CHAPTER 5
DATA ANALYSIS AND INTERPRETATION

5.1 Introduction

5.2 Data Analysis

Part A: Demographic Profile of Respondents

Part B: Reasons for Attrition

Part C: Job Profile

Part D: Hypothesis Testing

CHAPTER 5

DATA ANALYSIS AND INTERPRETATION

5.1 Introduction

Data was collected by using survey, and personal interviews. Respondents were contacted on telephone to collect missing responses. Filled questionnaires were checked and selected for analysis. Total 138 valid questionnaires were selected for analysis. First coding was done, and then data was recorded using EXCEL. EXCEL was used for recording because data entry is comparatively easy with EXCEL. Entered data was then transferred to SPSS for further analysis. This chapter presents analyses and interpretations.

5.2 Data Analysis

Data analysis is divided in four parts as follows:

Part A:

In this part, Demographic details of subjects are presented.

Part B:

In this part, Causes for Attrition are presented.

Part C:

In this part, Job profile is presented.

Part D:

In this part testing of hypotheses are presented.

Part A: Demographic Profile of Respondents

Table No. 5.1 Distribution of Companies and their Divisions

Sr. No.	Company Name	Division	No. Of MR	Total No. of MR
1	ABOTT	HEALTHCARE	5	6
		PIRAMAL	1	
2	AJANTHA PHARMA	ALARCON	2	5
		ALMEROM	1	
		CDC	1	
		ORTHO	1	
3	ALEMBIC	MAIN	1	1
4	ALKEM	CAHET	1	4
		CBD	1	
		MAIN -2	1	
		MEDIVA	1	
5	ARINA ALEM	ALCARE	1	1
6	ARISTO	MAIN	1	1
7	ASHWIN PHARMA	MAIN	1	1
8	BIOCON	CARDIAC	1	4
		GP	1	
		MAIN	2	
9	BLUECROSS	MAIN	1	1
10	CADILA	VOLTA	1	1
11	CENTUR	CARDIAC	1	1
12	CIPLA	OMNICARE	2	5
		PROTEK	2	
		SPECTRA CA	1	
13	CIPLA INDIA	ORTHO	1	2
		VITALIS 3	1	

Table No. 5.1 continued...

Sr. No.	Company Name	Division	No. Of MR	Total No. of MR
14	CIPLA PHARMA	PHARM	1	1
15	CULE INDIA	ORTHO	1	1
16	DR. REDDY	PHARMA	1	1
17	ELDER	PHARMA	2	2
18	EMCURE	MAIN	1	3
		PHARMA	2	
19	ERIS	DIEB	1	2
		GP	1	
20	FDC LTD.	LUMINA	1	9
		PROXIMA	3	
		SELECT	2	
		SPECTRA	2	
		VISTA	1	
21	FOURRTS LTD.	PREMIER	3	3
22	GENX PHARM	ANTIBIOTIC	1	1
23	GERMAN REMEDIES	GP	1	1
24	GLENMARK	MAIN	1	9
		CBD	1	
		MILIEUS	5	
		ORTHO	2	
25	GLAXO LTD.	GSK	1	1
26	HETRO LTD	GENEX	3	12
		KRISS	1	
		MAIN	8	
27	HIMALAYA	MAIN	1	1
28	HLL LIFE CARE	CBD	2	3
		HCD	1	

Table 5.1 continue....

Table No. 5.1 continued...

Sr. No.	Company Name	Division	No. Of MR	Total No. of MR
29	INDCHEMI	PHARMA	1	1
30	INDI PHARMA	GP	1	6
		PHARMA	5	
31	INTAS	PHARMA	3	4
		RESPIRATOR	1	
32	IPCA	DINAMIX	1	2
		PHARMA	1	
33	JHONSON & JHONSON	MAIN	1	1
34	JENBURKT	MAIN	1	1
35	KLAB	MAIN	1	1
36	LUPIN PHARMA	MAIN	1	1
37	MACLOEDS	MAIN	1	5
		OSTIVA	1	
		RESPIRATOR	2	
		TBCARE	1	
38	MANISH PHARMA	MAIN	1	1
39	MANKIND	DISCOVERY	2	3
		PHARMA	1	
40	MEYER ORGANICS	MAIN	1	1
41	MOLECULE	CBD	1	1
42	NOEL PHARMA	PHARMA	6	6
43	PFIZER LTD	WYTH	1	1
44	PRECIA PHARMA	PHARMA	1	1
45	RESILENT	GP	1	2
		GYN	1	
46	SAMARTH	SAMGAM	1	1

Table No. 5.1 continued...

Sr. No.	Company Name	Division	No. Of MR	Total No. of MR
47	SUN PHARMA	MAIN	1	2
		PHARM	1	
48	SUNDYOTA NUMANDIS	MAIN	1	1
49	SWIZERA	INSPIRA	1	1
50	TORRENT	MAIN	1	1
51	TTK HEALTHCARE	ENDURA	1	1
52	VERITAZ	GP	1	4
		MAIN	3	
53	WOCHARDT LTD.	ORION	1	1
54	YASH PHARM	MAIN	1	1
55	ZUVENTUS LTD.	GREMAXX	1	2
		MAIN	1	
56	ZYDUS	CADILLA	1	2
		DERMA	1	
Total	**56**	**92**	**138**	**138**

Source: (Field Data)

One of the major disadvantage of snow ball sampling method is initial respondents tends to refer the respondents to whom they know. Resultant sample may be only a small subset of population and not true representative. This problem can be overcome by careful identification of initial respondents. In this study, care has been taken to identify initial respondents, which is evident from above table as Medical representatives from 56 companies and 92 divisions are included in this study.

