

APPENDIX IV: MEDICAL REPRESENTATIVES RESPONSE

Descriptive analysis

I. Background of the Medical Representatives company

Table 70: Percent distribution of size of the Company by cities

Size of the Company	Ahmedabad	Baroda	Surat	Pune	Mumbai	Total
Small Scale	26.0	20.0	10.0	10.0	20.0	16.9
Medium Scale	35.0	65.0	45.0	49.0	55.0	49.8
Large Scale	29.0	16.0	29.0	35.0	16.0	25.1
Multinational	10.0	0.0	16.0	6.0	10.0	8.2
Total N =	50	50	50	50	50	250

Table 71: Percent distribution of years in the professions by cities

Number of years in the profession	Ahmedabad	Baroda	Surat	Pune	Mumbai	Total
Less than 5 years	88.0	69.0	78.0	84.0	65.0	76.9
5-10 years	6.0	16.0	16.0	6.0	35.0	15.7
10-15 years	6.0	10.0	6.0	10.0	0.0	6.3
More than 15 years	0.0	6.0	0.0	0.0	0.0	1.2
Total N =	50	50	50	50	50	250

Table 72: Percent distributions of average number of doctors meet per day by cities

Average doctor call everyday	Ahmedabad	Baroda	Surat	Pune	Mumbai	Total
6-8 Doctors	16.0	0.0	10.0	20.0	0.0	9.1
9-10 Doctors	35.0	50.0	55.0	40.0	45.0	45.1
More than 10 Doctors	49.0	50.0	35.0	40.0	55.0	45.8
Total N =	50	50	50	50	50	250

Table 73: Percent distribution of interaction with the doctors by cities

Interaction with doctor	Ahmedabad	Baroda	Surat	Pune	Mumbai	Total
Not very comfortable	6.0	0.0	0.0	6.0	6.0	3.5
Comfortable	84.0	75.0	70.0	45.0	69.0	68.5
Enjoyable	10.0	25.0	30.0	49.0	25.0	28.0
Total N =	50	50	50	50	50	250

## II. Attitudinal Information

Table 74: Opinion about the doctor and MR relationship

Doctors consider MRs as important source of information	Ahmedabad	Baroda	Surat	Pune	Mumbai	Total
Strongly Disagree	10	6	6	10	16	9.4
Generally Disagree	16	6	29	16	10	15.2
Moderately Disagree	20	25	10	29	10	18.8
Moderately Agree	25	19	10	16	29	19.9
Generally Agree	29	44	45	29	35	36.7
<b>Mean</b>	<b>3.5</b>	<b>4</b>	<b>3.6</b>	<b>3.4</b>	<b>3.6</b>	<b>3.6</b>
<b>Standard Deviation</b>	<b>1.3</b>	<b>1.2</b>	<b>1.4</b>	<b>1.3</b>	<b>1.4</b>	<b>1.4</b>
Doctor trusts me, he/she is more inclined to prescribe my medicine brands						
Strongly Disagree	10	6	10	10	20	11
Generally Disagree	16	20	16	25	10	17.3
Moderately Disagree	29	20	29	20	30	25.6
Moderately Agree	20	29	16	10	20	18.9
Generally Agree	25	25	29	29	20	26
No response/ Not reported	0	0	0	6	0	1.2
<b>Mean</b>	<b>3.4</b>	<b>3.5</b>	<b>3.4</b>	<b>3.1</b>	<b>3.1</b>	<b>3.3</b>
<b>Standard Deviation</b>	<b>1.3</b>	<b>1.2</b>	<b>1.3</b>	<b>1.6</b>	<b>1.4</b>	<b>1.4</b>
When a doctor accepts gifts/obligation from me, he/she is obliged to prescribe my medicine brand(s)						
Strongly Disagree	25	45	39	25	49	36.6
Generally Disagree	25	20	25	35	10	23
Moderately Disagree	44	20	25	29	35	30.7
Moderately Agree	6	16	10	6	0	7.4
Generally Agree	0	0	0	6	6	2.3
<b>Mean</b>	<b>2.3</b>	<b>2.1</b>	<b>2.1</b>	<b>2.3</b>	<b>2</b>	<b>2.1</b>
<b>Standard Deviation</b>	<b>0.9</b>	<b>1.1</b>	<b>1</b>	<b>1.1</b>	<b>1.2</b>	<b>1.1</b>
When a doctor accepts samples from me, he/she is obliged to prescribe my medicine brand(s)						
Strongly Disagree	20	45	39	29	38	34.4
Generally Disagree	20	10	25	25	25	21.1
Moderately Disagree	45	25	29	35	25	32
Moderately Agree	10	20	0	10	6	9
Generally Agree	6	0	6	0	6	3.5
<b>Mean</b>	<b>2.6</b>	<b>2.2</b>	<b>2.1</b>	<b>2.3</b>	<b>2.1</b>	<b>2.2</b>
<b>Standard Deviation</b>	<b>1.1</b>	<b>1.2</b>	<b>1.1</b>	<b>1</b>	<b>1.2</b>	<b>1.1</b>

