was found .000, .004 and .014 which is $<.05$. Hence, H_0 is rejected in favour of H_1 for all the three statements. So we conclude that average opinion rating of both the gender, differ for statement 3, 4 & 5. If we refer mean values from the above table, we can infer that more number of females were willing to compromise with speed as it protects the environment against their male counterparts. Similarly, more number of females here willing to compromise with speed as its operating cost is very low, against their male counterparts.

At last more number of females were of the opinion that govt. should introduce special subsidy for battery-operated two-wheeler as compared to male respondents.

Valuable Suggestions by Sample Respondents:

- 1) Minimum speed should be 40 km./hour
- 2) Maximum time for battery recharge should be 10 minutes
- 3) Battery recharge should be required only after 100 km.
- 4) Recharge point must be installed for hassle free driving
- 5) Price of electric two wheelers should be reduced
- 6) It should offer minimum weight carrying capacity of two adults
- 7) After sales service is poor , it needs lot of improvement
- 8) Back up battery must be provided