Table No. 5.2 Headquarters in Pune

Sr. No.	HQ	Frequency	%	Cumulative %
1	AUNDH	1	0.7	0.7
2	CAMP	9	6.5	7.2
3	DECCAN	2	1.4	8.7
4	HADAPSAR	15	10.9	19.6
5	KATRAJ*	1	0.7	20.3
5	SATARA RD*	25	18.1	90.6
6	KONDHVA	1	0.7	21
7	KOTHRUD	18	13	34.1
8	NAGAR RD**	3	2.2	36.2
8	YERWADA**	3	2.2	98.6
8	YERWADA-1**	1	0.7	99.3
8	YERWADA-2**	1	0.7	100
9	PETH$	11	8	44.9
9	PETH-I$	2	1.4	46.4
10	SHIVAJINAGR	1	0.7	91.3
11	SIHANGAD Rd	2	1.4	92.8
12	WARJE	5	3.6	96.4
13	CHINCHWAD	1	0.7	37
14	PIMPARI	2	1.4	47.8
	PUNE+	32	23.2	71
	PUNE WEST+	1	0.7	71.7
	PUNE-7+	1	0.7	72.5
	Total	**138**	**100**	

Source: (Field Data)

'*', '**', '$' Different names to single area

'+' Specific HQ name not mentioned by respondents hence cannot be considered as single HQ.

     As per above table there are 12 (1 through 12) head quarters in Pune city and + 2 (13 and 14) including Chinchwad and Pimpri.

Table No. 5.3 Hometowns of Respondents

Hometown	Frequency	Percentage
Other than Pune	113	82%
Pune	25	18%
Total	**138**	**100%**

Source: (Field Data)

Above table shows, that Hometown of 82% Medical Representatives is not Pune.

Table No. 5.4 Gender

Gender			
		Frequency	**Percentage**
Valid	Male	130	94.20
	Female	8	5.80
	Total	**138**	**100**

Source: (Field Data)

As per above table 94.20% MRs are male.

Table No. 5.5 Age Statistics

Statistics		
Age		
N	Valid	138
	Missing	0
Mean		25.56
Mode		24
Std. Deviation		3.18
Minimum		20
Maximum		41

Source: (Field Data)

Above table indicates that average age of MR is 25.56 and most of the MRs are of age 24 years

Table No. 5.6 Age Frequency

Age	Frequency	Percentage
20-25	82	59.42%
26-30	48	34.78%
31-35	5	3.62%
> 35	3	2.17%
Total	**138**	**100.00%**
Mean	**25.36**	

Source: (Field Data)

Above table shows that 59.42% MRs are in age group 20-25, 34.78% MRs are in age group of 26-30, while 5.79% MRs age is above 31.

Table No. 5.7 Education wise Distribution

Sr. No.	Education	Frequency	Percentage
1	B.COM	6	4.3
2	B.PHARM	17	12.3
3	BA	5	3.6
4	BSC	46	33.3
5	D.PHARM	21	15.2
6	MBA	33	23.9
7	MBA B.PH	1	0.7
8	MBA BSC	5	3.6
9	MMM	1	0.7
10	MSC	2	1.4
11	MSW	1	0.7
	Total	**138**	**100**

Source: (Field Data)

Above table shows that 33.3% MRs are science graduate, while 40% are MBAs. This suggests this profession is now able to attract MBAs too.

Table No. 5.8 Educational Stream wise Distribution

Sr. No.	Educational Stream	Frequency	Percentage
1	Science & Pharmacy	84	61%
2	Commerce	6	4%
3	Arts	5	4%
4	Post Gradates	43	31%
	Total	**138**	**100%**

Source: (Field Data)

Stream wise analysis from above table shows that the 61% MRs are from science and pharmacy stream while 31% are postgraduates.

Table No. 5.9 Marital Status

Marital Status	Age Mean	Frequency	Percentage
Married	29	41	29.7
Unmarried	24	97	70.3
Total		**138**	**100**

Source: (Field Data)

Above table indicates that 70.3% MRs are unmarried and average age of married and unmarried MR is 29 and 24 respectively.

Table No. 5.10 Spouse Earning Status

Spouse earning		
	Frequency	Percentage
No	30	73.2
Yes	11	26.8
Total	**41**	**100**

Source: (Field Data)

Above table shows that 26.8% spouses of married MR are earning

Table No. 5.11 Married and Staying with Family

Married and Staying with Family		
	Frequency	Percentage
No	8	19.5
Yes	33	80.5
Total	41	100

Source: (Field Data)

As per above table 80.5% married MRs are staying with their family.

Table No. 5.12 Staying with Family

Staying with Family	Frequency	Percentage
No	79	57.2
Yes	59	42.8
Total	138	100

Source: (Field Data)

Above table shows that 57.2% MRs are not staying with their families.

Table No. 5.13 Number of Dependents Statistics

Statistics		
No. of Dependents		
N	Valid	138
	Missing	0
Mean		2.52
Mode		2
Std. Deviation		0.83
Minimum		1
Maximum		5

Source: (Field Data)

Mean of number of dependents as per above table observed to be 2.52, while maximum number of dependents is 5.

Table No. 5.14 Number of Dependents Frequency

No. of Dependents	Frequency	Percentage
1	5	3.6
2	80	58
3	30	21.7
4	22	15.9
5	1	0.7
Total	138	100

Source: (Field Data)

As per above table most of the MRs has 2-3 dependents.