Doctors are more likely to prescribe my medicine brand(s), if I possess adequate knowledge						
Strongly Disagree	20	20	15	15	0	14.1
Generally Disagree	40	16	25	25	35	28.1
Moderately Disagree	0	10	15	15	16	11.3
Moderately Agree	10	20	10	10	20	13.7
Generally Agree	30	35	35	35	29	32.8
<b>Mean</b>	<b>2.9</b>	<b>3.4</b>	<b>3.3</b>	<b>3.3</b>	<b>3.5</b>	<b>3.2</b>
<b>Standard Deviation</b>	<b>1.6</b>	<b>1.6</b>	<b>1.5</b>	<b>1.5</b>	<b>1.3</b>	<b>1.5</b>
Doctor generally prefer those MRs who provides genuine information about their medicine brand(s)						
Strongly Disagree	16	6	16	25	16	15.7
Generally Disagree	29	20	39	29	20	27.5
Moderately Disagree	16	25	0	10	10	12.2
Moderately Agree	0	10	6	0	6	4.3
Generally Agree	39	39	39	35	49	40.4
<b>Mean</b>	<b>3.2</b>	<b>3.6</b>	<b>3.2</b>	<b>2.9</b>	<b>3.6</b>	<b>3.3</b>
<b>Standard Deviation</b>	<b>1.6</b>	<b>1.3</b>	<b>1.6</b>	<b>1.7</b>	<b>1.6</b>	<b>1.6</b>
<b>Total N =</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>250</b>

### III. Factors motivate the doctors to prescribe a medicine brand in order to importance

Table 75: Factors in prescribing medicine brands

	Ahmedabad	Baroda	Surat	Pune	Mumbai	Total
<b>Authenticated technical information</b>	(Wtg. Avg. 3.756)					
Importance order # 1	49	38	38	39	44	41.9
Importance order # 2	10	15	15	10	25	15.1
Importance order # 3	20	35	25	45	15	27.9
Importance order # 4	10	6	15	0	10	8.1
Importance order # 5	6	6	6	6	6	5.8
Not mention / Not important	6	0	0	0	0	1.2
<b>Recommendation of fellow doctor/friends/experts</b>	(Wtg. Avg. 2.669)					
Importance order # 1	10	15	0	10	0	7
Importance order # 2	20	10	16	39	6	18
Importance order # 3	39	15	35	20	49	31.6
Importance order # 4	20	35	29	6	25	23
Importance order # 5	6	25	20	25	20	19.1
Not mention / Not important	6	0	0	0	0	1.2
<b>Gifts and other obligations</b>	(Wtg. Avg. 2.752)					

Importance order # 1	20	16	29	20	19	20.7
Importance order # 2	20	20	10	10	6	12.9
Importance order # 3	16	25	16	10	6	14.5
Importance order # 4	20	20	20	45	25	25.8
Importance order # 5	20	20	25	16	44	25
Not mention / Not important	6	0	0	0	0	1.2
<b>Seminars/Workshops conducted by companies</b>	<i>(Wtg. Avg. 2.807)</i>					
Importance order # 1	6	16	6	10	15	10.4
Importance order # 2	15	29	48	25	29	29.3
Importance order # 3	6	20	15	16	15	14.3
Importance order # 4	43	16	15	20	25	23.9
Importance order # 5	25	20	15	29	15	20.8
Not mention / Not important	6	0	0	0	0	1.2
<b>Corporate image/ Medicine brand image</b>	<i>(Wtg. Avg. 2.788)</i>					
Importance order # 1	10	15	25	20	19	17.9
Importance order # 2	29	25	10	10	35	21.8
Importance order # 3	16	6	10	16	15	12.5
Importance order # 4	0	25	20	29	15	17.9
Importance order # 5	39	29	35	25	15	28.8
Not mention / Not important	6	0	0	0	0	1.2
<b>Total N =</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>250</b>

