

ANNEXURE – C

**FACTOR ANALYSIS FOR DIFFERENT
SEGMENT OF RESPONDENTS**

1.1 FACTOR ANALYSIS BASED ON GENDER:

1.1.1 Gender = F:

Table – 1.1

Total Variance Explained (A)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.175	27.190	27.190	2.175	27.190	27.190	2.006	25.072	25.072
2	1.603	20.032	47.222	1.603	20.032	47.222	1.553	19.415	44.487
3	1.032	12.895	60.117	1.032	12.895	60.117	1.250	15.630	60.117
4	.943	11.791	71.908						
5	.807	10.082	81.990						
6	.560	6.994	88.985						
7	.493	6.163	95.148						
8	.388	4.852	100.000						

Source: SPSS Output

Table – 1.2

Component Matrix (A, B)

	Component		
	1	2	3
Lowest distance	.356	.604	-.474
Travel time	.698	1.054E-02	-.409
Good roads	.418	.426	.453
Bus_size	.556	-.629	.110
Seat location	.317	-.188	.551
Safe driving	.429	.686	.296
AC_bus	.662	-.390	-.176
Emergency handling	.595	-4.454E-02	3.142E-02

Source: SPSS Output

Table – 1.3
Rotated Component Matrix (A, B)

	Component		
	1	2	3
Lowest distance	.140	.304	.777
Travel time	.689	.114	.409
Good roads	7.247E-02	.744	-5.729E-02
Bus_size	.741	-8.441E-02	-.401
Seat location	.240	.343	-.514
Safe driving	-9.150E-04	.832	.224
AC_bus	.787	-3.675E-02	-1.992E-02
Emergency handling	.529	.278	1.518E-02

Source: SPSS Output

Difficulty Factors for Female Respondents:

$DF1 = 0.787AB + 0.741BS + 0.689TT + 0.529EH$ $DF2 = 0.832SD + 0.744GR + 0.343SI$ $DF3 = 0.777LD + 0.409TT - 0.514SI - 0.401BS$

1.1.2 Gender = M:

Table – 1.4
Total Variance Explained (A)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.721	34.007	34.007	2.721	34.007	34.007	2.238	27.979	27.979
2	1.519	18.989	52.996	1.519	18.989	52.996	2.001	25.017	52.996
3	.929	11.612	64.608						
4	.850	10.631	75.239						
5	.646	8.081	83.320						
6	.558	6.978	90.298						
7	.417	5.218	95.517						
8	.359	4.483	100.000						

Source: SPSS Output

Table – 1.5
Component Matrix (A, B)

	Component	
	1	2
Lowest distance	.562	3.518E-02
Travel time	.649	-.114
Good roads	.510	-.275
Bus_size	.529	.523
Seat location	.581	.490
Safe driving	.683	-.497
AC_bus	.528	.591
Emergency handling	.600	-.565

Source: SPSS Output

Table – 1.6
Rotated Component Matrix (A, B)

	Component	
	1	2
Lowest distance	.413	.383
Travel time	.575	.323
Good roads	.569	.110
Bus_size	7.776E-02	.740
Seat location	.139	.747
Safe driving	.844	4.814E-02
AC_bus	3.463E-02	.792
Emergency handling	.822	-5.714E-02

Source: SPSS Output

Difficulty Factors for Male Respondents:

$DF1 = 0.844SD + 0.822EH + 0.575TT + 0.569GR + 0.413LD$ $DF2 = 0.792AB + 0.747SI + 0.740BS$

1.2 FACTOR ANALYSIS BASED ON INCOME:

1.2.1 Income = 0

Table – 1.7

Total Variance Explained (A)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.472	43.397	43.397	3.472	43.397	43.397	3.036	37.952	37.952
2	1.004	12.545	55.942	1.004	12.545	55.942	1.439	17.990	55.942
3	.917	11.461	67.403						
4	.749	9.357	76.760						
5	.676	8.447	85.207						
6	.599	7.483	92.690						
7	.429	5.358	98.048						
8	.156	1.952	100.000						

Source: SPSS Output

Table – 1.8

Component Matrix (A, B)

	Component	
	1	2
Lowest distance	.661	-.181
Travel time	.600	-.242
Good roads	.446	.714
Bus_size	.695	-.192
Seat location	.779	-1.882E-02
Safe driving	.745	.111
AC_bus	.821	-.245
Emergency handling	.395	.541

Source: SPSS Output

Table – 1.9

Rotated Component Matrix (A, B)

	Component	
	1	2
Lowest distance	.676	.114
Travel time	.647	3.242E-02
Good roads	.104	.835
Bus_size	.712	.118
Seat location	.714	.310
Safe driving	.630	.413
AC_bus	.848	.122
Emergency handling	.131	.657

Source: SPSS Output

Difficulty Factors for Respondents with No Income:

$$DF1 = 0.848AB + 0.714SL + 0.712BS + 0.676LD + 0.647TT$$

$$DF2 = 0.835GR + 0.657EH + 0.413SD$$

1.2.2: Income in the Range of Rs.5, 000 to Rs.15, 000.