Table No. 5.15 Preferred area by MR to Reside in Pune

Sr. No.	Area of Residence	Frequency	Percentage
1	Ambegaon	4	2.9
2	Anand Nagar	1	0.7
3	Aundh	2	1.4
4	Balaji Nagar	1	0.7
5	Bavadhan	1	0.7
6	Bhosari	1	0.7
7	Bhusari Colony	2	1.4
8	Bibewadi	4	2.9
9	Budhwarpeth	1	0.7
10	Camp	1	0.7
11	Chandannagar	1	0.7
12	Dattawadi	3	2.2
13	Deccan	1	0.7
14	Dhankawadi	10	7.2
15	Dhayri	2	1.4
16	Dighi	1	0.7

Table No. 5.15 continued...

Sr. No.	Area of Residence	Frequency	Percentage
17	Ghorpadi	3	2.2
18	Ghorpadipeth	1	0.7
19	Hadapsar	12	8.7
20	Hingne	2	1.4
21	Indiranagar	1	0.7
22	Karve Rd	1	0.7
23	Kasarwadi	1	0.7
24	Kasbapeth	1	0.7
25	Katraj	5	3.6
26	Kawade Rd	1	0.7
27	Khadki	1	0.7
28	Kothrud	11	8
29	Malwadi	1	0.7
30	Market Yard	6	4.3
31	Mhatre Bridge	1	0.7
32	Mundhava	1	0.7
33	Nanapeth	1	0.7
34	Narayan Peth	1	0.7
35	Narhe	3	2.2
36	Pcmc	1	0.7
37	Peth	3	2.2
38	Pimpri	1	0.7
39	Pune	1	0.7
40	Sadashiv Peth	2	1.4
41	Sandenagar	2	1.4
42	Sangvi	4	2.9
43	Satara Rd	4	2.9

Table No. 5.15 continued...

Sr. No.	Area of Residence	Frequency	Percentage
44	Shakarnagar	4	2.9
45	Shivajinagar	2	1.4
46	Shivne	1	0.7
47	Shukrawar peth	1	0.7
48	Sinhagad Rd	5	3.6
49	Swargate	5	3.6
50	Theur	1	0.7
51	Uttamnagar	1	0.7
52	Vishrantwadi	2	1.4
53	Vithalwadi	1	0.7
54	Wadgaon Sheri	2	1.4
55	Wanawari	1	0.7
56	Warje	3	2.2
57	Yerawada	1	0.7
	Total	**138**	**100**

Source: (Field Data)

Above table shows, that MRs reside in almost all areas of Pune. Hadapsar, Dhankawadi, and Kothrud are most preferred areas.

Table No. 5.16 Total filed experience Statistics

Statistics		
Total field experience		
N	Valid	138
In months	Missing	0
Mean		32.04
Mode		24
Std. Deviation		29.26
Minimum		1
Maximum		220

Source: (Field Data)

As per above table average experience of MR is 32.04 months. Most of the MRs has 2 years (24 months) of field experience.

Table No. 5.17 Total filed experience frequency

Total field experience in Months	Frequency	%
<=12	22	15.94
13 - 24	50	36.23
25 - 36	31	22.46
37 - 48	13	9.42
49 - 60	13	9.42
> 60	9	6.52
Total	**138**	**100.00**

Source: (Field Data)

Above table shows, that:

- 15.94% MR has less than 12 months experience,

- 36.23% MR has experience between 13-24 months,

- 22.46% MR has experience between 25-36 months,

- 9.42% MR has experience between 37-48 months and 49-60 months in each category, and

- 6.52% MR has more than 60 months experience.

Table No. 5.18 Total Field experience in Pune Statistic

Statistics		
Total Field experience in Pune (In Months)		
N	Valid	138
	Missing	0
Mean		29.33
Mode		24
Std. Deviation		21.04
Minimum		1
Maximum		120

Source: (Field Data)

As per above table average experience in Pune of MR is 29.33 months. Most of the MRs has 2 years (24 months) of field experience in Pune.

Table No. 5.19   Total Field Experience in Pune Frequency

Total Field Experience in Pune in Months	Frequency	Percentage
<=12	27	19.57
13 - 24	47	34.06
25 - 36	30	21.74
37 - 48	11	7.97
49 - 60	15	10.87
> 60	8	5.80
Total	**138**	**100.00**

Source: (Field Data)

Above table shows, that:

- 19.57% MR has less than 12 months experience,

- 34.06% MR has experience between 13-24 months,

- 21.74% MR has experience between 25-36 months,

- 7.97% MR has experience between 37-48 months,

- 10.87% MR has experience between 49-60 months, and

- 5.80% MR has more than 60 months experience in Pune.

Part B: Reasons for Attrition

Table No. 5.20 Number of Companies worked with in Pune Statistics

Statistics		
No. of Companies worked in Pune		
N	Valid	138
	Missing	0
Mean		1.85
Mode		2
Std. Deviation		1.45
Minimum		1
Maximum		13

Source: (Field Data)

In above table mode 2 suggests most of the MRs have worked with 2 companies.

Table No. 5.21 Number of Companies worked with in Pune Frequency

No. of companies worked with in Pune	Frequency	%
1	54	39.1
2	70	50.7
3	11	8
4	1	0.7
12	1	0.7
13	1	0.7
Total	138	100

Source: (Field Data)

As per above table 61.9% MRs have changed companies.

Table No. 5.22 Experience wise No. of Companies worked in Pune

Total field experience in Pune × No. of Companies worked in Pune Cross tabulation									
Sr. No.	Field Experience in Months	No. of Companies worked in Pune						Total	
		2	%	3	%	4	12	13	Tot	%
1	<=12	14	20.00%	0	0.00%	0	0	0	14	16.67%
2	13 - 24	24	34.29%	3	27.27%	0	0	0	27	32.14%
3	25 - 36	14	20.00%	3	27.27%	0	0	0	17	20.24%
4	37 - 48	5	7.14%	3	27.27%	1	0	0	9	10.71%
5	49 - 60	11	15.71%	0	0.00%	0	0	0	11	13.10%
6	> 60	2	2.86%	2	18.18%	0	1	1	6	7.14%
Total		70	100.00%	11	100.00%	1	1	1	84	100.00%

Source: (Field Data)

Above table shows that:

- 48.81% MRs took decision to change companies during first 2 years.