#### IV. Perception on prescription behaviour of the doctor

Table 76: Perception on prescription behaviour

Perception on the prescription behaviour of the doctor	Ahmedabad	Baroda	Surat	Pune	Mumbai	Total
<b>Doctors are generally price conscious when they prescribe medicine brand(s) to their patients</b>						
Strongly Disagree	6.0	6.0	10.0	10.0	20.0	10.2
Generally Disagree	29.0	25.0	25.0	45.0	10.0	27.2
Moderately Disagree	25.0	10.0	16.0	10.0	20.0	16.1
Moderately Agree	20.0	29.0	20.0	20.0	20.0	21.7
Generally Agree	20.0	29.0	29.0	16.0	30.0	24.8
<b>Mean</b>	<b>3.2</b>	<b>3.6</b>	<b>3.4</b>	<b>2.9</b>	<b>3.3</b>	<b>3.3</b>
<b>Standard Deviation</b>	<b>1.2</b>	<b>1.3</b>	<b>1.4</b>	<b>1.3</b>	<b>1.5</b>	<b>1.4</b>
<b>Aggressive promotions from the Company may influence the prescription behavior of doctors</b>						
Strongly Disagree	15.0	15.0	6.0	25.0	20.0	16.3
Generally Disagree	29.0	6.0	25.0	15.0	30.0	20.9
Moderately Disagree	15.0	29.0	15.0	19.0	10.0	17.8
Moderately Agree	15.0	25.0	25.0	25.0	10.0	20.2

Generally Agree	25.0	25.0	29.0	15.0	30.0	24.8
<b>Mean</b>	<b>3.1</b>	<b>3.4</b>	<b>3.5</b>	<b>2.9</b>	<b>3.0</b>	<b>3.2</b>
<b>Standard Deviation</b>	<b>1.5</b>	<b>1.3</b>	<b>1.3</b>	<b>1.4</b>	<b>1.6</b>	<b>1.4</b>
<b>Samples, gifts and other obligations from the Company does Influence the prescription behavior of doctors</b>						
Strongly Disagree	10.0	10.0	6.0	10.0	25.0	12.1
Generally Disagree	35.0	16.0	29.0	25.0	20.0	24.9
Moderately Disagree	25.0	29.0	39.0	25.0	25.0	28.8
Moderately Agree	15.0	16.0	20.0	6.0	10.0	13.2
Generally Agree	15.0	29.0	6.0	35.0	20.0	21.0
<b>Mean</b>	<b>2.9</b>	<b>3.4</b>	<b>2.9</b>	<b>3.3</b>	<b>2.8</b>	<b>3.1</b>
<b>Standard Deviation</b>	<b>1.2</b>	<b>1.3</b>	<b>1.0</b>	<b>1.4</b>	<b>1.5</b>	<b>1.3</b>
<b>Frequent visits to the doctor normally influence their prescription choice for the medicine brand(s)</b>						
Strongly Disagree	20.0	0.0	6.0	16.0	6.0	9.4
Generally Disagree	20.0	16.0	29.0	25.0	29.0	23.8
Moderately Disagree	29.0	39.0	25.0	20.0	10.0	24.6
Moderately Agree	16.0	10.0	15.0	10.0	20.0	14.1
Generally Agree	16.0	35.0	25.0	29.0	35.0	28.1
<b>Mean</b>	<b>2.9</b>	<b>3.7</b>	<b>3.3</b>	<b>3.2</b>	<b>3.5</b>	<b>3.3</b>
<b>Standard Deviation</b>	<b>1.3</b>	<b>1.1</b>	<b>1.3</b>	<b>1.5</b>	<b>1.4</b>	<b>1.3</b>
<b>Total N =</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>250</b>

## V. Reasons of visit of Medical Representative to the market

Table 77: Reasons of visit of MR to the market

Visiting Doctor's to insist them to prescribe my medicine brands	Ahmedabad	Baroda	Surat	Pune	Mumbai	Total
1 visit in week	20.0	15.0	29.0	40.0	25.0	25.9
2 visits in a week	69.0	63.0	55.0	50.0	75.0	62.4
1 visit in a month	6.0	15.0	16.0	0.0	0.0	7.5
2 visits in a month	6.0	6.0	0.0	10.0	0.0	4.3
<b>Visiting Pharmacist's to insist them to Stock my medicine brands</b>						
1 visit in week	25.0	25.0	30.0	45.0	35.0	32.3
2 visits in a week	49.0	59.0	60.0	45.0	49.0	52.4
1 visit in a month	25.0	16.0	10.0	10.0	16.0	15.4
<b>Assist Sales group</b>						
1 visit in week	49.0	45.0	39.0	45.0	35.0	42.7
2 visits in a week	16.0	10.0	25.0	20.0	16.0	17.3
1 visit in a month	29.0	39.0	35.0	25.0	39.0	33.7
2 visits in a month	0.0	0.0	0.0	10.0	10.0	3.9