Table – 1.10

Rotated Component Matrix (A, B)

	Component		
	1	2	3
Lowest distance	.094	-.005	.899
Travel time	.488	.329	.419
Good roads	.635	-.025	-.042
Bus_size	.072	.758	-.346
Seat location	-.089	.556	.277
Safe driving	.765	-.093	.279
AC_bus	-.019	.763	.061
Emergency handling	.855	.001	-.013

Source: SPSS Output

Difficulty Factors for Respondents with Income of Rs.5000 TO Rs.15, 000:

$$DF1 = 0.855EH + 0.765SD + 0.635GR$$

$$DF2 = 0.763AB + 0.758BS + 0.556SL$$

$$DF3 = 0.889LD + 0.419TT$$

1.2.3 Income above Rs. 15,001

Table – 1.11

Rotated Component Matrix (A, B)

	Component	
	1	2
Lowest distance	.559	.501
Travel time	.327	.678
Good roads	-.182	.863
Bus_size	.628	.618
Seat location	.758	.252
Safe driving	.637	.363
AC_bus	.465	.689
Emergency handling	.824	-.145

Source: SPSS Output

Difficulty Factors for Respondents with Income above Rs.15, 001

$$DF1 = 0.824EH + 0.758SL + 0.637SD + 0.628BS$$

$$DF2 = 0.863GR + 0.689AB + 0.678TT + 0.618BS$$

1.3 FACTOR ANALYSIS BASED ON AGE:

1.3.1 Age Group Between 18-35 Years

Table – 1.12

Rotated Component Matrix (A, B)

	Component	
	1	2
Lowest distance	.535	.306
Travel time	.435	.469
Good roads	.653	.088
Bus_size	.001	.775
Seat location	.180	.657
Safe driving	.807	.111
AC_bus	.065	.756
Emergency handling	.767	-.030

Source: SPSS Output

Difficulty Factors for Respondents with Age between 18 – 35 Years

$$DF1 = 0.807SD + 0.767EH + 0.653GR$$

$$DF2 = 0.775BS + 0.756AB + 0.657SL$$

1.3.2 Age above 36 years

Table – 1.13

Rotated Component Matrix (A, B)

	Component		
	1	2	3
Lowest distance	-.010	-.189	.808
Travel time	.868	.112	.255
Good roads	-.019	-.236	-.687
Bus_size	.268	.837	-.095
Seat location	-.282	.653	.134
Safe driving	.768	-.216	-.194
AC_bus	.061	.845	.033
Emergency handling	.909	.165	-.026

Source: SPSS Output

Difficulty Factors for Respondents Above 36 Years

$$DF1 = 0.909EH + 0.868TT + 0.768SD$$

$$DF2 = 0.845AB + 0.837BS + 0.653SL$$

$$DF3 = 0.808LD$$

1.4 FACTOR ANALYSIS BASED ON OCCUPATION:

1.4.1 Employee

Table – 1.14

Rotated Component Matrix (A, B)

	Component	
	1	2
Lowest distance	.460	.185
Travel time	.561	.419
Good roads	.595	-.004
Bus_size	.023	.779
Seat location	.076	.611
Safe driving	.826	-.028
AC_bus	.052	.775
Emergency handling	.777	-.001

Source: SPSS Output

Difficulty Factors for Respondents who are Employed

$$DF1 = 0.826SD + 0.777EH + 0.595GR$$

$$DF2 = 0.779BS + 0.775AB + 0.611SL$$

1.4.2 Business

Table – 1.15

Rotated Component Matrix (A, B)

	Component		
	1	2	3
Lowest distance	.029	.104	.930
Travel time	.037	.326	.806
Good roads	.249	.466	.208
Bus_size	.715	.371	-.094
Seat location	.767	-.270	.410
Safe driving	-.064	.924	.082
AC_bus	.866	.228	-.031
Emergency handling	.294	.606	.235

Source: SPSS Output

Difficulty Factors for Respondents who are Having Business

$$DF1 = 0.866AB + 0.767SL + 0.715BS$$

$$DF2 = 0.924SD + 0.606EH$$

$$DF3 = 0.930LD + 0.806TT$$

1.4.3 Students

Table – 1.16
Rotated Component Matrix (A, B)

	Component	
	1	2
Lowest distance	.691	.121
Travel time	.692	-.059
Good roads	.047	.866
Bus_size	.706	.152
Seat location	.679	.504
Safe driving	.714	.415
AC_bus	.838	.240
Emergency handling	.143	.551

Source: SPSS Output

$$\text{DF1} = 0.838\text{AB} + 0.714\text{SD} + 0.706\text{BS} + 0.692\text{TT} + 0.691\text{LD} + 0.679\text{SL}$$
$$\text{DF2} = 0.866\text{GR}$$