- 69.05% MRs took decision to change companies during first 3 years.

- Major reason to change company is 'Higher salary' (Refer Table No. 5.23). This may be attributed to unsatisfactory initial salaries offered by companies.

Table No. 5.23 Reasons for changing companies

Attrition Causes Frequencies			
Reasons for Attritions	**Responses**		**Rank**
	N	%	
Higher salary	47	39.20%	1
Salary/expenses not in time	32	26.70%	2
Non cooperation from manager	14	11.70%	3
Promotion	11	9.20%	4
Scattered work area	8	6.70%	5
Work area far away from residence	7	5.80%	6
Other	1	0.80%	7
Total	120	100.00%	
a. Dichotomy group tabulated at value 1.			

Source: (Field Data)

Above table shows, that:

- 39.2% Medical Representatives changed companies because of higher salary

- 26.7% changes because they were not getting their salary/expenses in time.

These two factors contribute 66% among the reasons for changing companies.

Part C: Job Profile

Table No. 5.24 Working Hours Statistics

Statistics		
Work Hours		
N	Valid	138
	Missing	0
Mean		2.55
Mode		3
Std. Deviation		0.71
Minimum		1
Maximum		4

Source: (Field Data)

Mode 3 in above table suggests most of the MRs work for 10 to 12 hours a day.

Table No. 5.25 Working Hours Frequency

	Work Hours	Frequency	Percentage
Valid	6-8 Hrs	10	7.2
	8-10 Hrs	50	36.2
	10-12 Hrs	70	50.7
	> 12 Hrs	8	5.8
	Total	**138**	**100**

Source: (Field Data)

Above table shows that:

- 92.8% MRs work for more than 8 hours a day.

- 56.5% MRs are working for more than 10 hours a day.

Table No. 5.26 Morning and Evening Working times

Statistics		Morning		Evening	
		Working starts at	Working ends at	Working starts at	Working ends at
N	Valid	138	138	138	138
	Missing	0	0	0	0
Mean		9.20	2.85 (3.25)	5.35	9.16
Mode		9	3	5	9
Std. Deviation		0.656	0.629	0.581	0.896
Minimum		6	2	3	6
Maximum		11	4.3	7	11

Source: (Field Data)

As per above table Morning work starts by 9.20 am and ends by 3.25 pm. Evening session starts by 5.35 pm and ends by 9.16 pm. Sometimes MR needs to work till 11 pm at night.

Table No. 5.27 Utilization of Afternoon time

Afternoon time utilization			
How MR spend Afternoon time	Responses		Rank
	N	%	
Stockiest visit	87	41.6%	1
Chemist visit	40	19.1%	2
Go to residence & rests	38	18.2%	3
Carry out admin work	33	15.8%	4
Hangout near work area	8	3.8%	5
Other	3	1.4%	6
Total	209	100.0%	
a. Dichotomy group tabulated at value 1.			

Source: (Field Data)

Above table indicates that only 18.2% MRs go to their residence and take rest during afternoon when they normally do not have Doctor's calls while 81.8% do not take rest.

Table No. 5.28 Mode of Transportation

Transport Frequencies		
Transportation mode	**Responses**	
	N	**%**
Bike	131	94.2%
Car	7	5.0%
Public transport	1	.7%
Total	139	100.0%
a. Dichotomy group tabulated at value 1.		

Source: (Field Data)

Above table shows that 94% Medical Representatives are using bike for working. This can be attributed to poor public transport service in Pune.

Table No. 5.29 Average Kilometres travelled in a Day

Statistics		
Kms/day		
N	Valid	138
	Missing	0
Mean		51.39
Mode		60
Std. Deviation		17.84
Minimum		15
Maximum		90

Source: (Field Data)

As per above table per day a MR travels 51.39 kilometres. Most of the MR travels 90 kilometres a day.

Table No. 5.30 Number of Doctors and Chemists on list

Statistics			
		No. of Doctors on list	No. of Chemists on list
N	Valid	138	138
	Missing	0	0
Mean		199.38	140.21
Mode		200	150
Std. Deviation		28.69	33.38
Minimum		100	50
Maximum		250	200

Source: (Field Data)

MR maintains his customer list. Above table shows, that there are 199.38 Doctors and 140.21 Chemists on list. Most of the MR has 200 Doctors and 150 Chemists on list.

Table No. 5.31 Important Calls

Important Calls Frequencies		
Important Calls	Responses	
	N	%
Important call – Doctor	130	47.1%
Important call – Chemist	89	32.2%
Important call - Stockiest	57	20.7%
Total	276	100.0%
a. Dichotomy group tabulated at value 1.		

Source: (Field Data)

Above table indicates that Doctor's calls are most important followed by Chemist's calls.

Table No. 5.32 Customer Coverage Expected and Actual

Statistics		Doctors Call avg.		Chemists Call avg.	
		Expected	Actual	Expected	Actual
N	Valid	138	138	138	138
	Missing	0	0	0	0
Mean		11.13	10.88	6.99	7.2
Mode		12	11	7	7
Std. Deviation		1.21	1.44	1.26	1.62
Minimum		7	5	4	2
Maximum		16	16	12	12

Source: (Field Data)

Above table shows that expected Doctors call average is 11.13 and for Chemist is 6.99. Actual coverage of Doctors and Chemists are 10.88 and 7.20 respectively. Most of the companies expect Doctors and Chemists coverage as 12 and 7 respectively, while most of the MRs could cover 11 Doctors and 7 Chemists on an average per day.