Not reported	6.0	6.0	0.0	0.0	0.0	2.4
<b>Visit territories at regular intervals to monitor the performance</b>						
1 visit in week	6.0	20.0	16.0	35.0	39.0	23.1
2 visits in a week	59.0	45.0	59.0	49.0	35.0	49.4
1 visit in a month	35.0	35.0	25.0	10.0	25.0	26.3
2 visits in a month	0.0	0.0	0.0	6.0	0.0	1.2
<b>Total N =</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>250</b>

### VI. Demographic profile of the Medical Representatives

Table 78: Personal details of the Medical Representatives

<b>Qualification</b>	<b>Ahmedabad</b>	<b>Baroda</b>	<b>Surat</b>	<b>Pune</b>	<b>Mumbai</b>	<b>Total</b>
B-Pharma	16.0	10.0	29.0	20.0	20.0	18.9
M-Pharma	0.0	6.0	0.0	0.0	0.0	1.2
BSC	75.0	69.0	59.0	65.0	70.0	67.3
MSC	0.0	16.0	6.0	10.0	10.0	8.3
D-Pharma	10.0	0.0	6.0	6.0	0.0	4.3
<b>Years of experience in this market</b>						
1-2 years	59.0	35.0	25.0	45.0	25.0	37.9
3-5 years	25.0	44.0	49.0	39.0	39.0	39.5
6-10 years	6.0	15.0	16.0	6.0	29.0	14.5
11+ years	10.0	6.0	10.0	10.0	6.0	8.2
<b>Income</b>						
< 60, 000 / annum	69.0	65.0	75.0	75.0	80.0	72.4
60,000-1,50,00/ annum	25.0	35.0	25.0	16.0	20.0	24.4
No response	6.0	0.0	0.0	10.0	0.0	3.1
<b>Total N =</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>250</b>

**Bivariate Analysis**

Table 79: ANOVA  
[Factors: B. Pharma, M. Pharma, B.Sc., M.Sc. and D. Pharma;  
Dependent variables: three composite variables]  
ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Opinion about Doctor and MR relationship	Between Groups	1480.196	4	370.049	18.503	.000
	Within Groups	4899.804	245	19.999		
	Total	6380.000	249			
Perception on prescription behaviour	Between Groups	518.893	4	129.723	6.675	.000
	Within Groups	4761.707	245	19.436		
	Total	5280.600	249			
Reasons of visit of MR to the market	Between Groups	94.722	4	23.680	5.344	.000
	Within Groups	1085.678	245	4.431		
	Total	1180.400	249			

Table 80: ANOVA  
[Factors: 1-2 years, 3-5 years, 6-10 years and above 10 years;  
Dependent variables: three composite variables]  
ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Opinion about Doctor and MR relationship	Between Groups	664.976	3	221.659	9.541	.000
	Within Groups	5715.024	246	23.232		
	Total	6380.000	249			
Perception on prescription behaviour	Between Groups	276.087	3	92.029	4.524	.004
	Within Groups	5004.513	246	20.344		
	Total	5280.600	249			
Reasons of visit of MR to the market	Between Groups	93.718	3	31.239	7.072	.000
	Within Groups	1086.682	246	4.417		
	Total	1180.400	249			

Table 81: ANOVA  
 [Factors: B. Pharma, M. Pharma, B.Sc., M.Sc. and D. Pharma;  
 Dependent variables: Eighteen variables]