Table No. 5.33 Total Products for Promotion

	Statistics	
Total Product		
N	Valid	138
	Missing	0
Mean		41.94
Mode		35
Std. Deviation		29.776
Minimum		1
Maximum		190

Source: (Field Data)

Above table indicates that most of the MRs promotes 35 products. The average products promoted by MRs are 41.94. Some MRs promotes single product while maximum products promoted are 190.

Table No. 5.34 Doctor Call Duration Statistics

Statistics		
Call Duration		
N	Valid	138
	Missing	0
Mean		2.45
Mode		2
Std. Deviation		0.74
Minimum		1
Maximum		4

Source: (Field Data)

Mean 2.45 in above table suggests call duration is 4-5 Minute.

Table No. 5.35 Doctor Call Duration Frequency

Call Duration	Frequency	%
1-2 min	9	6.5
3-4 min	69	50
5-6 min	48	34.8
> 6 min	12	8.7
Total	138	100

Source: (Field Data)

As per above table Call duration of 50% MR is 3-4 minute.

Table No. 5.36 Reporting Frequency

Reporting Frequency	Frequency	%	Rank
Alternate day	60	43.5	1
Twice in week	39	28.3	2
Weekly	23	16.7	3
Daily	16	11.6	4
Total	138	100	

Source: (Field Data)

A MR needs to prepare work report of every day. However report sending (reporting) frequency varies. As per above table 28.3% and 43.5% MR sends their reports twice and thrice a week respectively.

Table No. 5.37 Reporting System

Sr. No.	Reporting System	No. of Companies	%
1	Online	36	64.29
2	Manual	20	35.71
Total		**56**	**100.00**

Source: (Field Data)

Above table shows that 64.29% companies are using online reporting system.

Table No. 5.38 Meeting Frequency

Meeting Frequency	Responses	Percentage	Rank
	N		
Weekly	89	39.6%	1
Quarterly	82	36.4%	2
Monthly	35	15.6%	3
Fortnightly	14	6.2%	4
Daily	5	2.2%	5
Total	225	100.0%	
a. Dichotomy group tabulated at value 1.			

Source: (Field Data)

Above table indicates that Weekly, Quarterly and monthly meetings are common.

Table No. 5.39 Target achievement Statistics

Statistics		
Target Achievement		
N	Valid	138
	Missing	0
Mean		4.61
Mode		5
Std. Deviation		1.18
Minimum		1
Maximum		6

Source: (Field Data)

Mean 4.61 in above table suggests average target achievement is 90% achievement.

Table No. 5.40 Target Achievement Frequency

Target Achievement	Frequency	%	Rank
91%-100%	65	47.1	1
81%-90%	31	22.5	2
>100%	26	18.8	3
<60%	6	4.3	4
71%-80%	6	4.3	5
61%-70%	4	2.9	6
Total	138	100	

Source: (Field Data)

Above table shows that 88.4% MRs are able to achieve their targets above 80%.

Table No. 5.41 Sales Pressure Level

Sales Pressure Rating	Frequency	%	Rank
Average	43	31%	1
High	42	30%	2
Very high	27	20%	3
Low	19	14%	4
Very low	7	5%	5
Total (n)	138	100%	
Mean	**3.46**		

Source: (Field Data)

Above table shows that 50% MR experience high to very high sales pressure, while 31% experience average and 19% low to very low sales pressure. Mean 3.46 suggests overall above average sales pressure.

Table No. 5.42 Cooperation from Doctors

Cooperation from Doctor	Frequency	%	Rank
Very high	44	32%	1
High	37	27%	2
Low	20	14%	3
Average	19	14%	4
Very low	18	13%	5
Total (n)	138	100%	
Mean	**3.50**		

Source: (Field Data)

Above table shows that 59% MR gain high to very high cooperation from Doctors, while 14% gain average and 27% low to very low cooperation from Doctors. While mean 3.50, suggests overall above average cooperation.

Table No. 5.43 Cooperation from Chemists

Cooperation from Chemist	Frequency	%	Rank
Average	41	30%	1
High	31	22%	2
Very high	28	20%	3
Very low	19	14%	4
Low	19	14%	4
Total (n)	138	100%	
Mean	**3.22**		

Source: (Field Data)

Above table shows that 42% MR gain high to very high cooperation from Chemists, while 30% gain average and 28% low to very low cooperation from Chemists. While mean 3.22, suggests overall above average cooperation.

Table No. 5.44 Cooperation from Stockists

Cooperation from Stockiest	Frequency	%	Rank
High	51	37%	1
Very high	36	26%	2
Average	22	16%	3
Low	17	12%	4
Very low	12	9%	5
Total (n)	138	100%	
Mean	**3.59**		

Source: (Field Data)

Above table shows that 63% MR gain high to very high cooperation from stockists, while 16% gain average and 21% low to very low cooperation from stockists. While mean 3.59, suggests overall above average cooperation.

Table No. 5.45 Cooperation from Company

Cooperation from Company	Frequency	%	Rank
Very high	83	60%	1
High	31	22%	2
Average	16	12%	3
Very low	5	4%	4
Low	3	2%	5
Total (n)	138	100%	
Mean	**4.33**		

Source: (Field Data)

Above table shows that 82% MRs gain high to very high cooperation from company, while 12% gain average and 6% low to very low cooperation from company. While mean 4.33 suggests overall above high cooperation.

Table No. 5.46 Cooperation from Manager

Cooperation from Manager	Frequency	%	Rank
Very high	98	71%	1
High	22	16%	2
Average	9	7%	3
Very low	6	4%	4
Low	3	2%	5
Total (n)	138	100%	
Mean	**4.47**		

Source: (Field Data)

Above table shows that 87% MRs gain high to very high cooperation from manager, while 7% gain average and 6% low to very low cooperation from manager. While mean 4.47 suggests overall above high cooperation.

Table No. 5.47 Unethical Demand from Doctors

Unethical Demand Doctor	Frequency	%	Rank
Always(5)	60	43.5	1
Sometimes(3)	38	27.5	2
Often(4)	24	17.4	3
Rarely(2)	13	9.4	4
Never(1)	3	2.2	5
Total	138	100	
Mean	**3.91**		

Source: (Field Data)

Mean 3.91 in above table indicates that MRs face unethical demands from Doctors often.

Table No. 5.48 Unethical Demand from Chemists

Unethical Demand Chemist	Frequency	%	Rank
Always(5)	60	43.5	1
Sometimes(3)	42	30.4	2
Often(4)	18	13	3
Rarely(2)	13	9.4	4
Never(1)	5	3.6	5
Total	138	100	
Mean	**3.83**		

Source: (Field Data)

Mean 3.83 in above table suggests that MRs face unethical demands from Chemists often.

Table No. 5.49 Unethical Demand from Stockists

Unethical Demand Stockiest	Frequency	%	Rank
Always(5)	44	31.9	1
Rarely(2)	28	20.3	2
Never(1)	26	18.8	3
Sometimes(3)	21	15.2	4
Often(4)	19	13.8	5
Total	138	100	
Mean	**3.20**		

Source: (Field Data)

Mean 3.20 in above table suggests MRs face unethical demands from stockiest sometimes.

Table No. 5.50 Unethical Demand from Manager

Unethical Demand Manager	Frequency	%	Rank
Never(1)	62	44.9	1
Rarely(2)	44	31.9	2
Sometimes(3)	15	10.9	3
Often(4)	12	8.7	4
Always(5)	5	3.6	5
Total	138	100	
Mean	**1.94**		

Source: (Field Data)

Mean is 1.94 in above table suggests that MRs face unethical demands from managers rarely.

Table No. 5.51 Parking Problem

Parking Problem	Frequency	%	Rank
Always(5)	72	52.2	1
Sometimes(3)	30	21.7	2
Often(4)	15	10.9	3
Rarely(2)	15	10.9	4
Never(1)	6	4.3	5
Total	138	100	
Mean	**3.96**		

Source: (Field Data)

Mean 3.96 in above table suggests that MRs face parking problem often.

Table No. 5.52 Traffic Problem

Traffic Problem	Frequency	%	Rank
Always(5)	69	50	1
Sometimes(3)	26	18.8	2
Often(4)	23	16.7	3
Rarely(2)	12	8.7	4
Never(1)	8	5.8	5
Total	138	100	
Mean	**3.96**		

Source: (Field Data)

Mean 3.96 in above table suggests that MRs face traffic problem often.

Table No. 5.53 Frustration

Frustration	Frequency	%	Rank
Sometimes(3)	47	34.1	1
Always(5)	34	24.6	2
Rarely(2)	24	17.4	3
Never(1)	20	14.5	4
Often(4)	13	9.4	5
Total	138	100	
Mean	**3.12**		

Source: (Field Data)

Mean 3.12 in above table suggests that MRs feel frustration sometimes.

Table No. 5.54 Stress

Stress	Frequency	%	Rank
Sometimes(3)	38	27.5	1
Never(1)	31	22.5	2
Always(5)	29	21	3
Rarely(2)	22	15.9	4
Often(4)	18	13	5
Total	138	100	
Mean	**2.94**		

Source: (Field Data)

Mean 2.94 in above table suggests that MRs experience stress sometimes.

Table No. 5.55 Sales Pressure Frequency

Sales Pressure	Frequency	%	Rank
Often(4)	36	26.1	1
Always(5)	34	24.6	2
Rarely(2)	29	21	3
Sometimes(3)	22	15.9	4
Never(1)	17	12.3	5
Total	138	100	
Mean	**3.30**		

Source: (Field Data)

Mean 3.30 in above table suggests that MRs experience sales pressure sometimes.

Table No. 5.56 Allowances

Statistics								
	N		Mean	Mode	Std. Deviation	Min	Max
	Valid	Missing					
Allowance HQ	138	0	171.70	160	30.62	110	300
Allowance EXHQ	138	0	186.85	180	45.73	120	500
Allowance OS	62	76	369.71	400	110.26	175	1000
Allowance Petrol	138	0	1.99	2	0.46	1.25	5
Allowance Mobile	134	4	444.40	300	209.31	100	1000
Allowance Internet	116	22	283.92	300	131.98	100	750
Allowance Other	4	134	406.25	375	62.5	375	500

Source: (Field Data)

As per above table Mean Allowances for headquarter, ex-headquarter and outstation are Rs. 171.70, Rs. 186.85 and Rs. 369.71 respectively. Petrol allowance is given on per kilometre basis. It is Rs. 1.99 per kilometre. Mobile and internet allowances are Rs. 444.40 and Rs. 283.92 respectively.

Table No. 5.57 Status of getting Salary in time

Salary/expense in time	Frequency	%	Rank
Always (4)	108	78.3	1
Often (3)	15	10.9	2
Sometimes (2)	8	5.8	3
Never (1)	7	5.1	4
Total	138	100	
Mean	**3.62**		

Source: (Field Data)

Mean 3.30 in above table indicates that often a MR gets his salary/expenses in time.