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
V1	Between Groups	9.308	4	2.327	3.535	.008
	Within Groups	161.292	245	.658		
	Total	170.600	249			
V2	Between Groups	26.466	4	6.616	22.820	.000
	Within Groups	71.034	245	.290		
	Total	97.500	249			
V3	Between Groups	9.176	4	2.294	5.973	.000
	Within Groups	94.099	245	.384		
	Total	103.275	249			
V4	Between Groups	5.772	4	1.443	6.302	.000
	Within Groups	56.103	245	.229		
	Total	61.875	249			
V5	Between Groups	51.711	4	12.928	7.864	.000
	Within Groups	402.764	245	1.644		
	Total	454.475	249			
V6	Between Groups	78.662	4	19.665	12.586	.000
	Within Groups	382.813	245	1.563		
	Total	461.475	249			
V7	Between Groups	27.374	4	6.843	6.634	.000
	Within Groups	252.726	245	1.032		
	Total	280.100	249			
V8	Between Groups	20.812	4	5.203	4.399	.002
	Within Groups	289.788	245	1.183		
	Total	310.600	249			
V9	Between Groups	41.190	4	10.298	4.857	.001
	Within Groups	519.410	245	2.120		
	Total	560.600	249			
V10	Between Groups	53.797	4	13.449	5.815	.000
	Within Groups	566.603	245	2.313		
	Total	620.400	249			
V11	Between Groups	34.322	4	8.580	4.975	.001
	Within Groups	422.553	245	1.725		
	Total	456.875	249			
V12	Between Groups	37.642	4	9.411	4.930	.001
	Within Groups	467.633	245	1.909		
	Total	505.275	249			
V13	Between Groups	21.124	4	5.281	3.211	.014
	Within Groups	402.976	245	1.645		
	Total	424.100	249			



V14	Between Groups	53.123	4	13.281	8.295	.000
	Within Groups	392.277	245	1.601		
	Total	445.400	249			
V15	Between Groups	2.378	4	.595	1.244	.293
	Within Groups	117.097	245	.478		
	Total	119.475	249			
V16	Between Groups	6.483	4	1.621	3.826	.005
	Within Groups	103.792	245	.424		
	Total	110.275	249			
V17	Between Groups	10.509	4	2.627	2.667	.033
	Within Groups	241.366	245	.985		
	Total	251.875	249			
V18	Between Groups	20.419	4	5.105	11.221	.000
	Within Groups	111.456	245	.455		
	Total	131.875	249			

Table 82: ANOVA

[Factors: 1-2 years, 3-5 years, 6-10 years and above 10 years;

Dependent variables: Eighteen variables]

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
V1	Between Groups	3.022	3	1.007	1.479	.221
	Within Groups	167.578	246	.681		
	Total	170.600	249			
V2	Between Groups	54.241	3	18.080	102.817	.000
	Within Groups	43.259	246	.176		
	Total	97.500	249			
V3	Between Groups	8.405	3	2.802	7.265	.000
	Within Groups	94.870	246	.386		
	Total	103.275	249			
V4	Between Groups	1.112	3	.371	1.501	.215
	Within Groups	60.763	246	.247		
	Total	61.875	249			
V5	Between Groups	51.861	3	17.287	10.562	.000
	Within Groups	402.614	246	1.637		
	Total	454.475	249			
V6	Between Groups	26.531	3	8.844	5.002	.002
	Within Groups	434.944	246	1.768		
	Total	461.475	249			
V7	Between Groups	12.230	3	4.077	3.744	.012
	Within Groups	267.870	246	1.089		
	Total	280.100	249			
V8	Between Groups	8.933	3	2.978	2.428	.066
	Within Groups	301.667	246	1.226		

	Total	310.600	249			
V9	Between Groups	13.587	3	4.529	2.037	.109
	Within Groups	547.013	246	2.224		
	Total	560.600	249			
V10	Between Groups	18.545	3	6.182	2.527	.058
	Within Groups	601.855	246	2.447		
	Total	620.400	249			
V11	Between Groups	25.767	3	8.589	4.901	.003
	Within Groups	431.108	246	1.752		
	Total	456.875	249			
V12	Between Groups	13.845	3	4.615	2.310	.077
	Within Groups	491.430	246	1.998		
	Total	505.275	249			
V13	Between Groups	18.739	3	6.246	3.791	.011
	Within Groups	405.361	246	1.648		
	Total	424.100	249			
V14	Between Groups	18.914	3	6.305	3.637	.013
	Within Groups	426.486	246	1.734		
	Total	445.400	249			
V15	Between Groups	6.871	3	2.290	5.003	.002
	Within Groups	112.604	246	.458		
	Total	119.475	249			
V16	Between Groups	2.099	3	.700	1.591	.192
	Within Groups	108.176	246	.440		
	Total	110.275	249			
V17	Between Groups	7.264	3	2.421	2.435	.065
	Within Groups	244.611	246	.994		
	Total	251.875	249			
V18	Between Groups	21.743	3	7.248	16.189	.000
	Within Groups	110.132	246	.448		
	Total	131.875	249			