Table No. 5.58 Room Sharing Frequency

Room Sharing	Frequency	%
Yes	89	64.49
No	49	35.51
Total	138	100.00

Source: (Field Data)

Above table shows that 64.49% MRs are staying with room sharing basis.

Table No. 5.59 Room Sharing statistics

Statistics		
No. of Roommates		
N	Valid	89
Mean		3.06
Mode		3
Std. Deviation		1.32
Minimum		1
Maximum		6

Source: (Field Data)

Average number of roommates is 3.06 as per above table.

Table No. 5.60 Leave Approval Status

Leave Sanction	Frequency	%	Rank
Sometimes	57	41.3	1
Always	50	36.2	2
Often	15	10.9	3
Never	12	8.7	4
Rarely	4	2.9	5
Total	138	100	
Mean	**3.63**		

Source: (Field Data)

Mean 3.63 in above table shows that almost often leaves are sanctioned without hesitation.

Table No. 5.61 Weekends spending Details

Weekends Spending Frequencies			
Particulars	Responses		Rank
	N	%	
Half day with family half day admin work	57	27.0%	1
Spend whole day with family	41	19.4%	2
Completing pending admin work	36	17.1%	3
Go to home town	30	14.2%	4
Recreational activities	26	12.3%	5
Spend whole day with friends	20	9.5%	6
Other	1	.5%	7
Total	211	100.0%	
a. Dichotomy group tabulated at value 1.			

Source: (Field Data)

Above table shows that:

- 44.10% MR does company work during weekends.

- 57% spend half day for company work.

- 33.6% prefers to spend weekends with family ('Go to home town' is also considered as spending time with family as most of the MRs are from outside of Pune, and not staying with their families)

Table No. 5.62 Major Diseases affecting MR

Disease Frequencies			
Disease	**Responses**		**Rank**
	N	**%**	
Respiratory Tract	99	53.5%	1
Gastro intestinal	61	33.0%	2
Gynaecological	10	5.4%	3
Neurological	5	2.7%	4
Neuropsychiatric	5	2.7%	4
Other	3	1.6%	6
Cardiovascular	2	1.1%	7
Total	185	100.0%	
a. Dichotomy group tabulated at value 1.			

Source: (Field Data)

Above table shows that 53.5% and 33% MRs suffer from Respiratory tract and Gastro intestinal diseases respectively. It is clear that Respiratory track and Gastro intestinal diseases are common among MRs. These are attributed to air pollution and frequent unhealthy out-eating respectively.

Table No. 5.63 Medical Leave Approval Status

Medical Leave Sanction		Frequency	%	Valid %
Valid	Always (5)	69	50.00	51.88
	Often (4)	19	13.77	14.29
	Sometimes (3)	38	27.54	28.57
	Rarely (2)	3	2.17	2.26
	Never (1)	4	2.90	3.01
	Total	133	96.38	100.00
Missing	0	5	3.62	
Total		138	100	
	Mean	**4.1**		

Source: (Field Data)

Mean 4.10 in above table indicates that medical leaves are sanctioned often.

Table No. 5.64   Medical Expenses

Medical Expenses					
		Frequency	**%**	**Valid %**	**Cumulative %**
Valid	Self	117	84.783	90	90
	Company	13	9.4203	10	100
	Total	130	94.203	100	
Missing	0	8	5.7971		
Total		138	100		

Source: (Field Data)

As per above table 90% MR pays his medical bill.

Table No. 5.65   Facilities by Companies

Sr. No.	Facilities	No. of Companies offering	%	Rank	No. of Companies not offering	%	Rank	Total
1	Pension	8	14%	13	49	86%	1	57
2	Advance against salary	11	19%	12	46	81%	2	57
3	Loan	14	25%	11	43	75%	3	57
4	Life Insurance	22	39%	10	35	61%	4	57
5	Leave encashment	24	42%	9	33	58%	5	57
6	LTA	28	49%	8	29	51%	6	57
7	Bonus	34	60%	7	23	40%	7	57
8	ESI	46	81%	6	11	19%	8	57
9	Medical Insurance	47	82%	5	10	18%	9	57
10	Medical expense self	49	86%	3	8	14%	10	57
11	HRA	49	86%	3	8	14%	10	57
12	PF	50	88%	2	7	12%	12	57
13	Accident Insurance	51	89%	1	6	11%	13	57

Source: (Field Data)

As per above table 81% respondents informed that they have ESI facility, however 86% respondents had paid their medical expense. This suggests either they are not aware benefits of ESI or they could not utilise this facility. Further investigation is required in this regard. Accidents Insurance, PF, HRA Medical Insurance and ESI, are the benefits most of the companies are offering to their MRs.

Table No. 5.66 Smoking Habit

Smoking	Frequency	%	Cumulative %
Always (5)	40	29	29
Often (4)	26	18.8	47.8
Sometimes (3)	32	23.2	71
Rarely (2)	19	13.8	84.8
Never (1)	21	15.2	100
Total	138	100	
Mean	**3.33**		

Source: (Field Data)

Mean 3.33 in above table indicates that MR smokes some times. Further, it also shows that 71% MRs Smoke while 15.2% MRs do not.

Table No. 5.67 Alcohol Consuming Habit

Drinks	Frequency	%	Cumulative %
Always (5)	27	19.6	19.6
Often (4)	24	17.4	37
Sometimes (3)	38	27.5	64.5
Rarely (2)	18	13	77.5
Never (1)	31	22.5	100
Total	138	100	
Mean	**2.99**		

Source: (Field Data)

Mean 2.99 in above table indicates that MR drinks some times. Further, it also shows that 64.5% MRs have alcohol consuming habit while 22.5% MRs do not have alcohol consuming habit.

Table No. 5.68 Tobacco Chewing Habit

Tobacco	Frequency	%	Cumulative %
Always (5)	11	8	8
Often (4)	6	4.3	12.3
Sometimes (3)	25	18.1	30.4
Rarely (2)	28	20.3	50.7
Never (1)	68	49.3	100
Total	138	100	
Mean	**2.01**		

Source: (Field Data)

Mean 2.01 in above table indicates that MR chew tobacco rarely. Further, it also shows that 30.4% MRs have tobacco chewing habit while 49.3% MRs do not have tobacco chewing habit.

Table No. 5.69 Gutaka Chewing Habit

Gutaka	Frequency	%	Cumulative %
Always (5)	16	11.6	11.6
Often (4)	4	2.9	14.5
Sometimes (3)	22	15.9	30.4
Rarely (2)	18	13	43.5
Never (1)	78	56.5	100
Total	138	100	
Mean	**2**		

Source: (Field Data)

Mean 2.01 in above table indicates that MRs chew Gutaka rarely. Further, it also shows that 30.4% MRs have Gutaka chewing habit while 56.5% MRs do not have Gutaka chewing habit.

Part D: Hypothesis testing:

1. An attempt has been made to understand whether MR earn sufficient. Hypothesis formulated are as under:

H_{0-1}: There is no significant difference between the monetary packages offered by Pharmaceutical companies to Medical Representatives and domicile cost (expenditure) in Pune. (There is no significant difference between Income and Expenditure)

Table No. 5.70
Income and Domicile Cost (expenditure) of MR: Statistics

	Income	Domicile Cost
Mean	20378.6232	11040.2174
N	138	138
Std. Deviation	4748.78351	3712.00016
Std. Error Mean	404.24330	315.98644

Source: (Field Data)

Table No. 5.71
Income and Domicile Cost (expenditure) of MR: Correlation

	Income & Domicile Cost
N	138
Correlation	.219
Sig.	.010
Coefficient of Determination	.0479

Source: (Field Data)

From above table P = .01 hence the correlation is significant however Coefficient of Determination indicates only .0479% variance in Income can explained by variance in Domicile cost. Hence, it is concluded that there is very weak relationship.

Table No. 5.72 Income and Domicile Cost (expenditure) of MR: t-Test

			Income - Domicile Cost
Paired Differences	Mean		9338.40580
	Std. Deviation		5349.87390
	Std. Error Mean		455.41151
	95% Confidence Interval of the Difference	Lower	8437.86086
		Upper	10238.95073
T			20.505
d. f.			137
Sig. (2-tailed)			.000

Source: (Field Data)

From above table P < 0.001, hence H_0 is rejected.

Result: There is significant difference between Income and Expenditure. The Income of MR is greater than domicile cost (expenditure) in Pune.

2. The study has tried to find out, whether MRs fulfils family expectation of creating asset. To fulfil these expectations a MR should be able to purchase things other than basic necessities. Hypothesis formulated are as under:

H_{0-2}: The income of Medical Representatives fulfils his family expectations to create asset.

Table No. 5.73 Family Expectation: Assets Creation Frequencies

Particulars	Observed N	Expected N	Residual
Buy on cash immediately	41	46.0	-5.0
Buy immediately on instalments	25	36.8	-11.8
Delay buying till accumulate sufficient cash	56	27.6	28.4
Avoid buying	14	18.4	-4.4
Other	2	9.2	-7.2
Total	**138**		

Source: (Field Data)

Table No. 5.74 Family Expectation Asset Creation: Hypothesis Test Statistics

	Family Satisfaction Asset Creation
Chi-Square	40.237[a]
d.f.	4
Asymp. Sig.	.000

Source: (Field Data)

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 9.2.

From above table P<0.001, hence H_0 is rejected and H_1 is accepted.

Result: The test concludes that, the income of MR is not sufficient to fulfil family expectation of asset creation.

3. The study has tried to find out, whenever a MR required to be with his family members; may be for various reasons, does he able to do so? To remain with family means to take leave. Considering this relationship, respondents were asked questions regarding their leave situations. Three situations are considered as family expectations 1) leave demanded by family members, 2) leave to attend family functions, and 3) leave to attend relative's functions. Hypothesis formulated are as under:

H_{0-3}: Medical Representatives have sufficient time to spend with their family members.

Table No. 5.75 Family Expectations: Leave for Family member

	Observed N	Expected N	Residual
Always	40	46.0	-6.0
Often	11	36.8	-25.8
Sometimes	17	27.6	-10.6
Rarely	49	18.4	30.6
Never	21	9.2	11.8
Total	**138**		

Source: (Field Data)

Table No. 5.76 Family Expectations: Leave for Family functions

	Observed N	Expected N	Residual
Always	31	46.0	-15.0
Often	20	36.8	-16.8
Sometimes	28	27.6	.4
Rarely	52	18.4	33.6
Never	7	9.2	-2.2
Total	138		

Source: (Field Data)

Table No. 5.77 Family Expectations: Leave for Relative's functions

	Observed N	Expected N	Residual
Always	17	46.0	-29.0
Often	9	36.8	-27.8
Sometimes	40	27.6	12.4
Rarely	52	18.4	33.6
Never	20	9.2	10.8
Total	138		

Source: (Field Data)

Table No. 5.78 Family Expectation 'Leave': Hypothesis Test Statistics

	Family Expectations Family member	Family Expectations Family functions	Family Expectations Relative functions
Chi-Square	88.966[a]	74.449[a]	118.889[a]
d.f.	4	4	4
Asymp. Sig.	.000	.000	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 9.2.

From above table P<0.001, hence H_0 is rejected.

Result: The test concludes that, the MRs do not have sufficient time to spend with family.